SAUL EWING
LLP

Courtney L. Schultz
Phone: (215) 972-7717
Fax: (215) 972-1839
Courtney.Schultz@saul.com
www.saul.com

January 19, 2024

VIA ELECTRONIC MAIL and ELECTRONIC FILING
Honorable Sherri Golden
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
P.O. Box 350
Trenton, NJ 08625-0350
sherri.golden@bpu.nj.gov
board.secretary@bpu.nj.gov

Re: I/M/O the Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for the Water Service, Covid-19 Deferred Cost Recovery, Adjustment of Certain Depreciation Rates, and Other Tariff Changes
BPU Docket No. WR24010057

Dear Secretary Golden:

On behalf of Aqua New Jersey, Inc. ("Aqua" or the "Company"), enclosed please find a Certified Petition for filing to initiate the above-referenced docket.

In accordance with the March 19, 2020 and May 20, 2020 Board Orders in Docket No. EO20030254, hard copies are not being provided at this time, but may be submitted at a later time, if required. However, hard copies will be provided to those who previously requested them.

Kindly direct any inquiries to the undersigned. Thank you for your attention to this matter.

Respectfully submitted,
Courtney L. Schultz

cc: Per encl. service list

SERVICE LIST

I/M/O the Petition of Aqua New Jersey, Inc. for
Approval of an Increase in Rates for Water Service, COVID-19 Deferred Cost Recovery,
Adjustment of Certain Depreciation Rates, and Other Tariff Changes
BPU Docket No. WR24010057

BPU

Hon. Sherri Golden, Secretary
NJ Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
sherri.golden@bpu.nj.gov
board.secretary@bpu.nj.gov

Karriemah Graham
Program Specialist 3
Office of Case Management
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
karriemah.graham@bpu.nj.gov

Stacy Peterson
Deputy Executive Director,
Director, Division of Revenues & Rates
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
Stacy.peterson@bpu.nj.gov

Andrew Tuzzo
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
Andrew.Tuzzo@bpu.nj.gov

Dean Taklif
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
Dean.taklif@bpu.nj.gov

Cindy Bianco
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
cindy.bianco@bpu.nj.gov

Benjamin Witherell
Board of Public Utilities
44 South Clinton Ave., Suite 314
P.O. Box 350
Trenton, NJ 08625-0350
benjamin.witherell@bpu.nj.gov

DAG

Daren Eppley, DAG
Division of Law
25 Market Street
P.O. Box 112
Trenton, NJ 08625
daren.eppley@law.njoag.gov

Pamela Owen, DAG
Division of Law
25 Market Street
P.O. Box 112
Trenton, NJ 08625
pamela.owen@law.njoag.gov

Meliha Arnautovic, DAG
Division of Law
Public Utilities Section
RJ Hughes Justice Complex
25 Market Street
P.O. Box 112
Trenton, NJ 08625-0112
Meliha.Arnautovic@law.njoag.gov

Rate Counsel

Brian O. Lipman, Director
Division of Rate Counsel
140 East Front Street, 4th Fl.
P.O. Box 003
Trenton, NJ 08625
blipman@rpa.nj.gov

Susan E. McClure, Esq.
Managing Attorney, Water
Division of Rate Counsel
140 East Front Street, 4th Fl.
P.O. Box 003
Trenton, NJ 08625
smcclure@rpa.nj.gov

Emily Lam, Esquire
Division of Rate Counsel
140 East Front Street, 4th Fl.
P.O. Box 003
Trenton, NJ 08625
esmithman@rpa.nj.gov

Christine Juarez, Esquire
Division of Rate Counsel
140 East Front Street, 4th Fl.
P.O. Box 003
Trenton, NJ 08625
cjuarez@rpa.nj.giv

Felecia Jackson-Rodgers
Division of Rate Counsel
140 East Front Street, 4th Fl.
P.O. Box 003
Trenton, NJ 08625
FRodgers@rpa.nj.gov

Company
Mark H. McKoy,
Interim President
Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691
mhmckoy@aquaamerica.com

Dawn Peslak, Controller
Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691
DPeslak@aquaamerica.com

Adam Burger
Director of Operations
Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691
ABurger@aquaamerica.com

Katherine Cipolla
Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691
Kcipolla@aquaamerica.com

William C. Packer, Jr.
VP Regulatory Accounting
Aqua America, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010
WCPackerjr@essential.co

Kimberly A. Joyce, Esq.
Aqua America, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010
KAJoyce@essential.co

Colleen A. Foley, Esq.
Saul Ewing LLP
One Riverfront Plaza, Suite 1520
1037 Raymond Boulevard
Newark, NJ 07102
Colleen.foley@saul.com

Courtney L. Schultz, Esq.
Saul Ewing LLP
1500 Market Street
Centre Square West, 38th Fl.
Philadelphia, PA 19102
Courtney.Schultz@saul.com

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF AQUA NEW JERSEY, INC. FOR APPROVAL OF AN INCREASE IN RATES FOR WATER SERVICE, COVID-19 DEFERRED COST RECOVERY, ADJUSTMENT OF CERTAIN DEPRECIATION RATES, AND OTHER TARIFF CHANGES	:	**PETITION** **BPU DKT. NO.: WR24010057**

TO THE HONORABLE 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: 2-21.1, *N.J.S.A.* 48:2-18, and *N.J.A.C.* 14:1-5.12, and other related statutes and regulations and shows that:

I. Introduction & Background

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"). Petitioner's principal business office is located at 10 Black Forest Road, Hamilton, New Jersey 08691.

2. Petitioner is engaged in the business of collecting, treating and distributing water for retail service to approximately 55,350 customers.[1] The Company's customers are located in several municipalities in Warren, Hunterdon, Mercer, Morris, Burlington, Monmouth, Camden, Ocean, Sussex, Gloucester and Atlantic Counties, New Jersey. The Company has organized its

[1] Petitioner is also engaged in the wastewater collection, treatment and transmission business and currently serves approximately 6,600 wastewater customers. Rates for wastewater service are not the subject of this Petition.

business by the following Divisions: Northern Division (based in Phillipsburg), Central Division (based in Hamilton), Eastern Division (based in Berkeley) and the Southern Division (based in Blackwood).

3. The primary purpose of this Petition is to seek an increase in base rates for water service. Aqua's last base rate increase was approved by the Board in May 2018, and the Company has not sought an increase in base rates since that time—notwithstanding the significant increases Aqua has experienced in the cost to provide utility service. Today, the Company's request is driven by several factors including: continuing increases in operating and maintenance ("O&M") expenses; increasing costs related to new regulatory, legal and environmental requirements that are not recovered in currently approved base rates; and the significant capital investments required to continue to provide safe, adequate and proper water service. As will be discussed in greater detail in the testimony supporting this Petition, increased expenses and new requirements, coupled with increased capital investments, have significantly reduced the Company's earnings. Consequently, Petitioner's present rates for water service are not adequate to meet those increased expenses, support Aqua's required capital improvement programs, and provide the Company with a reasonable return on its investment in utility plant.

4. Petitioner proposes to increase rates for the purpose of producing additional revenues of approximately $8,329,647 or approximately 17.31% above the adjusted annual level of revenues for the 12-month Test Year ending April 30, 2024. Aqua's base rate proposal reflects its actual capital structure, including 47% debt and 53% equity, and a proposed return on equity ("ROE") of 11.15%. The Company's proposed overall rate of return ("ROR") is 7.91%. The additional revenues requested herein are required to enable the Company to maintain a satisfactory credit position; preserve its financial integrity; comply with new and enhanced regulatory requirements (including state and federal environmental requirements); permit proper

maintenance and improvement of the utility plant required to furnish safe, adequate and proper service to its customers; encourage continued good management and provide an incentive for efficiencies, where appropriate; prevent confiscation or diminution of its property; and earn a reasonable return upon the fair value of its property used and useful in the public service.

5. In addition to the proposed increase in base rates for water service, Petitioner also seeks the Board's review and approval of the following requests:

a. To reset to zero its current Distribution System Improvement Charge ("DSIC"), include those investments in rate base, determine that all charges imposed are final and not subject to refund, and approve a new DSIC Foundational Filing (see **Exhibit 2**);

b. To approve Aqua's recovery of costs related to the COVID-19 global pandemic, which costs were previously approved for deferred accounting treatment;[2]

c. To approve the Company's plan for recovering customer-side lead service line replacement ("LSLR") costs through an LSLR Surcharge;[3]

d. To approve Aqua's request to use deferred accounting for the expenses incurred to remediate PFAS;[4]

e. To address the ratemaking impact of the Company's tax treatment of repair deductions and related flow through accounting;

f. To authorize Aqua to capitalize the costs of tank painting consistent with the Board's adoption of the Uniform System of Accounts ("USOA") promulgated by the National Association of Regulatory Utility Commissioners ("NARUC");[5]

---

[2] *See I/M/O the New Jersey Board of Public Utilities' Response to the COVID-19 Pandemic,* Order Authorizing Establishment of a Regulatory Asset for Incremental COVID-19 Related Expenses, BPU Dkt. No. AO20060471 (dated July 2, 2020) ("March 2020 COVID-19 Order").

[3] *See* P.L. 2021, c. 183 (requiring water utilities to inventory and replace lead service lines, including those on private property, and to recover the costs of those replacements in rates). A copy of the updated LSLR Plan is attached hereto as **Exhibit 3**.

g. To implement new depreciation rates for the Company; and

h. To revise the Company's tariffs to reflect the proposed rate increase, including a continuation of its approach to equalize public fire rates. The Company also seeks authority to make other tariff changes including, (i) revisions to reflect changes to the Board's regulations; (ii) revisions to address the correction of shared service lines; and (iii) revisions to strengthen requirements related to cross connections. .

II. Distribution System Improvement Charge

6. Pursuant to *N.J.A.C.* 14:9-10.1 *et seq.*, the Company previously obtained the Board's approval of a Foundational Filing[6] which authorized Aqua to implement a DSIC to recover certain costs related to investments in DSIC-eligible plant. Since the Board's December 2022 approval in that proceeding, the Company has implemented a DSIC and made one semi-annual cost recovery filing for the six-month period ending June 2023. A second cost recovery filing (covering the 12 months ending December 31, 2023) will be made in mid-January 2024, and a third cost recovery filing may be made during the pendency of this proceeding.

7. Consistent with *N.J.A.C.* 14:9-10.6(c), the Company intends to use this base rate proceeding to roll DSIC surcharges into base rates and to reset the DSIC rate to zero. The Company also seeks the Board's approval of a new DSIC Foundational Filing, which has been included as Exhibit A to this Petition. In addition, Aqua seeks a finding that interim DSIC rates are final and not subject to refund. As explained by Company Witness Cipolla, the DSIC program and cost recovery mechanism have been an important tool in Aqua's efforts to replace older mains and services—all with an eye toward maintaining reliable service for customers.

---

[4] The term "PFAS" is used throughout this filing to refer to a group of long-lasting chemicals including per- and polyfluoroalkyl substances.

[5] *See N.J.A.C.* 14:9-12.1 adopting the NARUC USOA by water utilities subject to the jurisdiction of the Board.

[6] *See I/M/O the Petition of Aqua New Jersey, Inc.'s 2022 Distribution System Improvement Charge Foundational Filing*, BPU Dkt. No. WR22050360, Decision and Order Adopting Stipulation, (dated December 21, 2022).

III. Recovery of COVID-19 Deferred Costs

8. On March 9, 2020, Governor Murphy issued Executive Order ("EO") No. 103, declaring a State of Emergency and a Public Health Emergency in response to the COVID-19 global pandemic. EO No. 103 authorized state agencies to take actions to protect the public given the statewide emergency. In response, the Board worked closely with New Jersey public utilities to implement a series of measures to protect the public, including a moratorium on shut-offs for non-payment and the reinstatement of utility service where it had been terminated for non-payment.[7] At that time, the Board acknowledged that the utilities' response to COVID-19 could cause them "to incur significant and extraordinary COVID-19-related expenditures that could have a negative financial impact on the State's regulated utilities."[8] In recognition of this fact, the Board authorized utilities, including Aqua, to create a COVID-19 regulatory asset by deferring the "incremental costs related to COVID-19 beginning on March 9, 2020."[9] The Board subsequently concluded that the period of the COVID-19 regulatory asset deferral period should end on March 15, 2023.[10] In its various COVID-19 Orders, the Board permitted utilities to seek recovery of deferred COVID-19 costs in either a separate proceeding or in a base rate case. In May 2023, Aqua elected to defer recovery until its next base rate case.[11]

9. As explained in detail by Company Witness Peslak, Aqua has a remaining COVID-19 regulatory asset balance of $625,278.[12] The Company proposes to reflect these costs

---

[7] *See March 2020 COVID-19 Order*, at 2-3.
[8] *Id*. at 3.
[9] *Id.* at 4.
[10] *See I/M/O the New Jersey Board of Public Utilities' Response to the COVID-19 Pandemic, Order Authorizing Establishment of a Regulatory Asset for Incremental COVID-19 Related Expenses*, BPU Dkt. No. AO20060471, Order (dated June 7, 2023) ("June 2023 COVID-19 Order") at 3.
[11] *See* Aqua's March 5, 2023 Letter, BPU Dkt. No. AO20060471 ("Aqua is electing to defer recovery of its Covid-19 Arrearage balances to its next base rate case.")
[12] Aqua agreed to reduce its COVID-19 regulatory asset balance by $150,000 as part of a settlement in *In I/M/O the Request of Aqua New Jersey, Inc. and Aqua Water Holdings, Inc. for Approval of Intercompany Restructuring and of an Affiliated Interest Agreement*, BPU Docket No. WO21081067, Order Adopting Stipulation (dated March 23, 2022) (at 5 citing Stipulation ¶ A.8).

in base rates through a two (2) year amortization of the COVID -19 regulatory asset balance.

IV. LSLR and Cost Recovery

10. On July 22, 2021, Governor Murphy signed P.L. 2021, c. 183 into law (the "LSL Replacement Law"). The LSL Replacement Law required New Jersey's water utilities to inventory and replace all lead service lines, including those located on private property. The LSL Replacement Law directed utilities to submit an initial plan for replacing LSLs,[13] and required that utilities include in their next filed base rate case a proposal for the recoupment of certain costs related to the replacement of LSLs.[14]

11. On December 23, 2022, Aqua filed with the Board its initial plan for addressing the replacement of LSLs, as well as the Company's approach to cost recovery of LSL replacement costs.[15] On July 12, 2023, the Board approved Aqua's initial plan and authorized the Company to seek recovery through its DSIC of the "total cost of the replacement of Company-owned LSLs made since May 31, 2022," as well the "total cost of customer notifications," the costs of LSL inventorying that requires excavation to determine LSL composition, and other incremental costs incurred to comply with the LSL Replacement Law.[16] As discussed above and in the Direct Testimony of Company Witness Peslak, Aqua seeks the Board's review of these LSLR costs that are currently included in the DSIC, and a finding that those costs are reasonable and prudent and should be included in rate base.

12. In its initial plan, Aqua also requested, and received, authorization to defer certain customer-owned LSLR costs and seek their recovery in its next filed base rate case.[17] Consistent

---

[13] *N.J.S.A.* 52:12A-44(a).
[14] N.J.S.A. 58:12A-45.
[15] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval to Defer Certain Costs Related to the Replacement of Lead Service Lines and Other Related Approvals*, BPU Docket No. WR22120745, Order Adopting Stipulation (dated July 12, 2023), at 2.
[16] *Id.* at 3.
[17] *Id.* at 2-3.

with this authority, Aqua has deferred the "total cost of the replacement of customer-owned LSLs" and "interest on the project costs of customer-owned LSL replacements," and now seeks the recovery of those deferred costs in this proceeding. As explained by Company Witness Peslak, Aqua has deferred customer-owned LSLR costs and interest of $11,028,422 as of September 30, 2023 and anticipates that it will incur an additional $500,000 in deferred costs during the pendency of this case. To recover these and future customer-owned LSL replacement costs, Aqua has proposed the implementation of an LSL Surcharge to appear as a separate line item on the monthly bills of customers. Aqua also proposes to update the LSL Surcharge on a semi-annual basis to reflect the actual replacement costs and interest the Company has incurred in the prior six-month period. Details regarding the Company's cost recovery proposal are included in the Annual Update to the LSLR Plan[18] attached hereto as Exhibit 3 and discussed in the Direct Testimony of Company Witness Burger.

V. Deferred Accounting for PFAS Treatment Costs

13. As the Board is aware, both the United States Environmental Protection Agency ("EPA") and the New Jersey Department of Environmental Protection ("DEP") have promulgated standards that require water utilities to test for, and treat, PFAS in drinking water supplies. As explained in the Direct Testimony of Company Witness Burger, Aqua currently anticipates that it will be required to install PFAS treatment at 29 individual well locations. Depending on the characteristics of the individual wells, treatment costs can range from $250,000 to $ 10,000,000 per installation. In total, Company Witness Burger estimates Aqua may incur between $60 and $90 million in costs to install mandated treatment by the 2027 EPA deadline. In addition, Aqua will incur incremental, on-going O&M costs to keep the treatment

[18] Please note that the Annual Update to the LSLR Plan meets the Company's obligation pursuant to *N.J.S.A.* 52:12A-44 (a).

facilities in working order and to change out and replace the medium that is used in the treatment facilities. At this time, Aqua has had limited experience with PFAS treatment facility installation and operation; however, that experience has caused the Company to conclude that the costs will be significant—particularly to a company of Aqua's size. Therefore, Aqua requests authority to use deferred accounting to defer the costs of PFAS treatment, including capital investments and ongoing O&M expenses, and to create a regulatory asset for those deferred costs to be recovered in a future base rate case.

VI. Tax Repair Election and Flow-Through Accounting

14. In the Company's last base rate case,[19] Aqua indicated that it was evaluating the Internal Revenue Service's Tax Repair Election and sought authority to use "flow through" accounting, and to amortize any retroactive "catch-up" deductions over ten (10) years should Aqua determine to make the Repair Election. In 2023, Aqua made the Tax Repair Election and therefore has reflected the results of that election in the ratemaking adjustments included in this proceeding. Further details regarding the Repair Election and its impact on the rate proposed in this filing are included in the Direct Testimony of Company Witness Packer.

VII. Tank Painting

15. Aqua's water system includes many water storage tanks which are vital elements of the Company's distribution system in order to maintain water pressure and system supplies. In prior cases, the Company has been required to treat needed tank painting costs as expenses. In this proceeding, with the Board's adoption of the NARUC USOA, Aqua seeks to treat tank painting as a capital cost.

[19] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2018)*, BPU Docket No. WR18121351, Order Adopting Initial Decision/Stipulation (dated May 28, 2019).

VIII. Revised Depreciation Rates

16. In this Petition, the Company has included a Depreciation Study prepared by Company Witness John Spanos of Gannett Fleming Rate Valuation & Consultants, LLC. As Company Witness Spanos explains, it has been several years since Aqua prepared a comprehensive Depreciation Study. As a result, there are multiple instances in which the currently approved depreciation rates do not accurately reflect the Company's experience and so must be revised. Therefore, pursuant to *N.J.A.C.* 14:1-5.7, the Company requests that the depreciation rates set out in the Depreciation Study replace the currently approved depreciation rates. The impact of these proposed changes on the Company's operating revenue deductions and operating income are estimated to be a reduction of $1,464,677. The Company seeks approval of these revised depreciation rates in this proceeding and proposes to implement them upon approval of the revised rates by the Board in this matter.

IX. Revised Tariff

17. Attached as Exhibit 5 is a proposed revised tariff. In this revision, the Company has conducted a review of its tariff to ensure that it is compliant with existing Board regulations. In addition, the Company has made changes to some sections of its tariff to make the language clearer to its customers. Further, the Company has included additional language regarding its efforts to address instances in which customers residing at multiple premises are served by a single, shared service line. Such situations present significant challenges to Aqua and have the potential to negatively impact service to customers. Consequently, Aqua is engaged in an effort to remediate these situations. Finally, the Company has included additional language regarding requirements that must be followed to avoid the potential for cross connection. This language is intended to emphasize the need to comply fully with existing State regulations requiring the use

or installation of cross connection controls and/or backflow prevention devices in order to maintain the integrity of the Company's water system.

X. Public Fire Charges

18. Over its last several rate cases, the Company has taken steps to recognize, and mitigate to the extent possible, increases in charges for public fire protection services. In particular, the Company has attempted to mitigate increases to public fire charges in recognition of the impact of these charges on the municipalities and fire districts the Company serves. In addition, the Company has attempted to address the disparity in public fire charges between municipalities with the overarching goal of moving toward a unified public fire charge. In this proceeding, the Company is not proposing any changes to the All Service Areas public fire protection rate (which will remain at the current $53.65 monthly charge). The Company is proposing to move the Califon Borough, Holland Township – Church St., and Tranquility Springs public fire rates to the existing All Service Areas monthly rate of $53.65, as these service areas' increases from present rates to the unified rate were reasonable for consolidation. The remaining public fire protection rates, which are significantly lower than the All Service Areas rate, were increased to help move closer to a uniform public fire protection rate. As discussed in greater detail in the Direct Testimony of Company Witness Herbert, the Company believes that this proposal will not create undue hardship, will assist Aqua's municipalities and fire districts, and will better align its rates to the customers benefitting from the services they receive.

XI. Notices

19. Petitioner hereby notifies the Board that, for the reasons stated above, it seeks approval to increase its rates for water service, as provided in the proposed tariffs in Exhibit 5 attached hereto, for service rendered on and after February 19, 2024, 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, 2024, 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.* 48:2-21.1, but has not finally determined a just and reasonable tariff schedule prior to that date. Aqua notes that should it determine to implement rates on an interim basis, it will comply fully with the Board's regulations governing the process for implementing provisional rates at *N.J.A.C.* 14:1-5.12(f) through (j).

20. Annexed hereto and made a part hereof as if fully set forth herein are the following exhibits (Exhibit Nos. 16, 18, 19 and 24 are not used in this filing):

Supporting Exhibits:

Exhibit 1 – Certification of Petition.

Exhibit 2 – DSIC Foundational Filing.

Exhibit 3 – LSLR Plan Update.

Exhibit 4 - Present Tariff.

Exhibit 5 - Proposed Tariff, including Rate Schedules and Redline to Present Tariff.

Exhibit 6 - Proposed Form of Notice.

Exhibit 7 - Balance Sheet - Assets.

Exhibit 8 - Balance Sheet - Liabilities.

Exhibit 9 - Income Statement.

Exhibit 10 - Detail of O&M Expenses.

Exhibit 11 - Most Recent Balance Sheet.

Exhibit 12 - Most Recent Income Statement.

Exhibit 13 - Income Statement under Present and Proposed Rates.

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

Exhibit 15 - Rate Increase Calculation.

Exhibit 17 – Operating Revenues: Metered Sales, Summary and Detail.

Exhibit 20 - Summary of Operations and Maintenance Expenses.

Exhibit 21 – Summary of Taxes Other Than Income.

Exhibit 22 - Federal Income Tax Calculation.

Exhibit 23 – Amortization Adjustments.

Exhibit 25 - Interest Expense.

Exhibit 26 - Rate Base Summary and Rate of Return.

Supporting Direct Testimonies:

Petitioner's Testimony No.	Witness Name & Title	Topics Covered
PT-1	Mark McKoy, Interim President	Company and Policy Overview
PT-2	Dawn Peslak, Controller	Accounting Matters
PT-3	William C. Packer, Controller and Vice President of Regulatory Accounting	Accounting Matters
PT-4	Adam Burger, Director of Operations	Utility Plant in Service ("UPIS"); O&M; LSLRs; and PFAS
PT-5	Katherine Cipolla, State Engineer	UPIS and DSIC
PT-6	John Spanos, Gannett Fleming Valuation and Rate Consultants LLC ("Gannett")	Depreciation
PT-7	Greg Herbert, Gannett	Billing Analysis and Rate Design
PT-8	Constance E. Heppenstall, Gannett	Cost of Service
PT-9	Matthew Howard, ScottMadden, Inc.	Rate of Return; Capital Structure

21. This Petition is filed with five months of actual data and seven months of projected data, with adjustments made for known and measurable changes beyond the end of the test year. 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.

22. 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 will be furnished to Petitioner's customers by placing a line on customers' bills including a website address at which customers may access copies of this filing, by prominently posting this filing on the Company's website, and by a notice placed in newspapers published and circulated in Petitioner's service areas 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 counties pursuant to the Board's regulations.

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

Colleen A. Foley, Esq.
Saul Ewing LLP
One Riverfront Plaza, 15th Floor
Newark, New Jersey 07102
Colleen.Foley@saul.com

Courtney L. Schultz, Esq.
Saul Ewing LLP
Centre Square West
1500 Market Street, 37th Floor
Philadelphia, PA 19102
Courtney.Schultz@saul.com

Mark McKoy
Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, New Jersey 08691
MHMcKoy@aquaamerica.com

Dawn M. Peslak
Aqua New Jersey, Inc.
10 Black Forest Road\
Hamilton, New Jersey 08691
DPeslak@aquaamerica.com

William C. Packer
Essential Utilities, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010
WCPackerJr@essential.co

Kimberly A. Joyce, Esq.
Essential Utilities, Inc.
762 West Lancaster Avenue
Bryn Mawr, PA 19010
KAJoyce@essential.co

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, and that such other relief as described herein be granted by the Board.

Respectfully submitted,

By: _____

Courtney L. Schultz
Colleen A. Foley
Saul Ewing LLP
Attorneys for Aqua New Jersey, Inc.

Dated: January 19, 2024

EXHIBIT 1

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE PETITION OF AQUA NEW JERSEY, INC. FOR APPROVAL OF AN INCREASE IN RATES FOR WATER SERVICE, COVID-19 DEFERRED COST RECOVERY, ADJUSTMENT OF CERTAIN DEPRECIATION RATES, AND OTHER TARIFF CHANGES	:	**BPU DKT. NO. WR2401_____**

CERTIFICATION

DAWN M. PESLAK, of full age, being duly sworn, upon her oath deposes and says:

1. I am Controller of Aqua New Jersey, Inc. and in that capacity I am authorized to make this Verification on behalf of Aqua New Jersey, Inc. in this matter.

2. I have reviewed the within Petition and exhibits thereto, and the same are true and correct to the best of my knowledge, information and belief.

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

Dawn M. Peslak

Dawn M. Peslak

Dated: January 18, 2024

EXHIBIT 2

AQUA NEW JERSEY, INC.

DSIC FOUNDATIONAL FILING REPORT

JANUARY 2024

Prepared by:

ENTECH ENGINEERING
www.entecheng.com

Entech Engineering, Inc.
500 North Centre Street | PO Box 389 | Pottsville, PA 17901-1764
(p) 570.628.5655 (f) 570.628.5097

Project No. 4101.004

Dated: January 2024

AQUA NEW JERSEY
DSIC FOUNDATIONAL FILING REPORT
January 2024

Contents

➢ Transmission and Distribution Assessment

Introduction

Aqua owns and operates water systems throughout the State of New Jersey. Three main operating divisions serve approximately 44,000 customers in Warren, Mercer, and Camden counties. Other satellite operating divisions serving customers in Sussex, Ocean, and Gloucester Counties include numerous smaller systems. Aqua distribution systems have approximately 835 miles of pipe, serving more than 61,000 water and wastewater customers.

The characteristics of Aqua's systems vary across the state. The oldest three systems include the original Garden State Water Company, derived primarily through the previous acquisitions of People's Water Company (Phillipsburg), Hamilton Square Water Company, and Blackwood Water Company. These companies, now identified as the Northern, Central, and Southern Divisions, have expanded over the years. Still, these original companies contain the largest share of the distribution assets and the oldest assets. The other systems are much smaller and are scattered throughout the state. The largest of these other systems are the Berkeley Water Company, Lawrenceville Water Company, and Woolwich Water Company. Lawrenceville is typical of an older community with deteriorating infrastructure. The Woolwich Water Company is a newer system that has grown tremendously over the past fifteen years. Some of these acquired systems' water distribution systems are in poor condition and have high water loss. Corrective measures, including water main replacement, are needed to curb the ongoing system losses.

Aqua NJ's ongoing water main renewal program includes replacing aged pipes and cleaning and lining unlined cast iron pipes when appropriate. The renewal program is both reactive and proactive. The reactive renewal includes targeting specific pipes that have experienced performance issues or exhibit customer service problems. For example, pipes with multiple main breaks are targeted for replacement to eliminate service interruptions and mitigate the risk of water quality problems associated with main breaks. Similarly, dirty or red water complaints due to unlined cast iron pipes can typically be addressed by cleaning and lining that pipe, provided the pipe wall is structurally adequate. The renewal program is also proactive by targeting broad categories of pipe that have historically been problematic. An example of proactive renewal at Aqua NJ is targeting undersized water mains and asbestos cement water mains for replacement. Undersized Water mains, typically 2", 4", and 6" water mains, do not meet the current Safe Drinking Water regulations for systems with an average demand greater than 1 MGD. Asbestos Cement (AC) water mains tend to have a higher incidence of main breaks, demonstrating a shorter life expectancy than cast iron or ductile iron. AC pipe failures often require extensive repair efforts and recur over time in adjacent, compromised pipe segments. Targeting this category of pipe for proactive replacement is more cost-effective to our customers and less disruptive to

communities than dealing with emergency response measures associated with main breaks.

The proposed water main renewal program for 2025 and 2026 will be primarily funded through the Distribution System Improvement Charge (DSIC) mechanism. All projects previously approved under the current Foundational Filing may not be complete at the time this proposed Foundational Filing is approved in a Board Order. Consequently, some projects have been carried over from the current Foundational Filing to the proposed Foundational Filing. The DSIC spending would be in addition to a base level of spending required by the existing regulation. On average, Aqua New Jersey has renewed just over one mile of pipe per year before implementing the DSIC program. Aqua has increased its investment in DSIC-related assets to improve infrastructure.

The DSIC program contains a spending limit of a 5% surcharge "ceiling" between rate cases, which creates the regulatory framework needed to increase the rate of capital investment in the water main infrastructure. The regulations require both a base level of spending and the DSIC eligible spending to ensure that water utility companies increase their investment in the DSIC eligible spending categories and not just receive the 5% surcharge on capital each company had already planned to spend. For Aqua New Jersey, the base spending will be approximately $6.1 million/year. The increase in expenditures above the base will include increasing the number of water main replacement projects, water main cleaning and lining projects, service line renewal projects, lead service line replacements, and fire hydrant and valve replacement efforts. Projects may be accelerated or deferred depending on the field conditions and the ability to complete a specific project within the allowed time. Also, projects from new acquisitions may be added to this schedule as needed pursuant to existing regulations. The details of this engineering analysis will identify the rationale for accelerating the particular work needed, demonstrate that the accelerated work is the most cost-effective, identify possible failure mechanisms and identify practices that will extend the life of the distribution system assets.

- **Water Main Background**

Aqua NJ initiated coordination of the water main infrastructure records in 2009. Aqua NJ has created mapping to centrally track the location of all water main and service leaks/breaks across all operating divisions. Each division has an AutoCAD map that contains the location of all the pipes, hydrants, and valves and is updated regularly to show main rehabilitation projects and developer main extension projects. This type of tracking allows Aqua to target the most problematic areas of the system with "needle mapping" so that the most problematic areas are addressed on a priority basis for the most prudent expenditure of DSIC funds.

The following tables describe the Aqua pipe inventory in terms of material, diameter, and age.

Table 1
Breakdown of Water Pipe in Aqua NJ

Area	Length (Miles)	% Of Total
Berkeley Eastern System	57.58	6.90
Blackwood System	188.52	22.58
Hamilton System	241.42	28.92
Lawrenceville System	44.30	5.31
Miscellaneous Systems	79.08	9.47
Phillipsburg System	224.00	26.83
Total	834.90	100

Table 2
Breakdown of Aqua NJ Water Pipe by Material

Material	Phillipsburg System		Hamilton System		Blackwood System		All Others	
	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total
Asbestos Cement	0.00	0.00	12.47	5.17	6.32	3.35	34.60	19.12
Cast Iron	103.23	46.09	25.05	10.38	29.75	15.78	22.72	12.55
Ductile Iron	119.33	53.27	203.29	84.20	147.75	78.37	99.85	55.18
Other (PVC, HDPE, GALV)	1.29	0.58	0.52	0.21	4.24	2.25	23.37	12.92
Unknown	0.14	0.06	0.09	0.04	0.47	0.25	0.41	0.23
Total	224	100	241	100	189	100	181	100

Table 3
Breakdown of Aqua NJ Water Pipe by Diameter

Size	Phillipsburg System		Hamilton System		Blackwood System		All Others	
	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total
<=4	8.91	3.98	10.51	4.35	16.43	8.72	14.68	8.11
6	53.44	23.86	34.48	14.28	30.29	16.07	61.53	34.00
8	67.54	30.15	110.13	45.62	90.44	47.97	73.73	40.74
10	12.10	5.40	2.17	0.90	0.08	0.04	2.71	1.50
12	50.38	22.49	70.93	29.38	49.19	26.09	26.19	14.47
>12	31.63	14.12	13.15	5.45	1.88	1.00	2.12	1.17
Unknown	0.00	0.00	0.05	0.02	0.22	0.12	0.00	0.00
Total	224	100	241	100	189	100	181	100

Table 4
Breakdown of Aqua NJ Water Pipe by Vintage

Year	Phillipsburg System		Hamilton System		Blackwood System		All Others	
	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total	Length (Miles)	% of Total
1885-1899	4.87	2.17	0.00	0.00	0.00	0.00	0.00	0.00
1900-1930	40.37	18.02	1.65	0.68	0.00	0.00	2.35	1.30
1931-1950	9.59	4.28	1.09	0.45	3.45	1.83	3.18	1.76
1951-1980	52.10	23.26	76.50	31.69	76.86	40.77	49.09	27.13
1981-2000	67.37	30.08	82.44	34.15	69.68	36.96	35.30	19.51
>=2001	35.86	16.01	68.40	28.33	33.65	17.85	7.91	4.37
Unknown Year	13.83	6.17	11.35	4.70	4.89	2.59	83.13	45.94
Total	224	100	241	100	189	100	181	100

Table 1 shows that most of the water mains within Aqua NJ, approximately 78% of the 835 miles, are located in the three core Aqua systems of Phillipsburg, Hamilton, and Blackwood. Table 2 breaks down the pipe inventory by material. Of particular interest in the "All Others" systems is the 35 miles of AC pipe. AC pipe has been shown to be more problematic than other types of pipe from this vintage. Typically used during the years preceding and immediately following World War II and up to the late 1950s, this material has proven to be more susceptible to main breaks than other pipes of the same age in New Jersey. Much of this pipe is now over 60 years of age and considered problematic due to the frequency and severity of main breaks. Since the last rate filing, Aqua NJ has replaced

approximately 7,000 LF of AC pipe in its systems. Funding for these much-needed replacement projects was through the DSIC funding mechanism.

Table 3 provides a breakdown of the pipe inventory by size and shows that between 4% and 9% of all the main systems are ≤ 4-inch diameter. Over 8% of the pipe in the "Other" systems is also this small diameter pipe. This small-diameter pipe continues to be problematic because it has a high break frequency (see Table 8) and often results in severe hydraulic restrictions, limiting the potential for fire protection. Again, both 4-inch and 6-inch diameter mains do not meet the minimum standards of NJAC 7:10-11.10 for systems with an average demand of 1.0 MGD or higher.

Table 4 provides a breakdown of pipe age. The installation date for most of the pipes is known and presented in the table. Some assumptions were made regarding the installation years based on pipe material to populate this table.

- **System Analysis**

Unlike treatment plants or other above-ground facilities, it is not practical or technically feasible to accurately assess the condition of buried assets like pipe. However, pipe conditions can be assessed indirectly by examining specific performance measures. Examples of pipe performance measures include water main breaks and leaks, reduced hydraulic capacity (typically due to tuberculation), higher than acceptable non-revenue water levels, and customer water quality complaints.

Several mechanisms cause failures in water distribution system assets. One key mechanism causing failures is the mechanical degradation of the water main infrastructure over time. Mechanical degradation can affect all types of water infrastructure and manifests itself in various forms depending on the component. For instance, valves may become dysfunctional depending on the traffic loading and underlain soil conditions. Hydrants will fail, become difficult to operate, and/or leak over time requiring repairs and/or replacement. Service laterals will develop leaks at the corporation and/or the curb stop due to traffic loading and soil conditions and require replacement. Water mains will also experience mechanical degradation based on the soil bedding techniques used, the corrosively of the soil, quality of the construction techniques, type of construction joints, etc. This does not necessarily mean that the oldest water mains must be rehabilitated first. Some older assets that were originally constructed soundly and sized properly are still performing well today. These cases, however, are the exception to the norm.

Further analysis on a case-by-case basis is needed on all the indirect measures to properly assess when a water main should be rehabilitated or replaced. A scoring matrix has been created by Aqua NJ, utilizing an AWWA framework, on an approximate scale of 0-25 to prioritize water main rehabilitation projects. The indirect measures are only one set of reasons why water main infrastructure needs

to be rehabilitated. Other reasons such as inadequate original hydraulic capacity, inadequate fire protection coverage, and non-conformance with NJDEP Safe Drinking Water sizing standards are accepted principles for upgrading the water main infrastructure.

Aqua NJ maintains a detailed database of main breaks for the main water distribution systems. This database includes the available records of water main breaks, some dating back to the 1990s. The data provides a valuable resource for analyzing main break trends. In acquired systems, Aqua has started tracking water main breaks to ascertain the needs of those systems since the acquisition date.

Table 5 shows break occurrences in the main Aqua NJ systems by pipe material. The table compares the percentage of total breaks represented by each material and the percentage of the total length of pipe represented by each material. If all pipe materials were performing equally well, these percentages would be approximately equal. For example, if 20% of the pipe length were "Material A," we would expect 20% of the main breaks to occur on "Material A". When these percentages differ, it indicates that, in general, pipes of that material are either performing well (% of breaks < % of length) or poorly (% of breaks > % of length).

Table 5 shows that cast iron pipes in the Phillipsburg, Hamilton and Blackwood systems ware particularly problematic. Furthermore, AC pipe in the Hamilton and Blackwood systems demonstrate an abnormally high break frequency for their percentage of length. In the Berkely system, ductile iron pipe in the vicinity of an area of the distribution system known to experience pressure surges and water hammer due to sudden demands imposed by certain facilities is the cause for the higher-than-expected break frequency. Aqua NJ is in the process of addressing those issues.

Table 5
Main Breaks in Major Aqua NJ Water Systems by Pipe Material

Material	Phillipsburg System		Hamilton System		Blackwood System		Berkeley System	
	% of Breaks	% of Length	% of Breaks	% of Length	% of Breaks	% of Length	% of Breaks	% of Length
Asbestos Cement	0.00	0.00	10.71	5.17	11.39	3.35	55.56	59.53
Cast Iron	74.14	46.09	17.86	10.38	49.37	15.78	0.00	0.00
Ductile Iron	22.41	53.27	71.43	84.20	35.44	78.37	27.78	12.13
Other (PVC, HDPE, GALV)	1.72	0.58	0.00	0.21	3.80	2.25	16.67	27.8
Unknown	1.72	0.06	0.00	0.04	0.00	0.25	0.00	0.54
Total	100	100	100	100	100	100	100	100

Although Table 5 focuses on the pipe material, pipe age is also generally viewed as a contributing factor in how often a pipe fails, which is reflected in the data. Cast iron pipe and AC pipe are the two oldest types of pipes in the Aqua NJ systems. As previously mentioned, Table 5 clearly shows that some cast iron pipes and AC pipes are performing poorly in terms of break frequency. AC pipe represents about 60% of the total length of pipe in the Berkeley system and accounts for 56% of the main breaks in that system. Breaks on AC pipes tend to be more serious when they occur, resulting in more prolonged water outages and requiring more extensive repairs to community roads or immediate emergency replacement.

Cast iron pipes also appear to be failing at a higher rate than their length percentage would indicate. This is not unexpected since the cast iron pipe represents some of the oldest pipes in the system. Most notably in the Phillipsburg System, cast iron pipes amount to roughly 46% of the total length of all pipe in the system but yet account for 74% of the system's main breaks. The same pattern is apparent in the Blackwood System where 16% of pipe is cast iron and almost 50% of all main breaks are cast iron.

Cast iron pipe also warrants a more detailed analysis due to changes in manufacturing processes and joint types over the years. The oldest cast iron pipes were produced using a "pit cast" method, where molten iron was poured into vertical molds suspended in sandpits. This resulted in a pipe with non-uniform wall thicknesses. To compensate for the variations in thickness, the walls were thicker (0.75 inches or more depending on diameter and pressure rating). In late 1920, a new casting process was introduced using centrifugally spun molds. This allowed for thinner and more uniform pipe walls. It should be noted that the "thin" wall is somewhat of a misnomer, given that the pipe walls were still approximately 0.5 inches or more in thickness.

A more detailed analysis of cast iron main breaks was conducted for the Phillipsburg system break data using breaks occurring between 1999 and 2015. The data was segregated into four categories based on the installation year of the pipe. The categories represented the different pit and spun cast pipe combinations with various joint types. The results are presented in Figure 1 below. Figure 1 presents the percentage of all cast iron pipes represented by each category and the percentage of all cast iron breaks represented by each category. As noted previously, if all the material/joint combinations were performing equally, these percentages would be the same. However, this is not the case, indicating that certain categories of cast iron pipes are performing better than others. For example, approximately 48% of the cast iron pipe in Phillipsburg is pit cast, yet only 28% of the cast iron breaks are from this category. This indicates that this category of cast iron pipe, although the oldest category, is performing reasonably well. This can be attributed to the thicker pipe walls, which provide additional strength to the pipe. On the other hand, spun cast iron pipe represents nearly 72% of the cast iron main breaks even though it only accounts for 52% of the evaluated

cast iron pipe. This is believed to be due to the "new" spun cast manufactured pipe combined with the continued use of rigid joints during this period.

Figure 1: Phillipsburg System Main Breaks

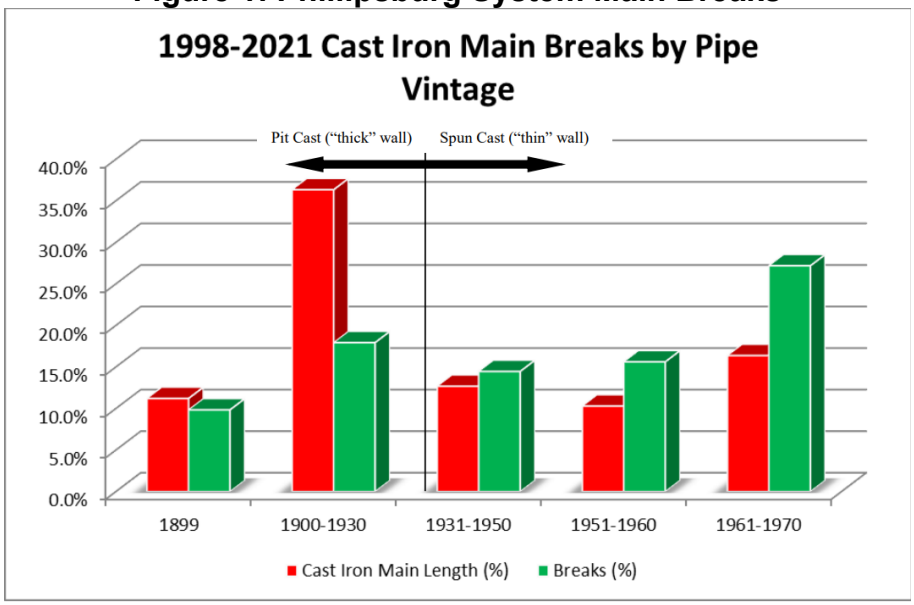


Table 6 presents data comparing breaks and pipe diameter. The table shows that smaller diameter pipes tend to break more often than larger diameter pipes. The table shows that pipes 8-inch in diameter and smaller account for most main breaks in the Aqua NJ systems listed. 72% of the main breaks within the Berkeley System were experienced on the 6-inch pipe. Also, note that although the 8-inch pipe in Blackwood also has experienced the highest percentage of mains breaks, it constitutes the majority of the pipe within that distribution system.

Table 6
Main Breaks in Major Aqua NJ Water Systems by Pipe Diameter

Diameter	Phillipsburg System		Hamilton System		Blackwood System		Berkeley System	
	% of Breaks	% of Length	% of Breaks	% of Length	% of Breaks	% of Length	% of Breaks	% of Length
<=4	1.72	3.98	5.36	4.35	14.92	8.72	0.00	0.00
6	43.10	23.86	37.50	14.28	22.78	16.07	72.22	61.74
8	18.97	30.15	41.07	45.62	54.43	47.97	22.22	24.61
10	0.00	5.40	0.00	0.90	0.00	0.04	0.00	2.74
12	18.97	22.49	16.07	29.38	7.59	26.09	5.56	10.89
>12	17.24	14.12	0.00	5.45	0.00	1.00	0.00	0.00
Unknown	0.00	0.00	0.00	0.02	0.00	0.12	0.00	0.00
Total	100	100	100	100	100	100	100	100

Leakage from pipes is a measure that can be used to ascertain the condition of a distribution system generally and, when quantified, is one component of the calculation of unaccounted-for water (UAW). In a small system with low water demand, even a single small leak that goes undetected can result in a high UAW percentage. Distribution system infrastructure, including services, valves, and mains in systems with excessive UAW, warrants further investigation as candidates for replacement. In 2009, the Delaware River Basin Commission (DRBC) amended its Comprehensive Plan and Water Code to implement an updated water audit approach to identify and control water loss in the Basin. This approach is consistent with the International Water Association (IWA) and American Water Works Association (AWWA) Water Audit Methodology, considered a best management practice in water loss control. NJDEP is expected to adopt the same practice in the future. Aqua NJ completes water audits on its systems annually.

NJDEP regulation NJAC 7:19-6.4, as part of its water conservation policy, requires systems to maintain unaccounted-for water below 15%. While most of Aqua's systems meet the NJDEP's requirements, the DSIC program will provide the incentive to continue to reduce the unaccounted-for water in the smaller systems acquired by Aqua and help address the long-standing issues in Phillipsburg. The high unaccounted-for water in Phillipsburg has been isolated to the low side service gradient covering an area of 40 miles. This specific 40-mile stretch is an area that continues to be a focus of Aqua NJ's leak detection efforts, and main replacement projects have been targeted in this area. This section of the distribution system contains the oldest water main and the largest collection of small-diameter water mains.

The hydraulic capacity of the pipe is typically evaluated using fire hydrant flow tests. Computer hydraulic models of the system are also utilized to evaluate hydraulic capacity issues. These tools help Aqua NJ identify candidate water mains with reduced hydraulic carrying capacity for replacement. Small diameter pipe serving areas with insufficient flow, low pressure, or fire hydrants is another priority for water main rehabilitation.

Finally, the additional data requested during a previous foundational filing submission is presented below. The statistics of breaks/100 miles/year for the main operating division can be found in Tables 7, 8, and 9 below for material, size, and vintage. Table 7 shows that ductile iron pipe continues to perform in this statistical category compared to other pipe materials. Note that the breaks/100 miles/year statistic is skewed for the ductile iron pipe within the pressure surge area of the Berkely system previously mentioned in this report. The length of the newer ductile iron pipe in each system is driving down the break rate in each division. That does not mean the areas of concern should not be addressed, such as cast iron pipe installed after 1931 in Phillipsburg, Hamilton, and Blackwood.

Furthermore, other areas of concern, such as AC pipes in Blackwood and Hamilton, have elevated break rates. Some areas identified in a previous foundational filing can be curtailed given the lower break metric such as the AC pipe in the Blackwood Division, which presented a break rate of 15.82 breaks/100 miles/year. Similarly, cast iron pipe also shows high break rates per 100 miles/year. Much of this AC and cast iron pipe, especially 4” and 6”, which have the highest break frequencies (See Table 7), will be considered in the candidate pool for replacement. This is not only for structural integrity reasons but, in the case of smaller diameter pipe, rather for NJAC size requirements and availability of fire flows.

Table 7
Main Breaks in Major Aqua NJ Water Systems by Material

Material	Phillipsburg System (2015 - 2023)			Hamilton System (2016 - 2023)			Blackwood System (2015 - 2023)			Berkeley System (2015 - 2023)		
	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr
Asbestos Cement	0.00	0	0.00	12.47	6	6.01	6.32	9	15.82	34.28	10	3.24
Cast Iron	103.23	43	4.63	25.05	10	4.99	29.75	39	14.57	0.00	0	0.00
Ductile Iron	119.33	13	1.21	203.29	40	2.46	147.75	28	2.11	6.98	5	7.96
Other (PVC, HDPE, GALV)	1.29	1	8.61	0.52	0	0.00	4.24	3	7.86	16.00	3	2.08
Unknown	0.14	1	79.37	0.09	0	0.00	0.47	0	0.00	0.31	0	0.00
Total	223.99	58	2.88	241.42	56	2.90	188.53	79	4.66	57.57	18	3.47

Table 8
Main Breaks in Major Aqua NJ Water Systems by Diameter

Diameter	Phillipsburg System (2015 - 2023)			Hamilton System (2016 - 2023)			Blackwood System (2015 - 2023)			Berkeley System (2015 - 2023)		
	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr
<=4	8.91	1	1.25	10.51	3	3.57	16.43	12	8.12	0.00	0	0.00
6	53.44	25	5.20	34.48	21	7.61	30.29	18	6.60	35.55	13	4.06
8	67.54	11	1.81	110.13	23	2.61	90.44	43	5.28	14.17	4	3.14
10	12.10	0	0.00	2.17	0	0.00	0.08	0	0.00	1.58	0	0.00
12	50.38	11	2.43	70.93	9	1.59	49.19	6	1.36	6.27	1	1.77
>12	31.63	10	3.51	13.15	0	0.00	1.88	0	0.00	0.00	0	0.00
Unknown	0.00	0	0.00	0.05	0	0.00	0.22	0	0.00	0.00	0	0.00
Total	224.00	58	2.88	241.42	56	2.90	188.53	79	4.66	57.57	18	3.47

Table 9
Main Breaks in Major Aqua NJ Water Systems by Vintage

Year	Phillipsburg System (2015 - 2023)			Hamilton System (2016 - 2023)			Blackwood System (2015 - 2023)			Berkeley System (2015 - 2023)		
	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr	Length (Miles)	Breaks	Brks/100 Mi/Yr
1885-1899	4.87	2	4.56	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
1900-1930	40.37	7	1.93	1.65	0	0.00	0.00	0	0.00	0.00	0	0.00
1931-1950	9.59	3	3.48	1.09	0	0.00	3.45	4	12.88	0.00	0	0.00
1951-1980	52.10	25	5.33	76.5	36	5.88	76.86	56	8.10	35.42	9	2.82
1981-2000	67.37	4	0.66	82.44	13	1.97	69.68	7	1.12	15.52	3	2.15
>=2001	35.86	5	1.55	68.40	4	0.73	33.65	7	2.31	5.31	4	8.37
Unknown Year	13.83	12	9.64	11.35	3	3.30	4.89	5	11.36	1.33	2	16.71
Total	223.99	58	2.88	241.43	56	2.90	188.53	79	5.99	57.58	18	3.47

- **System Improvement Plan**

  Recognizing the need for continual renewal of the distribution system to maintain quality service to customers, Aqua has rehabilitated the water main, services, hydrants, and valves in its systems for many years. Between 2005 and 2010, Aqua replaced approximately 8 miles of pipe in its systems, equating to approximately a 400-year renewal rate (or a 0.25% renewal rate). This rate is longer than expected for any pipe materials, notwithstanding the specific issues outlined above. The creation of the DSIC rule has allowed the company to accelerate the replacement of certain assets based on macro and micro information. Prior to the implementation of the DSIC program between 2005 and 2010, Aqua maintained a 1.6 mile–per-year average replacements pace. During the first year of the DSIC, Aqua rehabilitated 8 miles of water main, or 1.2% of the overall system. Since the 2022 DSIC filing, Aqua has rehabilitated 6.5 miles of water main.

  Aqua has prioritized water main rehabilitation "candidates" at both a macro and micro level. At the macro level, general categories of pipe (for example, thin-walled cast iron from 1936-1960 and AC and galvanized pipe of all vintages) and geographic areas within a system have been identified as areas of concern. Any pipe meeting this criterion is considered a potential candidate for rehabilitation. The macro examination also eliminates certain pipes from consideration for rehabilitation. For example, ductile iron pipe less than 30 years old is typically unlikely to need rehabilitation.

  Micro-level main replacement planning addresses the order in which specific pipes within the broader categories are replaced. This requires considering existing performance characteristics of the pipe, such as main break history, customer complaints, size, criticality, and other performance criteria. Needle maps have been developed for all major systems to evaluate trends and identify unique failure mechanisms causing main breaks or other operational issues. All listed water mains have been scored based on the included matrix to properly prioritize the work and create minimum standards for mains needing rehabilitation. The minimum score for a water main that will be considered for replacement is a 7 out of 20+. During the first DSIC interval, the lowest score for a project was a 7, and the highest score was a 24. Since its original inception, the Aqua NJ scoring matrix was improved to include more weight on water quality projects that would further enhance and demonstrate that cleaning and lining projects are an important component of the DSIC program as it extends the useful life of a water main in specific circumstances.

- **Macro-Level Planning**

It is helpful to define the pool of potential candidate pipes for rehabilitation at the macro level. From the previous discussion, there are two broad categories of pipe that Aqua is targeting for rehabilitation based on main break trends. These are the problematic areas of AC pipe and cast iron pipe installed between 1931 and 1950. The total length of AC pipe in all systems equals 53.39 miles (see Table 2). Cast Iron pipe installed between 1931 and 1950 is estimated to total 17.3 miles of main. By 2025, the "youngest" of these cast iron pipes will be approximately 75 years old, *i.e.*, installed in 1950, while the oldest thin-walled cast iron will be around 95 years old. AC pipe was typically installed between 1940 and 1980 and continues to show a significantly higher break rate than other materials even if those pipes are older. Berkeley AC pipe breaks account for 56% of all system breaks, with 44% of breaks occurring on other pipe materials (see Table 7). These potential candidates have demonstrated that the renewal rate for these classes should be shorter than one hundred years based on their ability to stand the test of time versus older materials and new ductile iron materials.

Another candidate pool is all pipes installed before 1900, regardless of material. This category has been reduced in the candidate pool to reflect the performance of this category over time. The Phillipsburg System has approximately 40 miles of pipe installed prior to 1930 but only 5 miles were installed before 1900 (see Table 4). Mains in these vintages will remain in the candidate pool for replacement. Much of this pipe is already over 100 years old, and over the next 15 years, the remainder will reach the 100-year age. Any pipe reaching a 100-year service life at a macro level should be considered a candidate for rehabilitation.

The last broad category of pipes to be considered are the smaller pipes (≤ 6-inch). As shown in Table 8, these pipes are experiencing some elevation in break rate and can contribute to hydraulic issues, *i.e.*, low pressure or low flow. Some of this pipe was already accounted for in the Pre-1900 and AC pipe categories, so they are not included in the total pipe in Table 10. Each specific pipe identified will be shown in the micro section and the appendices.

Table 10 summarizes these broad categories of pipes for rehabilitation or replacement. Together this totals approximately 103 miles of pipe. The additional ≤ 6-inch not contained in other categories is listed separately to demonstrate the need to still address these sizes of pipe for structural and/or hydraulic reasons. Over the four major systems (Phillipsburg, Hamilton, Blackwood, and Berkeley), there are roughly 230 miles of pipe ≤ 6-inch (see Table 10). This macro approach yields general categories of pipes that are candidates for rehabilitation but doesn't prioritize specific pipes within those categories. At the same time, there may be legitimate reasons for <u>not</u> rehabilitating individual pipes in one of these categories. For example, a 4-inch PVC pipe installed in the 1980s serving a small residential cul-de-sac with no fire hydrants may be perfectly acceptable. The selection of specific pipes for replacement is addressed later in this report.

Table 10
Aqua NJ Candidate Pool of Water Pipe for Replacement

Pipe Category	Miles of Pipe			
	Phillipsburg System	**Hamilton System**	**Blackwood System**	**Berkeley System**
Asbestos Cement Pipe	0.00	12.47	6.32	34.60
Cast Iron 1931-1950	9.59	2	4	0
1885-1899 pipe	4.87	0.00	0.00	0.00
Other (Galvanized, Plastics)	1.29	0.52	4.24	23.37
Total	15.75	14.99	14.56	57.97
≤ 6-inch pipe (partially included in above)	62.35	44.99	46.72	76.21

This macro approach suggests that Aqua NJ has a near-term need to replace approximately 103 miles of pipe and up to 230 miles of smaller diameter mains that are potentially undersized.

As noted earlier, Aqua had rehabilitated 8 miles of the pipe over the five years before implementing DSIC. During the past DSIC filing period, 6.5 miles were replaced each year, increasing the replacement rate considerably, showing increased investment. Virtually all of the mains in the 103-mile "Candidate Pool" shown in Table 10 will require rehabilitation over the next 20 years. At the original 1.6 mile–per-year average pace that Aqua replaced pipe between 2005 and 2010, it would take over 60 years to replace just the 103 miles of pipe, or 12% of the system's pipe, identified as candidates for near term replacement and, over this time, the other 88% of Aqua's pipe inventory will continue to age adding to the "Candidate Pool". However, the DSIC program allows this rate to increase significantly, thereby showing a path forward to address these areas of concern at a rate of 6.5 miles per year. Assuming the DSIC program continues, the entire "Candidate Pool" could be addressed over the next sixteen years. The following Foundational Filing template includes approximately 39 miles of water main that will be addressed from the candidate pool. This represents that 38% of the candidates will be addressed over the next six years of the DSIC program, assuming the program continues.

- **Micro-Level Planning**

Increased weight has been given to low-pressure conditions and customer water quality complaints. The weight of these categories is worth 10 possible points on Aqua NJ's water main scoring matrix. Aqua has developed and is applying detailed mapping tools to help identify and prioritize specific pipes for replacement. Material, diameter, age, the criticality of the main, hydrant coverage, water quality complaints, and main break history are used to assign scores to pipe segments

based on the pipe's characteristics. Generally speaking, the higher the score, the greater the need for rehabilitation. The individual scores are developed from the needle mapping and are created for all the main breaks, discolored water complaints, and inventory information. This information targets the streets/areas in the most need of rehabilitation. The complete listing of all projects for the Aqua DSIC program is contained in the attached document. The needle mapping for the major company divisions is also attached to this Foundation Filing. The major categories conform to the macro-level planning outlined above and are further subdivided into Rehabilitation Projects, Hydraulic Improvement Projects, Service/Hydrant/Valve Renewal Programs, and Un-reimbursed Relocations. The issue of UAW is primarily captured in the hydraulic improvement sections below. The attached listing of projects outlines the specific nature of the rehabilitation project, including the information on the existing main, the proposed main and the estimated cost for the individual project. For all types of projects, Aqua performs several critical functions to extend the life of the water utility's distribution network assets. At many of Aqua's well stations, the corrosion inhibitor is added to provide a film on the water main to protect the pipe from internal corrosion. Flushing is performed on a semiannual basis in all systems to minimize tuberculation accumulation. All systems are surveyed for leaks are various intervals depending on the amount of non-revenue water in the system. The water main rehabilitation scoring system ensures that the water mains in the most need of capital investment are addressed first.

- **Rehabilitation Projects**

Water mains are identified as rehabilitation type projects when the water main has a history of leakage or breaks and/or history of water quality complaints, the mains were constructed with obsolete material, poor construction standards were in place at the time the mains were constructed, or in many cases, all of these factors combined. Historical main break records are reviewed to identify categories of mains with higher break rates. The elevated break rates compared to length are indicators of the aging infrastructure issue that is well recognized and widely accepted across the utility industry. Higher break rates per mile also indicate pockets of issues that will lead to higher rates in the next decade. Needle mapping surveys identify main break clusters and areas to be analyzed for either replacement or rehabilitation. The appendix contain detailed lists of all the projects that fit each category; a scoring matrix that outlines the need for each project is individually listed in the appendix. In certain instances, main rehabilitation projects are spread out, so that only certain township areas are affected at any one construction season to lessen community impacts. In addition, in some systems, even one main break can cause significant disruption to the system if the wells are sized only to handle the system demands. A criticality component has been incorporated into the scoring matrix to address this issue. Aqua has acquired systems that experienced periods of no water pressure because one main break usually occurred due to poor craftsmanship at the time of construction. These

systems need to be upgraded to provide a safe and reliable service to those customers.

Several mechanisms have been found through system operating experience as causing the failures in the targeted areas of the distribution system. The mechanisms typically found are poor construction practices at the time of original installation, such as improper bedding, poor joint connection, and mismatched and random materials. Also, inferior materials utilized at the time of construction are a failure mechanism. Thin-walled cast iron has been shown to have a shorter service life than a thick-walled pipe but is less likely to break compared to the specific vintages outlined in Figure 2. AC pipe, in most instances, will have a shorter service life than typically expected with other materials. Aqua intends to budget $11,603,518.60, $10,074,444.48, and $7,455,555.60 for the years 2024, 2025 and 2026, respectively, for the replacement of service lines. This effort includes the removal and replacement of service lines which have been identified as being constructed of lead. The work under this effort includes the removal and replacement of the identified services lines from the existing water main to the customer's water meter including a new corporation stop, curb stop, copper water service and all work required for the installation, including but not limited to excavation and backfill and restoration. Based on an estimated cost of $8,000 to remove and replace a water service completely, Aqua anticipates removing and replacing up to 1,450 water services in the first year, 1,259 water services in the second year, and 931 water services in the third year. Note, however, that any costs spent on replacement of the customer side for any lead service lines will not be recovered through the DSIC (it will be recovered in a separate surcharge mechanism), and such work is not included in the above estimates.

- **Hydraulic Improvements**

Aqua NJ's system hydraulic model identifies mains requiring improvements within the following areas: Transmission, fire flow, undersized mains, and criticality/redundancy. Improvements can involve installing a new main, replacing the existing main, and/or cleaning/lining. These projects aim to remedy existing deficiencies, and they all have a relatively high priority to complete. Projects to improve fire flow, water quality, and transmission problems are generally given higher priority and scheduled earliest. Hydraulic Bottlenecks are used as an analysis criterion when hydraulic modeling demonstrates that the fire flow conditions are restrained due to high-pressure drop sections of the distribution system in accordance with NJAC 7:10-11.10. The undersized pipe is an analysis criterion when water mains do not meet the criteria set forth in NJAC 7:10-11.10. The timing of renewal projects may coincide with a municipal paving project. Appendix 1 contains a detailed list of all projects that fit this category and a scoring matrix that outlines the need for each project. The scoring matrix comprises age, the main size, break history, water quality complaints, dead ends, inferior pipe materials, and divergence from the acceptable distribution main size regulations. These criteria provide a solid basis for the water main selection process. By

accelerating these hydraulic improvements, customers will benefit from higher pressure and higher fire flow availability, sustaining the water distribution system. The Insurance Services Office (ISO) rating score for the water supply section typically can also be positively affected when distribution system assets are upgraded. The specific hydraulic improvements proposed are the most cost-effective solution because the program targets specific regions of the water system in which hydraulic improvements are needed. Over the DSIC program life, entire neighborhoods in Phillipsburg, Hamilton, Lawrenceville, and Gloucester Township will experience noticeable increases in flow and fire protection. To increase the amount of flow, the water main must be replaced in all cases to increase cross-sectional surface area. In reference to the statistics above, many of the smaller water mains, 4" and 6" are more susceptible to leakage and failure. By replacing these sections due to hydraulic limitations, two issues are addressed simultaneously.

- **Cleaning and Lining Projects**

The decision to select a lining is based on the protocol outlined in AWWA Manual M-28. Internal pipe corrosion, known as tuberculation, reduces hydraulic capacity and can produce red water complaints in metallic water mains. Mains in this structurally sound category have no graphitization or external corrosion evidence, have specific service issues and are candidates for nonstructural cement mortar linings. Mains with structural issues are candidates for fully structural lining or replacement per the matrix presented in AWWA Manual M-28. The needle mapping documents the locations of all discolored water complaints and taste and odor complaints for the past three years. Per the recommendations of a previous foundational filing, the scoring matrix has been re-evaluated, and cleaning lining projects are now presented in the Appendix of this report.

- **Service/Hydrant/Valve Renewals**

The renewal of services, hydrants, and valves are integral to sustainable infrastructure. Aqua replaces all these components on a routine basis to maintain safe and reliable service. Service replacement also reduces leakage and prevents future breaks. Service connections of lead and galvanized are obsolete and required to be replaced as per EPA regulations. Aqua NJ intends to focus on replacing galvanized service lines to eliminate lead fittings sometimes found on galvanized service lines. Hydrants support community fire protection and need to be replaced when deteriorated or obsolete. Proper fire protection saves lives, reduces property damage, and, with increased ISO ratings, lowers insurance rates. Aqua intends to budget $161,823.00, $176,500.00, and $162,500.00 for 2024, 2025, and 2026, respectively, for the replacement of fire hydrants. This effort includes the removal and replacement of fire hydrants which have been damaged or exceeded their useful life, or the addition of fire hydrants identified by Aqua or government entities in need of installation, including but not limited to excavation, backfill and restoration. Based on an estimated cost of $10,000 to remove and

replace a fire hydrant completely, Aqua anticipates removing and replacing roughly 16 fire hydrants per year.

Valves are critical components of distribution systems and need to be replaced when broken. Valves are used to isolate mains when repairs are needed. If valves are not operational or do not seal, shutdowns take longer to execute, and a larger customer area is impacted.

As part of the DSIC program, regularly scheduled leak surveys for all divisions will continue to identify service renewal areas better. The highest focus areas will come from known problem areas identified on the needle mapping. Aqua intends to budget $400,000 for each of the years 2024, 2025 and 2026 for the replacement of various valves. This effort includes the removal and replacement of valves which Aqua has identified as inoperable, damaged, or having exceeded their useful life. The work under this effort includes a new valve, valve box and all work required for the installation, including cost of $10,000 to remove and replace a valve completely, Aqua anticipates removing and replacing 40 valves per year.

- **Un-reimbursed Utility Relocations**

Counties and Townships often require water mains to be relocated at the cost of the utility to accommodate community improvement projects such as road construction and storm and sanitary sewer improvement projects. Notification for this work varies widely and is often relayed to the utility after funding decisions on water main projects have already been reached. Because this work cannot be postponed, the priority and timing will often result in the shifting of other priorities. Rehabilitations of water utility infrastructure in coordination with these activities of others are beneficial to the community and general public by minimizing multiple disruptions of the same area. The foundation filing template captures all known water main relocation projects. It is estimated that $300,000 of unreimbursed utility relocation work will occur in the filing period (2024-2026). This encompasses four projects with an average cost of $75,000 each.

- **Conclusions**

Aqua will maximize, to the extent possible, the amount of water main renewal possible using the DSIC mechanism. However, a pool of 103 miles of pipe (or 12% of the system) is in near-term need of renewal. This pool targets:

- AC pipe due to its high main break frequency and severe customer service disruptions and peripheral property damage when failures occur,
- Cast iron pipe installed between 1931 and 1950 due to its greater frequency of breaks than other cast iron pipe in the system,
- Pipes of all materials installed before 1900 that are over 100 years old and at the end of their expected service life,

- Alternate pipe materials, such as galvanized steel and plastics that are of smaller diameter and have a higher break frequency, may have lead service fittings and sources of water quality and low-pressure complaints.
- Pipe in small, troubled systems where wholesale replacement of pipe may be the best remedy to excessive lost water due to leaks and service outages,
- Cleaning and Lining projects that meet the necessary criteria, address water quality complaints, and extend the useful life of the infrastructure,
- Smaller mains, especially in the larger systems, to increase system pressure and fire flows and satisfy state sizing regulations.

At the pre-DSIC historical average pace of 1.6 miles per year, it would take about 65 years to replace this targeted 103 miles of pipe and 144 years to replace the potentially undersized pipe. At average historic replacement costs, the DSIC should allow Aqua NJ to replace pipe at a pace nearly four times the pre-DSIC average pace and achieve the level of system renewal necessary to address this current backlog in 20 years. A DSIC will also help offset the inordinately high-cost escalation for necessary materials and increased costs for municipal permitting, which have had, and will continue to have, a direct impact on Aqua NJ's main replacement program.

Figure 2 below illustrates the makeup of Aqua's distribution system in 2009 before the DSIC program. Figure 3 below shows the current makeup of Aqua's distribution after eight years of rehabilitation under the DSIC program. The requested main replacement program will allow Aqua to continue to address the 103-mile backlog of distribution system water mains requiring near-term replacement on a timely basis. When the DSIC period work is completed over the next two (2) years, the makeup of Aqua's distribution system will be as shown in Figure 4. Over 69% of the mains would be ductile iron pipes. The problematic AC pipe would be reduced to approximately 6% in the system, and cast iron water mains would be reduced to under 22%. Also, the Other (galvanized and plastic) mains would be reduced to about 3% of all pipe.

The benefits of the DSIC program are apparent from the tables below. Approving the proposed Foundation Filing would further improve these values and allow continued focus on the other areas of need to decrease service interruptions and improve water quality and fire flows.

Figure 2: Prior to the DSIC Program, Miles of Main (by Material)

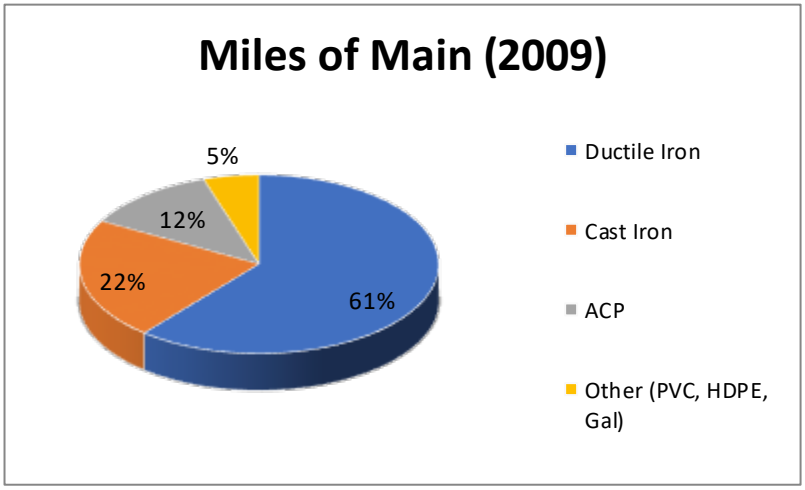


Figure 3: Current Miles of Main (by Material)

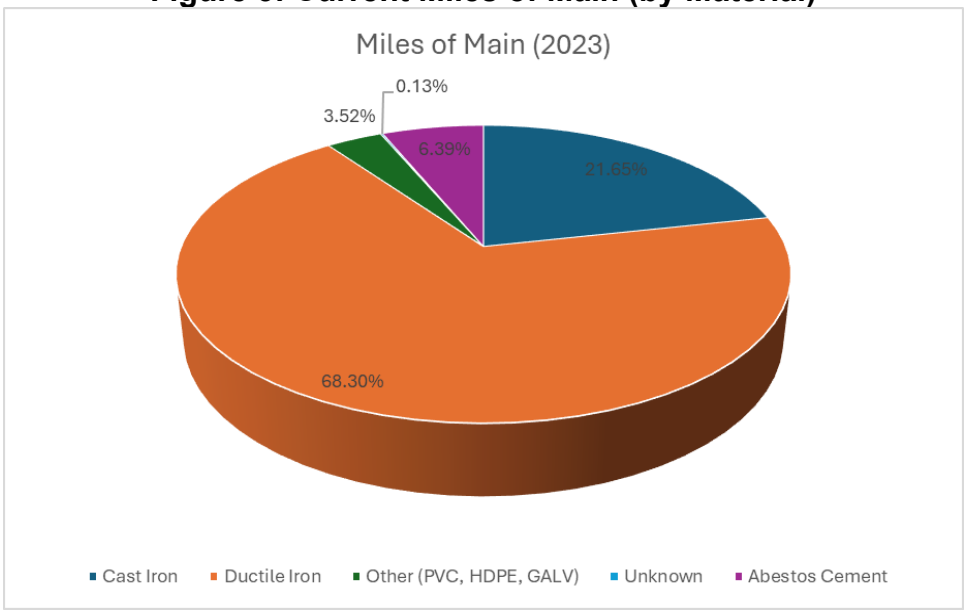
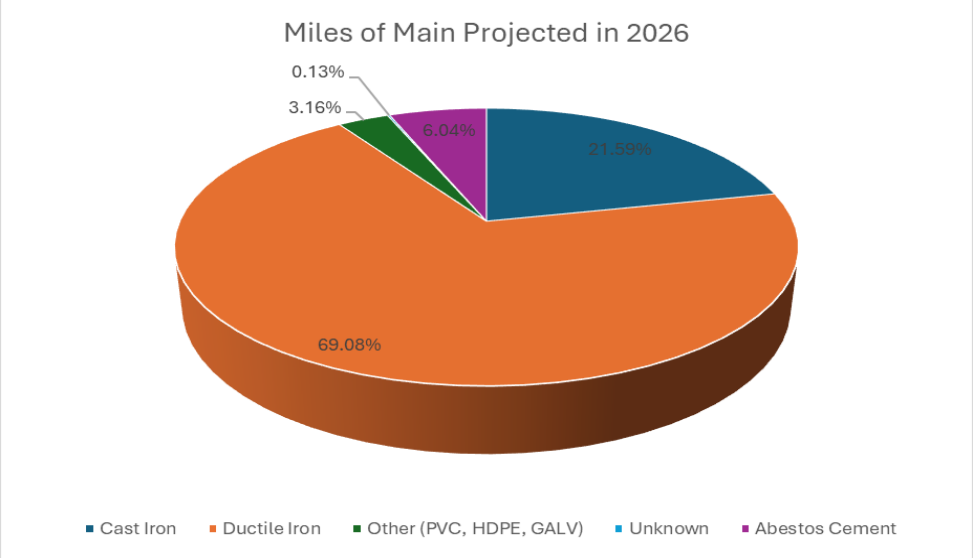


Figure 4: Projected Miles of Main in 2026 (by Material)



Division	WO Number	Streets	Location Parameters	Type	Design Year	Construction Year Planned	System	Township	Pressure Zone	Total Length per Zone	Length (LF)	Original Size	Original Material	Age/Era	Proposed Size	Proposed Material	Performance Criteria	Est Cost
Eastern	25040070362	Red Bank	Moorage to Veeder	Replacement		2023	Berkeley	Berkeley			1650	6	ACP	1975	8	CLDIP	Undersized	$412,500
Eastern		Bayville Ave	East of Millcreek	Replacement	2022-2023	2024	Berkeley	Berkeley			2700	6	ACP	1955	8	CLDIP	Undersized	$675,000
Eastern		Belmont	Red Bank to Sherman	Replacement		2025	Berkeley	Berkeley			1200	6	ACP	1965	8	CLDIP	Undersized	$300,000
Eastern		Edison	Red Bank to Sherman	Replacement		2024	Berkeley	Berkeley			1200	6	ACP	1975	8	CLDIP	Undersized	$300,000
Eastern		Mill Creek Road	Route 9 to Chelsea	Replacement		2026	Berkeley	Berkeley			5100	8	ACP	1958	12	CLDIP	Undersized	$1,275,000
Eastern		Point Pleasant Ave	Berkeley Dr to Mill Creek Rd	Replacement		2023	Berkeley	Berkeley			1,730	6	ACP		6	CLDIP		
Eastern		Scott Drive	Full length	Replacement		2023	Berkeley	Berkeley			2,350	8	ACP		8	CLDIP		
Eastern		Shore Boulvelard	Mill Creek to End	Replacement		2022	Berkeley	Berkeley			2400	6	ACP	1958	12	CLDIP	Undersized	$600,000
Eastern		Storm Jib Ct	End to End	Replacement		2023	Berkeley	Berkeley			1,490	6	PVC		6	CLDIP		
Eastern		Tudor Ave	Chelsea to End	Replacement		2024	Berkeley	Berkeley			1600	6	ACP	1961	12	CLDIP	Undersized	$400,000
Southern	100000100	Apple Ave	Cummins to dead end	Replacement		2022	Blackwood	Blackwood			400	2	PLASTIC	1975	6	CLDIP	Undersized	$100,000
Southern	100000101	Lincoln Ave	Blackhorse Pike to Washington	Replacement		2023	Blackwood	Blackwood			1000	6	CI	1940	8	CLDIP	Undersized	$250,000
Southern	100000102	Garfield	Blackhorse Pike to Washington	Replacement		2023	Blackwood	Blackwood			1000	6	CI	1930	8	CLDIP	Undersized	$250,000
Southern	25030026680	Lakeview	Prospect to End	Replacement		2022	Blackwood	Blackwood			1000	4	CI	1930	8	CLDIP	Undersized	$250,000
Southern	25030027053	Kay Lane & Jarvis Ct.	All	Replacement		2026	Blackwood	Blackwood			600	4	PLASTIC	1975	6	CLDIP	Undersized	$150,000
Southern		Presidential	Kings Road to Noble	Replacement		2022	Blackwood	Blackwood			1200	4	DI	1975	8	CLDIP	Undersized	$300,000
Southern	25030078436	Cummings Fairview and Graisbury	Almonesson Rd to Oak Ave	Replacement		2020	Blackwood		Blackwood_Low_Service_Area		2,310							$577,500.00
Southern		Blackhorse Pike	Black Horse Pike to Hillcrest Easement	Replacement		2024	Blackwood	Blackwood			2400	6	ACP	1940	12	CLDIP	Undersized	$1,080,000
Southern		Frankford Ave	Black Horse Pike to Hillcrest Easement	Replacement		2023	Blackwood	Blackwood			2400	6	ACP	1955	8	CLDIP	Undersized	$600,000
Southern		Lehigh Ave	Carol Ave to Cecelia Drive	Replacement		2024	Blackwood	Blackwood			1000	6	ACP	1957	8	CLDIP	Undersized	$250,000
Southern		Pennsylvania Ave	Lake to End	Replacement		2022	Blackwood	Blackwood			325	2	Gal	1940	6	CLDIP	Undersized	$81,250
Southern		E Lake Avenue	S Blackhorse Pike to State Street	Replacement	2023	2024	Blackwood	Gloucester			2785	8	ACP		8	CLDIP		
Southern		Digby Lane	Cloverdale to E Lake Avenue	Replacement	2023	2024	Blackwood	Gloucester			515	8	ACP		8	CLDIP		
Northern		Gardinier St	North St. to Bethlehem	Replacement		2025	Bloomsbury	Bloomsbury			1200	4 and 6	CI	1900	8	CLDIP	Undersized	$300,000
Northern	100000079	Church St.	Main St. to Rt. 173	Replacement	2022	2022	Bloomsbury	Bloomsbury			770	6	CI	1900	8	CLDIP	Undersized	$192,500
Northern	100000074	Main St.	Church to Wilson to end	Replacement	2022	2022	Bloomsbury	Bloomsbury			3700	6	CI	1900	8	CLDIP	Undersized	$925,000
Northern		North Street	Church to Wilson to end	Replacement		2025	Bloomsbury	Bloomsbury			2100	4	CI	1930's	8	CLDIP	Undersized	$525,000
Northern		East St.	Main St. SE to Storage Tank	Replacement		2024	Bloomsbury	Bloomsbury			4600	8	CI	1900	8	CLDIP	Age	$1,150,000
Northern		Route 173 to Bloomsbury	Int. Vault to Brunswick Ave	Replacement		2026	Bloomsbury	Bloomsbury			2500	6	CI	1931	16	CLDIP	Undersized	$1,125,000
Central		Bordentown-Crosswicks	Bend in Road to Adelphia	Replacement		2026	Chesterfield	Chesterfield			2000	8	unknown	1957	12	CLDIP	Undersized	$500,000
Northern		Cleveland Ave	Hillcrest Ave to River Dr	Replacement		2023	Cliffside Park	Washington			1,007	4	PVC		4	CLDIP		
Northern		Hillcrest Ave	Lawrence Trl to End of Main	Replacement		2023	Cliffside Park	Washington			475	4	PVC		4	CLDIP		
Northern		La Bounty Trl	Hillcrest Ave to Lawrence Trl	Replacement		2023	Cliffside Park	Washington			650	4	PVC		4	CLDIP		
Northern		Lawrence Trail	End to End	Replacement		2023	Cliffside Park	Washington			596	4	PVC		4	CLDIP		
Northern		Roosevelt Ave	End to End	Replacement		2023	Cliffside Park	Washington			1,130	4	PVC		4	CLDIP		
Northern		S River Dr	Cleveland Ave to End of Main	Replacement		2023	Cliffside Park	Washington			215	4	PVC		4	CLDIP		
Northern		To Wells	Roosevelt Ave to Well 1 & 2	Replacement		2023	Cliffside Park	Washington			307	4	PVC		4	CLDIP		
Southern	25030075753	Theresa	Church to South	Replacement		2025	Gloucester	Gloucester			440	4	ACP	1957	8	CLDIP	Undersized	$110,000
Southern	25030075755	Service to B'Wood Sch	Theresa to School	Replacement		2026	Gloucester	Gloucester			510	4	ACP	1957	8	CLDIP	Undersized	$127,500
Southern	25030075756	Fairmount	High to State	Replacement		2026	Gloucester	Gloucester			1800	6	ACP	1963	8	CLDIP	Undersized	$450,000
Southern	25030077956	Hortman	Drexel to Hillcrest	Replacement		2024	Gloucester	Gloucester			650	4	ACP	1957	8	CLDIP	Undersized	$146,250
Southern		4" Line	Between Fairmount & Asyla	Replacement		2024	Gloucester	Gloucester			570	4	ACP	1963	8	CLDIP	Undersized	$142,500
Southern		Barbara	Barbara	Replacement		2024	Gloucester	Gloucester			320	6	ACP	1963	8	CLDIP	Undersized	$80,000
Southern		Carol Ave	Indiana Ave to State Street	Replacement		2023	Gloucester	Gloucester			1570	6	ACP	1957	8	CLDIP	Undersized	$392,500
Southern		Cornell Ave	Cecelia Drive to Carol Ave	Replacement		2024	Gloucester	Gloucester			810	6	ACP	1957	8	CLDIP	Undersized	$202,500
Southern		Dearbourne	High to End	Replacement		2024	Gloucester	Gloucester			2570	6	ACP	1963	8	CLDIP	Undersized	$642,500
Southern		Fay Ann	Fay Ann	Replacement		2026	Gloucester	Gloucester			1070	6	ACP	1963	8	CLDIP	Undersized	$267,500
Southern		Grand	High to State	Replacement		2025	Gloucester	Gloucester			1800	6	ACP	1957	8	CLDIP	Undersized	$450,000
Southern		Hillcrest	Hortman Street to Frankford Ave	Replacement		2026	Gloucester	Gloucester			2450	6	ACP	1957	8	CLDIP	Undersized	$612,500
Southern		Jerome Ave	Cecelia Drive to Carol Ave	Replacement		2026	Gloucester	Gloucester			810	6	ACP	1957	8	CLDIP	Undersized	$202,500
Southern		Lakeland Road	Blackhorse Pike to Railroad	Replacement		2023	Gloucester	Gloucester			1000	6	CI	1955	12	CLDIP	Undersized	$250,000
Southern		Lehigh	Fairmount to End	Replacement		2026	Gloucester	Gloucester			650	6	ACP	1963	8	CLDIP	Undersized	$162,500
Southern		Mathews	Drexel to Hillcrest	Replacement		2026	Gloucester	Gloucester			500	6	ACP	1957	8	CLDIP	Undersized	$125,000
Southern		Pennsylvania	Pennsylvania	Replacement		2025	Gloucester	Gloucester			930	6	ACP	1957	8	CLDIP	Undersized	$232,500
Southern		South	South	Replacement		2026	Gloucester	Gloucester			1320	6	ACP	1957	8	CLDIP	Undersized	$330,000
Southern		State Street	E Church to Carol	Replacement		2024	Gloucester	Gloucester			1100	6	ACP	1957	8	CLDIP	Undersized	$275,000
Southern		State	Carol to Hillcrest	Replacement		2026	Gloucester	Gloucester			1350	6 (8)	ACP	1963	8	CLDIP	Undersized	$337,500
Southern		Theresa	South to the end	Replacement		2026	Gloucester	Gloucester			660	6	ACP	1957	8	CLDIP	Undersized	$165,000
Southern		Trinity Ave	Carol Ave to Cecelia Drive	Replacement		2024	Gloucester	Gloucester			1150	6	ACP	1957	8	CLDIP	Undersized	$287,500
Southern		Vassar	Vassar Pl.	Replacement		2024	Gloucester	Gloucester			100	6	ACP	1957	8	CLDIP	Undersized	$25,000
Northern	25010027253	Route 173 (Church St)	Under the Bridge	Replacement		2022	Greenwich	Greenwich			200	6	ACP	1956	16	CLDIP	Undersized	$200,000
Northern		South Main/North Main	End to End	Replacement		2025	Greenwich	Greenwich			3500	6	CI	1920's	8	CLDIP	Undersized	$875,000
Central	100000085	Imperial	Estates to 8" at stream	Replacement		2022	Hamilton	Hamilton			300	6	ACP	1965	8	CLDIP	Undersized	$75,000
Central	100000087	Coleman Rd and Denise	N Crest to nottingham and Sunset	Replacement		2022	Hamilton	Hamilton	Hamilton_Low_Service_Area		1000	6 and 8	ACP	1955	8	CLDIP	Undersized	$250,000
Central	100000087	N. Crest Ave	Nottingham to Coleman	Replacement		2022	Hamilton	Hamilton	Hamilton_Low_Service_Area		625	10	ACP	1955	12	CLDIP	Undersized	$156,250
Central	100000086	Ryerson Dr	All	Replacement		2022	Hamilton	Hamilton			800	6	ACP	1965	8	CLDIP	Undersized	$200,000
Central	100000086	Jean Dr	Sunset Blvd to Shelly	Replacement		2022	Hamilton	Hamilton			900	6	ACP	1955	8	CLDIP	Undersized	$225,000
Central	100000086	Matthew Dr	Sunset Blvd, end to end	Replacement		2024	Hamilton	Hamilton			2000	6	ACP	1955	8	CLDIP	Undersized	$500,000
Central	100000086	Shelly	Sunset Blvd to Matthew	Replacement		2022	Hamilton	Hamilton			1300	6	ACP	1955	8	CLDIP	Undersized	$325,000
Central	25020024694	Sunset blvd	Matthew to Nottingham	Replacement		2022	Hamilton	Hamilton			600	8	ACP	1955	8	CLDIP	Undersized	$150,000
Central	100000088	Bernath dr	Applegate to End	Replacement		2023	Hamilton	Hamilton			480	6"	ACP	1965	8	CLDIP	Undersized	$120,000
Central	100000088	Hughes	Mercer to Applegate	Replacement		2022	Hamilton	Hamilton			1700	10	ACP	1965	12	CLDIP	Undersized	$765,000
Central	25020026673	Route 33 at Deerwood	4" Connection at Deerwood	Replacement		2022	Hamilton	Hamilton			600	4	ACP	1955	8	CLDIP	Undersized	$270,000
Central	25020027050	Hirsch and Walter	Cubberly to Park	Replacement		2022	Hamilton	Hamilton			800	10	ACP	1965	12	CLDIP	Undersized	$360,000
Central	25020027051	Jericho	Doreen to Sayen	Replacement		2022	Hamilton	Hamilton			1000	6	ACP	1965	8	CLDIP	Undersized	$250,000
Central		Whitehorse Ham. Sq. Rd.	Shoprite to Rt. 33	Replacement		2026	Hamilton	Hamilton			1000	10"	ACP	1957	12	CLDIP	Undersized	$450,000
Central		Barry Way	Off Philrich Road	Replacement		2024	Hamilton	Hamilton			350	4"	PVC	1976	8	CLDIP	Undersized	$87,500
Central		Brandywine Way	All	Replacement		2022	Hamilton	Hamilton			1300	6	ACP	1955	8	CLDIP	Undersized	$325,000
Central		Cannon	End to End	Replacement		2023	Hamilton	Hamilton			2000	6	ACP	1955	8	CLDIP	Undersized	$500,000
Central		Clarion Ct and Fordham	all	Replacement		2022	Hamilton	Hamilton			1000	4	CI	1975	6	CLDIP	Undersized	$250,000
Central		Coronet Ct.	Estates Blvd. to Dead End	Replacement		2025	Hamilton	Hamilton			225	4"	CI	1968	8	CLDIP	Undersized	$56,250
Central		Doreen	Paxson to Sayen	Replacement		2023	Hamilton	Hamilton			1300	6	ACP	1965	8	CLDIP	Undersized	$325,000
Central		Duncan Dr	All	Replacement		2022	Hamilton	Hamilton			1000	6	ACP	1955	8	CLDIP	Undersized	$250,000
Central		Evergreen Ln	All	Replacement		2022	Hamilton	Hamilton			875	6	ACP	1955	8	CLDIP	Undersized	$218,750
Central		Fleetwood Dr	All	Replacement		2023	Hamilton	Hamilton			1900	6	ACP	1955	8	CLDIP	Undersized	$475,000
Central		Friendly Way	All	Replacement		2022	Hamilton	Hamilton			200	6	ACP	1955	8	CLDIP	Undersized	$50,000
Central		Gateway Ln	All	Replacement		2022	Hamilton	Hamilton			200	6	ACP	1955	8	CLDIP	Undersized	$50,000
Central		Jonathon/Daniels	End to End	Replacement		2023	Hamilton	Hamilton			2000	6	ACP	1955	8	CLDIP	Undersized	$500,000
Central		Miry Brook	Route 33 to Century	Replacement		2023	Hamilton	Hamilton			2,000	6	ACP	1955	8	CLDIP	Undersized	$500,000
Central		Overton Dr	All	Replacement		2022	Hamilton	Hamilton			1000	6	ACP	1955	8	CLDIP	Undersized	$250,000
Central		Ro+A69:D75ute 33	Herbert to Crest Ave	Replacement		2022	Hamilton	Hamilton			800	4	ACP	1965	12	CLDIP	Undersized	$360,000
Central		Rt. 33	Yard. Ham. Sq. to Endicott	Replacement		2025	Hamilton	Hamilton			1150	6	ACP	1958	8	CLDIP	Undersized	$517,500
Central		Whitehorse Ham. Sq. Rd.	Estates Blvd. to Klockner	Replacement		2024	Hamilton	Hamilton			2000	10"	ACP	1957	12	CLDIP	Undersized	$900,000
Central		Whitehorse-Ham. Sq.	Nottingham Way to Rt 33	Replacement		2023	Hamilton	Hamilton			500	4	CI	1924	8	CLDIP	Undersized	$225,000
Central		Whitehorse-Ham. Sq.	South of Nottingham	Replacement		2026	Hamilton	Hamilton			400	6	ACP	1955	12	CLDIP	Undersized	$180,000
Central		Yardville-Ham. Sq.	Nottingham Way to Rt 33	Replacement		2023	Hamilton	Hamilton			1050	4	CI	1924	8	CLDIP	Undersized	$472,500

Division	WO Number	Streets	Location Parameters	Type	Design Year	Construction Year Planned	System	Township	Pressure Zone	Total Length per Zone	Length (LF)	Original Size	Original Material	Age/Era	Proposed Size	Proposed Material	Performance Criteria	Est Cost
Central	100000083	Under I95	West Church to I95 Ramp	Replacement		2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		600	8	CI	1900	8	CLDIP	Age	$150,000
Central	100000083	West Chruch Road	End to End	Replacement		2022	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		550	4	CI	1900	6	CLDIP	Age	$137,500
Central	100734422	Craven Lane	George St to Route 206	Replacement	2022	2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		435	6"			8"	CLDIP		
Central	100734422	Edgehill Avenue	Green Ave to Titus Ave	Replacement	2022	2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		530	2		1900	6"	CLDIP		
Central	100734422	George Street	Titus Ave to Phillips Ave	Replacement	2022	2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		970				8"	CLDIP		
Central	100734422	Phillips Avenue	George St tie-in to Phillips Ave	Replacement	2022	2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		65	N/A			6", 8"	CLDIP		
Central	100734422	Titus Avenue	Edgehill to Route 206	Replacement	2022	2023	Lawrenceville	Lawrenceville	Lawrenceville_Service_Area		780	2	GAL	1900	6", 8"	CLDIP	Undersized	$540,000
Central	25020022868	Garden Road	West Long to West Church	Replacement		2022	Lawrenceville	Lawrenceville			1000	6	CI	1900	6	CLDIP	Age	$250,000
Central	25020022869	Route 206 and Green	Route 206 Connected to Green	Replacement		2022	Lawrenceville	Lawrenceville			225	6	CI	1900	6	CLDIP	Age	$101,250
Northern	100000077	Lyndale	Logan to Stanley	Replacement		2022	Phillipsburg	Phillipsburg			900	6	CI	1965	8	CLDIP	Undersized	$225,000
Northern	100000078	Reese Ct	Market to Main	Replacement		2022	Phillipsburg	Phillipsburg			350	4	CI	1899	4 or 6	CLDIP	Age	$87,500
Northern	100000107	Stryker's Rd	Tie in 12" dead ends to Uniontown Rd	Grid	2019	2022	Phillipsburg	Phillpsburg	Phillipsburg_High_Service_Area		1,473	NA			12"			$368,250.00
Northern	25010005986	N. Main	Fourth to Memorial Parkway	Replacement		2021	Phillipsburg	Phillipsburg			670	4	CI	1900	8	CLDIP	Undersized	$167,500
Northern		Hudson	Evelyn to Filmore	Replacement		2025	Phillipsburg	Phillipsburg			700	4	CI	1886	8	CLDIP	Undersized	$175,000
Northern		Randall	Randall	Replacement		2025	Phillipsburg	Phillipsburg			200	4	CI	1886	8	CLDIP	Undersized	$50,000
Northern		Ann	Sayre to Green	Replacement		2026	Phillipsburg	Phillipsburg			1800	6	CI	1920	8	CLDIP	Undersized	$450,000
Northern		Belt	Best to Center	Replacement		2023	Phillipsburg	Phillipsburg			650	4	CI	1955	8	CLDIP	Undersized	$162,500
Northern		Best	No. Riverview to Elmherst	Replacement		2025	Phillipsburg	Phillipsburg			900	4	CI	1955	8	CLDIP	Undersized	$225,000
Northern		Brainard	Brainard	Replacement		2023	Phillipsburg	Phillipsburg			1050	4	CI	1886	8	CLDIP	Undersized	$472,500
Northern		Carrpentersville to Kent Street	Knoll View and Mill Street	Replacement		2023	Phillipsburg	Phillipsburg			2200	8"	CI	1953	8	CLDIP	Undersized	$550,000
Northern		Colby Place & Filmore	Heckman to Railroad	Replacement		2023	Phillipsburg	Phillipsburg			1000	4	CI	1899-1930	8	CLDIP	Undersized	$250,000
Northern		East Memorial Parkway	Miller to Wareen	Replacement		2025	Phillipsburg	Phillipsburg			1075	6"	CI	1900	12	CLDIP	Undersized	$268,750
Northern		Ethan Place	Stonehendge to Powderhorn	Replacement		2025	Phillipsburg	Phillipsburg			660	6	CI	1970	8	CLDIP	Undersized	$165,000
Northern		Firth St	Marshall to Heckman	Replacement		2024	Phillipsburg	Phillipsburg			720	4	CI	1900	8	CLDIP	Undersized	$180,000
Northern		Grant and Stockton	Heckman to Stockton	Replacement		2024	Phillipsburg	Phillipsburg			450	4	CI	1930	6	CLDIP	Undersized	$112,500
Northern		Heckman	Chambers to Firth	Replacement		2026	Phillipsburg	Phillipsburg			1700	6	CI	1910	8	CLDIP	Undersized	$765,000
Northern		Hudson	So. Main to Brainard	Replacement		2023	Phillipsburg	Phillipsburg			350	4	CI	1893	8	CLDIP	Undersized	$87,500
Northern		Irwin	Filmore to Henderson	Replacement		2025	Phillipsburg	Phillipsburg			1400	6	CI	1940	8	CLDIP	Undersized	$350,000
Northern		Jersey St	So. Main to Sitgreaves	Replacement		2022	Phillipsburg	Phillipsburg			200	4	CI	1900	4 or 6	CLDIP	Age	$50,000
Northern		Liberty	Shimer to Bliss	Replacement		2026	Phillipsburg	Phillipsburg			1600	6	CI	1955	8	CLDIP	Undersized	$400,000
Northern		Lynda	Brakeley to Red School	Replacement		2026	Phillipsburg	Phillipsburg			2600	6	CI	1955	8	CLDIP	Undersized	$650,000
Northern		Maple	South of Cedar	Replacement		2026	Phillipsburg	Phillipsburg			1650	6	CI	1935	8	CLDIP	Undersized	$412,500
Northern		March and New Brunswich	Middlesex to Pershing	Replacement		2026	Phillipsburg	Phillipsburg			1300	6	CI	1960	8	CLDIP	Undersized	$325,000
Northern		Market	Reese to Hanover	Replacement		2023	Phillipsburg	Phillipsburg			160	2	PLASTIC	1931	6	CLDIP	Undersized	$40,000
Northern		Mercer	East of Mckeen	Replacement		2025	Phillipsburg	Phillipsburg			530	4	CI	1886	8	CLDIP	Undersized	$132,500
Northern		Mercer St	McKeen St to River St	Replacement		2025	Phillipsburg	Phillipsburg			2,270	6	CI		6	CLDIP		
Northern		Miller	Morris to Henderson	Replacement		2025	Phillipsburg	Phillipsburg			1700	4&6	CI	1898	8	CLDIP	Undersized	$425,000
Northern		Ohio	Sussex to Passiac	Replacement		2024	Phillipsburg	Phillipsburg			550	6	CI	1965	8	CLDIP	Undersized	$137,500
Northern		Pohatcong	Zeller to Hawk	Replacement		2026	Phillipsburg	Phillipsburg			1150	6	CI	1935	8	CLDIP	Undersized	$287,500
Northern		Railroad	Heckman to Marshall	Replacement		2025	Phillipsburg	Phillipsburg			700	4	CI	1902	8	CLDIP	Undersized	$175,000
Northern		Riverside Way	Riverside Way	Replacement		2023	Phillipsburg	Phillipsburg			425	2	CI	1900	6	CLDIP	Undersized	$106,250
Northern		Rose & Third St.	Forth to Broad St.	Replacement		2023	Phillipsburg	Phillipsburg			1100	4	CI	1912	8	CLDIP	Undersized	$275,000
Northern		S Main Street	Stockton St to Abboots St	Replacement		2025	Phillipsburg	Phillipsburg			2,430	10	CI		12	CLDIP		
Northern		Sitgreaves St	Stockton St to Mckeen St	Replacement		2025	Phillipsburg	Phillipsburg			1,280	6	CLDIP		6	CLDIP		
Northern		So. Main	Market to Hudson	Replacement		2023	Phillipsburg	Phillipsburg			350	4	CI	1893	8	CLDIP	Undersized	$157,500
Northern		Stockton St	Howard St to S Main St	Replacement		2025	Phillipsburg	Phillipsburg			1,025	6	CI		6	CLDIP		
Northern		Stull Alley	Chambers to Filmore	Replacement		2025	Phillipsburg	Phillipsburg			425	4	CI	1900	8	CLDIP	Undersized	$106,250
Northern		Tindall, Front & Bullman	End to End	Replacement		2023	Phillipsburg	Phillipsburg			830	2-4	Gal.	1886	8	CLDIP	Undersized	$207,500
Northern		Tyndall	Brainard to So. Main	Replacement		2026	Phillipsburg	Phillipsburg			300	4	CI	1886	8	CLDIP	Undersized	$75,000
Northern		Warren	Marshall to Heckman	Replacement		2023	Phillipsburg	Phillipsburg			700	4	CI	1900	8	CLDIP	Undersized	$175,000
Northern		Warren	Marshall to Irwin	Replacement		2025	Phillipsburg	Phillipsburg			650	4	CI	1905	8	CLDIP	Undersized	$162,500
Northern		West Mercer	West of River St.	Replacement		2025	Phillipsburg	Phillipsburg			450	4	CI	1888	8	CLDIP	Undersized	$112,500
Northern		Wilson	Heckman to Marshall	Replacement		2023	Phillipsburg	Phillipsburg			700	4	CI	1898	8	CLDIP	Undersized	$175,000
Northern		Youngs	Rose Hill to Red Sschool	Replacement		2023	Phillipsburg	Phillipsburg			2000	6	CI	1955	8	CLDIP	Undersized	$500,000
Northern		Zeller Alley	End to End	Replacement		2024	Phillipsburg	Phillipsburg			1150	6	CI	1935	8	CLDIP	Undersized	$287,500
Northern		Reigel Ridge	Clarkson, Elmhurst, Fernwood, Maplewood, Oak, Sycamore	Replacement		2026	Riegel Ridge	Holland			8000	8,6,4	CI	1950	8, 6	CLDIP	Undersized - fire protection	$2,000,000
Northern		Oak Lane, Millview & Fernwood	All	Replacement		2022	Riegel Ridge											
Central		School Dr. (Windsor)	Main St. to Church St.	Replacement		2025	Robbinsville	Robbinsville			735	4"	CI	1974	8	CLDIP	Undersized	$183,750
Northern	25010019993	E. Shore Trial 6" Pipe	E. Shore Trail	Replacement		2023	Summit Lake	Summit Lake			1300	6	ACP	1950	6	CLDIP	Material & Age	$325,000
Northern	25010019993	W. Shore Trail 4" Pipe	W. Shore Trail	Replacement		2022	Summit Lake	Summit Lake			420	4	ACP	1950	4	?	Age	$105,000
Northern	25010019993	W. Shore Trail 6" Pipe	W. Shore Trail	Replacement		2022	Summit Lake	Summit Lake			1020	6	CI	1950	6	CLDIP	Age	$255,000
Northern		Beach Plaza	Beach Plaza	Replacement		2022	Summit Lake	Summit Lake			310	2	GAL	1950	?	?	Age	$77,500
Northern		E. Shore Trail 2"Pipe	E. Shore Trail	Replacement		2022	Summit Lake	Summit Lake			390	2	GAL	1950	2	?	Age	$97,500
Northern		Oak and W. Shore Trail 2" Pipe	Oak and W. Shore Trail	Replacement		2022	Summit Lake	Summit Lake			700	2	GAL	1950	2	?	Age	$175,000
Central	25020025107	Broad Street	Under Turnpike	Replacement		2024		Hamilton			800	6	CI	1950	6	LCI	Low Pressure	$500,000
Southern	25030026681	Central? Lakeview? Woodlyn?	Franchise Boundary/Creek to 8" on Woodlyn	Replacement							1,300							
Central		W Long Drive	Dead End to Lawrenceville Road	Replacement	2022	2024	Lawrenceville	Lawrence	Lawrenceville_Service_Area		5,010	4" , 6"	CI	1965		CLDIP	Age / Material	
Central		Sunset Road	W Long Dr to Garden Road	Replacement	2022	2024	Lawrenceville	Lawrence	Lawrenceville_Service_Area		1,300	6"	CI	1965		CLDIP	Age / Material	
Central		W Church Road	Sunset Road to Garden Road	Replacement	2022	2024	Lawrenceville	Lawrence	Lawrenceville_Service_Area		1,300	6"	CI	1965		CLDIP	Age / Material	
Central		Garden Road	W Long Dr to W Church Road	Replacement	2022	2024	Lawrenceville	Lawrence	Lawrenceville_Service_Area		1,000	6"	CI	1965		CLDIP	Age / Material	
Central		Under 295	W Church Road to Under 295 Ramp	Replacement	2024	2025	Lawrenceville	Lawrence	Lawrenceville_Service_Area		600	6"	CLDIP	1915		CLDIP	Age	
Central		Rolling Lane	Mark Twain Drive to Walt Whitman Way	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		1,600	6"	AC	1955		CLDIP	Material	
Central		Thoreau Road	Mark Twain Drive to Walt Whitman Way	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		1,900	6"	AC	1955		CLDIP	Material	
Central		Perro Pl	Dead End to Mark Twain Drive	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		400	6"	AC	1955		CLDIP	Material	
Central		Aster Road	Thoreau Road to Mark Twain Drive	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		500	6"	AC	1955		CLDIP	Material	
Central		George Dye Road	Route 33 to Carl Sandburg Drive	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		2,500	8"	AC	1955		CLDIP	Material	
Central		Kendall Road	Scott Road to Mark Twain Drive	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		600	6"	AC	1955		CLDIP	Material	
Central		Mark Twain Drive	Kendall Road to George Dye Road	Replacement	2023	2025	Hamilton	Hamilton	Hamilton_Low_Service_Area		2,300	6"	AC	1955		CLDIP	Material	
Eastern		Veeder Lane	Ocean Gate Drive to Bayview	Replacement	2022-2023	2024	Bayville	Berkeley	Berkeley Eastern		6,300	10"	AC	1965	12	CLDIP	Material	
Eastern		Edison Street	Sherman Ave to Red Bank Ave	Replacement			Bayville	Berkeley	Berkeley Eastern		1,200	6"	AC	1975		CLDIP	Material	
Eastern		Bell Street	Sherman Ave to Red Bank Ave	Replacement		2025	Bayville	Berkeley	Berkeley Eastern		1,200	6"	AC	1975	8	CLDIP	Undersized	$300,000
Eastern		Ford Ave	Sherman Ave to Red Bank Ave	Replacement		2025	Bayville	Berkeley	Berkeley Eastern		1,230	6"	AC	1975	8	CLDIP	Undersized	$300,000
Eastern		Deal Ave	Red Bank Ave to Veeder Lane	Replacement			Bayville	Berkeley	Berkeley Eastern		1,100	6"	AC	1975		CLDIP	Material	
Eastern		Carver Street	Sherman Ave to Red Bank Ave	Replacement		2025	Bayville	Berkeley	Berkeley Eastern		1,230	6"	AC	1975	8	CLDIP	Material	$300,000
Eastern		Morage Ave	Route 9 to Veeder Lane	Replacement			Bayville	Berkeley	Berkeley Eastern		4,500	6"	AC	1995		CLDIP	Material	
Eastern		Sherman Ave	Bell Street to Morage Ave	Replacement			Bayville	Berkeley	Berkeley Eastern		1,100	6"	AC	1995		CLDIP	Material	
Eastern		Well 6		Replacement			Bayville	Berkeley	Berkeley Eastern		900	6"	AC	1975		CLDIP	Material	
Southern		Washintong Avenue	W Church Street to Cleveland Ave	Replacement			Blackwood	Gloucester	Blackwood_Low_Service_Area		150	2"	CI & Galvanized	1940		CLDIP	Size & Material	
Southern		Glenn Avenue	Pine Ave to Railroad Ave	Replacement			Blackwood	Gloucester	Blackwood_Low_Service_Area		700	2"	CI & Galvanized	1940		CLDIP	Size & Material	
Southern		W Railroad Ave	Glenn Ave to Marshall Ave	Replacement			Blackwood	Gloucester	Blackwood_Low_Service_Area		800	2" , 8"	CI	1940		CLDIP	Size & Material	
Northern		Jefferson	Cedar Aly to Sitgreaves St	Gridding			Phillipsburg	Phillipsburg	Phillipsburg_Low_Service_Area		500					CLDIP		
Northern		McKeen	S Main S to Dead End	Gridding			Phillipsburg	Phillipsburg	Phillipsburg_Low_Service_Area		700					CLDIP		
Northern		Abbott	Sitgreaves St to S Main St	Replacement			Phillipsburg	Phillipsburg	Phillipsburg_Low_Service_Area		330	6"	CI	1915		CLDIP	Age & Material	
Northern		Pine Ridge Road	Tank to High Bridge-Califon Road	Replacement			Califon	Lebanon Twp	Califon_Service_Area		3,600	10"	CI	N/A		CLDIP	Material	
Northern		Winding Brook Road	Pine Ridge Road to Sliker Road	Replacement			Califon	Lebanon Twp	Califon_Service_Area		800	12"	CI	N/A		CLDIP	Material	
Northern		Sliker Road	Wunder Lane to High Bridge-Califon Road	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,600	2"	Galvanized	N/A		CLDIP	Size & Material	

Division	WO Number	Streets	Location Parameters	Type	Design Year	Construction Year Planned	System	Township	Pressure Zone	Total Length per Zone	Length (LF)	Original Size	Original Material	Age/Era	Proposed Size	Proposed Material	Performance Criteria	Est Cost
Northern		High Bridge-Califon Road (SB)	Main Street to Dan-Ly Way	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,720	8"	CI	N/A		CLDIP	Material	
Northern		High Bridge-Califon Road (NB)		Replacement			Califon	Lebanon Twp	Califon_Service_Area		900	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		School Street	High Bridge-Califon Road to School Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,550	6"	CI	N/A		CLDIP	Material	
Northern		School Street	Dead End to Pershing Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,500	2" , 6"	CI & Galvanized	N/A		CLDIP	Size & Material	
Northern		Glover Hill Drive	School Street to Crestmore Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		850	6"	CI	N/A		CLDIP	Material	
Northern		Crestmore Street	Glover Hill Drive to Lime Rock Lane	Replacement			Califon	Lebanon Twp	Califon_Service_Area		400	6"	CI	N/A		CLDIP	Material	
Northern		Lime Rock Lane	School Street to Crestmore Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		800	6"	CI	N/A		CLDIP	Material	
Northern		Pershing Street	School Street to Dead End	Replacement			Califon	Lebanon Twp	Califon_Service_Area		900	6"	CI	N/A		CLDIP	Material	
Northern		Pershing Street	2nd Street to Dead End	Replacement			Califon	Lebanon Twp	Califon_Service_Area		350	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		2nd Street	Main Street to Eisenhower Lane	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,100	6"	CI	N/A		CLDIP	Material	
Northern		Coolidge Ct	2nd Street to Dead End	Replacement			Califon	Lebanon Twp	Califon_Service_Area		700	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		Eisenhower Lane	Hoffman Drive to Dead End	Replacement			Califon	Lebanon Twp	Califon_Service_Area		500	2", 6"	CI & Galvanized	N/A		CLDIP	Size & Material	
Northern		Hoffman Drive	All	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,600	2" , 6"	CI & Galvanized	N/A		CLDIP	Size & Material	
Northern		Main Street	2nd Stree to River Road	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,000	6"	CI	N/A		CLDIP	Material	
Northern		1st Street	End to Main Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,300	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		River Road	Main Street to Parking Lot	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,000	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		Center Street	Dead End to River Road	Replacement			Califon	Lebanon Twp	Califon_Service_Area		400	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		Mill Street	Main Street to Bank Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		800	6"	Galvanized	N/A		CLDIP	Material	
Northern		Bank Street	Main Street to end of existing main	Replacement			Califon	Lebanon Twp	Califon_Service_Area		830	2" , 6"	CI & Galvanized	N/A		CLDIP	Size & Material	
Northern		Pillhowever Ave	Main Street to end of existing main	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,300	2", 4", 6"	CI & Galvanized	N/A		CLDIP	Size & Material	
Northern		Main Street	Pillhower Ave to Academy Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,800	6" , 8"	CI	N/A		CLDIP	Material	
Northern		Academy Street	Main Street to end of existing main	Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,500	6"	CI	N/A		CLDIP	Material	
Northern		Railroad Ave	Dead end to Main Street	Replacement			Califon	Lebanon Twp	Califon_Service_Area		2,400	6"	CI	N/A		CLDIP	Material	
Northern		Off of Academy Steet		Replacement			Califon	Lebanon Twp	Califon_Service_Area		1,400	2"	Galvanized	N/A		CLDIP	Size & Material	
Northern		Willow Lane		Replacement			Warren Glenn	Holland Twp	Warren_Glen_Service_Area		1,500	4"	CI			CLDIP	Undersized	
Northern		Mill Road		Replacement			Warren Glenn	Holland Twp	Warren_Glen_Service_Area		1,250	2"	CI & Galvanized			CLDIP	Undersized	
Northern		Cyphers Road		Replacement			Warren Glenn	Holland Twp	Warren_Glen_Service_Area		750	2"	CI & Galvanized			CLDIP	Undersized	
Northern		Riegelsville-Warren Glenn Road (Warren County 6274)		Replacement			Warren Glenn	Holland Twp	Warren_Glen_Service_Area		500	2"	Galvanized			CLDIP	Undersized	

Aqua New Jersey, Inc.
Distribution System Improvement Charge Baseline Depreciation
Docket No. WR2401_____
Mains, Services, Hydrants

	Plant Balances as of 4/30/2024	Depreciation Rate	DSIC Base Spending Requirement
Account #343: Mains	$ 189,723,621	1.98%	$ 3,756,528
Account #345: Services	$ 76,615,258	3.83%	$ 2,934,364
Account #348: Hydrants	$ 12,756,743	2.22%	$ 283,200
	$ 279,095,622		*$ 6,974,092*
CIAC & CAC Mains	$ (58,862,368)	1.42%	$ (835,846)
CIAC & CAC Services	$ (1,109,227)	0.20%	$ (2,218)
CIAC & CAC Hydrants	$ (38,239)	0.87%	$ (333)
	$ (60,009,834)		*$ (838,397)*
Total	$ 219,085,788	2.80%	$ 6,135,695
			-

Date of Foundational Filing Submission 1/19/2024
Date of Most Recent BPU Annual Report at the time the Foundational Filing was Submitted 12/31/2022

Note: The above amounts agree to Aqua New Jersey Inc.'s filed rate case and depreciation rates proposed in Docket No. WR2401_____.

Aqua New Jersey, Inc.
Monthly DSIC Assessment Revenues at 5.00%
Docket No. WR2401_____

Applicable to General Metered Service Connections noted below:

DSIC Eligible Revenues	$56,447,090
Maximum Annual DSIC Revenue Surcharge at 5.00%	$2,822,355
Annual Assessment per Meter Equivalent at 5.00%	$40.21
Monthly Assessment per Meter Equivalent at 5.00%	$3.35 **

Class	Size	Customers	Meter Equivalents	Monthly DSIC Assessment $	Weighted Meter Equivalents	Monthly DSIC Assessment Revenues at 5.00%
Residential						
	5/8x3/4"	45,360	1.0	$3.35	45,360	$151,956
	3/4"	5,590	1.5	$5.03	8,385	$28,090
	1"	1,087	2.5	$8.38	2,718	$9,105
	1-1/2"	144	5.0	$16.75	720	$2,412
	2"	152	8.0	$26.80	1,216	$4,074
	3"	5	15.0	$50.25	75	$251
	4"	0	25.0	$83.75	0	$0
	6"	1	50.0	$167.50	50	$168
	8"	1	80.0	$268.00	80	$268
	Total Base RES	**52,340**			**58,604**	**$196,323**
Commercial						
	5/8x3/4"	1,230	1.0	$3.35	1,230	$4,121
	3/4"	150	1.5	$5.03	225	$754
	1"	358	2.5	$8.38	895	$2,998
	1-1/2"	177	5.0	$16.75	885	$2,965
	2"	513	8.0	$26.80	4,104	$13,748
	3"	48	15.0	$50.25	720	$2,412
	4"	22	25.0	$83.75	550	$1,843
	6"	6	50.0	$167.50	300	$1,005
	8"	11	80.0	$268.00	880	$2,948
	Total Base COM	**2,515**			**9,789**	**$32,793**
Industrial						
	5/8x3/4"	10	1.0	$3.35	10	$34
	3/4"	1	1.5	$5.03	2	$7
	1"	1	2.5	$8.38	3	$10
	1-1/2"	3	5.0	$16.75	15	$50
	2"	14	8.0	$26.80	112	$375
	3"	0	15.0	$50.25	0	$0
	4"	7	25.0	$83.75	175	$586
	6"	2	50.0	$167.50	100	$335
	8"	1	80.0	$268.00	80	$268
	10"	0	115.0	$385.25	0	$0
	Total Base IND	**39**			**497**	**$1,665**
Public Authority						
	5/8x3/4"	19	1.0	$3.35	19	$64
	3/4"	0	1.5	$5.03	0	$0
	1"	3	2.5	$8.38	8	$27
	1-1/2"	10	5.0	$16.75	50	$168
	2"	56	8.0	$26.80	448	$1,501
	3"	4	15.0	$50.25	60	$201
	4"	3	25.0	$83.75	75	$251
	6"	8	50.0	$167.50	400	$1,340
	8"	3	80.0	$268.00	240	$804
	Total Base PUB	**106**			**1,300**	**$4,355**
Totals		**55,000**			**70,190**	**$235,137**

EXHIBIT 3

Exhibit 3

AQUA NEW JERSEY, INC.
LEAD SERVICE LINE REPLACEMENT PLAN
2024 UPDATE

Filed pursuant to the Order of Approval in
BPU Docket No. WR22120745

LEAD SERVICE LINE REPLACEMENT PLAN
2024 UPDATE

Aqua New Jersey, Inc. ("ANJ" or the "Company"), a public utility corporation of the State of New Jersey, maintaining its principal place of business at 10 Black Forest Rd, Hamilton NJ, hereby provides the Board of Public Utilities (the "Board" or "BPU") with this Update to the Company's Initial Lead Service Line Replacement Plan approved by the Board in BPU Docket No. WR22120745. As the Board is aware, the Lead Service Line Replacement Law ("LSLR Law"), P.L. 2021, c. 183, required water utilities to submit Initial Lead Service Line Replacement Plans and to update those plans annually. ANJ submitted its Initial Lead Service Line Replacement Plan ("LSLR Plan"), and related request for deferred accounting, on December 23, 2022, which Plan was ultimately approved by the Board in July 2023.[1]

As noted above, the LSLR Law also requires water utilities to update their Initial Plans annually. In compliance with the requirement to update its Initial Plan, ANJ submits this updated information. Please note that the Company incorporates by reference its Initial Plan approved by the Board in BPU Docket No. WR22120745.

I. BACKGROUND

1. ANJ is a regulated public utility corporation engaged in the production, treatment and distribution of water, and the collection and treatment of wastewater within its defined service territory within the State of New Jersey. The Company's service territory includes portions of the following counties: Atlantic, Burlington, Camden, Gloucester, Hunterdon, Mercer, Monmouth,

[1] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval to Defer Certain Costs Related to the Replacement of Lead Service Lines and Other Related Approvals*, BPU Docket No. WR22120745, Order Adopting Stipulation (dated July 12, 2023), at 2.

Sussex, Ocean, and Warren. As of November 30, 2023, Petitioner serves approximately 57,000 water and fire service customers and 6,600 wastewater service customers.

2. ANJ is subject to regulation by the Board for purposes of setting its rates for water and wastewater service and to assure safe, adequate and proper water and wastewater service pursuant to *N.J.S.A.* 48:2-13, 48:2-16, and 48:2-21*, et seq*.

3. The Company is submitting this Update to its plan for the replacement of property-owner side, or customer-owned, lead service lines pursuant to the LSLR Law, and contemporaneously with the Company's filing of its 2024 base rate case.

II. LSLR PLAN

4. ANJ's LSLR Plan and Update include replacement of customer-owned lead service lines, including goosenecks and galvanized services (together, "LSLs") as required by the LSLR Law in conjunction with main replacement and relocation projects using the Company's prioritization model previously reviewed in prior filings with the Board, as well as through other means as the replacement program progresses over the next 10 years.

5. The LSLR Plan and Update include the following elements required by the LSLR Law:

- Estimated total cost to replace both sides of LSLs;
- Availability of grants or low interest loans;
- Proposed rate treatment of replacement costs;
- How replacement of LSLs will be accomplished;
- Estimated savings; and
- Communication with customers and documentation of consent.

III. ESTIMATED COSTS FOR TOTAL LSLRs

6. As of this Update filing, ANJ estimates that there are approximately 2,000 Company-owned LSLs and 4,000 customer-owned LSLs. These estimates are based on a comprehensive review of tap records; however, such records do not consistently identify the material of the customer-owned portion of the service line, as this level of detail was not historically relevant and thus, not maintained in the Company's records. As ANJ further inventories service line material, it is anticipated that the number of LSLs identified will change and may increase.

7. Based on ANJ's experience replacing LSLs in the Company's Northern Division (Phillipsburg system), the Company estimates the average cost (in 2023 dollars) to complete a full LSL replacement to be approximately $8,000. Company side partial replacements are estimated to cost approximately $4,200, and customer side only replacements are estimated to cost approximately $5,100.

8. The average cost to replace Company and/or customer-owned LSLs could increase or decrease as work continues. Factors impacting actual costs include, but are not limited to: (1) whether work is completed as a part of a main replacement program, in a targeted area or as a one-off replacement; (2) local ordinances, codes and requirements; (3) changes in laws, standards, and best practices; (4) local competitive market prices for services and materials; (5) differences in construction methods and equipment in different areas; (6) property site conditions; (7) scope of work and building conditions for work, if any, performed through building foundation walls and within buildings; (8) any factors impacting material and labor costs such as inflation, strikes, and events affecting the supply chain; and (9) improvements in technology.

9. The Company estimates that it could replace up to 2,000 LSLs each year as shown by ANJ's replacement program performance in 2022-2023. This speed of replacement depends on access, local moratoriums, and contractor availability resulting in a total estimated cost to replace both the Company and customer-owned LSLs ranging from $14 million to $24 million over the next 10 years. The Company notes this is an estimate that is subject to change as replacement work continues.

10. The Company will also continue to incur costs associated with evaluating service lines of unknown composition through a service line inventory program. Methods for obtaining service line inventory data include: customer surveys, test-pits, door knocking for access, material verification during meter changes, and computer based modeling. These costs will vary as the success of many of these methods is not yet fully known.

IV. UTILIZATION OF AVAILABLE GRANTS AND LOANS

11. ANJ is currently pursuing funds from the New Jersey Infrastructure Bank ("NJIB") to take advantage of principle forgiveness related to the costs of removing LSLs in an effort to minimize the financial impacts of LSL the Company's customers. This combination of low-interest financing and principal forgiveness will support getting this critical project done at the lowest possible rate impact to our customers. Currently, a $10 million application is under review for the Phillipsburg system, and similarly a second $10 million loan application has been submitted to NJIB for the Blackwood water system. These are the major areas of impact from the new lead service line regulations.

12. The Company's Blackwood system has been selected as part of the EPA's Lead Line Accelerator Program. This pilot program will lend financial, engineering, and administrative

support to increase the speed of implementation of this program in the Blackwood system. This program is projected to have a savings to ANJ's customers of approximately $6 million.

13. The Company will continue to pursue additional opportunities for which it may be or may become eligible in an effort to lower the total cost of implementing the LSLR Plan.

V. PROPOSED RATE TREATMENT

14. The Company's approach to recovering the costs of the LSLR Plan is described in detail in the Direct Testimony of Dawn Peslak.

VI. HOW LSLRs ARE ACCOMPLISHED

15. To date, Aqua has replaced just shy of 2,200 LSLs across its 3 main operating divisions, with the majority of the work being done in the Phillipsburg system (see Table 1). This work amounts to almost 17 miles of LSLs replaced, removing a significant amount of point source contamination that has been in-place and potentially impacting customers for many years. The Company utilized four different contractors (Roman E&G, Montana Construction, Henkels & McCoy, and Alpha Utilities) to do this critical work. Thus far, the primary method of replacement has been trenchless technology which minimizes the impact to customers' property. Despite the minimal impact, a major cost on the LSLR program is restoration of municipal roadways, customer sidewalks and property.

16. Table 1, below, shows the LSL inventory taken at the beginning of the project and the inventory levels submitted to the NJDEP in late 2023. As shown on Table 1, major progress has been made eliminating unknown services from the Company's inventory.

Table 1 LSL Inventory July 2021 vs. July 2023 & Total LSLs Replaced

Table 1									
	July 2021				July 2023				
System Name	Aqua Side "Lead"	Customer Service "Lead"	Aqua Service "Unknown"	Customer Service "Unknown"	Aqua Side "Lead"	Customer Service "Lead"	Aqua Service "Unknown"	Customer Service "Unknown"	Services Replaced
Blackwood	0	10	12565	9193	0	12	5097	3784	4
Woolwich	0	0	0	0	0	0	0	0	0
Seaview Harbor	0	0	0	0	0	0	0	0	0
Hamilton	3	12	6722	8148	4	66	595	925	43
North Hanover	0	0	0	0	0	0	0	0	0
Cal Village	0	0	0	0	0	0	0	0	0
Spartan Village	0	0	0	0	0	0	0	0	0
Berkeley-Eastern	0	0	0	0	0	0	0	0	0
Lawrenceville Water	14	35	592	649	29	34	22	19	45
Phillipsburg	140	1402	3562	4803	82	441	324	533	1998
Riegelsville	2	2	12	9	2	2	10	7	0
Warren Glen	2	11	23	35	5	14	17	27	0
Califon	7	19	235	247	4	6	20	10	27
Riegle Ridge	5	13	108	130	5	12	15	19	1
Fox Hill	0	0	0	0	0	0	0	0	0
Bunnvale	0	3	36	52	0	1	13	28	0
Brainards	1	3	23	30	1	6	11	27	0
Bear Brook	0	0	0	0	0	0	0	0	0
Harkers Hollow	0	0	0	0	0	0	0	0	0
Wallkill	0	0	235	199	1	1	50	40	0
Vernon	0	3	129	111	0	3	6	6	0
Tranquility	0	0	0	0	0	0	0	0	0
Summit Lake	0	1	67	65	0	0	0	0	0
Byram	0	0	0	0	0	0	0	0	0
Cliffside Park	0	0	0	0	0	0	0	0	0
Total	174	1514	24309	23671	133	598	6180	5425	2118
*Data set shows inventory submitted to NJDEP. "Services Replaced" Column shows LSLs replaced since beginning of the program.									

17. While completing the majority of the detailed inventory work, ANJ also remediated just over 2,100 lead service lines. ANJ looks forward to bringing this program to a close in the coming years and being able to declare our New Jersey water systems to be lead free. This is a critical milestone as lead and copper regulations have been updated by the EPA and will become more and more stringent for systems that still contain leaded materials.

VII. CUSTOMER COMMUNICATIONS

18. A big success of the LSLR program has been our acceptance rate of getting the work scheduled with homeowners. To date only 53 customers have rejected the service line

replacement work being done on their homes. This is an acceptance rate of over 97%. Aqua attributes this success rate to the lack of upfront charges to the homeowner, skilled labor completing the work, and an exhaustive outreach program using door knocking crew members reaching out to homeowners during varied times of the day. A description of the Company's outreach plan and notice was included in the Company's Initial filing (see Exhibit D to the Initial LSLR Plan) and should be consulted for further details.

19. As the composition of LSLs are identified by ANJ and/or its contractors through excavation and other activities, customers are provided with the results of those tests. When a customer-owned LSL is identified for replacement, the customer is provided with contact information for the contractor assigned to that premises, advised of the replacement process and timing. Customers are also advised that the LSLR will be done free of charge. Customers who agree to have their LSL replaced are required to sign a short license agreement authorizing Aqua (or its contractor) to access the premises to perform the LSLR. Whenever possible, customer consent is obtained well in advance to limit customer inconvenience or confusion, and to facilitate efficient contractor scheduling and workflows.

EXHIBIT 4

AQUA NEW JERSEY, INC.

TARIFF FOR

WATER SERVICE

APPLICABLE IN

ALL OR PART OF

WARREN, HUNTERDON, MERCER, BURLINGTON, CAMDEN, OCEAN,

SUSSEX, MONMOUTH, GLOUCESTER, ATLANTIC AND MORRIS COUNTIES

NEW JERSEY

Issued: May 28, 2019 Effective Date: June 1, 2019
By: John Hildabrant, President
10 Black Forest Road
Hamilton, NJ 08691
Filed pursuant to decision and order of the Board of Public Utilities dated May 28, 2019, in Docket No. WR18121351.

TABLE OF CONTENTS

TERRITORY SERVED

ATLANTIC COUNTY
Egg Harbor Township

BURLINGTON COUNTY
Chesterfield Township *
North Hanover Township
Borough of Wrightstown

CAMDEN COUNTY
Gloucester Township *

GLOUCESTER COUNTY
Woolwich Township

HUNTERDON COUNTY
Bloomsbury Borough*
Califon Borough
Holland Township*
Lebanon Township
Readington Township

MERCER COUNTY
Hamilton Township *
Lawrence Township
Robbinsville Township *

MONMOUTH COUNTY
Howell Township
Upper Freehold

MORRIS COUNTY
Washington Township
Mount Olive Township

OCEAN COUNTY
Berkeley Township

SUSSEX COUNTY
Byram Township*
Fredon Township
Green Township*
Hardyston Township *
Vernon Township *

WARREN COUNTY
Alpha Borough
Greenwich Township
Harmony Township
Lopatcong Township
Mansfield Township*
Town of Phillipsburg
Pohatcong Township

*Partially served

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS:

1.1 "Aqua" or "Company" shall be used herein to refer to Aqua New Jersey, Inc., the party rendering water service.

1.2 "BPU" or "Board" shall be used herein to refer to the New Jersey Board of Public Utilities.

1.3 "Classes of General Metered Service." There are five classes of general metered service, based on the nature of the Customer and the use of the property receiving service, as follows:

1.3.1 **Residential Class:** An individually-metered dwelling unit intended for human habitation (including a detached house, rowhome, townhouse, condominium and mobile home) or an individually-metered home or building consisting of not more than two dwelling units.

1.3.2 **Commercial Class:** A building, store, restaurant or office which is primarily a site for the buying or selling of goods or the provision of professional or consumer services. In addition, apartments, condominium complexes, colleges, private and public schools, car washes, laundromats, construction sites, hotels, motels, and tanks filled at the Company's premises are included in this class.

1.3.3 **Industrial Class:** A building or factory which is primarily a site for the manufacture or production of goods.

1.3.4 **Other Water Utility:** A public water utility, Municipal Corporation or water authority which purchases water for resale to their customers.

1.3.5 **Public:** A public building, library, park or playground which is owned by a governmental unit which has the power of taxation.

1.4 "Connecting line" is the portion of pipe that starts at the curb stop and conveys domestic water and/or fire service to the customer. The customer owns, and is responsible for the operation and maintenance of the connecting line .

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.5 "Curb stop" is the fitting attached to the service line, and is used primarily for turning on and shutting off water at the curb in emergencies, for purposes of repair or to discontinue service to a customer.

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

1.7 "DSIC" shall be used herein to refer to the Distribution System Improvement Charge. (N.J.A.C. 14:9-10.2).

1.8 "Diversion" shall be used herein to refer to 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).

1.9 "DPA" shall be used herein to refer to a Deferred Payment Agreement, which may be offered by the Company to a Customer upon request, as appropriate and in accordance with the Board's regulations.

1.10 "Extension" is an addition to the existing system of mains, intended to service more than one customer, either at the time of installation or in the future.

1.11 "Interruptible Service" means service which may be interrupted in the sole discretion of the Company on not less than three (3) hours' notice to the customer by telephone or otherwise.

1.12 "Main" is a pipe or conduit for conveying water or wastewater. A "water main" will exclusively convey water and a "sewer main" will exclusively convey wastewater.

1.13 "Meter" is a device to measure the quantity of water, wastewater and/or the rate of flow delivered to or from a customer.

1.14 "Meter pit" is a structure that houses a small meter or meters less than or equal to 2-inches. Unless agreed to by the Company and the customer, it is installed, furnished and maintained by the Customer.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.15 "Meter vault" is a structure that houses a meter or meters larger than 2-inches. Unless explicitly agreed to by the Company and the customer in writing, it is located and designed by the Company, and constructed, installed, furnished and maintained by the Customer at the sole expense to the customer.

1.16 "Multi-use service" shall be used herein to refer to water service that is supplied to a structure through one water line extending from the water main to the structure, and which is used inside the structure for both domestic water service and fire suppression service. (N.J.A.C. 14:9-8.1).

1.17 "NJ DEP" shall be used herein to refer to the New Jersey Department of Environmental Protection.

1.18 PSTAC" or "Purchased wastewater treatment adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of wastewater treatment purchased from a wastewater treatment purveyor. (N.J.A.C. 14:9-7.2)

1.19 "PWAC" or "Purchased water adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of water purchased from a water purveyor. (N.J.A.C. 14:9-7.2)

1.20 "PWAC Year" and "PSTAC Year" shall mean the twelve-month period beginning each January 1 and ending December 31 of the following calendar year.

1.21 "Residential Customer" shall be used herein to refer to Customers who receive service for use in a residence. (N.J.A.C. 14:3-1.1).

1.22 "Service line" is the portion of pipe that starts from a main and ends at the curb stop. The service line is owned, operated and maintained by the Company. (N.J.A.C. 14:3-8)

1.23 "Tap" is the fitting inserted in the main to which the service line is attached. It is used to facilitate the tapping of the main and for shutting off water in case of repairs to the service line.

1.24 "Tariff," as referred to herein, is the entire "Tariff for Water Service" as the same may be amended or revised from time to time in accordance with N.J.A.C. 14:3-1.3, Tariffs.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.25 "Tenant-Customer" shall be used herein to refer to 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).

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.

2.4 The Company will endeavor to provide a regular and uninterrupted supply of water through its facilities. However, if service shall be interrupted, irregular, or defective, or fail because of breakdown or emergency, the Company will not be liable for damage, inconvenience or lost income resulting there from.

2.5 A customer's responsibility to pay for service continues from the time service is commenced, pursuant to his/her application, until written notice is received by the Company of a change of ownership or occupancy of the premises or written notice is received by the Company to discontinue the applicable service. Upon receipt of such notice, the Company will arrange for a final meter reading and billing. No allowance will be made in case of non-occupancy, unless the Company is notified in writing as stated above.

TERMS AND CONDITIONS OF SERVICE

2. GENERAL INFORMATION (CONTINUED):

2.6 The Company does not undertake to render any special service or maintain any fixed pressure. In the event of an accident or for other reasons, the Company may shut off the water in its mains and pipes and may restrict the use of water whenever the public welfare may require it. All customers requiring an uninterrupted supply or a uniform pressure of water for any purpose, such as steam boilers, are cautioned to provide their own means of providing such special uninterrupted service. When the supply is to be interrupted or curtailed, the Company will endeavor to give notice.

2.7 The Company does not undertake to supply any uniform quality of water for special purposes, such as laboratories, manufacturing or processing plants, swimming pools, bleaching or dyeing plants, or laundries. Customers requiring water of special quality, or water free from discoloration or turbidity, are required to provide their own means of treating water, or provide such other protection as may be deemed necessary for the purpose required.

2.8 The location of meters and the arrangement of the fittings and piping are subject to inspection and approval of the Company and should meet the Company's requirements presented herein.

2.9 Neither by inspection approval nor failure to approve, nor in any other way, does the Company give any guarantee, or assume any responsibility, expressed or implied, as to the adequacy, safety or characteristics of any structures, equipment, pipes, appliances or devices owned, installed or maintained by the customer or leased by the customer from third parties.

2.10 The Company will not be liable for any loss, injury, casualty, or damage resulting from the supply or use of water service, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises.

2.11 From time to time, the Company may provide public notices, specific notices, correspondence or other notifications ("Notices") regarding the presence of conditions affecting the quality and/or quantity of water service provided by the Company. (Examples of such Notices include, but are not limited to, boil water alerts, notice of hydrant and main flushing, and notice of water quality testing results.) These Notices may contain information about actions members of the public may wish to, are recommended to, or should take in response to the conditions identified in the Notice. In the event the Company issues a Notice, the Company will not be liable for any expenses or costs incurred by a customer or end-user for any action taken in response to any condition identified in the Notice.

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 The Company shall not impose any fees or charges for any fire protection system to a Residential Customer served by a water service line of two inches or less in diameter. Nor will the Company impose any fees in excess of the cost of water actually used for any sprinkler system required by State statutes or regulations to be installed in any residential health care facility or rooming or boarding house. The Company may, however, require separate, dedicated lines for fire protection and that those lines be metered. (N.J.S.A. 48:19-18).

3.4 Tenant-Customers shall not be required to pay for charges associated with a Diversion where, after investigation, Aqua New Jersey, Inc. has determined a Diversion of service has occurred. (N.J.A.C. 14:3-7.8(b)).

3.5 The Distribution System Improvement Charge (DSIC) is a Board-approved charge that allows the Company to more timely recover costs of rehabilitating, improving, or replacing non-revenue producing water distribution infrastructure needed for conservation, continued system safety and reliability, improved water quality, and sustained economic growth in New Jersey. (N.J.A.C. 14:9-10.1). The DSIC rate (as specified in Rate Schedule No. 1D) is reflected as a separate line item on Customer bills, and is calculated in accordance with N.J.A.C. 14:9-10.9(a)3.

3.6 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 $50.00.

TERMS AND CONDITIONS OF SERVICE

3. BILLING, FEES AND CHARGES (CONTINUED):

3.7 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.

3.8 Non-Standard Meter Connection Fees.

3.8.1 For metered connections which are set up for the temporary, short term sale of water such as to contractors, lawn care specialists, the Company will charge for the water taken based on the "General Metered Service" tariff. The Company shall have the right to designate where, how, when and if such water may be obtained. Anyone granted permission to obtain water in such a manner must have in place a mechanism acceptable to the Company that will protect against the backflow of water into the Company's system.

3.8.2 In addition, the Company shall require a $1,600 deposit for any temporary meter obtained from the Company. This deposit shall be refunded upon return of the temporary meter, provided that the meter is returned in the same condition in which it was borrowed. The Company reserves the right to retain all or a portion of the deposit if the meter is returned in a condition other than that which it was borrowed and/or if the meter is not returned at all.

3.9 Bulk Water Purchase. For bulk water purchases, such as the filling of tanker trucks, the Company will charge for the water taken based on the "General Metered Service" tariff.

TERMS AND CONDITIONS OF SERVICE

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)).

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

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.3 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.

5.4 **At the Company's Direction (For Nonpayment):** The Company has the right to curtail, suspend or discontinue service for nonpayment of water 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)).

5.4.1 Customers shall be provided with at least fifteen (15) days from the postmark date of the outstanding bill to pay the water bill, or any deposit amount requested by the Company, except for those Customers receiving fire protection or multi-use service. (N.J.A.C. 14:3-3A.3).

5.4.2 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.

5.4.3 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.

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.4.4 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).

5.4.5 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.

5.5 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).

5.6 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))

5.7 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).

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.8 **Service Restoration:** In cases where service has been discontinued at the Company's direction, as set forth herein, a charge for reconnection will be made as specified in Paragraph 3 herein, except where such discontinuance has been made by the Company in order to effectuate repairs, changes or improvements in any part of the Company's system.

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 New Jersey, Inc. 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).

TERMS AND CONDITIONS OF SERVICE

7. METERS:

7.1 Upon Customer request, the Company will provide one free meter test per year. Where a billing dispute exists, the Customer may request that the meter test be witnessed by the Board, or a third-party. A meter test arising from a billing dispute may be appropriate in instances which include, but are not limited to: unexplained increased consumption, crossed meters, consumption while an account is vacant or any other instance where the meter's accuracy might be an issue in a bill dispute. Upon application, a Customer may also request that his, her or its meter be tested by the Board. (N.J.A.C. 14:3-4.5).

7.2 Where a Customer has filed a complaint with the Board regarding meter accuracy or performance, Aqua shall not remove the Customer's meter from service during the pendency of said complaint, or during the thirty (30) days following the Board's decision on the complaint, unless otherwise authorized or directed by the Board (N.J.A.C. 14:3-4.8(c)).

7.3 Aqua shall make an adjustment of charges, to be determined consistent with N.J.A.C. 14:3-4.6, whenever a water meter is found to be registering fast by more than one and one-half percent.

8. EMERGENCY INTERRUPTIONS DUE TO EXTRAORDINARY DEMAND AND/OR DIMINISHED SUPPLY:

8.1 The Company endeavors to provide a regular and uninterrupted supply of water through its facilities to its Customers. However, if because of emergencies beyond Aqua's control, including but not limited to, governmental mandate, service is interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom. In the event of an emergency for extraordinary demand and/or diminished supply, the Company may restrict the use of water whenever the public welfare may require it and, if necessary, may shut off the water in its mains and pipes. In such cases, the Company will provide Customers, by phone, with detailed information regarding the conditions and restrictions, and the purpose and probable duration of the usage restriction or service interruption, curtailment or discontinuance.

8.2 Aqua New Jersey, Inc. may restrict or interrupt water service during certain periods in order to protect the public water supply, or to otherwise comply with any regulations or orders issued pursuant to the Water Supply Management Act, N.J.S.A. 58:1A-1 *et seq*. The Company will provide notice and subsequent outage reports to the Board in accordance with N.J.A.C. 14:3-3.7, as appropriate.

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE:

9.1 By applying for Multi-use service, the Customer agrees to be responsible for all claims, costs, and liability for personal injury, death and/or property damage, resulting from the Customer's individual water system, unless caused by the negligence of the Company. (N.J.A.C. 14:9-8.3(d)).

9.2 Terms of Payment: The Company may terminate a Customer's Multi-use service for non-payment of a valid water bill for Multi-use service, in accordance with the Board's rules governing discontinuance of service at N.J.A.C. 14:3-3A.4(j). (N.J.A.C. 14:9-8.3(b)).

9.3 Conditions: By applying for Multi-use service, the Customer or builder certifies that:

9.3.1 The Customer or builder has hydraulically calculated the demand for the Customer's or builder's water system, based on the simultaneous domestic demand and fire sprinkler demand. The Customer or builder shall make this calculation in accordance with the Uniform Construction Code; and

9.3.2 The Customer or builder will ensure that the system is installed in accordance with the Uniform Construction Code at N.J.A.C. 5:23; and

9.3.3 The Customer will, prior to installation of the meter, obtain a construction permit in accordance with the Uniform Construction Code from the enforcing agency having jurisdiction over the system. (N.J.A.C. 14:9-8.3(c)).

9.4 Provision of Services: By applying for Multi-use service, and operating the same, the Customer agrees:

9.4.1 To include a backflow prevention device(s) as defined at N.J.A.C. 7:10-1.3, and as specified at N.J.A.C. 7:10-10.3;

9.4.2 To be solely responsible for all costs and expenses relating to the installation, operation, maintenance, repair and replacement of the Customer's water system, including the fire suppression system and backflow prevention device(s);

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE (CONTINUED):

9.4.3 To ensure that the Customer's water system complies with the applicable requirements of the Uniform Construction Code in effect at the time of system installation, including any applicable building, plumbing and fire protection subcodes; and

9.4.4 To ensure that the Customer's water system is maintained in accordance with all applicable law so as to protect against backflow, back-siphonage and contamination of the potable water system. (N.J.A.C. 14:9-8.3(e)).

10. WATER SERVICE AND CONNECTING LINES

10.1 Company Side – Service Lines:

10.1.1 The Company is responsible for the installation and maintenance of the service line. N.J.A.C. 14 :3-8.1 et seq.

10.1.2 Only employees of the Company or persons duly authorized to do so by the Company are permitted to operate or otherwise access the curb stop.

10.1.3 No service line shall be used to supply more than one customer unless authorized in advance by the Company in writing.

10.1.4 Where two or more customers are supplied through a single service line, the customers must provide a suitable location(s) for a separate meter and separate shut-off valve that will be dedicated to each customer. The piping of the building must be so arranged that each customer can be supplied through an independent meter, shut off valve and piping system as may be required by the Company, at the Company's discretion. The meter pit or vault shall be installed at a location acceptable to, and with the express approval of, the Company.

10.1.5 No single building or single group of buildings in one common enclosure and under one ownership shall be supplied by more than one service line.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2 Customer Side – Connecting Lines:

10.2.1 Connecting lines are owned, installed, maintained and repaired by the customer at the customer's sole expense. The connecting line should be maintained in a condition conducive for the Company to perform the services required to serve the customer. If the connecting pipe is not so maintained, any failure of this pipe following the operation of the curb stop by the Company will be the responsibility of the customer. While performing its duties, if the Company notices that the connecting pipe or other customer owned and maintained appurtenances appear to be in poor condition, the Company will attempt to notify the customer of such, including that the customer may desire to contact a licensed plumber for a professional evaluation and/or repair of the connecting pipe and appurtenances. Failure to repair a leaking connecting line is grounds for discontinuance of water service. (N.J.A.C. 14:3-3A.1(a)5.x).

10.2.2 Connecting lines should be installed, without sharp bends, at right angles to the line of the street and shall be installed in the trench not less than 3-1/2 feet in depth to avoid damage and possible interruption to service caused by freezing. Other utility service lines shall not be installed in the same trench as the connecting line.

10.2.3 No attachment shall be made to the connecting line between the curb stop and the meter except as otherwise authorized by the Company. Unauthorized attachments are grounds for termination of service. (N.J.A.C. 14:3-3A.1(a)5.ii).Connecting lines should not be less than ¾ inch in inside diameter.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2.4 A Customer must install a water pressure reducing valve where required by State of New Jersey plumbing code. If a water pressure reducing valve is required to be installed, the customer must install a pressure relief valve (collectively both are referred to as the "Valves"). In all cases, the costs of installation and maintenance of the Valves shall be borne by the Customer. The Customer shall own and be obligated to maintain the Valves. The Company will not be liable for damage due to meter failures if the Customer is located in a high pressure zone and does not have a pressure reducing valve or has a pressure reducing valve downstream from a water meter that is installed inside the premises. For meters less than or equal to 2 inches the pressure reducing valve will be located on the downstream side of the meter if the meter is located outside of the Customer's premises and on the upstream side of the meter, if the meter is located inside of the Customer's premises. For meters greater than 2 inches the pressure reducing valve will always be located on the upstream side of the meter.

10.2.5 The Customer is required to make all changes in the connecting line due to changes in grade, relocation of mains, or other causes only if such changes are mandated by a municipality, county, state or other governmental body.

11. WATER MAIN EXTENSIONS:

11.1 The Company will extend water service in accordance with all applicable laws of the State of New Jersey and Board regulations and orders including N.J.A.C. 14:3-8.1 *et seq.* Upon request, an application will be provided to the applicant, which must be returned to the Company.

12. CUSTOMER'S PREMISES:

12.1 The Company may refuse to provide a water connection, or furnish water through a connection pipe already installed, when a customer's piping system is not installed in accordance with the regulations of the Company and of the municipality in which the premises are located; or when the system on the premises is not at sufficient depth to prevent freezing.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.2 The Company shall have the right of reasonable access to Customer's premises, and to all property furnished by the Company, at all reasonable times for the purpose of inspection of Customer's premises incident to the rendering of service, reading meters, or installing, relocating, inspecting, testing, replacing or repairing its facilities used in connection with supplying the service, or for the removal of its property. (N.J.A.C. 14:3-3.6). Service can be discontinued for refusal of reasonable access to the Customer's premises for necessary purposes in connection with rendering of service, including meter installation, reading or testing, installation, replacement or relocation of meter reading devices, or the maintenance or removal of the utilities property. (N.J.A.C. 14:3-3A.1(a)5.i). A charge for reconnection will be made as specified in Paragraph 3 herein upon restoration of service.

12.3 Customers shall not permit access to the meter and other appliances of the Company except by authorized employees of the Company or properly authorized state or local inspectors.

12.4 In all cases the Customers should not interfere with property of the Company, but should immediately notify the Company of any problem.

12.5 It is the sole responsibility of each Customer to ensure that all piping and appurtenances within a Customer's premises comply with state, municipal and other public health regulations in force with respect hereto including state and local plumbing codes. The piping and appurtenances shall be maintained in a condition conducive for the Company to perform the services required to serve the Customer.

12.6 In any premises where devices are used which might produce a back pressure, such as steam boilers, carbonation equipment for soft drinks, booster pumps, etc., a check valve shall be installed by the Customer at the meter. In the event such check valve is installed, pressure relief valves should be provided by the Customer in the system.

12.7 In any premises where an auxiliary water source is available, the pipes carrying water from the mains of the Company are required to be marked in some distinctive manner for ready identification.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.8 Physical connections, such as cross-connections, interconnections, valves, pumps, or similar devices, either permanent or temporary, connecting the pipelines or facilities of the Company with other pipelines or facilities supplied with water from other sources will not be permitted without the express written consent of the Company. Water which has once been drawn from the Company's distribution network and used for any purpose or stored in tanks, is considered an unapproved source of supply.

12.9 The Company may require a cross-connection protective device on a customer's service, in accordance with N.J.A.C. 7:10-10, which shall be purchased and installed at the expense of the customer. The cross-connection device shall be of the type approved by the Company. Inspection and testing at intervals, in accordance to N.J.A.C. 7:10-10, shall be performed, at the expense of the customer.

12.10 No device or connection is permitted between pipes carrying water from the mains of the Company and any portion of the plumbing system of the premises, which may under any condition permit back-flow or back-siphonage unless prior written permission has been granted by the Company.

RATE SCHEDULE NO. 1
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all customers served by the Company including those supplied through approved Multi-Use Services.

CHARACTER OF SERVICE: Continuous

RATE: Size of Meter	Fixed Service Charge Amount Per Month
5/8”	$ 16.50
3/4”	24.75
1”	41.25
1 1/2”	82.50
2”	132.00
3”	247.50
4”	412.50
6”	825.00
8”	1,320.00
10”	1,897.50
12”	3,547.50
Bulk Water Purchase	31.08
Flat Rate for Unmetered Customers	
Residential	$ 55.21
Commercial, Industrial, Other Water Utility, and Public	75.87

	Usage Charge Rate/1000 Gallons
All Service Areas (Except as noted below)	$ 6.452
Wallkill Only	4.528
Byram Township and Seaview Harbor Only	11.560
Non-Potable Water	1.290
Resale	6.442

*The above rates, excepting the Resale rate, include a water tax of $0.01 per 1,000 gallons of water, which water tax was established by the State of New Jersey with the passage of the Safe Drinking Water Act. (N.J.S.A. 58:12A-21).

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

RATE SCHEDULE NO. 2
DISTRIBUTION SYSTEM IMPROVEMENT CHARGE
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all Customers served by the Company.

CHARACTER OF SERVICE:
Continuous

RATE:

Size of Meter	DSIC Amount Per Month
5/8”	$ 2.62
3/4”	3.93
1”	6.55
1 1/2”	13.10
2”	20.96
3”	39.30
4”	65.50
6”	131.00
8”	209.60
10”	301.30
12”	563.30

TERMS OF PAYMENT
PAYMENT FOR ALL BILLS RENDERED IS DUE FIFTEEN (15) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. The DSIC is assessed monthly for metered service, and is reflected on the Customer’s bill rendered at the close of the billing period.

RATE SCHEDULE NO. 3
PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY:
Applicable to all Customers for service furnished exclusively to private fire protection facilities served by the Company, except as specifically provided elsewhere in this tariff.

CHARACTER OF SERVICE:
The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

Size of Service	Fixed Service Charge Amount Per Month
Sprinklers	
2" or less	$ 0.00
3"	96.40
4"	160.66
6"	321.32
8"	514.10
10"	739.02
12"	1,381.66
Private Hydrants (per hydrant)	$ 41.28

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

SPECIAL PROVISIONS:
Private fire service lines shall be equipped with special meters or detection devices and are to be used exclusively for fire protection purposes. No water shall be used through these fire protection connections except for testing purposes or in case of fire. However, the Company shall be provided with at least 72 hours (or 3 days) notice prior to the testing of any fire protection connection and shall be given the opportunity to witness such testing.

SPECIAL PROVISIONS (CONTINUED):

Customers desiring a separate service connection for private fire service are required to make separate written application for such service on forms prescribed by the Company. Private fire service installations must be made in accordance with the provisions of this tariff regarding the installation of service and connecting pipes and other facilities necessary for the provision of such service.

Service lines designated for private fire protection are installed for customers requiring a private fire service to supply sprinkler heads or hose connections. Any connection in which sprinkler heads and/or hose connections are supplied through a domestic service connection are not considered as part of a private fire protection service and shall not be subject to the requirements as set forth herein (i.e., limited fire protection). Residential Customers served by a 2-inch water service line or less in diameter will not be imposed a standby fee for a fire protection system.

The connection shall be in accordance with the applicable laws including but not limited to those of the BPU, NJ DEP and all federal, state and local agencies.

The Company shall not be liable for any loss, injury, casualty or damage resulting from fire or water, resulting from the supply or use of water service or the failure thereof, which may occur on account of the installation or presence of a private fire service connection, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises, or connected therewith.

The Company may not discontinue fire protection service unless it has provided written notice giving the customer at least thirty (30) days' notice, by certified mail, prior to the proposed discontinuance. (N.J.A.C. 14:3-3A.4(j)). However, in case of fraud, illegal use, or when it is clearly indicated that the customer is preparing to leave, immediate payment of accounts may be required, and service may be discontinued without further notice.

When hydrants are attached between the main and the meter, a charge per hydrant will be made. The installation and maintenance of fire hydrants and the supplying of water through such hydrants is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire.

No additional charge shall be made for water used in testing or for fire. However, should it be determined by Aqua that water is being, or has been, used through a fire protection connection for other than fire protection or testing purposes, the Company shall have the right to charge for the water used based on its "General Metered Service" tariff and to order said unauthorized use to cease immediately subject to the termination of the service.

RATE SCHEDULE NO. 4
PUBLIC FIRE PROTECTION SERVICE

APPLICABILITY:
This schedule is applicable to all municipal Customers served by the Company, for public fire protection service.

CHARACTER OF SERVICE:
The installation and maintenance of fire hydrants, and the supplying of water through such hydrants, is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire. The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

For each fire hydrant installed there shall be made a Monthly Fixed Fire Protection Charge of:

All Service Areas (Except as noted below)	$ 53.65
Alpha Borough	23.28
Bayville Township	18.64
Califon Borough	51.23
Fredon Township	23.28
Hardyston Township	13.37
Holland Township – Church St.	51.23
Holland Township – Fox Hill Dr.	31.66
Lawrenceville Township	25.48
Tranquility Springs	46.57
Upper Freehold Township	30.74

For Byram Township only, the following Monthly Fixed Fire Protection Charge shall apply, per customer: $5.34

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

SPECIAL PROVISIONS:

All hydrants, lead valves, branches and other appurtenances shall be and remain the property of the Company.

Upon application or request by a duly authorized representative of a municipality in the Company's service area, the Company will install fire hydrants for purposes of public fire protection. The locations of such hydrants shall be selected upon agreement between the necessary municipal official(s) and representatives of the Company after careful consideration. Municipalities shall pay the Company a charge for service to public fire hydrants as provided in this tariff.

EXHIBIT 5

AQUA NEW JERSEY, INC.

TARIFF FOR

WATER SERVICE

APPLICABLE IN

ALL OR PART OF

WARREN, HUNTERDON, MERCER, BURLINGTON, CAMDEN, OCEAN,

SUSSEX, MONMOUTH, GLOUCESTER, ATLANTIC AND MORRIS COUNTIES

NEW JERSEY

Issued: Effective Date:
By: Mark McKoy, 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. WR2401_____.

TABLE OF CONTENTS

TERRITORY SERVED

ATLANTIC COUNTY
Egg Harbor Township*

BURLINGTON COUNTY
Chesterfield Township *
North Hanover Township*
Borough of Wrightstown*

CAMDEN COUNTY
Gloucester Township *

GLOUCESTER COUNTY
Woolwich Township

HUNTERDON COUNTY
Bloomsbury Borough*
Califon Borough
Holland Township*
Lebanon Township*

MERCER COUNTY
Hamilton Township *
Lawrence Township*
Robbinsville Township *

MONMOUTH COUNTY

Upper Freehold*

MORRIS COUNTY
Washington Township*

OCEAN COUNTY
Berkeley Township

SUSSEX COUNTY
Byram Township*
Fredon Township*
Green Township*
Hardyston Township *
Vernon Township *

WARREN COUNTY
Alpha Borough*
Greenwich Township
Harmony Township
Lopatcong Township
Mansfield Township*
Town of Phillipsburg
Pohatcong Township

*Partially served

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS:

1.1 "Aqua" or "Company" shall be used herein to refer to Aqua New Jersey, Inc., the party rendering water service.

1.2 "BPU" or "Board" shall be used herein to refer to the New Jersey Board of Public Utilities.

1.3 "Classes of General Metered Service." There are five classes of general metered service, based on the nature of the Customer and the use of the property receiving service, as follows:

1.3.1 **Residential Class:** An individually-metered dwelling unit intended for human habitation (including a detached house, rowhome, townhouse, condominium and mobile home) or an individually-metered home or building consisting of not more than two dwelling units.

1.3.2 **Commercial Class:** A building, store, restaurant or office which is primarily a site for the buying or selling of goods or the provision of professional or consumer services. In addition, apartments, condominium complexes, colleges, private and public schools, car washes, laundromats, construction sites, hotels, motels, and tanks filled at the Company's premises are included in this class.

1.3.3 **Industrial Class:** A building or factory which is primarily a site for the manufacture or production of goods.

1.3.4 **Other Water Utility:** A public water utility, Municipal Corporation or water authority which purchases water for resale to their customers.

1.3.5 **Public:** A public building, library, park or playground which is owned by a governmental unit which has the power of taxation.

1.4 "Connecting line" is the portion of pipe that starts at the curb stop and conveys domestic water and/or fire service to the customer. The customer owns, and is responsible for the operation and maintenance of the connecting line .

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.5 "Cross Connection" refers to physical connections between an approved public potable water supply and an unapproved water supply. Pursuant to N.J.S.A. 58:11-9.1 *et seq.* Cross Connections are prohibited unless Cross Connection Controls, or Backflow Prevention devices, are first installed and a Permit has been obtained from the New Jersey State Department of Health pursuant to N.J.S.A. 58:11-9.2 or a permit has been issued pursuant to N.J.A.C. 7:10-10.1 *et seq*. Further, Cross Connections shall not be permitted without the Company's written consent thereto.

1.6 "Curb stop" is the fitting attached to the service line, and is used primarily for turning on and shutting off water at the curb in emergencies, for purposes of repair or to discontinue service to a customer.

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

1.8 "DSIC" shall be used herein to refer to the Distribution System Improvement Charge. (N.J.A.C. 14:9-10.2).

1.9 "Diversion" shall be used herein to refer to 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).

1.10 "DPA" shall be used herein to refer to a Deferred Payment Agreement, which will be offered by the Company to a Customer upon request, as appropriate and in accordance with the Board's regulations. DPAs shall be limited to one DPA per year for each utility service received by a Customer (i.e., one for water service and one for wastewater service, as appropriate).

1.11 "Extension" is an addition to the existing system of mains, intended to service more than one customer, either at the time of installation or in the future.

1.12 "Interruptible Service" means service which may be interrupted in the sole discretion of the Company on not less than three (3) hours' notice to the customer by telephone or otherwise.

1.13 "Main" is a pipe or conduit for conveying water or wastewater. A "water main" will exclusively convey water and a "sewer main" will exclusively convey wastewater.

1.14 "Meter" is a device to measure the quantity of water, wastewater and/or the rate of flow delivered to or from a customer.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.15 "Meter pit" is a structure that houses a small meter or meters less than or equal to 2-inches. Unless agreed to by the Company and the customer, it is installed, furnished and maintained by the Customer.

1.16 "Meter vault" is a structure that houses a meter or meters larger than 2-inches. Unless explicitly agreed to by the Company and the customer in writing, it is located and designed by the Company, and constructed, installed, furnished and maintained by the Customer at the sole expense to the customer.

1.17 "Multi-use service" shall be used herein to refer to water service that is supplied to a structure through one water line extending from the water main to the structure, and which is used inside the structure for both domestic water service and fire suppression service. (N.J.A.C. 14:9-8.1).

1.18 "NJ DEP" shall be used herein to refer to the New Jersey Department of Environmental Protection.

1.19 PSTAC" or "Purchased wastewater treatment adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of wastewater treatment purchased from a wastewater treatment purveyor. (N.J.A.C. 14:9-7.2).

1.20 "PWAC" or "Purchased water adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of water purchased from a water purveyor. (N.J.A.C. 14:9-7.2).

1.21 "PWAC Year" and "PSTAC Year" shall mean the twelve-month period beginning each January 1 and ending December 31 of the following calendar year.

1.22 "Residential Customer" shall be used herein to refer to Customers who receive service for use in a residence. (N.J.A.C. 14:3-1.1).

1.23 "Service line" is the portion of pipe that starts from a main and ends at the curb stop. The service line is owned, operated and maintained by the Company. (N.J.A.C. 14:3-8)

1.24 "Shared Service Line" is a single service line that is used to provide service to customers located at multiple premises such that water service via the shared service line cannot be curtailed to one customer premises without also curtailing service to customers located at other premises. Shared service lines are strictly prohibited absent an agreement in writing by Aqua that the shared service line is in the public interest and that appropriate safeguards are in place to protect the interests of all customers served by the shared service line.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.25 "Tap" is the fitting inserted in the main to which the service line is attached. It is used to facilitate the tapping of the main and for shutting off water in case of repairs to the service line.

1.26 "Tariff," as referred to herein, is the entire "Tariff for Water Service" as the same may be amended or revised from time to time in accordance with N.J.A.C. 14:3-1.3, Tariffs.

1.27 "Tenant-Customer" shall be used herein to refer to 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).

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 by phone, toll free, at (800) 624-0241, by email at http://www.state.nj.us/bpu/assistance/complaints/inquiry.html, or by mail. If you choose to email or 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.

2.4 The Company will endeavor to provide a regular and uninterrupted supply of water through its facilities. However, if service shall be interrupted, irregular, or defective, or fail because of breakdown or emergency, the Company will not be liable for damage, inconvenience or lost income resulting there from.

TERMS AND CONDITIONS OF SERVICE

2. GENERAL INFORMATION (CONTINUED):

2.5 A customer's responsibility to pay for service continues from the time service is commenced, pursuant to his/her application, until notice is received by the Company of a change of ownership or occupancy of the premises or notice is received by the Company to discontinue the applicable service. Upon receipt of such notice, the Company will arrange for a final meter reading and billing. No allowance will be made in case of non-occupancy, unless the Company is notified as stated above.

2.6 The Company does not undertake to render any special service or maintain any fixed pressure. In the event of an accident or for other reasons, the Company may shut off the water in its mains and pipes and may restrict the use of water whenever the public welfare may require it. All customers requiring an uninterrupted supply or a uniform pressure of water for any purpose, such as steam boilers, are cautioned to provide their own means of providing such special uninterrupted service. When the supply is to be interrupted or curtailed, the Company will endeavor to give notice.

2.7 The Company does not undertake to supply any uniform quality of water for special purposes, such as laboratories, manufacturing or processing plants, swimming pools, bleaching or dyeing plants, or laundries. Customers requiring water of special quality, or water free from discoloration or turbidity, are required to provide their own means of treating water, or provide such other protection as may be deemed necessary for the purpose required.

2.8 The location of meters and the arrangement of the fittings and piping are subject to inspection and approval of the Company and should meet the Company's requirements presented herein.

2.9 Neither by inspection approval nor failure to approve, nor in any other way, does the Company give any guarantee, or assume any responsibility, expressed or implied, as to the adequacy, safety or characteristics of any structures, equipment, pipes, appliances or devices owned, installed or maintained by the customer or leased by the customer from third parties.

2.10 The Company will not be liable for any loss, injury, casualty, or damage resulting from the supply or use of water service, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises.

TERMS AND CONDITIONS OF SERVICE

2. GENERAL INFORMATION (CONTINUED):

2.11 From time to time, the Company may provide public notices, specific notices, correspondence or other notifications ("Notices") regarding the presence of conditions affecting the quality and/or quantity of water service provided by the Company. (Examples of such Notices include, but are not limited to, boil water alerts, notice of hydrant and main flushing, and notice of water quality testing results.) These Notices may contain information about actions members of the public may wish to, are recommended to, or should take in response to the conditions identified in the Notice. In the event the Company issues a Notice, the Company will not be liable for any expenses or costs incurred by a customer or end-user for any action taken in response to any condition identified in the Notice.

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 The Company shall not impose any fees or charges for any fire protection system to a Residential Customer served by a water service line of two inches or less in diameter. Nor will the Company impose any fees in excess of the cost of water actually used for any sprinkler system required by State statutes or regulations to be installed in any residential health care facility or rooming or boarding house. The Company may, however, require separate, dedicated lines for fire protection and that those lines be metered. (N.J.S.A. 48:19-18).

3.4 Tenant-Customers shall not be required to pay for charges associated with a Diversion where, after investigation, Aqua New Jersey, Inc. has determined a Diversion of service has occurred. (N.J.A.C. 14:3-7.8(b)).

3.5 The Distribution System Improvement Charge (DSIC) is a Board-approved charge that allows the Company to more timely recover costs of rehabilitating, improving, or replacing non-revenue producing water distribution infrastructure needed for conservation, continued system safety and reliability, improved water quality, and sustained economic growth in New Jersey. (N.J.A.C. 14:9-10.1). The DSIC rate (as specified in Rate Schedule No. 1D) is reflected as a separate line item on Customer bills, and is calculated in accordance with N.J.A.C. 14:9-10.9(a)3.

TERMS AND CONDITIONS OF SERVICE

3. BILLING, FEES AND CHARGES (CONTINUED):

3.6 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 $50.00.

3.7 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.

3.8 Non-Standard Meter Connection Fees.

3.8.1 For metered connections which are set up for the temporary, short term sale of water such as to contractors or lawn care specialists, the Company will charge for the water taken based on the "General Metered Service" tariff. The Company shall have the right to designate where, how, when and if such water may be obtained. Anyone granted permission to obtain water in such a manner must have in place a Cross Connection Control mechanism acceptable to the Company that will protect against the backflow of water into the Company's system and is compliant with all applicable rules and regulations concerning Cross Connections.

3.8.2 In addition, the Company shall require a $1,600 deposit for any temporary meter obtained from the Company. This deposit shall be refunded upon return of the temporary meter, provided that the meter is returned in the same condition in which it was borrowed. The Company reserves the right to retain all or a portion of the deposit if the meter is returned in a condition other than that which it was borrowed and/or if the meter is not returned at all.

3.9 Bulk Water Purchase. For bulk water purchases, such as the filling of tanker trucks, the Company will charge for the water taken based on the "General Metered Service" tariff.

TERMS AND CONDITIONS OF SERVICE

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 an existing Customer pay a deposit, or increase their existing deposit, if the Customer fails to pay a bill within thirty (30) days after the due date printed on the bill, 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)).

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;

5.2.3 For the purpose of replacing any shared service line with service lines to individual customer premises;

5.2.4 For the purpose of inspecting the adequacy of any installed Cross Connection Controls, and for correcting or preventing any unauthorized or unpermitted Cross Connection; or

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

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

- Refusal of reasonable access to the Customer's premises;
- Refusal to permit access to the Company's metering equipment, including for the purpose of conducting regular meter reading, inspection, installation and removal activities;
- Tampering with any facility of the Company;
- Fraudulent representation in relation to use of service;
- Theft of service;
- Failure to test and/or maintain all required Cross Connection Controls, backflow prevention devices, and permits related thereto;
- 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, including, but not limited to, failure to cooperate in the remediation of shared service lines;
- 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 or replace any faulty facility of the Customer.

5.4 **At the Company's Direction (For Nonpayment):** The Company has the right to curtail, suspend or discontinue service for nonpayment of water charges or for nonpayment of a deposit, upon due notice given, where the Residential Customer's arrearage is (i) more than $200.00, or (ii) more than three (3) months in arrears. (N.J.A.C. 14:3-3A.2(a)).

5.4.1 Customers shall be provided with at least twenty (20) days from the postmark date of the outstanding bill to pay the water bill, or any deposit amount requested by the Company, except for those Customers receiving fire protection or multi-use service. (N.J.A.C. 14:3-3A.3).

5.4.2 Where payment is not received within twenty (20) days, the Company shall provide the Residential Customer with at least ten (10) days' notice prior to discontinuance of service.

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.4.3 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.

5.4.4 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).

5.4.5 The Company shall not discontinue service to any Residential Customer for up to 90 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. 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.

5.5 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).

5.6 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)).

5.7 **Winter Termination Program:** The Company shall not discontinue service to Residential Customers for non-payment during the period from November 15 through March 15 (the "Winter Termination Period"), unless otherwise ordered by the Board, where a customer meets the enumerated criteria set forth in N.J.A.C 14:3-3A.5(a).

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.8 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).

5.9 **Service Restoration:** In cases where service has been discontinued at the Company's direction, as set forth herein, a charge for reconnection will be made as specified in Paragraph 3 herein, except where such discontinuance has been made by the Company in order to effectuate repairs, changes or improvements in any part of the Company's system.

6. DEFERRED PAYMENT AGREEMENTS:

6.1 Aqua will offer any Customer who is unable to pay an outstanding bill and/or deposit an opportunity to enter into one DPA per year per utility service. 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 New Jersey, Inc. may discontinue service upon due notice. (N.J.A.C. 14:3-7.7(d))

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).

TERMS AND CONDITIONS OF SERVICE

7. METERS:

7.1 Upon Customer request, the Company will provide one free meter test per year. Where a billing dispute exists, the Customer may request that the meter test be witnessed by the Board, or a third-party. A meter test arising from a billing dispute may be appropriate in instances which include, but are not limited to: unexplained increased consumption, crossed meters, consumption while an account is vacant or any other instance where the meter's accuracy might be an issue in a bill dispute. Upon application, a Customer may also request that his, her or its meter test be witnessed by the Board. (N.J.A.C. 14:3-4.5).

7.2 Where a Customer has filed a complaint with the Board regarding meter accuracy or performance, Aqua shall not remove the Customer's meter from service during the pendency of said complaint, or during the thirty (30) days following the Board's decision on the complaint, unless otherwise authorized or directed by the Board (N.J.A.C. 14:3-4.8(c)).

7.3 Aqua shall make an adjustment of charges, to be determined consistent with N.J.A.C. 14:3-4.6, whenever a water meter is found to be registering fast by more than one and one-half percent.

8. EMERGENCY INTERRUPTIONS DUE TO EXTRAORDINARY DEMAND AND/OR DIMINISHED SUPPLY:

8.1 The Company endeavors to provide a regular and uninterrupted supply of water through its facilities to its Customers. However, if because of emergencies beyond Aqua's control, including but not limited to, governmental mandate, service is interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom. In the event of an emergency for extraordinary demand and/or diminished supply, the Company may restrict the use of water whenever the public welfare may require it and, if necessary, may shut off the water in its mains and pipes. In such cases, the Company will provide Customers, by phone, with detailed information regarding the conditions and restrictions, and the purpose and probable duration of the usage restriction or service interruption, curtailment or discontinuance.

8.2 Aqua New Jersey, Inc. may restrict or interrupt water service during certain periods in order to protect the public water supply, or to otherwise comply with any regulations or orders issued pursuant to the Water Supply Management Act, N.J.S.A. 58:1A-1 *et seq*. The Company will provide notice and subsequent outage reports to the Board in accordance with N.J.A.C. 14:3-3.7, as appropriate.

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE:

9.1 By applying for Multi-use service, the Customer agrees to be responsible for all claims, costs, and liability for personal injury, death and/or property damage, resulting from the Customer's individual water system, unless caused by the negligence of the Company. (N.J.A.C. 14:9-8.3(d)).

9.2 Terms of Payment: The Company may terminate a Customer's Multi-use service for non-payment of a valid water bill for Multi-use service, in accordance with the Board's rules governing discontinuance of service at N.J.A.C. 14:3-3A.4(j). (N.J.A.C. 14:9-8.3(b)).

9.3 Conditions: By applying for Multi-use service, the Customer or builder certifies that:

9.3.1 The Customer or builder has hydraulically calculated the demand for the Customer's or builder's water system, based on the simultaneous domestic demand and fire sprinkler demand. The Customer or builder shall make this calculation in accordance with the Uniform Construction Code; and

9.3.2 The Customer or builder will ensure that the system is installed in accordance with the Uniform Construction Code at N.J.A.C. 5:23; and

9.3.3 The Customer will, prior to installation of the meter, obtain a construction permit in accordance with the Uniform Construction Code from the enforcing agency having jurisdiction over the system. (N.J.A.C. 14:9-8.3(c)).

9.4 Provision of Services: By applying for Multi-use service, and operating the same, the Customer agrees:

9.4.1 To include a backflow prevention device(s) as defined at N.J.A.C. 7:10-1.3, and as specified at N.J.A.C. 7:10-10.3 or required to obtain a permit pursuant to N.J.S.A. 58:11-9.2;

9.4.2 To be solely responsible for all costs and expenses relating to the installation, operation, maintenance, repair and replacement of the Customer's water system, including the fire suppression system and backflow prevention device(s);

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE (CONTINUED):

9.4.3 To ensure that the Customer's water system complies with the applicable requirements of the Uniform Construction Code in effect at the time of system installation, including any applicable building, plumbing and fire protection subcodes; and

9.4.4 To ensure that the Customer's water system is maintained in accordance with all applicable laws so as to protect against Cross Connections, backflow, back-siphonage and contamination of the potable water system. (N.J.A.C. 14:9-8.3(e)).

10. WATER SERVICE AND CONNECTING LINES

10.1 Company Side – Service Lines:

10.1.1 The Company is responsible for the installation and maintenance of the service line. N.J.A.C. 14 :3-8.1 et seq.

10.1.2 Only employees of the Company or persons duly authorized to do so by the Company are permitted to operate or otherwise access the curb stop.

10.1.3 No service line shall be used to supply more than one customer unless authorized in advance by the Company in writing.

10.1.4 Where the Company has agreed that two or more customers may be supplied through a single shared service line, the customers must provide a suitable location(s) for a separate meter and separate shut-off valve that will be dedicated to each customer. The piping of the building(s) must be so arranged that each customer can be supplied through an independent meter, shut off valve and piping system as may be required by the Company, at the Company's discretion. The meter pit or vault shall be installed at a location acceptable to, and with the express approval of, the Company.

10.1.5 No single building or single group of buildings in one common enclosure and under one ownership shall be supplied by more than one shared service line.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2 Customer Side – Connecting Lines:

10.2.1 Connecting lines are owned, installed, maintained and repaired by the customer at the customer's sole expense. The connecting line should be maintained in a condition conducive for the Company to perform the services required to serve the customer. If the connecting pipe is not so maintained, any failure of this pipe following the operation of the curb stop by the Company will be the responsibility of the customer. While performing its duties, if the Company observes that the connecting pipe or other customer owned and maintained appurtenances appear to be in poor condition, the Company will attempt to notify the customer of such, including that the customer may desire to contact a licensed plumber for a professional evaluation and/or repair of the connecting pipe and appurtenances. Failure to repair a leaking connecting line is grounds for discontinuance of water service. (N.J.A.C. 14:3-3A.1(a)5.x).

10.2.2 Connecting lines should be installed, without sharp bends, at right angles to the line of the street and shall be installed in the trench not less than 3-1/2 feet in depth to avoid damage and possible interruption to service caused by freezing. Other utility service lines shall not be installed in the same trench as the connecting line.

10.2.3 No attachment shall be made to the connecting line between the curb stop and the meter except as otherwise authorized by the Company. Unauthorized attachments are grounds for termination of service. (N.J.A.C. 14:3-3A.1(a)5.ii). Connecting lines should not be less than ¾ inch in inside diameter.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2.4 A Customer must install a water pressure reducing valve where required by State of New Jersey plumbing code. If a water pressure reducing valve is required to be installed, the customer must install a pressure relief valve (collectively both are referred to as the "Valves"). In all cases, the costs of installation and maintenance of the Valves shall be borne by the Customer. The Customer shall own and be obligated to maintain the Valves. The Company will not be liable for damage due to meter failures if the Customer is located in a high pressure zone and does not have a pressure reducing valve or has a pressure reducing valve downstream from a water meter that is installed inside the premises. For meters less than or equal to 2 inches the pressure reducing valve will be located on the downstream side of the meter if the meter is located outside of the Customer's premises and on the upstream side of the meter, if the meter is located inside of the Customer's premises. For meters greater than 2 inches the pressure reducing valve will always be located on the upstream side of the meter.

10.2.5 The Customer is required to make all changes in the connecting line due to changes in grade, relocation of mains, or other causes only if such changes are mandated by a municipality, county, state or other governmental body.

11. WATER MAIN EXTENSIONS:

11.1 The Company will extend water service in accordance with all applicable laws of the State of New Jersey and Board regulations and orders including N.J.A.C. 14:3-8.1 *et seq.* Upon request, an application will be provided to the applicant, which must be returned to the Company.

12. CUSTOMER'S PREMISES:

12.1 The Company may refuse to provide a water connection, or furnish water through a connection pipe already installed, when a customer's piping system is not installed in accordance with the regulations of the Company and of the municipality in which the premises are located; or when the system on the premises is not at sufficient depth to prevent freezing.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.2 The Company shall have the right of reasonable access to Customer's premises, and to all property furnished by the Company, at all reasonable times for the purpose of inspection of Customer's premises incident to the rendering of service, reading meters, or installing, relocating, inspecting, testing, replacing or repairing its facilities used in connection with supplying the service, or for the removal of its property. (N.J.A.C. 14:3-3.6). Service can be discontinued for refusal of reasonable access to the Customer's premises for necessary purposes in connection with rendering of service, including meter installation, reading or testing, installation, replacement or relocation of meter reading devices, or the maintenance or removal of the Company's property. (N.J.A.C. 14:3-3A.1(a)5.i). A charge for reconnection will be made as specified in Paragraph 3 herein upon restoration of service.

12.3 Customers shall not permit access to the meter and other appliances of the Company except by authorized employees of the Company or properly authorized state or local inspectors.

12.4 In all cases the Customers should not interfere with property of the Company, but should immediately notify the Company of any problem.

12.5 It is the sole responsibility of each Customer to ensure that all piping and appurtenances within a Customer's premises comply with state, municipal and other public health regulations in force with respect hereto including state and local plumbing codes. The piping and appurtenances shall be maintained in a condition conducive for the Company to perform the services required to serve the Customer.

12.6 In any premises where devices are used which might produce a back pressure, such as steam boilers, carbonation equipment for soft drinks, booster pumps, etc., a check valve shall be installed by the Customer at the meter. In the event such check valve is installed, pressure relief valves should be provided by the Customer in the system.

12.7 In any premises where an auxiliary water source is available, the pipes carrying water from the mains of the Company are required to be marked in some distinctive manner for ready identification.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.8 Physical connections, such as Cross Connections, interconnections, valves, pumps, or similar devices, either permanent or temporary, connecting the pipelines or facilities of the Company with other pipelines or facilities supplied with water from other sources will not be permitted without the express written consent of the Company and full compliance with all applicable regulations concerning such connections. Water which has once been drawn from the Company's distribution network and used for any purpose or stored in tanks, is considered an unapproved source of supply.

12.9 The Company may require installation of a Cross Connection Control or backflow prevention protective device on a customer's service, in accordance with N.J.A.C. 7:10-10.1 *et seq.* and N.J.S.A. 58:11-9.1 *et seq.,* as appliable, which shall be purchased and installed at the expense of the customer. The Cross Connection and/or backflow prevention device shall be of the type approved by the Company and required to be installed to obtain any required permit. Inspection and testing at regular intervals shall be performed at the expense of the customer.

12.10 No device or connection is permitted between pipes carrying water from the mains of the Company and any portion of the plumbing system of the premises, which may under any condition permit back-flow or back-siphonage, unless prior written permission has been granted by the Company. Further, any such device or connection must comply fully with all applicable permits, statutes and regulations.

12.11 Failure to comply with any of these provisions is grounds for discontinuance of service on an emergent basis to prevent harm to the Company's system and its customers.

RATE SCHEDULE NO. 1
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all customers served by the Company including those supplied through approved Multi-Use Services.

CHARACTER OF SERVICE: Continuous

RATE: Size of Meter	Fixed Service Charge Amount Per Month
5/8”	$ 23.36
3/4”	35.04
1”	58.40
1 1/2”	116.80
2”	186.88
3”	350.40
4”	584.00
6”	1,168.00
8”	1,868.80
10”	2,686.40
12”	5,022.40
Bulk Water Purchase	43.92
Flat Rate for Unmetered Customers	
Residential	$ 69.87
Commercial, Industrial, Other Water Utility, and Public	104.91

	Usage Charge Rate/1000 Gallons
All Service Areas (Except as noted below)	$ 7.518
Wallkill Only	6.390
Byram Township and Seaview Harbor Only	11.280
Non-Potable Water	1.504
Resale	7.508

*The above rates, excepting the Resale rate, include a water tax of $0.01 per 1,000 gallons of water, which water tax was established by the State of New Jersey with the passage of the Safe Drinking Water Act. (N.J.S.A. 58:12A-21).

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE TWENTY (20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL Bills for metered service will be rendered at the close of the billing period.

Issued: Effective Date:
By: Mark McKoy, 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. WR2401_____.

RATE SCHEDULE NO. 2
DISTRIBUTION SYSTEM IMPROVEMENT CHARGE
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all Customers served by the Company.

CHARACTER OF SERVICE:
Continuous

RATE:

Size of Meter	DSIC Amount Per Month
5/8”	$ 0.00
3/4”	0.00
1”	0.00
1 1/2”	0.00
2”	0.00
3”	0.00
4”	0.00
6”	0.00
8”	0.00
10”	0.00
12”	0.00

TERMS OF PAYMENT
PAYMENT FOR ALL BILLS RENDERED IS DUE TWENTY (20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. The DSIC is assessed monthly for metered service, and is reflected on the Customer’s bill rendered at the close of the billing period.

RATE SCHEDULE NO. 3
PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY:
Applicable to all Customers for service furnished exclusively to private fire protection facilities served by the Company, except as specifically provided elsewhere in this tariff.

CHARACTER OF SERVICE:
The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

Size of Service	Fixed Service Charge Amount Per Month
Sprinklers	
2" or less	$ 0.00
3"	104.11
4"	173.51
6"	347.03
8"	555.23
10"	798.14
12"	1,492.19
Private Hydrants (per hydrant)	$ 49.36

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE TWENTY (20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for metered service will be rendered at the close of the billing period.

SPECIAL PROVISIONS:
Private fire service lines shall be equipped with special meters or detection devices and are to be used exclusively for fire protection purposes. No water shall be used through these fire protection connections except for testing purposes or in case of fire. However, the Company shall be provided with at least 72 hours (or 3 days) notice prior to the testing of any fire protection connection and shall be given the opportunity to witness such testing.

SPECIAL PROVISIONS (CONTINUED):

Customers desiring a separate service connection for private fire service are required to make separate written application for such service on forms prescribed by the Company. Private fire service installations must be made in accordance with the provisions of this tariff regarding the installation of service and connecting pipes and other facilities necessary for the provision of such service.

Service lines designated for private fire protection are installed for customers requiring a private fire service to supply sprinkler heads or hose connections. Any connection in which sprinkler heads and/or hose connections are supplied through a domestic service connection are not considered as part of a private fire protection service and shall not be subject to the requirements as set forth herein (i.e., limited fire protection). Residential Customers served by a 2-inch water service line or less in diameter will not be imposed a standby fee for a fire protection system.

The connection shall be in accordance with the applicable laws including but not limited to those of the BPU, NJ DEP and all federal, state and local agencies.

The Company shall not be liable for any loss, injury, casualty or damage resulting from fire or water, resulting from the supply or use of water service or the failure thereof, which may occur on account of the installation or presence of a private fire service connection, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises, or connected therewith.

The Company may not discontinue fire protection service unless it has provided written notice giving the customer at least thirty (30) days' notice, by certified mail, prior to the proposed discontinuance. (N.J.A.C. 14:3-3A.4(k)). However, in case of fraud, illegal use, or when it is clearly indicated that the customer is preparing to leave, immediate payment of accounts may be required, and service may be discontinued without further notice.

When hydrants are attached between the main and the meter, a charge per hydrant will be made. The installation and maintenance of fire hydrants and the supplying of water through such hydrants is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire.

No additional charge shall be made for water used in testing or for fire. However, should it be determined by Aqua that water is being, or has been, used through a fire protection connection for other than fire protection or testing purposes, the Company shall have the right to charge for the water used based on its "General Metered Service" tariff and to order said unauthorized use to cease immediately subject to the termination of the service.

RATE SCHEDULE NO. 4
PUBLIC FIRE PROTECTION SERVICE

APPLICABILITY:
This schedule is applicable to all municipal Customers served by the Company, for public fire protection service.

CHARACTER OF SERVICE:
The installation and maintenance of fire hydrants, and the supplying of water through such hydrants, is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire. The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

For each fire hydrant installed there shall be made a Monthly Fixed Fire Protection Charge of:

All Service Areas (Except as noted below)	$ 53.65
Alpha Borough	30.26
Bayville Township	24.23
Fredon Township	30.26
Hardyston Township	22.38
Holland Township – Fox Hill Dr.	41.16
Lawrenceville Township	33.12
Upper Freehold Township	39.96

For Byram Township only, the following Monthly Fixed Fire Protection Charge shall apply, per customer: $6.94

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE TWENTY (20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for metered service will be rendered at the close of the billing period.

SPECIAL PROVISIONS:
All hydrants, lead valves, branches and other appurtenances shall be and remain the property of the Company.

Upon application or request by a duly authorized representative of a municipality in the Company's service area, the Company will install fire hydrants for purposes of public fire protection. The locations of such hydrants shall be selected upon agreement between the necessary municipal official(s) and representatives of the Company after careful consideration. Municipalities shall pay the Company a charge for service to public fire hydrants as provided in this tariff.

Tariff Redline

AQUA NEW JERSEY, INC.

TARIFF FOR

WATER SERVICE

APPLICABLE IN

ALL OR PART OF

WARREN, HUNTERDON, MERCER, BURLINGTON, CAMDEN, OCEAN,

SUSSEX, MONMOUTH, GLOUCESTER, ATLANTIC AND MORRIS COUNTIES

NEW JERSEY

Issued: Effective Date:
By: Mark McKoy, 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. WR2401_____.

TABLE OF CONTENTS

TERRITORY SERVED

ATLANTIC COUNTY
Egg Harbor Township*

BURLINGTON COUNTY
Chesterfield Township *
North Hanover Township*
Borough of Wrightstown*

CAMDEN COUNTY
Gloucester Township *

GLOUCESTER COUNTY
Woolwich Township

HUNTERDON COUNTY
Bloomsbury Borough*
Califon Borough
Holland Township*
Lebanon Township*
~~Readington Township~~

MERCER COUNTY
Hamilton Township *
Lawrence Township*
Robbinsville Township *

MONMOUTH COUNTY
~~Howell Township~~
Upper Freehold*

MORRIS COUNTY
Washington Township*
~~Mount Olive Township~~

OCEAN COUNTY
Berkeley Township

SUSSEX COUNTY
Byram Township*
Fredon Township*
Green Township*
Hardyston Township *
Vernon Township *

WARREN COUNTY
Alpha Borough*
Greenwich Township
Harmony Township
Lopatcong Township
Mansfield Township*
Town of Phillipsburg
Pohatcong Township

*Partially served

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS:

1.1 "Aqua" or "Company" shall be used herein to refer to Aqua New Jersey, Inc., the party rendering water service.

1.2 "BPU" or "Board" shall be used herein to refer to the New Jersey Board of Public Utilities.

1.3 "Classes of General Metered Service." There are five classes of general metered service, based on the nature of the Customer and the use of the property receiving service, as follows:

1.3.1 **Residential Class:** An individually-metered dwelling unit intended for human habitation (including a detached house, rowhome, townhouse, condominium and mobile home) or an individually-metered home or building consisting of not more than two dwelling units.

1.3.2 **Commercial Class:** A building, store, restaurant or office which is primarily a site for the buying or selling of goods or the provision of professional or consumer services. In addition, apartments, condominium complexes, colleges, private and public schools, car washes, laundromats, construction sites, hotels, motels, and tanks filled at the Company's premises are included in this class.

1.3.3 **Industrial Class:** A building or factory which is primarily a site for the manufacture or production of goods.

1.3.4 **Other Water Utility:** A public water utility, Municipal Corporation or water authority which purchases water for resale to their customers.

1.3.5 **Public:** A public building, library, park or playground which is owned by a governmental unit which has the power of taxation.

1.4 "Connecting line" is the portion of pipe that starts at the curb stop and conveys domestic water and/or fire service to the customer. The customer owns, and is responsible for the operation and maintenance of the connecting line .

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.5 "Cross Connection" refers to physical connections between an approved public potable water supply and an unapproved water supply. Pursuant to N.J.S.A. 58:11-9.1 *et seq.* Cross Connections are prohibited unless Cross Connection Controls, or Backflow Prevention devices, are first installed and a Permit has been obtained from the New Jersey State Department of Health pursuant to N.J.S.A. 58:11-9.2 or a permit has been issued pursuant to N.J.A.C. 7:10-10.1 *et seq*. Further, Cross Connections shall not be permitted without the Company's written consent thereto.

1.6 ~~1.5~~ "Curb stop" is the fitting attached to the service line, and is used primarily for turning on and shutting off water at the curb in emergencies, for purposes of repair or to discontinue service to a customer.

1.7 ~~1.6~~ "Customer" shall be used herein to refer to the party contracting for service to a property, or the party receiving and paying for the service, as appropriate.

1.8 ~~1.7~~ "DSIC" shall be used herein to refer to the Distribution System Improvement Charge. (N.J.A.C. 14:9-10.2).

1.9 ~~1.8~~ "Diversion" shall be used herein to refer to 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).

1.10 ~~1.9~~ "DPA" shall be used herein to refer to a Deferred Payment Agreement, which ~~may~~will be offered by the Company to a Customer upon request, as appropriate and in accordance with the Board's regulations. DPAs shall be limited to one DPA per year for each utility service received by a Customer (i.e., one for water service and one for wastewater service, as appropriate).

1.11 ~~1.10~~ "Extension" is an addition to the existing system of mains, intended to service more than one customer, either at the time of installation or in the future.

1.12 ~~1.11~~ "Interruptible Service" means service which may be interrupted in the sole discretion of the Company on not less than three (3) hours' notice to the customer by telephone or otherwise.

1.13 ~~1.12~~ "Main" is a pipe or conduit for conveying water or wastewater. A "water main" will exclusively convey water and a "sewer main" will exclusively convey wastewater.

1.14 ~~1.13~~ "Meter" is a device to measure the quantity of water, wastewater and/or the rate of flow delivered to or from a customer.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.15 ~~1.14~~ "Meter pit" is a structure that houses a small meter or meters less than or equal to 2-inches. Unless agreed to by the Company and the customer, it is installed, furnished and maintained by the Customer.

~~TERMS AND CONDITIONS OF SERVICE~~

~~1. DEFINITIONS (CONTINUED):~~

1.16 ~~1.15~~ "Meter vault" is a structure that houses a meter or meters larger than 2-inches. Unless explicitly agreed to by the Company and the customer in writing, it is located and designed by the Company, and constructed, installed, furnished and maintained by the Customer at the sole expense to the customer.

1.17 ~~1.16~~ "Multi-use service" shall be used herein to refer to water service that is supplied to a structure through one water line extending from the water main to the structure, and which is used inside the structure for both domestic water service and fire suppression service. (N.J.A.C. 14:9-8.1).

1.18 ~~1.17~~ "NJ DEP" shall be used herein to refer to the New Jersey Department of Environmental Protection.

1.19 ~~1.18~~ PSTAC" or "Purchased wastewater treatment adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of wastewater treatment purchased from a wastewater treatment purveyor. (N.J.A.C. 14:9-7.2).

1.20 ~~1.19~~ "PWAC" or "Purchased water adjustment clause" is a provision that authorizes a utility to adjust its rates to compensate for an increase or decrease in the cost of water purchased from a water purveyor. (N.J.A.C. 14:9-7.2).

1.21 ~~1.20~~ "PWAC Year" and "PSTAC Year" shall mean the twelve-month period beginning each January 1 and ending December 31 of the following calendar year.

1.22 ~~1.21~~ "Residential Customer" shall be used herein to refer to Customers who receive service for use in a residence. (N.J.A.C. 14:3-1.1).

1.23 ~~1.22~~ "Service line" is the portion of pipe that starts from a main and ends at the curb stop. The service line is owned, operated and maintained by the Company. (N.J.A.C. 14:3-8)

1.24 "Shared Service Line" is a single service line that is used to provide service to customers located at multiple premises such that water service via the shared service line cannot be curtailed to one customer premises without also curtailing service to customers located at other premises. Shared service lines are strictly prohibited absent an agreement in writing by Aqua that the shared service line is in the public interest and that appropriate safeguards are in place to protect the interests of all customers served by the shared service line.

TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

1.25 ~~1.23~~ "Tap" is the fitting inserted in the main to which the service line is attached. It is used to facilitate the tapping of the main and for shutting off water in case of repairs to the service line.

1.26 ~~1.24~~ "Tariff," as referred to herein, is the entire "Tariff for Water Service" as the same may be amended or revised from time to time in accordance with N.J.A.C. 14:3-1.3, Tariffs.

~~TERMS AND CONDITIONS OF SERVICE~~

~~1.~~ ~~DEFINITIONS (CONTINUED):~~

1.27 ~~1.25~~ "Tenant-Customer" shall be used herein to refer to 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).

2. ~~2.~~ GENERAL INFORMATION:

2.1 ~~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 ~~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 ~~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, by email at http://www.state.nj.us/bpu/assistance/complaints/inquiry.html, or by mail. If you choose to email or 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.

2.4 ~~2.4~~ The Company will endeavor to provide a regular and uninterrupted supply of water through its facilities. However, if service shall be interrupted, irregular, or defective, or fail because of breakdown or emergency, the Company will not be liable for damage, inconvenience or lost income resulting there from.

TERMS AND CONDITIONS OF SERVICE

2. GENERAL INFORMATION (CONTINUED):

2.5 ~~2.5~~ A customer's responsibility to pay for service continues from the time service is commenced, pursuant to his/her application, until ~~written~~ notice is received by the Company of a change of ownership or occupancy of the premises or ~~written~~ notice is received by the Company to discontinue the applicable service. Upon receipt of such notice, the Company will arrange for a final meter reading and billing. No allowance will be made in case of non-occupancy, unless the Company is notified ~~in writing~~ as stated above.

~~TERMS AND CONDITIONS OF SERVICE~~
~~2. GENERAL INFORMATION (CONTINUED):~~

2.6 ~~2.6~~ The Company does not undertake to render any special service or maintain any fixed pressure. In the event of an accident or for other reasons, the Company may shut off the water in its mains and pipes and may restrict the use of water whenever the public welfare may require it. All customers requiring an uninterrupted supply or a uniform pressure of water for any purpose, such as steam boilers, are cautioned to provide their own means of providing such special uninterrupted service. When the supply is to be interrupted or curtailed, the Company will endeavor to give notice.

2.7 ~~2.7~~ The Company does not undertake to supply any uniform quality of water for special purposes, such as laboratories, manufacturing or processing plants, swimming pools, bleaching or dyeing plants, or laundries. Customers requiring water of special quality, or water free from discoloration or turbidity, are required to provide their own means of treating water, or provide such other protection as may be deemed necessary for the purpose required.

2.8 ~~2.8~~ The location of meters and the arrangement of the fittings and piping are subject to inspection and approval of the Company and should meet the Company's requirements presented herein.

2.9 ~~2.9~~ Neither by inspection approval nor failure to approve, nor in any other way, does the Company give any guarantee, or assume any responsibility, expressed or implied, as to the adequacy, safety or characteristics of any structures, equipment, pipes, appliances or devices owned, installed or maintained by the customer or leased by the customer from third parties.

2.10 ~~2.10~~ The Company will not be liable for any loss, injury, casualty, or damage resulting from the supply or use of water service, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises.

TERMS AND CONDITIONS OF SERVICE

2. GENERAL INFORMATION (CONTINUED):

2.11 ~~2.11~~ From time to time, the Company may provide public notices, specific notices, correspondence or other notifications ("Notices") regarding the presence of conditions affecting the quality and/or quantity of water service provided by the Company. (Examples of such Notices include, but are not limited to, boil water alerts, notice of hydrant and main flushing, and notice of water quality testing results.) These Notices may contain information about actions members of the public may wish to, are recommended to, or should take in response to the conditions identified in the Notice. In the event the Company issues a Notice, the Company will not be liable for any expenses or costs incurred by a customer or end-user for any action taken in response to any condition identified in the Notice.

~~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 The Company shall not impose any fees or charges for any fire protection system to a Residential Customer served by a water service line of two inches or less in diameter. Nor will the Company impose any fees in excess of the cost of water actually used for any sprinkler system required by State statutes or regulations to be installed in any residential health care facility or rooming or boarding house. The Company may, however, require separate, dedicated lines for fire protection and that those lines be metered. (N.J.S.A. 48:19-18).

3.4 Tenant-Customers shall not be required to pay for charges associated with a Diversion where, after investigation, Aqua New Jersey, Inc. has determined a Diversion of service has occurred. (N.J.A.C. 14:3-7.8(b)).

3.5 The Distribution System Improvement Charge (DSIC) is a Board-approved charge that allows the Company to more timely recover costs of rehabilitating, improving, or replacing non-revenue producing water distribution infrastructure needed for conservation, continued system safety and reliability, improved water quality, and sustained economic growth in New Jersey. (N.J.A.C. 14:9-10.1). The DSIC rate (as specified in Rate Schedule No. 1D) is reflected as a separate line item on Customer bills, and is calculated in accordance with N.J.A.C. 14:9-10.9(a)3.

TERMS AND CONDITIONS OF SERVICE

3. BILLING, FEES AND CHARGES (CONTINUED):

3.6 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 $50.00.

~~TERMS AND CONDITIONS OF SERVICE~~
~~3. BILLING, FEES AND CHARGES (CONTINUED):~~

3.7 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.

3.8 Non-Standard Meter Connection Fees.

3.8.1 For metered connections which are set up for the temporary, short term sale of water such as to contractors~~,~~ or lawn care specialists, the Company will charge for the water taken based on the "General Metered Service" tariff. The Company shall have the right to designate where, how, when and if such water may be obtained. Anyone granted permission to obtain water in such a manner must have in place a Cross Connection Control mechanism acceptable to the Company that will protect against the backflow of water into the Company's system and is compliant with all applicable rules and regulations concerning Cross Connections.

3.8.2 In addition, the Company shall require a $1,600 deposit for any temporary meter obtained from the Company. This deposit shall be refunded upon return of the temporary meter, provided that the meter is returned in the same condition in which it was borrowed. The Company reserves the right to retain all or a portion of the deposit if the meter is returned in a condition other than that which it was borrowed and/or if the meter is not returned at all.

3.9 Bulk Water Purchase. For bulk water purchases, such as the filling of tanker trucks, the Company will charge for the water taken based on the "General Metered Service" tariff.

TERMS AND CONDITIONS OF SERVICE

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~~an existing Customer pay a deposit, or increase their existing deposit, if the Customer fails to pay a bill within ~~fifteen~~thirty (~~15~~30) days after the due date printed on the bill, 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)).

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 the purpose of replacing any shared service line with service lines to individual customer premises;

5.2.4 For the purpose of inspecting the adequacy of any installed Cross Connection Controls, and for correcting or preventing any unauthorized or unpermitted Cross Connection; or

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

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

- Refusal of reasonable access to the Customer's premises;
- Refusal to permit access to the Company's metering equipment, including for the purpose of conducting regular meter reading, inspection, installation and removal activities;
- Tampering with any facility of the Company;
- Fraudulent representation in relation to use of service;
- Theft of service;
- Failure to test and/or maintain all required Cross Connection Controls, backflow prevention devices, and permits related thereto;
- 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, including, but not limited to, failure to cooperate in the remediation of shared service lines;
- 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 or replace any faulty facility of the Customer.

5.4 **At the Company's Direction (For Nonpayment):** The Company has the right to curtail, suspend or discontinue service for nonpayment of water charges or for nonpayment of a deposit, upon due notice given, where the Residential Customer's arrearage is (i) more than $~~100.00~~200.00, or (ii) more than three (3) months in arrears. (N.J.A.C. 14:3-3A.2(a)).

5.4.1 Customers shall be provided with at least ~~fifteen~~twenty (~~15~~20) days from the postmark date of the outstanding bill to pay the water bill, or any deposit amount requested by the Company, except for those Customers receiving fire protection or multi-use service. (N.J.A.C. 14:3-3A.3).

5.4.2 Where payment is not received within ~~fifteen~~twenty (~~15~~20) days, the Company shall provide the Residential Customer with at least ten (10) days' notice prior to discontinuance of service.

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.4.3 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.

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

5.4.4 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).

5.4.5 The Company shall not discontinue service to any Residential Customer for up to ~~60~~90 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.

5.5 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).

5.6 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)).

5.7 **Winter Termination Program:** The Company shall not discontinue service to Residential Customers for non-payment during the period from November 15 through March 15 (the "Winter Termination Period"), unless otherwise ordered by the Board, where a customer meets the enumerated criteria set forth in N.J.A.C 14:3-3A.5(a).

TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.8 ~~5.7~~ 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).

~~TERMS AND CONDITIONS OF SERVICE~~

~~5.~~ ~~DISCONTINUANCE OF SERVICE (CONTINUED):~~

5.9 ~~5.8~~ **Service Restoration:** In cases where service has been discontinued at the Company's direction, as set forth herein, a charge for reconnection will be made as specified in Paragraph 3 herein, except where such discontinuance has been made by the Company in order to effectuate repairs, changes or improvements in any part of the Company's system.

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 per utility service. 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 New Jersey, Inc. may discontinue service upon due notice. (N.J.A.C. 14:3-7.7(d))

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).

TERMS AND CONDITIONS OF SERVICE

7. METERS:

7.1 Upon Customer request, the Company will provide one free meter test per year. Where a billing dispute exists, the Customer may request that the meter test be witnessed by the Board, or a third-party. A meter test arising from a billing dispute may be appropriate in instances which include, but are not limited to: unexplained increased consumption, crossed meters, consumption while an account is vacant or any other instance where the meter's accuracy might be an issue in a bill dispute. Upon application, a Customer may also request that his, her or its meter test be ~~tested~~witnessed by the Board. (N.J.A.C. 14:3-4.5).

7.2 Where a Customer has filed a complaint with the Board regarding meter accuracy or performance, Aqua shall not remove the Customer's meter from service during the pendency of said complaint, or during the thirty (30) days following the Board's decision on the complaint, unless otherwise authorized or directed by the Board (N.J.A.C. 14:3-4.8(c)).

7.3 Aqua shall make an adjustment of charges, to be determined consistent with N.J.A.C. 14:3-4.6, whenever a water meter is found to be registering fast by more than one and one-half percent.

8. EMERGENCY INTERRUPTIONS DUE TO EXTRAORDINARY DEMAND AND/OR DIMINISHED SUPPLY:

8.1 The Company endeavors to provide a regular and uninterrupted supply of water through its facilities to its Customers. However, if because of emergencies beyond Aqua's control, including but not limited to, governmental mandate, service is interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom. In the event of an emergency for extraordinary demand and/or diminished supply, the Company may restrict the use of water whenever the public welfare may require it and, if necessary, may shut off the water in its mains and pipes. In such cases, the Company will provide Customers, by phone, with detailed information regarding the conditions and restrictions, and the purpose and probable duration of the usage restriction or service interruption, curtailment or discontinuance.

8.2 Aqua New Jersey, Inc. may restrict or interrupt water service during certain periods in order to protect the public water supply, or to otherwise comply with any regulations or orders issued pursuant to the Water Supply Management Act, N.J.S.A. 58:1A-1 *et seq*. The Company will provide notice and subsequent outage reports to the Board in accordance with N.J.A.C. 14:3-3.7, as appropriate.

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE:

9.1 By applying for Multi-use service, the Customer agrees to be responsible for all claims, costs, and liability for personal injury, death and/or property damage, resulting from the Customer's individual water system, unless caused by the negligence of the Company. (N.J.A.C. 14:9-8.3(d)).

9.2 Terms of Payment: The Company may terminate a Customer's Multi-use service for non-payment of a valid water bill for Multi-use service, in accordance with the Board's rules governing discontinuance of service at N.J.A.C. 14:3-3A.4(j). (N.J.A.C. 14:9-8.3(b)).

9.3 Conditions: By applying for Multi-use service, the Customer or builder certifies that:

9.3.1 The Customer or builder has hydraulically calculated the demand for the Customer's or builder's water system, based on the simultaneous domestic demand and fire sprinkler demand. The Customer or builder shall make this calculation in accordance with the Uniform Construction Code; and

9.3.2 The Customer or builder will ensure that the system is installed in accordance with the Uniform Construction Code at N.J.A.C. 5:23; and

9.3.3 The Customer will, prior to installation of the meter, obtain a construction permit in accordance with the Uniform Construction Code from the enforcing agency having jurisdiction over the system. (N.J.A.C. 14:9-8.3(c)).

9.4 Provision of Services: By applying for Multi-use service, and operating the same, the Customer agrees:

9.4.1 To include a backflow prevention device(s) as defined at N.J.A.C. 7:10-1.3, and as specified at N.J.A.C. 7:10-10.3 or required to obtain a permit pursuant to N.J.S.A. 58:11-9.2;

9.4.2 To be solely responsible for all costs and expenses relating to the installation, operation, maintenance, repair and replacement of the Customer's water system, including the fire suppression system and backflow prevention device(s);

TERMS AND CONDITIONS OF SERVICE

9. MULTI-USE SERVICE (CONTINUED):

9.4.3 To ensure that the Customer's water system complies with the applicable requirements of the Uniform Construction Code in effect at the time of system installation, including any applicable building, plumbing and fire protection subcodes; and

9.4.4 To ensure that the Customer's water system is maintained in accordance with all applicable ~~law~~laws so as to protect against Cross Connections, backflow, back-siphonage and contamination of the potable water system. (N.J.A.C. 14:9-8.3(e)).

10. WATER SERVICE AND CONNECTING LINES

10.1 Company Side – Service Lines:

10.1.1 The Company is responsible for the installation and maintenance of the service line. N.J.A.C. 14 :3-8.1 et seq.

10.1.2 Only employees of the Company or persons duly authorized to do so by the Company are permitted to operate or otherwise access the curb stop.

10.1.3 No service line shall be used to supply more than one customer unless authorized in advance by the Company in writing.

10.1.4 Where the Company has agreed that two or more customers ~~are~~may be supplied through a single shared service line, the customers must provide a suitable location(s) for a separate meter and separate shut-off valve that will be dedicated to each customer. The piping of the building(s) must be so arranged that each customer can be supplied through an independent meter, shut off valve and piping system as may be required by the Company, at the Company's discretion. The meter pit or vault shall be installed at a location acceptable to, and with the express approval of, the Company.

10.1.5 No single building or single group of buildings in one common enclosure and under one ownership shall be supplied by more than one shared service line.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2 Customer Side – Connecting Lines:

10.2.1 Connecting lines are owned, installed, maintained and repaired by the customer at the customer's sole expense. The connecting line should be maintained in a condition conducive for the Company to perform the services required to serve the customer. If the connecting pipe is not so maintained, any failure of this pipe following the operation of the curb stop by the Company will be the responsibility of the customer. While performing its duties, if the Company ~~notices~~observes that the connecting pipe or other customer owned and maintained appurtenances appear to be in poor condition, the Company will attempt to notify the customer of such, including that the customer may desire to contact a licensed plumber for a professional evaluation and/or repair of the connecting pipe and appurtenances. Failure to repair a leaking connecting line is grounds for discontinuance of water service. (N.J.A.C. 14:3-3A.1(a)5.x).

10.2.2 Connecting lines should be installed, without sharp bends, at right angles to the line of the street and shall be installed in the trench not less than 3-1/2 feet in depth to avoid damage and possible interruption to service caused by freezing. Other utility service lines shall not be installed in the same trench as the connecting line.

10.2.3 No attachment shall be made to the connecting line between the curb stop and the meter except as otherwise authorized by the Company. Unauthorized attachments are grounds for termination of service. (N.J.A.C. 14:3-3A.1(a)5.ii). Connecting lines should not be less than ¾ inch in inside diameter.

TERMS AND CONDITIONS OF SERVICE

10. WATER SERVICE AND CONNECTING LINES (CONTINUED):

10.2.4 A Customer must install a water pressure reducing valve where required by State of New Jersey plumbing code. If a water pressure reducing valve is required to be installed, the customer must install a pressure relief valve (collectively both are referred to as the "Valves"). In all cases, the costs of installation and maintenance of the Valves shall be borne by the Customer. The Customer shall own and be obligated to maintain the Valves. The Company will not be liable for damage due to meter failures if the Customer is located in a high pressure zone and does not have a pressure reducing valve or has a pressure reducing valve downstream from a water meter that is installed inside the premises. For meters less than or equal to 2 inches the pressure reducing valve will be located on the downstream side of the meter if the meter is located outside of the Customer's premises and on the upstream side of the meter, if the meter is located inside of the Customer's premises. For meters greater than 2 inches the pressure reducing valve will always be located on the upstream side of the meter.

10.2.5 The Customer is required to make all changes in the connecting line due to changes in grade, relocation of mains, or other causes only if such changes are mandated by a municipality, county, state or other governmental body.

11. WATER MAIN EXTENSIONS:

11.1 The Company will extend water service in accordance with all applicable laws of the State of New Jersey and Board regulations and orders including N.J.A.C. 14:3-8.1 *et seq.* Upon request, an application will be provided to the applicant, which must be returned to the Company.

12. CUSTOMER'S PREMISES:

12.1 The Company may refuse to provide a water connection, or furnish water through a connection pipe already installed, when a customer's piping system is not installed in accordance with the regulations of the Company and of the municipality in which the premises are located; or when the system on the premises is not at sufficient depth to prevent freezing.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.2 The Company shall have the right of reasonable access to Customer's premises, and to all property furnished by the Company, at all reasonable times for the purpose of inspection of Customer's premises incident to the rendering of service, reading meters, or installing, relocating, inspecting, testing, replacing or repairing its facilities used in connection with supplying the service, or for the removal of its property. (N.J.A.C. 14:3-3.6). Service can be discontinued for refusal of reasonable access to the Customer's premises for necessary purposes in connection with rendering of service, including meter installation, reading or testing, installation, replacement or relocation of meter reading devices, or the maintenance or removal of the ~~utilities~~Company's property. (N.J.A.C. 14:3-3A.1(a)5.i). A charge for reconnection will be made as specified in Paragraph 3 herein upon restoration of service.

12.3 Customers shall not permit access to the meter and other appliances of the Company except by authorized employees of the Company or properly authorized state or local inspectors.

12.4 In all cases the Customers should not interfere with property of the Company, but should immediately notify the Company of any problem.

12.5 It is the sole responsibility of each Customer to ensure that all piping and appurtenances within a Customer's premises comply with state, municipal and other public health regulations in force with respect hereto including state and local plumbing codes. The piping and appurtenances shall be maintained in a condition conducive for the Company to perform the services required to serve the Customer.

12.6 In any premises where devices are used which might produce a back pressure, such as steam boilers, carbonation equipment for soft drinks, booster pumps, etc., a check valve shall be installed by the Customer at the meter. In the event such check valve is installed, pressure relief valves should be provided by the Customer in the system.

12.7 In any premises where an auxiliary water source is available, the pipes carrying water from the mains of the Company are required to be marked in some distinctive manner for ready identification.

TERMS AND CONDITIONS OF SERVICE

12. CUSTOMER'S PREMISES (CONTINUED):

12.8 Physical connections, such as ~~cross-connections~~Cross Connections, interconnections, valves, pumps, or similar devices, either permanent or temporary, connecting the pipelines or facilities of the Company with other pipelines or facilities supplied with water from other sources will not be permitted without the express written consent of the Company and full compliance with all applicable regulations concerning such connections. Water which has once been drawn from the Company's distribution network and used for any purpose or stored in tanks, is considered an unapproved source of supply.

12.9 The Company may require ~~a cross-connection~~installation of a Cross Connection Control or backflow prevention protective device on a customer's service, in accordance with N.J.A.C. 7:~~10-10~~10-10.1 *et seq.* and N.J.S.A. 58:11-9.1 *et seq.*, as appliable, which shall be purchased and installed at the expense of the customer. The ~~cross-connection~~Cross Connection and/or backflow prevention device shall be of the type approved by the Company and required to be installed to obtain any required permit. Inspection and testing at regular intervals~~, in accordance to N.J.A.C. 7:10-10,~~ shall be performed~~,~~ at the expense of the customer.

12.10 No device or connection is permitted between pipes carrying water from the mains of the Company and any portion of the plumbing system of the premises, which may under any condition permit back-flow or back-siphonage, unless prior written permission has been granted by the Company. Further, any such device or connection must comply fully with all applicable permits, statutes and regulations.

12.11 Failure to comply with any of these provisions is grounds for discontinuance of service on an emergent basis to prevent harm to the Company's system and its customers.

RATE SCHEDULE NO. 1
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all customers served by the Company including those supplied through approved Multi-Use Services.

CHARACTER OF SERVICE: Continuous

RATE: Size of Meter	Fixed Service Charge Amount Per Month
5/8"	$ ~~16.50~~23.36
3/4"	~~24.75~~35.04
1"	~~41.25~~58.40
1 1/2"	~~82.50~~116.80
2"	~~132.00~~186.88
3"	~~247.50~~350.40
4"	~~412.50~~584.00
6"	~~825.00~~1,168.00
8"	~~1,320.00~~1,868.80
10"	~~1,897.50~~2,686.40
12"	~~3,547.50~~5,022.40
Bulk Water Purchase	~~31.08~~43.92
Flat Rate for Unmetered Customers	
Residential	$ ~~55.21~~69.87
Commercial, Industrial, Other Water Utility, and Public	~~75.87~~104.91

	Usage Charge Rate/1000 Gallons
All Service Areas (Except as noted below)	$ ~~6.452~~7.518
Wallkill Only	~~4.528~~6.390
Byram Township and Seaview Harbor Only	~~11.560~~11.280
Non-Potable Water	~~1.290~~1.504
Resale	~~6.442~~7.508

*The above rates, excepting the Resale rate, include a water tax of $0.01 per 1,000 gallons of water, which water tax was established by the State of New Jersey with the passage of the Safe Drinking Water Act. (N.J.S.A. 58:12A-21).

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE ~~FIFTEEN~~TWENTY (~~15~~20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL Bills for metered service will be rendered at the close of the billing period.

Issued: Effective Date:
By: Mark McKoy, 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. WR2401_____.

RATE SCHEDULE NO. 2
DISTRIBUTION SYSTEM IMPROVEMENT CHARGE
GENERAL METERED SERVICE

APPLICABILITY:
Applicable to the use of water supplied through meters to all Customers served by the Company.

CHARACTER OF SERVICE:
Continuous

RATE:

Size of Meter	DSIC Amount Per Month
5/8”	$ ~~2.62~~0.00
3/4”	~~3.93~~0.00
1”	~~6.55~~0.00
1 1/2”	~~13.10~~0.00
2”	~~20.96~~0.00
3”	~~39.30~~0.00
4”	~~65.50~~0.00
6”	~~131.00~~0.00
8”	~~209.60~~0.00
10”	~~301.30~~0.00
12”	~~563.30~~0.00

TERMS OF PAYMENT
PAYMENT FOR ALL BILLS RENDERED IS DUE ~~FIFTEEN~~TWENTY (~~15~~20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. The DSIC is assessed monthly for metered service, and is reflected on the Customer’s bill rendered at the close of the billing period.

RATE SCHEDULE NO. 3
PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY:
Applicable to all Customers for service furnished exclusively to private fire protection facilities served by the Company, except as specifically provided elsewhere in this tariff.

CHARACTER OF SERVICE:
The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

Size of Service	Fixed Service Charge Amount Per Month
Sprinklers	
2" or less	$ 0.00
3"	~~96.40~~104.11
4"	~~160.66~~173.51
6"	~~321.32~~347.03
8"	~~514.10~~555.23
10"	~~739.02~~798.14
12"	~~1,381.66~~1,492.19
Private Hydrants (per hydrant)	$ ~~41.28~~49.36

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE ~~FIFTEEN~~TWENTY (~~15~~20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for metered service will be rendered at the close of the billing period.

SPECIAL PROVISIONS:
Private fire service lines shall be equipped with special meters or detection devices and are to be used exclusively for fire protection purposes. No water shall be used through these fire protection connections except for testing purposes or in case of fire. However, the Company shall be provided with at least 72 hours (or 3 days) notice prior to the testing of any fire protection connection and shall be given the opportunity to witness such testing.

SPECIAL PROVISIONS (CONTINUED):

Customers desiring a separate service connection for private fire service are required to make separate written application for such service on forms prescribed by the Company. Private fire service installations must be made in accordance with the provisions of this tariff regarding the installation of service and connecting pipes and other facilities necessary for the provision of such service.

Service lines designated for private fire protection are installed for customers requiring a private fire service to supply sprinkler heads or hose connections. Any connection in which sprinkler heads and/or hose connections are supplied through a domestic service connection are not considered as part of a private fire protection service and shall not be subject to the requirements as set forth herein (i.e., limited fire protection). Residential Customers served by a 2-inch water service line or less in diameter will not be imposed a standby fee for a fire protection system.

The connection shall be in accordance with the applicable laws including but not limited to those of the BPU, NJ DEP and all federal, state and local agencies.

The Company shall not be liable for any loss, injury, casualty or damage resulting from fire or water, resulting from the supply or use of water service or the failure thereof, which may occur on account of the installation or presence of a private fire service connection, or from the presence or operation of the Company's structures, equipment, pipes, appliances or devices on the customer's premises, or connected therewith.

The Company may not discontinue fire protection service unless it has provided written notice giving the customer at least thirty (30) days' notice, by certified mail, prior to the proposed discontinuance. (N.J.A.C. 14:3-3A.4(~~j~~k)). However, in case of fraud, illegal use, or when it is clearly indicated that the customer is preparing to leave, immediate payment of accounts may be required, and service may be discontinued without further notice.

When hydrants are attached between the main and the meter, a charge per hydrant will be made. The installation and maintenance of fire hydrants and the supplying of water through such hydrants is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire.

No additional charge shall be made for water used in testing or for fire. However, should it be determined by Aqua that water is being, or has been, used through a fire protection connection for other than fire protection or testing purposes, the Company shall have the right to charge for the water used based on its "General Metered Service" tariff and to order said unauthorized use to cease immediately subject to the termination of the service.

RATE SCHEDULE NO. 4
PUBLIC FIRE PROTECTION SERVICE

APPLICABILITY:
This schedule is applicable to all municipal Customers served by the Company, for public fire protection service.

CHARACTER OF SERVICE:
The installation and maintenance of fire hydrants, and the supplying of water through such hydrants, is for the sole use of authorized fire-fighting personnel for the control and extinguishment of any fire. The Company will use due diligence at all times to provide Customers with service of the character or quality proposed to be supplied. However, if the service shall be interrupted, irregular, restricted, defective or fails, the Company shall not be liable for any damage or inconvenience resulting therefrom and is obligated only to use reasonably diligent efforts in the light of the circumstances then-existing to restore service.

RATE:

For each fire hydrant installed there shall be made a Monthly Fixed Fire Protection Charge of:

All Service Areas (Except as noted below)	$ 53.65
Alpha Borough	~~23.28~~30.26
Bayville Township	~~18.64~~
~~Califon Borough~~	~~51.23~~24.23
Fredon Township	~~23.28~~30.26
Hardyston Township	~~13.37~~22.38
~~Holland Township – Church St.~~	~~51.23~~
Holland Township – Fox Hill Dr.	~~31.66~~41.16
Lawrenceville Township	~~25.48~~33.12
~~Tranquility Springs~~	~~46.57~~
Upper Freehold Township	~~30.74~~39.96

For Byram Township only, the following Monthly Fixed Fire Protection Charge shall apply, per customer: $~~5.34~~6.94

TERMS OF PAYMENT:
PAYMENT FOR ALL BILLS RENDERED IS DUE ~~FIFTEEN~~TWENTY (~~15~~20) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for metered service will be rendered at the close of the billing period.

Issued: Effective Date:
By: Mark McKoy, 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. WR_____.

SPECIAL PROVISIONS:
All hydrants, lead valves, branches and other appurtenances shall be and remain the property of the Company.

Upon application or request by a duly authorized representative of a municipality in the Company's service area, the Company will install fire hydrants for purposes of public fire protection. The locations of such hydrants shall be selected upon agreement between the necessary municipal official(s) and representatives of the Company after careful consideration. Municipalities shall pay the Company a charge for service to public fire hydrants as provided in this tariff.

EXHIBIT 6

Exhibit 6

NOTICE OF FILING OF PETITION OF AQUA NEW JERSEY, INC.
FOR APPROVAL OF AN INCREASE IN RATES FOR WATER SERVICE,
COVID-19 DEFERRED COST RECOVERY, ADJUSTMENT OF CERTAIN
DEPRECIATION RATES, AND OTHER TARIFF CHANGES
BPU Docket No. WR2401____
OAL Docket No. _____

PLEASE TAKE NOTICE that on January 19, 2024, Aqua New Jersey, Inc. ("Aqua" or the "Company"), pursuant to N.J.S.A. 48:2-21 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 water 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 $8,328,380, or approximately 17.3% above the adjusted annual level of revenues for the test year period ending April 30, 2024.

The proposed rates provide for increases to the following classes of customers: General Metered Service, Public Fire Protection Service, Private Fire Protection Service, and Non-Treated and Non-Potable Metered Service. The proposed rates for all customers are contained in the tariff sheets and Petition filed with the Board. The present and proposed base rates for monthly billing for General Metered Service are as follows:

COMPARISON OF PRESENT AND PROPOSED RATES

Consumption and monthly service charges have been revised as follows:

General Metered Service

All Consumption	Present Rates	Proposed Rates	$ Increase
	$6.452/per Thous. Gals.	$7.518/per Thous. Gals.	$1.066/per Thous. Gals.

Fixed Monthly Charge:

Size of Meter	Present Fixed Rates	Proposed Fixed Rates	Proposed Fixed Rate Increase
5/8"	$ 16.50	$ 23.36	$ 6.86
3/4"	$ 24.75	$ 35.04	$ 10.29
1"	$ 41.25	$ 58.40	$ 17.15
1-1/2"	$ 82.50	$ 116.80	$ 34.30
2"	$ 132.00	$ 186.88	$ 54.88
3"	$ 247.50	$ 350.40	$ 102.90
4"	$ 412.50	$ 584.00	$ 171.50
6"	$ 825.00	$ 1,168.00	$ 343.00
8"	$ 1,320.00	$ 1,868.80	$ 548.80
10"	$ 1,897.50	$ 2,686.40	$ 788.90
12"	$ 3,547.50	$ 5,022.40	$ 1,474.90

Billing for each period shall be based on the volume of water consumed plus all applicable fixed charges, including the fixed monthly service charge and the approved Distribution System Improvement Charge (the "DSIC Charge") in effect at that time.

A GENERAL METERED SERVICE RESIDENTIAL CUSTOMER WITH A 5/8" METER USING 6,000 GALLONS OF WATER PER MONTH WILL SEE HIS/HER TOTAL MONTHLY BILL (INCLUDING FIXED, CONSUMPTION AND DSIC CHARGES) INCREASE FROM $57.83 TO $68.47, AN INCREASE OF $10.64 PER MONTH, APPROXIMATELY 18.4% OR APPROXIMATELY $034 PER DAY. THIS PROPOSED RATE IMPACT DOES NOT REFLECT THE INCLUSION IN RATES OF A DSIC CHARGE WHICH MAY BE APPROVED IN THE FUTURE.

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.

The tariff for the proposed rates is part of the Petition, which was served upon the Director of the New Jersey Division of Rate Counsel ("Rate Counsel"). Notice of the filing of the Petition was also served on the clerks of the municipalities in the service areas of the Company. Further information and copies of the Petition may be obtained at the Company's offices located at 10 Black Forest Road, Hamilton, New Jersey 08691, and on the Company's website at www.aquawater.com. Copies of the Petition are also available to review online at the Board's website, https://publicaccess.bpu.state.nj.us/ where you can search by the above-captioned docket number, WR2401_____. Copies of the Petition are also available for review at the Board, located at 44 South Clinton Avenue, 1st Floor, Trenton, New Jersey, by appointment. To make an appointment, please call (609) 913-6298.

PLEASE TAKE FURTHER NOTICE that the Company intends to implement, subject to any refunds that may be ordered by the Board, the proposed tariff for service on and after October 21, 2024 if the Board has not finally determined a just and reasonable tariff schedule prior to that date.

PLEASE TAKE FURTHER NOTICE that that virtual public hearings will be conducted on the following date and times so that members of the public may present their views on the Petition:

Date:
Times: 4:30 PM and 5:30 P.M.
Link:
Dial-in:
Meeting ID:
Passcode:

Representatives of the Company, Board Staff, and Rate Counsel will participate in the virtual public hearings. Members of the public are invited to participate by utilizing the Meeting ID or the Dial-In Number set forth above and may express their views on this

Petition. All comments will be made part of the final record to be considered by the Board. In order to encourage full participation in this opportunity for public comment, please submit any requests for needed accommodations, such as interpreters or listening assistance, 48 hours prior to the above hearing to the Board Secretary at board.secretary@bpu.nj.gov.

The Board is also accepting written and electronic comments. Comments may be submitted directly to the specific docket listed above using the "Post Comments" button on the Board's Public Document Search tool at https://publicaccess.bpu.state.nj.us. Comments are considered public documents for purposes of the State's Open Public Records Act. Only documents that are intended to be public should be submitted using the "Post Comments" button on the Board's Public Document Search tool. Any confidential information should be submitted in accordance with the procedures set forth in N.J.A.C. 14:1-12.3. In addition to hard copy submissions, confidential information may also be filed electronically via the Board's e-filing system or by email to the Secretary of the Board at board.secretary@bpu.nj.gov. Please include "Confidential Information" in the subject line of any email. Instructions for confidential e-filing are found on the Board's webpage, https://www.nj.gov/bpu/agenda/efiling/.

Emailed and/or written comments may also be submitted to:
Secretary of the Board
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350
Phone: 609-913-6241
Email: board.secretary@bpu.nj.gov

AQUA NEW JERSEY, INC.
10 Black Forest Road
Hamilton, New Jersey 08691

EXHIBIT 7

Exhibit 7
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Balance Sheet - Assets

Description	Twelve Months Ended December 31st 2022	2021	2020	2019
Assets:				
Property, Plant & Equipment at Cost:				
Water Utility Plant In Service	$ 396,704,217	$ 370,904,903	$ 357,245,117	$ 347,920,302
Less: Accumulated Depreciation	(102,199,470)	(97,929,819)	(90,843,650)	(83,818,318)
Net	294,504,747	272,975,084	266,401,467	264,101,983
Construction Work In Progress	$ 9,412,506	8,969,942	5,769,407	3,024,374
Utility Plant Adjustment	$ (322,983)	(374,638)	(429,170)	(483,702)
Net Utility Plant	303,594,270	281,570,388	271,741,705	266,642,656
Current Assets:				
Cash and Temporary Investments	129,816	96,196	180,507	175,104
Accounts Receivable - Affiliates	-	11,779,515	7,744,805	3,765,728
Accounts Receivable	3,815,178	3,546,649	3,493,658	2,836,890
Unbilled Revenue	2,240,054	2,309,218	2,241,952	2,128,510
Materials & Supplies	2,622,690	1,706,110	1,261,880	1,358,141
Prepayments	562,917	601,582	338,732	1,608,253
Other	83,668	83,677	109,402	23,326
Total Current Assets	9,454,322	20,122,946	15,370,937	11,895,953
Deferred Charges & Other Assets:				
Regulatory Assets 1/	26,527,774	5,517,713	4,741,419	4,905,963
Other	211,105	211,105	211,105	213,351
Total Deferred Charges & Other Assets	26,738,879	5,728,818	4,952,524	5,119,314
Total Assets	**$ 339,787,471**	**$ 307,422,153**	**$ 292,065,166**	**$ 283,657,923**

EXHIBIT 8

Exhibit 8
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Balance Sheet - Liabilities

Description	Twelve Months Ended December 31st 2022	2021	2020	2019
Shareholders Investment & Liabilities:				
Capitalization:				
Shareholders Equity	$ 3,603,125	$ 3,603,125	$ 3,603,125	$ 3,603,125
Premium on Common Shares	15,566,026	15,566,026	15,566,026	15,566,026
Capital Investment by Parent	9,431,661	9,343,903	6,920,044	30,478,634
Reinvested Earnings	95,585,805	93,611,521	83,152,168	72,592,915
Total Equity	124,186,616	122,124,575	109,241,363	122,240,700
Mortgage Bonds & Unamort Issue Cost	96,527,645	96,864,676	97,203,669	73,218,496
Total Capitalization	220,714,261	218,989,251	206,445,032	195,459,196
Current Liabilities:				
Current Portion of Long Term Debt	442,690	429,653	410,275	593,174
Accounts Payable - Affiliates	14,917,602	-	-	-
Accounts Payable	4,173,890	1,601,613	1,185,424	1,254,390
Accrued Interest	28,339	325,445	30,495	41,261
Other Accrued Expenses	1,779,217	6,694,090	3,701,821	5,514,441
Total Current Liabilities	21,341,738	9,050,800	5,328,015	7,403,267
Deferred Credits:				
Customer Advances for Construction	25,744,327	20,643,698	20,666,054	20,254,927
Deferred Federal Income Taxes	(11,169,463)	12,706,433	13,393,820	13,874,079
Other	56,073,799	18,324,398	17,855,191	17,153,564
Total Deferred Credits	70,648,663	51,674,529	51,915,064	51,282,570
Contributions in Aid of Construction	27,082,810	27,707,573	28,377,054	29,512,890
Total Shareholders' Investment & Liabilities	**$ 339,787,471**	**$ 307,422,153**	**$ 292,065,166**	**$ 283,657,923**

EXHIBIT 9

Exhibit 9
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Income Statement

Description	Audited Twelve Months Ended December 31st 2022	2021	2020	2019
Operating Revenues:				
Water Revenues	$ 44,204,518	$ 43,928,171	$ 43,676,244	$ 40,547,058
Total Operating Revenues	44,204,518	43,928,171	43,676,244	40,547,058
Operating Expenses:				
Operating & Maintenance Expenses	13,144,281	12,850,342	12,314,776	12,375,221
Depreciation Expense	9,586,317	9,266,105	8,993,026	8,331,212
Amortization Expense	514,120	635,742	635,742	485,337
Taxes Other Than Income	7,043,842	6,524,440	6,257,303	5,771,643
Income Taxes	(231,580)	2,301,483	2,348,378	2,398,769
Total Operating Expenses	30,056,981	31,578,112	30,549,225	29,362,183
Utility Operating Income	14,147,537	12,350,058	13,127,019	11,184,875
Other Income, Net	668,820	739,703	448,441	1,538,403
Income Before Interest Charges	14,816,357	13,089,762	13,575,460	12,723,278
Interest Charges:				
Interest On Long-Term Debt	4,163,417	4,167,439	3,795,250	3,617,629
Other Interest Expense	67	2,742	3,732	3,285
Interest Charged To Construction	(837,530)	(502,960)	(229,605)	(1,216,782)
Total Interest Charges	3,325,954	3,667,221	3,569,377	2,404,132
Minority Interest	-	-	-	-
Net Income	**$ 11,490,403**	**$ 9,422,541**	**$ 10,006,083**	**$ 10,319,146**

EXHIBIT 10

Exhibit 10
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Detail of Operating Expenses

Description	Audited Twelve Months Ended December 31st 2022	2021	2020	2019
Operating Expenses:				
Source of Supply	$ 2,519,255	$ 2,001,751	$ 1,986,585	$ 2,005,278
Water Treatment	1,654,235	1,908,741	1,863,122	1,641,369
Transmission & Distribution	532,632	876,302	864,363	863,408
Customer Accounts	1,169,609	1,846,051	1,744,974	1,826,796
Administrative & General	6,718,171	4,866,957	4,694,498	4,953,863
Total Operating Expenses	12,593,903	11,499,803	11,153,543	11,290,714
Maintenance Expenses:				
Source of Supply	175,262	208,749	239,858	192,972
Water Treatment	100,254	220,714	184,349	164,051
Transmission & Distribution	274,861	921,076	737,026	727,484
Total Maintenance Expenses	550,378	1,350,539	1,161,233	1,084,507
Total Operation & Maintenance Expenses	**$ 13,144,281**	**$ 12,850,342**	**$ 12,314,776**	**$ 12,375,221**

EXHIBIT 11

Exhibit 11
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Most Recent Balance Sheet (See Exhibits 7 and 8)

EXHIBIT 12

Exhibit 12
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Most Recent Income Statement (See Exhibit 9)

EXHIBIT 13

Exhibit 13
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Income Statement Under Present And Proposed Rates
5 Months Actual + 7 Months Estimated

Description	Test Year Ending Apr 30, 2024	Adjustment	Proforma at Present Rates	Adjustment	Proforma at Proposed Rates
Operating Revenues:					
Metered Sales	$ 41,664,257	$ (302,566)	$ 41,361,691	$ 10,313,856	$ 51,675,547
Service Improvement Charge	1,128,897	1,072,280	2,201,177	(2,201,177)	-
Private Fire	1,776,329	(4,231)	1,772,098	154,442	1,926,541
Public Fire	2,302,190	(12,880)	2,289,310	61,259	2,350,569
Miscellaneous	68,577	-	68,577	-	68,577
Antennae	409,913	14,677	424,590	-	424,590
Total	$ 47,350,163	$ 767,280	$ 48,117,443	$ 8,328,380	$ 56,445,823
					-
Operating Expenses:					
O & M Expenses	$ 13,872,764	$ 1,144,615	$ 15,017,379	$ 50,218	$ 15,067,597
Depreciation	10,736,164	544,746	11,280,911	-	11,280,911
Amortizations	(53,359)	314,397	261,038	-	261,038
Taxes Other than Income	7,586,890	86,393	7,673,283	1,142,788	8,816,071
Income Taxes	(2,020,783)	(522,346)	(2,543,129)	1,498,428	(1,044,701)
Total	$ 30,121,676	$ 1,567,806	$ 31,689,482	$ 2,691,434	$ 34,380,916
Utility Operating Income	**$ 17,228,487**	**$ (800,526)**	**$ 16,427,961**	**$ 5,636,945**	**$ 22,064,906**
Interest Charges:					
Long Term Debt	$ 4,758,809	$ 812,660	$ 5,571,469	$ -	$ 5,571,469
Other	-	-	-	-	-
Total	$ 4,758,809	$ 812,660	$ 5,571,469	$ -	$ 5,571,469
Net Income	**$ 12,469,678**	**$ (1,613,185)**	**$ 10,856,492**	**$ 5,636,945**	**$ 16,493,437**
Rate Base	$ 238,270,944		$ 278,960,356		$ 278,960,356
ROE					11.16%
Rate of Return	7.23%		5.89%		7.91%

EXHIBIT 14

Exhibit 14
Witness: William C. Packer, Jr.

Aqua New Jersey, Inc
Water Systems
Calculation Of Cost Of Capital And Rate Of Return
As of April 30, 2024
5 Months Actual + 7 Months Estimated

	Outstanding	(A) Ratio to	(B) Effective	(A*B) Weighted
First Mortgage Bonds:	Amount	Capitalization	Cost	Cost
SERIES P 4.00%	100,000	0.03%	5.1374%	0.0017%
SERIES Q 0.00%	61,866	0.02%	0.7373%	0.0002%
SERIES S 6.23%	6,000,000	2.01%	6.6970%	0.1344%
SERIES T 5.80%	3,800,000	1.27%	6.8160%	0.0867%
SERIES U 3.90%	320,000	0.11%	4.5300%	0.0049%
SERIES V 0.00%	139,828	0.05%	0.2744%	0.0001%
SERIES W 3.68%	114,000	0.04%	5.3183%	0.0020%
SERIES X 0.00%	94,679	0.03%	0.9476%	0.0003%
SERIES Y 3.70%	85,000	0.03%	5.7662%	0.0016%
SERIES Z 0.00%	75,858	0.03%	1.1531%	0.0003%
SERIES AA 3.15%	175,000	0.06%	4.2394%	0.0025%
SERIES BB 0.00%	79,285	0.03%	1.5655%	0.0004%
SERIES CC 3.23%	400,000	0.13%	3.8334%	0.0051%
SERIES DD 0.00%	347,521	0.12%	0.3323%	0.0004%
Pushdown Debt 3.57%	1,500,000	0.50%	3.5972%	0.0181%
Pushdown Debt 3.57%	37,504,444	12.55%	3.6588%	0.4591%
Pushdown Debt 4.28%	46,880,556	15.69%	4.3495%	0.6822%
Pushdown Debt 2.40%	19,000,000	6.36%	2.5388%	0.1614%
Pushdown Debt 5.30%	23,800,000	7.96%	5.4730%	0.4358%
Total Bonds	140,478,036	47.00%	4.2493%	1.9972%
Other Debt				
Common Equity:				
Capital Stock				
Paid In Capital				
Retained Earnings	158,404,884			
Total Equity	158,404,884	53.00%	11.15%	5.91%
Capitalization	$ 298,882,920	100%		
Rate Of Return				7.91%

** 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 P 4.00%	1,300,000	145,860	1,154,140	52,000	7,293	59,293	5.1374%
SERIES Q 0.00%	1,135,000	145,860	989,140	0	7,293	7,293	0.7373%
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 3.90%	985,000	65,120	919,880	38,415	3,256	41,671	4.5300%
SERIES V 0.00%	971,000	50,520	920,480	0	2,526	2,526	0.2744%
SERIES W 3.68%	295,000	46,840	248,160	10,856	2,342	13,198	5.3183%
SERIES X 0.00%	294,000	46,840	247,160	0	2,342	2,342	0.9476%
SERIES Y 3.70%	230,000	44,140	185,860	8,510	2,207	10,717	5.7662%
SERIES Z 0.00%	235,542	44,140	191,402	0	2,207	2,207	1.1531%
SERIES AA 3.15%	430,000	50,700	379,300	13,545	2,535	16,080	4.2394%
SERIES BB 0.00%	212,631	50,700	161,931	0	2,535	2,535	1.5655%
SERIES CC 3.23%	780,000	53,280	726,720	25,194	2,664	27,858	3.8334%
SERIES DD 0.00%	855,017	53,280	801,737	0	2,664	2,664	0.3323%
Pushdown Debt 3.57%	1,500,000	5,377	1,494,623	53,550	215	53,765	3.5972%
Pushdown Debt 3.57%	37,504,444	254,844	37,249,600	1,337,408	25,484	1,362,893	3.6588%
Pushdown Debt 4.28%	46,880,556	448,373	46,432,183	2,004,613	14,946	2,019,558	4.3495%
Pushdown Debt 2.40%	19,000,000	156,742	18,843,258	456,000	22,392	478,392	2.5388%
Pushdown Debt 5.30%	23,800,000	455,276	23,344,724	1,261,400	16,260	1,277,660	5.4730%

EXHIBIT 15

Exhibit 15
Witness: William C. Packer, Jr.

Aqua New Jersey, Inc
Water Systems
Revenue Increase Calculation
PRO FORMA - PROPOSED RATES
5 Months Actual + 7 Months Estimated

Description	Reference			Amount
Pro Forma Rate Base	Exh 26 Page 1		$	278,960,356
Recommmended Rate of Return	Exhibit 14			7.9100%
Operating Income Pro Forma:				
Proposed Rates		=	$	22,065,764
Present Rates	Exhibit 13		$	16,427,961
Deficiency/(Excess)		=	$	5,637,803
Revenue Conversion Factor		x		1.4774633
Total Revenue Increase		**=**	**$**	**8,329,647**

Description	Reference	Conversion Factor
Gross Revenue Factor		1.000000
Uncollectible Expenses	Exh 20 Page 9	-0.006030
Net After Uncollectible Component		0.993970
Excise Taxes (GRT and Franshise)	Exh 21 Page 4	-0.134583
Regulatory Assessment (BPU and RPA)	Exh 21 Page 2	-0.002633
Net Revenues		0.856754
Federal Income Taxes @ 21%		-0.179918
Net Operating Income Factor - ("NOIF")		0.676836
Gross Revenue Conversion Factor - 1/NOIF		1.477463

EXHIBIT 16
(Reserved)

EXHIBIT 17

Aqua New Jersey, Inc
Water Systems
Operating Revenues Under Present And Proposed Rates
Based Upon the Base Year Ended September 30, 2023
and the Test Year Ended April 30, 2024
5 Months Actual + 7 Months Estimated

Description	Test Year	Under Present Rates Adjustments	Under Present Rates Pro Forma Amount	Under Proposed Rates Adjustments	Under Proposed Rates Pro Forma Amount	Percent Increase
Residential	$ 33,413,642	$ (135,810)	$ 33,277,832	$ 8,393,287	$ 41,671,119	
Commercial	$ 7,114,547	$ (187,807)	$ 6,926,741	$ 1,640,321	$ 8,567,062	
Industrial	$ 590,413	$ 75,268	$ 665,681	$ 134,589	$ 800,269	
Public Authority	$ 545,655	$ (54,217)	$ 491,438	$ 145,659	$ 637,097	
Other	$ (6,847)	$ 6,847	$ -	$ -	$ -	
Rounding Difference						
Total Sales Revenue	$ 41,657,409	$ (295,718)	$ 41,361,691	$ 10,313,856	$ 51,675,547	
Service Improvement Charge	$ 1,128,897	$ 1,072,280	$ 2,201,177	$ (2,201,177)	$ -	
Total Sales + SIC Revenue	$ 42,786,307	$ 776,562	$ 43,562,868	$ 8,112,678	$ 51,675,547	18.62%
Private Fire	$ 1,776,329	$ (4,231)	$ 1,772,098	$ 154,442	$ 1,926,541	8.72%
Public Fire	$ 2,302,190	$ (12,880)	$ 2,289,310	$ 61,259	$ 2,350,569	2.68%
Total Sales & SIC Revenue	$ 46,864,826	$ 759,451	$ 47,624,276	$ 8,328,380	$ 55,952,656	17.49%
Miscellaneous	$ 68,577	$ -	$ 68,577	$ -	$ 68,577	0.00%
Nonutil Inc-Antennae	$ 409,913	$ 14,677	$ 424,590	$ -	$ 424,590	0.00%
Total Operating Revenue	$ 47,343,316	$ 774,128	$ 48,117,443	$ 8,328,380	$ 56,445,823	17.31%

Aqua New Jersey, Inc
Water Systems
Pro Forma Billing Determinants, Revenue At Present Rates
Based Upon the Base Year Ended September 30, 2023
5 Months Actual + 7 Months Estimated

	Meter Size	Res Units	Com Units	Ind Units	Pub Units	Oth Units	Total Units	Present Rate $	PF Rev at Prsnt Rts ($)	*Equv Custs*
Class->								(see PF-9)		
Billed Months & Base Revenue										
	Easement cust	12	-	-	-	-	12	-	$ -	*1*
	5/8x3/4"	544,314	14,760	120	228	-	559,422	various	9,231,863	*46,619*
	3/4"	67,080	1,800	12	-	-	68,892	various	1,705,077	*5,741*
	1"	13,044	4,296	12	36	-	17,388	various	717,133	*1,449*
	1-1/2"	1,728	2,124	36	120	-	4,008	various	330,660	*334*
	2"	1,824	6,156	168	672	-	8,820	various	1,164,240	*735*
	3"	60	576	-	48	-	684	various	158,902	*57*
	4"	-	264	84	36	-	384	various	158,400	*32*
	6"	12	72	24	96	-	204	various	158,773	*17*
	8"	12	132	12	36	-	192	various	237,973	*16*
	10"	-	-	-	-	-	-	various	-	-
	Bulk	-	-	-	-	-	-	various	-	-
	Raw 4"	-	12	-	-	-	12	various	4,950	*1*
	Flat Rate	-	-	-	-	-	-	various	-	-
	Total Base	628,086	30,192	468	1,272	-	660,018		$ 13,867,970	*55,002*
EDUs		*703,236*	*117,768*	*5,952*	*15,594*	-	*842,550*			
Usage kGals & Revenue		-								
	Allowance	12	-	-	-		12		$ -	
	Charged	3,353,195	805,910	87,953	36,289	-	4,283,347	various	27,493,720	
	Total Usage	3,353,207	805,910	87,953	36,289	-	4,283,359		$ 27,493,720	
Total Water Sales Revenue									$ 41,361,691	
Fire Protection										
Private Fire Protection										*Equiv Units*
Sprinklers	3"						144	various	$ 13,882	*12*
	4"						1,920	various	308,467	*160*
	6"						2,040	various	655,493	*170*
	8"						804	various	413,336	*67*
	10"						300	various	221,706	*25*
	12"						36	various	49,740	*3*
	Total Sprinklers						5,244		$ 1,662,624	*437*
Private Hydrants							2,652	various	$ 109,475	*221*
	Total Private Fire						7,896		$ 1,772,098	*658*
Public Fire Protection										
Rate Per Hydrant per Month										
	All Service						38,448	$ 49.99	$ 2,062,735	*3,204*
	Alpha Boro						12	21.69	279	*1*
	Bayville						3,876	17.37	72,249	*323*
	Califon Boro						324	47.74	16,599	*27*
	Fredon Twp						240	21.69	5,587	*20*
	Holland Twp-Church St						300	47.74	15,369	*25*
	Holland Twp-Fox Hill Dr.						48	29.50	1,520	*4*
	Hardyston Township						576	12.22	7,701	*48*
	Lawrenceville						2,784	23.74	70,936	*232*
	Phillipsburg Twn						-	49.99		-
	Tranquility Springs						216	43.39	10,059	*18*
	Upper Freehold Twp						540	28.64	16,600	*45*
Rate per Customer per Month										
	Byram (per cust)						1,812	5.34	9,676	
	Total Public Fire						49,176		$ 2,289,310	*3,947*
Total Water Sales & Fire									$ 45,423,099	-
Service Improvement Charges										
Rate per DSIC CEU										
DSIC CEUs & Revenue							*840,144*	$ 2.62	$ 2,201,177	
Total Sales Revenue & DSIC									$ 47,624,276	
Miscellaneous									68,577	
Antennae									424,590	
									$ 48,117,443	

Aqua New Jersey, Inc
Water Systems
Billed Consumption And Production
Based Upon the Base Year Ended September 30, 2023

Description	kGals
Historical	
Water Sales (PF-9)	4,157,253
Production	4,988,081
Yields	
Metered ratio	83.34%
Pro Forma	
Water Sales (PF-9)	4,283,359
At above Metered Ratio yields:	
Production	5,139,389

EXHIBIT 18
(Reserved)

EXHIBIT 19
(Reserved)

EXHIBIT 20

Aqua New Jersey, Inc
Water Systems
Summary Of Operations & Maintenance Expenses
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Reference Exhibit 20	Description	Test Year	Adjustment	Pro Forma Present Rates
Page 2	Labor	$ 3,688,119	$ 142,431	3,830,550
Page 2	Employee Benefits	718,502	(63,202)	655,300
Page 3	Purchased Water	865,671	(7,889)	857,782
Page 4	Purchased Power	1,064,847	200,398	1,265,245
Page 5	Chemicals	1,235,657	156,085	1,391,742
Page 6	Supplies	187,606	(29,638)	157,968
Page 7	Outside Services - Engineering	-	-	-
Page 7	Outside Services - Accounting	69,852	285	70,137
Page 7	Outside Services - Legal	189,492	10,668	200,160
Page 7	Outside Services - Lab Testing	202,432	37,832	240,264
Page 7	Outside Services - Other	732,384	(184,524)	547,860
Page 7	Outside Services - O&M	1,520,788	220,638	1,741,426
Page 7	Management Fees	1,651,798	445,145	2,096,943
Page 8	Leases	4,802	(1,386)	3,416
Page 8	Transportation	202,672	(12,700)	189,972
Page 8	Insurance	415,516	21,214	436,730
Page 8	Other	491,637	29,055	520,692
Page 9	Bad Debt	154,143	133,433	287,576
Page 10	Rate Case Expense Amort	-	523,617	523,617
Page 11	Tank Painting Amortization	476,844	(476,844)	-
	TOTAL	$ 13,872,764	$ 1,144,615	$ 15,017,379

Aqua New Jersey, Inc
Water Systems
Labor and Benefits
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Amount	
Labor		
Test Year Amount		$ 3,688,119
Projected Amount in 2nd Half of 2024 *	1,915,275	
Pro Forma Present Rates		
Full Year = Projected Amount Above x 2		3,830,550
Adjustment		$ 142,431
Employee Benefits		
Test Year Amount		$ 718,502
Pro Forma Present Rates	676,536	
Less:		
Employee Relations Expense	21,236	
Pro Forma Present Rates Net		655,300
Adjustment		$ (63,202)

* Includes 3% annual pay increase in Q2

Aqua New Jersey, Inc
Water Systems
Purchased Water
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Purchased Water	610		
Test Year Amount		$	865,671
Pro Forma Present Rates			857,782
Adjustment		$	(7,889)

Aqua New Jersey, Inc
Water Systems
Purchased Power
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Purchased Power	615,616		
Test Year Amount		$	1,064,847
Pro Forma Present Rates			1,265,245
Adjustment		$	200,398

Cost Per Million Gallons Pumped:		
Actual Production 2023 (MG)	$	4,285
Actual Expense Incurred 2023		1,024,236
Cost Per Million Gallons	$	239.02
Pro Form Present Rates Purchased Power		
Pro Forma Present Rates Production (MG)	$	5,139
Projected Increase in Prices		3.0%
Estimated Cost Per Million Gallons	$	246
Pro Forma Present Rates Expense	$	1,265,245

Aqua New Jersey, Inc
Water Systems
Chemicals
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Chemicals	618		
Test Year Amount		$	1,235,657
Pro Forma Present Rates			1,252,415
True up for mix of wells used			139,327
Adjustment		$	156,085

Calculations for Pro Forma Present Rates Expense:

Cost Per Million Gallons Pumped:		
Actual Production 2023 (MG)	$	4,285
Actual Expense Incurred 2023	$	956,287
Cost Per Million Gallons	$	223.16
Pro Forma Present Rates Purchased Chemicals:		
Pro Forma Present Rates Production (MG)	$	5,139
Projected % Increase in Cost		9.2%
Projected Cost Per Million Gallons	$	243.69
Pro Forma Present Rates Expense	$	1,252,415

Aqua New Jersey, Inc
Water Systems
Supplies
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Supplies	620		
Test Year Amount		$	187,606
Pro Forma Present Rates		$	157,968
Adjustment		$	(29,638)

Aqua New Jersey, Inc
Water Systems
Outside Services
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Outside Services - Engineering	631		
Test Year Amount		$	-
Pro Forma Present Rates			-
Adjustment		$	-
Outside Services - Accounting	632		
Test Year Amount		$	69,852
Pro Forma Present Rates			70,137
Adjustment		$	285
Outside Services - Legal	633		
Test Year Amount		$	189,492
Pro Forma Present Rates			200,160
Adjustment		$	10,668
Management Fees	634		
Test Year Amount		$	1,651,798
Pro Forma Present Rates			2,096,943
Adjustment		$	445,145
Outside Services - Lab Testing	635		
Test Year Amount		$	202,432
Pro Forma Present Rates			240,264
Adjustment		$	37,832
Outside Services - Other	636		
Test Year Amount		$	732,384
Pro Forma Present Rates			547,860
Adjustment		$	(184,524)
Outside Services - O&M	636		
Test Year Amount		$	1,520,788
Pro Forma Present Rates			1,741,426
Adjustment		$	220,638

Aqua New Jersey, Inc
Water Systems
Leases, Transportation, Insurance and Other
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Desscription	Account(s)		Amount
Leases	641,642		
Test Year		$	4,802
Pro Forma Present Rates			3,416
Adjustment		$	(1,386)
Transportation	650		
Test Year		$	202,672
Pro Forma Present Rates			189,972
Adjustment		$	(12,700)
Insurance	656.9		
Test Year		$	415,516
Pro Forma Present Rates			436,730
Adjustment		$	21,214
Other	660,675, 676200,676240		
Test Year		$	491,637
Pro Forma Present Rates			520,692
Adjustment		$	29,055

Aqua New Jersey, Inc
Water Systems
Bad Debt
3 Year Average, Test Year Ending April 30, 2024
And Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account	Operating Revenue Water	Amount
Calculation of Test Year Adjustment:			
Sales & Miscellaneous Revenue - Pro Forma Present Rates		$ 47,692,853	
Percentage		0.60297%	
Expense			$ 287,576
Test Year Expense			$ 154,143
Adjustment			$ 133,433
Calculation of Pro Forma Proposed Rates Adjustment:			
Sales & Miscellaneous Revenue - Pro Forma Proposed Rates		$ 56,021,233	
Percentage		0.60297%	
Expense			$ 337,794
Adjustment			$ 50,218
Calculation of Average Bad Debt:			
2021	670	43,928,171	149,975
2022	670	44,204,514	334,619
September YTD 2023	670	34,826,692	256,820
Total		$ 122,959,377	$ 741,414
Five Year Average			**0.60297%**

Aqua New Jersey, Inc
Water Systems
Rate Case Expense
CURRENT CASE PROJECTION

Description	Account		Amount
Test Year Amount	666800	$	-
Current Rate Case Costs:			
Administrative		$	2,000
Billing Analysis, Design, MFR, COSS			67,000
Depreciation Study			45,000
Cost of Capital			20,000
Court Reporter / Transcripts / Public Notices			10,000
Regulated Capital Consultants			318,165
Legal-Saul Ewing			585,068
Total Cost		$	1,047,233
Amortization Period - Years	2		
Pro Forma Present Rates Annually		$	523,617
Adjustment		$	523,617

Aqua New Jersey, Inc
Water Systems
Tank Painting Amortization
Test Year Ended April 30, 2024 and Pro Forma Present Rates

Description	Account		Amount
Tank Painting Amortization			
Test Year Amount	407201	$	476,844
Pro Forma Present Rates			0
Adjustment		$	(476,844)

EXHIBIT 21

Aqua New Jersey, Inc
Water Systems
Summary of Taxes Other Than Income
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account	Test Year	Adjustment	Pro Forma @ Present Rates	Pro Forma @ Proposed Rates
Regulatory Assessments	408101	$ 170,476	$ (43,792)	$ 126,683	$ 148,610
Property Taxes	408110	$ 499,389	-	499,389	499,389
Payroll Taxes	40812x	$ 282,004	10,885	292,890	292,890
Excise Taxes	40820x	$ 6,317,375	$ 101,288	6,418,663	7,539,524
Miscellaneous-Water Tax/SDWA	40813x	$ 317,646	18,013	335,658	335,658
Total		$ 7,586,890	$ 86,393	$ 7,673,283	$ 8,816,071

SDWA = Safe Drinking Water Act allocation fees

Aqua New Jersey, Inc
Water Systems
Regulatory Assessments
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Test Year	Adjustment	Pro Forma at Present Rates	Adjustment	Pro Forma at Proposed Rates
Gross Revenues	$ 47,343,316		$ 48,117,443		$ 56,445,823
BPU Assessment					
Actual 2023 Rate	0.213044732%		0.213044732%		0.213044732%
Assessment Amount	$ 100,862	$ 1,649	$ 102,512	$ 17,743	$ 120,255
Rate Counsel Assessment					
Actual 2023 Rate	0.050234362%		0.050234362%		0.050234362%
Assessment Amount	$ 23,783	$ 389	$ 24,171	$ 4,184	$ 28,355
Total Regulatory Assessments	$ 124,645	$ 2,038	$ 126,683	$ 21,927	$ 148,610

Aqua New Jersey, Inc
Water Systems
Payroll Tax Adjustments
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Acct	Tax Amount	Labor Expense
Payroll Taxes			
Test Year Amounts	408112	$ 282,004	$ 3,688,119
Pro Forma Present Rates			3,830,550
Increase factor			1.0386
Pro Forma Amount		292,890	
Adjustment		$ 10,885	
Capital Credit Adjustment:			
Test Year Amount	676230	$ -	
Pro Forma Present Rates	676230		
Adjustment		$ -	
Total Adjustments		$ 10,885	

Aqua New Jersey, Inc
Water Systems
Excise Taxes
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Test Year	Pro Forma at Present Rates	Pro Forma at Proposed Rates
Sales Revenues	$ 46,940,250	$ 47,692,853	$ 56,021,233
Gross Receipts	$ 46,940,250	$ 47,692,853	$ 56,021,233
Gross Receipts Tax:			
State Tax Rate	0.9375%	0.9375%	0.9375%
State GRT	$ 440,065	$ 447,120	$ 525,199
Municipal Tax Rate	7.50%	7.50%	7.50%
Municipal GRT	$ 3,520,519	$ 3,576,964	$ 4,201,592
Total Gross Receipts Tax	$ 3,960,584	$ 4,024,084	$ 4,726,792
Franchise Tax:			
Public Miles of facilities	688.7600	688.7600	688.7600
Total Miles of facilities	771.6400	771.6400	771.6400
Public Component Multiplier	89.2592%	89.2592%	89.2592%
Taxable Receipts for Franchise Taxes	$ 41,898,510	$ 42,570,278	$ 50,004,127
State Tax Rate	0.6250%	0.6250%	0.6250%
State Tax	$ 261,866	$ 266,064	$ 312,526
Municipal Tax Rate	5.00%	5.00%	5.00%
Municipal Tax	$ 2,094,926	$ 2,128,514	$ 2,500,206
Total Franchise Tax	$ 2,356,791	$ 2,394,578	$ 2,812,732
Total Excise Taxes	$ 6,317,375	$ 6,418,663	$ 7,539,524
Effective Combined Tax Rate on Gross Revenue		13.4583%	13.4583%

Aqua New Jersey, Inc
Water Systems
Misc-Water Tax/SDWA Adjustments
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Test Year Amount
Other Taxes-Water	408131	$	46,238
Other Taxes-Allocation Fees	408132	$	155,650
Other Taxes-Misc	408139	$	950
Other Taxes & Licenses	408113	$	-
SDWA Fees/Permits *	408101	$	114,808
Total		$	317,646

Water Taxes			
Test Year Amount		$	46,238
Pro Forma kGal Sales	4,283,359		
Tax Rate per kGal	$0.015		
Pro Forma Tax Amount		$	64,250
Adjustment		$	18,013

SDWA = Safe Drinking Water Act allocation fees

EXHIBIT 22

Exhibit 22
Witness: William C. Packer, Jr.

Aqua New Jersey, Inc
Water Systems
Federal Income Tax
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Rate	Test Year Ending 04/30/2024	Pro Forma @ Present Rates	Pro Forma @ Proposed Rates	Exhibit Reference
Operating Revenue		$ 47,350,163	$ 48,117,443	$ 56,445,823	Exhibit 13
Operating Revenue Deductions:					
Operating Expenses		13,872,764	15,017,379	15,067,597	Exhibit 13
Interest on Customer Deposits		-	-	-	
Depreciation & Amort		10,682,805	11,541,949	11,541,949	Exhibit 13
Taxes Other than Income Taxes		7,586,890	7,673,283	8,816,071	Exhibit 13
Interest Expense		4,758,809	5,571,469	5,571,469	Exhibit 13
Total Operating Revenue Deductions		36,901,269	39,804,080	40,997,086	
Book vs Tax Differences					
Tax Repairs - Flow Through		(15,000,000)	(15,000,000)	(15,000,000)	
Book Depreciation Reversal - Flow Through		1,778,975	1,778,975	1,778,975	
Taxable Income (L1-L7)		(2,772,131)	(4,907,662)	2,227,712	
State Income Tax @	0.00%	-	-	-	
Federal Taxable Income		(2,772,131)	(4,907,662)	2,227,712	
Federal Income Tax @	21.00%	(582,147)	(1,030,609)	467,819	
Less:					
Reg Asset Tax Repairs Reversal Amort		-	-	-	
481a Repairs Amort		(1,100,459)	(1,100,459)	(1,100,459)	
Excess Deferred Taxes-RSG		(116,524)	(116,524)	(116,524)	
Excess Deferred Taxes-ARAM		(221,653)	(295,537)	(295,537)	
Total Income Taxes		**$ (2,020,783)**	**$ (2,543,129)**	**$ (1,044,701)**	Exhibit 13 & 15
				-6.76%	

EXHIBIT 23

Exhibit 23
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Amortization Adjustments
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Account		Amount
Calculation of Amortization of Utility Plant Acquisition Adjustment:			
Amortization-Utility Plant Acquisition Adjustment ("UPAA")			
Test Year Amount	406000	$	(53,359)
Actual Cost (Gross UPAA)		$	(818,747)
Less: Fully Amortized UPAA			44,733
Net UPAA		$	(774,014)
Amortization Period (months)			180
Monthly Amortization Expense			(4,300)
Pro Forma Annual Amortization Expense		$	(51,601)
Adjustment		$	1,758
Calculation of Amortization of Covid-19 expenses			
Amortization Regulatory Debits			
Test Year Amount		$	-
Pro Forma Total Expense - Bad Debt			106,354
Pro Forma Total Expense - All Other expense			518,924
Pro Forma Annual Amortization Expense			312,639
Adjustment		$	312,639
Total Pro Forma Annual Amortization Expense		$	261,038
Total Pro Forma Amortization Expense Adjustments		$	314,397

EXHIBIT 24
(Reserved)

EXHIBIT 25

Exhibit 25
Witness: Dawn M Peslak

Aqua New Jersey, Inc
Water Systems
Interest Expense
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Reference	Test Year	Pro Forma
Interest Synchronization:			
Test Year Rate Base	Exh 26, Pg 1	$ 238,270,944	$ 278,960,356
Times Weighted Cost Of Debt	Exh 14	1.9972%	1.9972%
Interest Synchronization Amount		$ 4,758,809	$ 5,571,469

EXHIBIT 26

Aqua New Jersey, Inc
Water Systems
Rate Base and Rate of Return
Under Present and Proposed Rates
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Reference Exhibit 26	Description	Actual 09/30/23	Adjustment	Pro Forma 04/30/24
Page 2	Utility Plant in Service	$ 428,502,958	$ 34,064,199	$ 462,567,157
Page 5	Materials and Supplies	3,174,396	-	3,174,396
Page 6	Prepayments	652,368	-	652,368
Page 7	Unamortized Acquisition Adj.	(284,278)	30,100	(254,178)
Page 10	Tank Maintenance Balance		-	
	Subtotal	$ 432,045,444	$ 34,094,299	$ 466,139,744
Page 8	Reserve for Depreciation	$ 115,146,796	$ 6,860,863	$ 122,007,659
Page 9	Customer Advances	22,268,701	(393,442)	21,875,259
Page 9	Contributed Property	25,908,534	(823,967)	25,084,567
Page 10	Deferred FIT	30,437,903	(12,238,567)	18,199,336
Page 10	Customer Deposits	12,566	-	12,566
	Consolidated Tax Adjustment	-	-	-
	Other	-	-	-
	Subtotal	$ 193,774,500	$ (6,595,112)	$ 187,179,388
	Rate Base	**$ 238,270,944**	**$ 40,689,412**	**$ 278,960,356**
	Operating Income	$ 17,228,487		$ 22,064,906
	Rate of Return	7.23%		7.91%

Aqua New Jersey, Inc
Water Systems
Schedule Of Utility Plant In Service
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Account # Actual	Account # Budget	Description	Actual Plant Balance 09/30/2023	10/01/23 04/30/24 Net Additions	Test Year Plant Balance 04/30/24	Post Test Year Net Additions	Pro Forma Plant Balance 10/31/24	Current Depreciation Rate	Pro Forma Depreciation Expense
301100	301	Organization	$ 1,063,478	-	$ 1,063,478	$ -	$ 1,063,478	0.00%	$ -
302100	302	Franchises	628,834	-	628,834	-	628,834	0.00%	-
303210	303	Land & Land Rights-Source	883,722	296,142	1,179,863	-	1,179,863	0.00%	-
303220		Land & Land Rights-Pumping	78,759	-	78,759	-	78,759	0.00%	-
303300		Land & Land Rights-Treatment	361,847	-	361,847	-	361,847	0.00%	-
303400		Land & Land Rights-T&D	489,031	-	489,031	-	489,031	0.00%	-
303510		Land & Land Rights-Office	25,883	-	25,883	-	25,883	0.00%	-
304200	304	Structures & Imp-SoS&Pump	-	204,805	204,805	-	204,805	1.89%	3,871
304220		Structures & Imp-Pumping	1,889,874	-	1,889,874	-	1,889,874	1.89%	35,719
304300		Structures & Imp-Treatment	16,893,847	-	16,893,847	-	16,893,847	2.16%	364,907
304400		Structures & Imp-T&D	911,336	-	911,336	-	911,336	1.85%	16,860
304500		Structures & Imp-General	13,981,042	-	13,981,042	-	13,981,042	3.86%	539,668
304510		Structures & Imp-Gen-Office	3,461,173	-	3,461,173	-	3,461,173	1.78%	61,609
307200	307	Wells & Springs	22,959,985	2,285,439	25,245,424	1,753,679	26,999,103	1.79%	483,284
309200	309	Supply Mains	2,022,933	-	2,022,933	-	2,022,933	2.19%	44,302
310200	310	Power Generation Equip-Solar	17,734	4,765	22,499	-	22,499	2.46%	553
310201		Power Generation Equip-Solar	2,325,291	-	2,325,291	-	2,325,291	2.46%	57,202
310300		Power Generation Equip-Treat	7,213	-	7,213	-	7,213	2.46%	177
310400		Power Generation Equip-T&D	2,830	-	2,830	-	2,830	2.46%	70
311200	311	Pumping Equip-SoS&Pumping	9,646,804	747,694	10,394,498	-	10,394,498	1.68%	174,628
311250		Pumping Equip-SoS&P-Diesel	636,073	-	636,073	-	636,073	1.68%	10,686
311300		Pumping Equip-Treatment	3,228	-	3,228	-	3,228	2.11%	68
311400		Pumping Equip-T&D	116,234	-	116,234	-	116,234	2.11%	2,453
320300	320	Water Treatment Equipment	17,298,365	976,023	18,274,388	1,554,362	19,828,750	2.26%	448,130
320.PFAS	320	Water Treatment Equipment - PFAS	-	4,677,815	4,677,815	1,682,975	6,360,790	6.65%	422,993
330400	330	Dist Reservoirs & Standpipes	15,382,356	1,822,318	17,204,674	4,973,124	22,177,798	1.68%	372,587
330410	330	Dist Reservoirs & Standpipes - Tank Painting	6,794,500	1,200,000	7,994,500	-	7,994,500	7.52%	601,186
331400	331	T&D Mains	183,148,197	6,575,424	189,723,621	-	189,723,621	1.98%	3,756,528
333400	333	Services	73,543,643	3,071,615	76,615,258	-	76,615,258	3.83%	2,934,364
334400	334	Meters & Meter Installations	2,215,987	(499,266)	1,716,721	-	1,716,721	5.65%	96,995
334420		Meter Installations	3,042,565	-	3,042,565	-	3,042,565	3.41%	103,751
334430		Meters-ERT	2,314,009	-	2,314,009	-	2,314,009	2.82%	65,255
334440		Meters-Other	15,601,626	-	15,601,626	-	15,601,626	2.65%	413,443
335400	335	Hydrants	12,449,215	307,528	12,756,743	-	12,756,743	2.22%	283,200
336400	336	Backflow Prevention Devices	269,959	-	269,959	-	269,959	2.84%	7,667
339200	339	Oth Plnt & Misc Eq-SoS&Pump	416,851	-	416,851	-	416,851	2.86%	11,922
339400		Oth Plnt & Misc Eq-T&D	69,985	-	69,985	-	69,985	0.17%	119
340500	340	Office Furniture & Equipment	2,334,004	1,266,753	3,600,757	-	3,600,757	5.01%	180,398
340550		OF&E-Computer Equipment	73,840	-	73,840	-	73,840	0.00%	-
340600		SAP Software	3,089,706	-	3,089,706	-	3,089,706	6.72%	207,628
341500	341	Transportation Equipment	1,988,414	142,642	2,131,057	-	2,131,057	2.94%	62,653
342500	342	Stores Equipment	20,593	-	20,593	-	20,593	6.20%	1,277
343500	343	Tools, Shop & Garage Equip	1,232,634	4,141	1,236,775	-	1,236,775	6.73%	83,235
344500	344	Laboratory Equipment	1,095	-	1,095	-	1,095	5.66%	62
345500	345	Power Operated Equipment	368,833	-	368,833	-	368,833	8.40%	30,982
346500	346	Communication Equipment	1,820,391	878,680	2,699,071	-	2,699,071	6.74%	181,917
347500	347	Miscellaneous Equipment	228,778	2	228,779	-	228,779	4.35%	9,952
348500	348	Other Tangible Plant	6,390,261	137,540	6,527,801	-	6,527,801	1.35%	88,125
		Total Utility Plant in Service	**$ 428,502,958**	**$ 24,100,060**	**$ 452,603,018**	**$ 9,964,139**	**$ 462,567,157**		**$ 12,160,425**
		Contributions in Aid of Construction & Customer Advances	$ (62,770,382)	$ 393,442	$ (62,376,940)	$ -	$ (62,376,940)	1.41%	$ (879,515)

Aqua New Jersey, Inc
Water Systems
Test Year Plant Additions & Retirements
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Account	Description	Gross Additions	Period Retirements	Net Additions
301100	Organization	-	-	-
302100	Franchises	-	-	-
303210	Land & Land Rights-Source	311,728	(15,586)	296,142
303220	Land & Land Rights-Pumping	-	-	-
303300	Land & Land Rights-Treatment	-	-	-
303400	Land & Land Rights-T&D	-	-	-
303510	Land & Land Rights-Office	-	-	-
304220	Structures & Imp-Pumping	215,585	(10,779)	204,805
304300	Structures & Imp-Treatment	-	-	-
304400	Structures & Imp-T&D	-	-	-
304500	Structures & Imp-General	-	-	-
304510	Structures & Imp-Gen-Office	-	-	-
307200	Wells & Springs	2,390,125	(104,686)	2,285,439
309200	Supply Mains	-	-	-
310200	Power Generation Equip-Solar	5,016	(251)	4,765
310201	Power Generation Equip-Solar	-	-	-
310300	Power Generation Equip-Treatment	-	-	-
310400	Power Generation Equip-T&D	-	-	-
311200	Pumping Equip-SoS&Pumping	787,046	(39,352)	747,694
311250	Pumping Equip-SoS&P-Diesel	-	-	-
311300	Pumping Equip-Treatment	-	-	-
311400	Pumping Equip-SoS&P-T&D	-	-	-
320300	Water Treatment Equipment	1,027,393	(51,370)	976,023
320.PFAS	Water Treatment Equipment - PFAS	4,677,815	-	4,677,815
330400	Dist Reservoirs & Standpipes	1,917,796	(95,477)	1,822,318
330410	Dist Reservoirs & Standpipes - Tank Pa	1,200,000	-	1,200,000
331400	T&D Mains	6,822,278	(246,854)	6,575,424
333400	Services	3,233,279	(161,664)	3,071,615
334400	Meters & Meter Installations	(499,266)	-	(499,266)
334420	Meter Installations	-	-	-
334430	Meters-ERT	-	-	-
334440	Meters-Other	-	-	-
335400	Hydrants	323,714	(16,186)	307,528
336400	Backflow Prevention Devices	-	-	-
339200	Oth Plnt & Misc Eq-SoS&Pump	-	-	-
339400	Oth Plnt & Misc Eq-T&D	-	-	-
340500	Office Furniture & Equipment	1,266,753	-	1,266,753
340550	OF&E-Computer Equipment	-	-	-
341500	Transportation Equipment	150,150	(7,507)	142,642
342500	Stores Equipment	-	-	-
343500	Tools, Shop & Garage Equip	4,141	-	4,141
344500	Laboratory Equipment	-	-	-
345500	Power Operated Equipment	-	-	-
346500	Communication Equipment	878,680	-	878,680
347500	Miscellaneous Equipment	2	-	2
348500	Other Tangible Plant	141,392	(3,852)	137,540
252	CAC	393,442	-	393,442
271	CIAC	-	-	-
Total		$ 25,247,066	$ (753,564)	$ 24,493,502

Aqua New Jersey, Inc
Water Systems
Post Test Year Plant Additions & Retirements
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Post Test Year Additions: May 01, 2024 thru October 31, 2024

Account	Description	Gross Additions	Period Retirements	Net Additions
301100	Organization	$ -	$ -	$ -
302100	Franchises	-	-	-
303210	Land & Land Rights-Source	-	-	-
303220	Land & Land Rights-Pumping	-	-	-
303300	Land & Land Rights-Treatment	-	-	-
303400	Land & Land Rights-T&D	-	-	-
303510	Land & Land Rights-Office	-	-	-
304220	Structures & Imp-Pumping	-	-	-
304300	Structures & Imp-Treatment	-	-	-
304400	Structures & Imp-T&D	-	-	-
304500	Structures & Imp-General	-	-	-
304510	Structures & Imp-Gen-Office	-	-	-
307200	Wells & Springs	1,845,978	(92,299)	1,753,679
309200	Supply Mains	-	-	-
310200	Power Generation Equip-Solar	-	-	-
310201	Power Generation Equip	-	-	-
310300	Power Generation Equip-Treat	-	-	-
310400	Power Generation Equip-T&D	-	-	-
311200	Pumping Equip-SoS&Pumping	-	-	-
311250	Pumping Equip-SoS&P-Diesel	-	-	-
311300	Pumping Equip-Treatment	-	-	-
311400	Pumping Equip-T&D	-	-	-
320300	Water Treatment Equipment	1,636,170	(81,809)	1,554,362
320.PFAS	Water Treatment Equipment - PFAS	1,682,975	-	1,682,975
330400	Dist Reservoirs & Standpipes	5,234,867	(261,743)	4,973,124
331400	T&D Mains	-	-	-
333400	Services	-	-	-
334400	Meters & Meter Installations	-	-	-
334420	Meter Installations	-	-	-
334430	Meters-ERT	-	-	-
334440	Meters-Other	-	-	-
335400	Hydrants	-	-	-
336400	Backflow Prevention Devices	-	-	-
339200	Oth Plnt & Misc Eq-SoS&Pump	-	-	-
339400	Oth Plnt & Misc Eq-T&D	-	-	-
340500	Office Furniture & Equipment	-	-	-
340550	OF&E-Computer Equipment	-	-	-
341500	Transportation Equipment	-	-	-
342500	Stores Equipment	-	-	-
343500	Tools, Shop & Garage Equip	-	-	-
344500	Laboratory Equipment	-	-	-
345500	Power Operated Equipment	-	-	-
346500	Communication Equipment	-	-	-
347500	Miscellaneous Equipment	-	-	-
348500	Other Tangible Plant	-	-	-
252000	CAC - Net of FIT	-	-	-
271000	CIAC	-	-	-

Aqua New Jersey, Inc
Water Systems
Materials And Supplies
Rate Base Component
Base Year Ended September 30, 2023

Description		Amount
September 2022	$	2,249,539
October 2022		2,562,797
November 2022		2,712,988
December 2022		2,622,690
January 2023		2,645,993
February 2023		3,012,904
March 2023		2,965,517
April 2023		3,150,598
May 2023		3,388,456
June 2023		3,666,130
July 2023		4,056,967
August 2023		4,071,228
September 2023		4,161,346
Total	$	41,267,151
Test Year Amount - 13-Month Average	$	3,174,396

Aqua New Jersey, Inc
Water Systems
Prepayments
Rate Base Component
Base Year Ended September 30, 2023

Description		Amount
September 2022	$	719,348
October 2022		636,770
November 2022		574,033
December 2022		562,917
January 2023		497,205
February 2023		552,916
March 2023		612,951
April 2023		883,557
May 2023		855,694
June 2023		773,221
July 2023		684,777
August 2023		619,737
September 2023		507,662
Total	$	8,480,789
Test Year Amount - 13-Month Average	$	652,368

Aqua New Jersey, Inc
Water Systems
Unamortized Acquisition Adjustment
Rate Base Component
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

	Total Acquisition Adjustment	Amortization Months	Unamortized Acquisition Adjustment: Monthly Amortizations	Unamortized Acquisition Adjustment: Balance @ 09/30/2023	Unamortized Acquisition Adjustment: Balance @ 04/30/2024
				-	-
Byram	(86,549)	180	481	(47,603)	(44,237)
Cliffside Park	(107,344)	180	596	(59,608)	(55,434)
Bear Brook *	(869,889)	180	-	-	-
Berkley *	825,156	180	-	-	-
Bloomsbury	(229,412)	180	1,275	(53,215)	(44,293)
Harkers Hollow	17,000	180	(94)	4,059	3,398
Lawrenceville	423,832	180	(2,355)	101,234	84,752
Seaview Harbor	(82,732)	180	460	(39,980)	(36,763)
Spartan Village	(11,120)	180	62	(4,817)	(4,385)
Summit Lake	(15,151)	180	84	(6,583)	(5,994)
Tranquility Springs	(334,565)	180	1,859	(96,386)	(83,375)
Vernon	(55,400)	180	308	(12,484)	(10,330)
Wallkill	(292,573)	180	1,625	(68,895)	(57,517)
TOTALS	$ (818,747)		$ 4,300	$ (284,278)	$ (254,178)
Adjustment					$ 30,100

* Acquisition fully amortized

Aqua New Jersey, Inc
Water Systems
Reserve For Depreciation
Rate Base Component
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description	Amount
Actual Balance at September 30, 2023	$ 115,146,796
Depreciation 10/01/2023 thru 04/30/2024	8,050,278
Retirements/Removal/Salvage 10/01/2023 thru 04/30/2024	(1,189,415)
Test Year Reserve For Depreciation Balance	$ 122,007,659

Adjustment for change in Depreiciation Rates (Exhibit 26.2)

Aqua New Jersey, Inc
Water Systems
Customer Advances And Contributed Property
Rate Base Component
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description		Amount
Customer Advances:		
Actual Balance @ 09/30/2023	$	(22,268,701)
Activity/Refunds 10/01/2023 thru 04/30/2024	$	393,442
Test Year Customer Advances	$	(21,875,259)
Contributed Property:		
Actual Balance @ 09/30/2023 Inclusive of Amortization	$	(25,908,534)
Activity/Refunds 10/01/2023 thru 04/30/2024	$	-
Test Year Contributed Property	$	(25,908,534)

Note: Company has actual contractual obligations to refund customer advances.

Note: Additions to plant accounts include "Company funded" projects only.

Aqua New Jersey, Inc
Water Systems
Deferred Federal Taxes, Tank Maintenance Balance & Customer Deposits
Test Year Ended April 30, 2024 and Pro Forma Present Rates
5 Months Actual + 7 Months Estimated

Description		Amount
Deferred Federal Taxes:		
Balance at 9/30/2023	$	30,437,903
Balance at 9/30/2023 - Reg. Liab. Acct. 253116		-
Activity 10/1/2023 - 4/30/2024		(12,238,567)
Test Year Deferred FIT 4/30/2024	$	18,199,336
Tank Maintenance Balance:		
Balance at 9/30/23	$	6,794,496
Activity 10/1/2023 - 4/30/2024 (move to UPIS)		(6,794,496)
Test Year Balance	$	-
Customer Deposits:		
Balance at 9/30/2023 - Accts 235020 & 235050	$	12,566
Activity 10/1/2023 - 4/30/2024		-
Test Year Balance	$	12,566

Aqua New Jersey, Inc
Water Systems
Schedule of Utility Plant In Service by Division

Total By Division	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	$ 111,611,595	$ 1,978,989	$ (59,313)	$ 1,919,676	$ 5,966,997	$ (67,028)	$ 5,899,969	$ 119,431,240	$ -	$ -	$ -	**$ 119,431,240**	$ 3,384,408	$ 1,853,152	$ 1,692,204
Eastern	35,430,260	1,547,759	(16,805)	1,530,954	3,040,291	(135,517)	2,904,774	39,865,988	-	-	-	**39,865,988**	$ 1,257,412	$ 680,414	$ 628,706
Northern	107,146,730	2,130,186	(104,988)	2,025,198	3,273,731	(115,019)	3,158,712	112,330,639	10,399,990	(435,851)	9,964,139	**122,294,779**	$ 3,436,974	$ 1,828,386	$ 1,652,991
Southern	97,531,964	1,803,368	(77,630)	1,725,738	3,591,827	(163,094)	3,428,733	102,686,435	-	-	-	**102,686,435**	$ 2,667,791	$ 1,520,409	$ 1,333,895
Corporate	14,012,028	884,384	(5,317)	879,066	636,092	(8,852)	627,240	15,518,334	-	-	-	**15,518,334**	$ 528,779	$ 289,259	$ 264,389
Total	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	$ 11,275,363	$ 6,171,619	$ 5,572,185
Totals Based on Filter ----------->	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	11,275,363	6,171,619	5,572,185

Division	Account	Acct3	Description	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	Dep_Rate	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Northern	301100	301	Organization	530,322	-	-	-	-	-	-	530,322	-	-	-	**530,322**	0.00%	$ -	0	0
Northern	302100	302	Franchises	262,262	-	-	-	-	-	-	262,262	-	-	-	**262,262**	0.00%	-	0	0
Northern	303210	303	Land & Land Rights-Source	183,089	-	-	-	-	-	-	183,089	-	-	-	**183,089**	0.00%	-	0	0
Northern	303220		Land & Land Rights-Pumping	3,109	-	-	-	-	-	-	3,109	-	-	-	**3,109**	0.00%	-	0	0
Northern	303300		Land & Land Rights-Treatment	53,001	-	-	-	-	-	-	53,001	-	-	-	**53,001**	0.00%	-	0	0
Northern	303400		Land & Land Rights-T&D	58,664	-	-	-	-	-	-	58,664	-	-	-	**58,664**	0.00%	-	0	0
Northern	303510		Land & Land Rights-Office	(7,609)	-	-	-	-	-	-	(7,609)	-	-	-	**(7,609)**	0.00%	-	0	0
Northern	304220	304	Structures & Imp-Pumping	645,371	72,368	(3,618)	68,750	-	-	-	714,121	-	-	-	**714,121**	1.89%	13,497	7,494	6,748
Northern	304300		Structures & Imp-Treatment	3,473,991	-	-	-	-	-	-	3,473,991	-	-	-	**3,473,991**	2.16%	75,038	43,772	37,519
Northern	304400		Structures & Imp-T&D	325,262	-	-	-	-	-	-	325,262	-	-	-	**325,262**	1.85%	6,017	3,510	3,009
Northern	304500		Structures & Imp-General	2,824,536	-	-	-	-	-	-	2,824,536	-	-	-	**2,824,536**	3.86%	109,027	63,599	54,514
Northern	304510		Structures & Imp-Gen-Office	858,131	-	-	-	-	-	-	858,131	-	-	-	**858,131**	1.78%	15,275	8,910	7,637
Northern	307200	307	Wells & Springs	3,955,987	3,015	-	3,015	293,397	-	293,397	4,252,398	1,845,978	(92,299)	1,753,679	**6,006,077**	1.79%	107,509	42,855	45,907
Northern	309200	309	Supply Mains	1,554,834	-	-	-	-	-	-	1,554,834	-	-	-	**1,554,834**	2.19%	34,051	19,863	17,025
Northern	310200	310	Power Generation Equip-Solar	8,889	-	-	-	-	-	-	8,889	-	-	-	**8,889**	2.46%	219	128	109
Northern	310201		Power Generation Equip	1,816,754	-	-	-	-	-	-	1,816,754	-	-	-	**1,816,754**	2.46%	44,692	26,070	22,346
Northern	310300		Power Generation Equip-Treat	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Northern	310400		Power Generation Equip-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Northern	311200	311	Pumping Equip-SoS&Pumping	3,453,012	271,576	(13,579)	257,998	-	-	-	3,711,009	-	-	-	**3,711,009**	1.68%	62,345	35,104	31,172
Northern	311250		Pumping Equip-SoS&P-Diesel	74,456	-	-	-	-	-	-	74,456	-	-	-	**74,456**	1.68%	1,251	730	625
Northern	311300		Pumping Equip-Treatment	(2,810)	-	-	-	-	-	-	(2,810)	-	-	-	**(2,810)**	2.11%	(59)	-35	-30
Northern	311400		Pumping Equip-T&D	48,587	-	-	-	-	-	-	48,587	-	-	-	**48,587**	2.11%	1,025	598	513
Northern	320.PFAS	320	Water Treatment Equipment	-	-	-	-	350,000	-	350,000	350,000	1,682,975	-	1,682,975	**2,032,975**	6.65%	135,193	6,789	39,617
Northern	320300	320	Water Treatment Equipment	5,130,013	(5,427)	271	(5,156)	-	-	-	5,124,857	1,636,170	(81,809)	1,554,362	**6,679,219**	2.26%	150,950	67,597	66,693
Northern	330400	330	Dist Reservoirs & Standpipes	6,418,183	8,249	-	8,249	-	-	-	6,426,432	5,234,867	(261,743)	4,973,124	**11,399,556**	1.68%	191,513	62,939	74,869
Northern	330410		Dist Reservoirs & Standpipes - Tank Paint	2,537,821	-	-	-	-	-	-	2,537,821	-	-	-	**2,537,821**	7.52%	190,844	111,326	95,422
Northern	331400	331	T&D Mains	53,939,521	1,259,642	(62,982)	1,196,660	1,500,033	(75,002)	1,425,032	56,561,213	-	-	-	**56,561,213**	1.98%	1,119,912	638,142	559,956
Northern	331400	331	T&D Mains	-	1,885,202	-	1,885,202		-	-	1,885,202	-	-	-	**1,885,202**	1.98%	37,327	10,887	18,663
Northern	333400	333	Services	26,665,205	355,729	(17,786)	337,942	774,074	(38,704)	735,370	27,738,517	-	-	-	**27,738,517**	3.83%	1,062,385	607,735	531,193
Northern	334400	334	Meters & Meter Installations	2,167,958	18,896	-	18,896	298,615	-	298,615	2,485,469	-	-	-	**2,485,469**	5.65%	140,429	76,685	70,215
Northern	334400	334	Meters & Meter Installations	-	(1,885,202)	-	(1,885,202)		-	-	(1,885,202)	-	-	-	**(1,885,202)**	5.65%	(106,514)	-31,067	-53,257
Northern	334420		Meter Installations	401,164	-	-	-	-	-	-	401,164	-	-	-	**401,164**	3.41%	13,680	7,980	6,840
Northern	334430		Meters-ERT	-	-	-	-	-	-	-	-	-	-	-	**-**	2.82%	-	0	0
Northern	334440		Meters-Other	4,674,300	-	-	-	-	-	-	4,674,300	-	-	-	**4,674,300**	2.65%	123,869	72,257	61,934
Northern	335400	335	Hydrants	4,474,598	145,864	(7,293)	138,571	26,278	(1,314)	24,964	4,638,134	-	-	-	**4,638,134**	2.22%	102,967	59,005	51,483
Northern	336400	336	Backflow Prevention Devices	38,479	-	-	-	-	-	-	38,479	-	-	-	**38,479**	2.84%	1,093	637	546
Northern	339200	339	Oth Plnt & Misc Eq-SoS&Pump	7,299	-	-	-	-	-	-	7,299	-	-	-	**7,299**	2.86%	209	122	104
Northern	339400		Oth Plnt & Misc Eq-T&D	17,285	-	-	-	-	-	-	17,285	-	-	-	**17,285**	0.17%	29	17	15
Northern	340500	340	Office Furniture & Equipment	10,476	-	-	-	31,333	-	31,333	41,809	-	-	-	**41,809**	5.01%	2,095	764	1,047
Northern	340550		OF&E-Computer Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Northern	341500	341	Transportation Equipment	14,974	-	-	-	-	-	-	14,974	-	-	-	**14,974**	2.94%	440	257	220
Northern	342500	342	Stores Equipment	200	-	-	-	-	-	-	200	-	-	-	**200**	6.20%	12	7	6
Northern	343500	343	Tools, Shop & Garage Equip	664,909	-	-	-	-	-	-	664,909	-	-	-	**664,909**	6.73%	44,748	26,103	22,374
Northern	344500	344	Laboratory Equipment	1,095	-	-	-	-	-	-	1,095	-	-	-	**1,095**	5.66%	62	36	31
Northern	345500	345	Power Operated Equipment	94,404	-	-	-	-	-	-	94,404	-	-	-	**94,404**	8.40%	7,930	4,626	3,965
Northern	346500	346	Communication Equipment	576,447	274	-	274	-	-	-	576,720	-	-	-	**576,720**	6.74%	38,871	22,669	19,435

Aqua New Jersey, Inc
Water Systems
Schedule of Utility Plant In Service by Division

Total By Division	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	$ 111,611,595	$ 1,978,989	$ (59,313)	$ 1,919,676	$ 5,966,997	$ (67,028)	$ 5,899,969	$ 119,431,240	$ -	$ -	$ -	**$ 119,431,240**	$ 3,384,408	$ 1,853,152	$ 1,692,204
Eastern	35,430,260	1,547,759	(16,805)	1,530,954	3,040,291	(135,517)	2,904,774	39,865,988	-	-	-	**39,865,988**	$ 1,257,412	$ 680,414	$ 628,706
Northern	107,146,730	2,130,186	(104,988)	2,025,198	3,273,731	(115,019)	3,158,712	112,330,639	10,399,990	(435,851)	9,964,139	**122,294,779**	$ 3,436,974	$ 1,828,386	$ 1,652,991
Southern	97,531,964	1,803,368	(77,630)	1,725,738	3,591,827	(163,094)	3,428,733	102,686,435	-	-	-	**102,686,435**	$ 2,667,791	$ 1,520,409	$ 1,333,895
Corporate	14,012,028	884,384	(5,317)	879,066	636,092	(8,852)	627,240	15,518,334	-	-	-	**15,518,334**	$ 528,779	$ 289,259	$ 264,389
Total	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	$ 11,275,363	$ 6,171,619	$ 5,572,185
Totals Based on Filter ----------->	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	11,275,363	6,171,619	5,572,185

Division	Account	Acct3	Description	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	Dep_Rate	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Northern	347500	347	Miscellaneous Equipment	83,830	-	-	-	-	-	-	83,830	-	-	-	**83,830**	4.35%	3,647	2,127	1,823
Northern	348500	348	Other Tangible Plant	60,078	-	-	-	-	-	-	60,078	-	-	-	**60,078**	1.35%	811	473	406
Northern	252000	252	CAC - Net of FIT	(11,583,187)	-	-	-	-	-	-	(11,583,187)	-	-	-	**(11,583,187)**	1.41%	(163,323)	(95,272)	(81,661)
Northern	271000	271	CIAC	(9,368,159)	-	-	-	-	-	-	(9,368,159)	-	-	-	**(9,368,159)**	1.41%	(132,091)	(77,053)	(66,046)
Central	301100	301	Organization	333,997	-	-	-	-	-	-	333,997	-	-	-	**333,997**	0.00%	$ -	0	0
Central	302100	302	Franchises	299,482	-	-	-	-	-	-	299,482	-	-	-	**299,482**	0.00%	-	0	0
Central	303210	303	Land & Land Rights-Source	252,283	-	-	-	-	-	-	252,283	-	-	-	**252,283**	0.00%	-	0	0
Central	303220		Land & Land Rights-Pumping	5,164	-	-	-	-	-	-	5,164	-	-	-	**5,164**	0.00%	-	0	0
Central	303300		Land & Land Rights-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Central	303400		Land & Land Rights-T&D	320,321	-	-	-	-	-	-	320,321	-	-	-	**320,321**	0.00%	-	0	0
Central	303510		Land & Land Rights-Office	33,492	-	-	-	-	-	-	33,492	-	-	-	**33,492**	0.00%	-	0	0
Central	304220	304	Structures & Imp-Pumping	364,696	30,684	(1,534)	29,149	-	-	-	393,846	-	-	-	**393,846**	1.89%	7,444	4,181	3,722
Central	304300		Structures & Imp-Treatment	4,640,773	-	-	-	-	-	-	4,640,773	-	-	-	**4,640,773**	2.16%	100,241	58,474	50,120
Central	304400		Structures & Imp-T&D	132,747	-	-	-	-	-	-	132,747	-	-	-	**132,747**	1.85%	2,456	1,433	1,228
Central	304500		Structures & Imp-General	1,081,262	-	-	-	-	-	-	1,081,262	-	-	-	**1,081,262**	3.86%	41,737	24,346	20,868
Central	304510		Structures & Imp-Gen-Office	1,102,531	-	-	-	-	-	-	1,102,531	-	-	-	**1,102,531**	1.78%	19,625	11,448	9,813
Central	307200	307	Wells & Springs	10,001,936	65,841	(3,292)	62,549	146,698	(7,335)	139,363	10,203,849	-	-	-	**10,203,849**	1.79%	182,649	105,491	91,324
Central	309200	309	Supply Mains	54,764	-	-	-	-	-	-	54,764	-	-	-	**54,764**	2.19%	1,199	700	600
Central	310200	310	Power Generation Equip-Solar	8,304	5,009	(250)	4,759	-	-	-	13,063	-	-	-	**13,063**	2.46%	321	153	161
Central	310201		Power Generation Equip	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Central	310300		Power Generation Equip-Treat	7,213	-	-	-	-	-	-	7,213	-	-	-	**7,213**	2.46%	177	104	89
Central	310400		Power Generation Equip-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Central	311200	311	Pumping Equip-SoS&Pumping	1,793,361	447,165	(22,358)	424,807	31,333	(1,567)	29,767	2,247,935	-	-	-	**2,247,935**	1.68%	37,765	19,802	18,883
Central	311250		Pumping Equip-SoS&P-Diesel	150,054	-	-	-	-	-	-	150,054	-	-	-	**150,054**	1.68%	2,521	1,471	1,260
Central	311300		Pumping Equip-Treatment	4,924	-	-	-	-	-	-	4,924	-	-	-	**4,924**	2.11%	104	61	52
Central	311400		Pumping Equip-T&D	18,752	-	-	-	-	-	-	18,752	-	-	-	**18,752**	2.11%	396	231	198
Central	320.PFAS	320	Water Treatment Equipment	-	-	-	-	4,327,815	-	4,327,815	4,327,815				**4,327,815**	6.65%	287,800	83,942	143,900
Central	320300	320	Water Treatment Equipment	5,674,744	3,070	(154)	2,917	-	-	-	5,677,661	-	-	-	**5,677,661**	2.26%	128,315	74,831	64,158
Central	330400	330	Dist Reservoirs & Standpipes	4,564,115	-	-	-	-	-	-	4,564,115	-	-	-	**4,564,115**	1.68%	76,677	44,728	38,339
Central	330410		Dist Reservoirs & Standpipes - Tank Paint	980,392	-	-	-	-	-	-	980,392	-	-	-	**980,392**	7.52%	73,725	43,007	36,863
Central	331400	331	T&D Mains	64,987,026	279,112	(13,956)	265,157	756,457	(37,823)	718,634	65,970,816	-	-	-	**65,970,816**	1.98%	1,306,222	756,282	653,111
Central	333400	333	Services	24,994,427	304,423	(15,221)	289,202	387,037	(19,352)	367,685	25,651,314	-	-	-	**25,651,314**	3.83%	982,445	565,755	491,223
Central	334400	334	Meters & Meter Installations	22,008	96,010	-	96,010	298,615	-	298,615	416,633	-	-	-	**416,633**	5.65%	23,540	7,228	11,770
Central	334420		Meter Installations	975,588	-	-	-	-	-	-	975,588	-	-	-	**975,588**	3.41%	33,268	19,406	16,634
Central	334430		Meters-ERT	-	-	-	-	-	-	-	-	-	-	-	**-**	2.82%	-	0	0
Central	334440		Meters-Other	5,925,764	-	-	-	-	-	-	5,925,764	-	-	-	**5,925,764**	2.65%	157,033	91,602	78,516
Central	335400	335	Hydrants	3,564,721	50,964	(2,548)	48,416	19,042	(952)	18,090	3,631,227	-	-	-	**3,631,227**	2.22%	80,613	46,594	40,307
Central	336400	336	Backflow Prevention Devices	103,443	-	-	-	-	-	-	103,443	-	-	-	**103,443**	2.84%	2,938	1,714	1,469
Central	339200	339	Oth Plnt & Misc Eq-SoS&Pump	2,945	-	-	-	-	-	-	2,945	-	-	-	**2,945**	2.86%	84	49	42
Central	339400		Oth Plnt & Misc Eq-T&D	30,902	-	-	-	-	-	-	30,902	-	-	-	**30,902**	0.17%	53	31	26
Central	340500	340	Office Furniture & Equipment	105,438	-	-	-	-	-	-	105,438	-	-	-	**105,438**	5.01%	5,282	3,081	2,641
Central	340550		OF&E-Computer Equipment	73,840	-	-	-	-	-	-	73,840	-	-	-	**73,840**	0.00%	-	0	0
Central	341500	341	Transportation Equipment	98,421	-	-	-	-	-	-	98,421	-	-	-	**98,421**	2.94%	2,894	1,688	1,447
Central	342500	342	Stores Equipment	20,393	-	-	-	-	-	-	20,393	-	-	-	**20,393**	6.20%	1,264	738	632
Central	343500	343	Tools, Shop & Garage Equip	301,251	4,141	-	4,141	-	-	-	305,391	-	-	-	**305,391**	6.73%	20,553	11,908	10,276
Central	344500	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	5.66%	-	0	0

Aqua New Jersey, Inc
Water Systems
Schedule of Utility Plant In Service by Division

Total By Division	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	$ 111,611,595	$ 1,978,989	$ (59,313)	$ 1,919,676	$ 5,966,997	$ (67,028)	$ 5,899,969	$ 119,431,240	$ -	$ -	$ -	**$ 119,431,240**	$ 3,384,408	$ 1,853,152	$ 1,692,204
Eastern	35,430,260	1,547,759	(16,805)	1,530,954	3,040,291	(135,517)	2,904,774	39,865,988	-	-	-	**39,865,988**	$ 1,257,412	$ 680,414	$ 628,706
Northern	107,146,730	2,130,186	(104,988)	2,025,198	3,273,731	(115,019)	3,158,712	112,330,639	10,399,990	(435,851)	9,964,139	**122,294,779**	$ 3,436,974	$ 1,828,386	$ 1,652,991
Southern	97,531,964	1,803,368	(77,630)	1,725,738	3,591,827	(163,094)	3,428,733	102,686,435	-	-	-	**102,686,435**	$ 2,667,791	$ 1,520,409	$ 1,333,895
Corporate	14,012,028	884,384	(5,317)	879,066	636,092	(8,852)	627,240	15,518,334	-	-	-	**15,518,334**	$ 528,779	$ 289,259	$ 264,389
Total	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	$ 11,275,363	$ 6,171,619	$ 5,572,185
Totals Based on Filter ----------->	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	11,275,363	6,171,619	5,572,185

Division	Account	Acct3	Description	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	Dep_Rate	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	345500	345	Power Operated Equipment	32,103	-	-	-	-	-	-	32,103	-	-	-	**32,103**	8.40%	2,697	1,573	1,348
Central	346500	346	Communication Equipment	1,090,643	692,570	-	692,570	-	-	-	1,783,213	-	-	-	**1,783,213**	6.74%	120,189	56,495	60,094
Central	347500	347	Miscellaneous Equipment	2,973	-	-	-	-	-	-	2,973	-	-	-	**2,973**	4.35%	129	75	65
Central	348500	348	Other Tangible Plant	89,667	-	-	-	-	-	-	89,667	-	-	-	**89,667**	1.35%	1,211	706	605
Central	252000	252	CAC - Net of FIT	(3,583,730)	-	-	-	-	-	-	(3,583,730)	-	-	-	**(3,583,730)**	1.41%	(50,531)	(29,476)	(25,265)
Central	271000	271	CIAC	(19,051,535)	-	-	-	-	-	-	(19,051,535)	-	-	-	**(19,051,535)**	1.41%	(268,627)	(156,699)	(134,313)
Southern	301100	301	Organization	197,720	-	-	-	-	-	-	197,720	-	-	-	**197,720**	0.00%	$ -	0	0
Southern	302100	302	Franchises	66,523	-	-	-	-	-	-	66,523	-	-	-	**66,523**	0.00%	-	0	0
Southern	303210	303	Land & Land Rights-Source	448,350	311,728	(15,586)	296,142	-	-	-	744,492	-	-	-	**744,492**	0.00%	-	0	0
Southern	303220		Land & Land Rights-Pumping	11,102	-	-	-	-	-	-	11,102	-	-	-	**11,102**	0.00%	-	0	0
Southern	303300		Land & Land Rights-Treatment	308,846	-	-	-	-	-	-	308,846	-	-	-	**308,846**	0.00%	-	0	0
Southern	303400		Land & Land Rights-T&D	110,046	-	-	-	-	-	-	110,046	-	-	-	**110,046**	0.00%	-	0	0
Southern	303510		Land & Land Rights-Office	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Southern	304220	304	Structures & Imp-Pumping	879,806	24,717	(1,236)	23,481	-	-	-	903,287	-	-	-	**903,287**	1.89%	17,072	9,829	8,536
Southern	304300		Structures & Imp-Treatment	8,779,082	-	-	-	-	-	-	8,779,082	-	-	-	**8,779,082**	2.16%	189,628	110,616	94,814
Southern	304400		Structures & Imp-T&D	453,328	-	-	-	-	-	-	453,328	-	-	-	**453,328**	1.85%	8,387	4,892	4,193
Southern	304500		Structures & Imp-General	388,701	-	-	-	-	-	-	388,701	-	-	-	**388,701**	3.86%	15,004	8,752	7,502
Southern	304510		Structures & Imp-Gen-Office	935,981	-	-	-	-	-	-	935,981	-	-	-	**935,981**	1.78%	16,660	9,719	8,330
Southern	307200	307	Wells & Springs	7,610,280	1,734,475	(86,724)	1,647,752	146,698	(7,335)	139,363	9,397,395	-	-	-	**9,397,395**	1.79%	168,213	88,794	84,107
Southern	309200	309	Supply Mains	400,935	-	-	-	-	-	-	400,935	-	-	-	**400,935**	2.19%	8,780	5,122	4,390
Southern	310200	310	Power Generation Equip-Solar	541	7	(0)	6	-	-	-	547	-	-	-	**547**	2.46%	13	8	7
Southern	310201		Power Generation Equip	508,537	-	-	-	-	-	-	508,537	-	-	-	**508,537**	2.46%	12,510	7,298	6,255
Southern	310300		Power Generation Equip-Treat	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Southern	310400		Power Generation Equip-T&D	2,830	-	-	-	-	-	-	2,830	-	-	-	**2,830**	2.46%	70	41	35
Southern	311200	311	Pumping Equip-SoS&Pumping	3,460,877	36,971	(1,849)	35,122	-	-	-	3,495,999	-	-	-	**3,495,999**	1.68%	58,733	34,089	29,366
Southern	311250		Pumping Equip-SoS&P-Diesel	410,427	-	-	-	-	-	-	410,427	-	-	-	**410,427**	1.68%	6,895	4,022	3,448
Southern	311300		Pumping Equip-Treatment	1,114	-	-	-	-	-	-	1,114	-	-	-	**1,114**	2.11%	23	14	12
Southern	311400		Pumping Equip-T&D	48,895	-	-	-	-	-	-	48,895	-	-	-	**48,895**	2.11%	1,032	602	516
Southern	320.PFAS	320	Water Treatment Equipment	-	-	-	-	-	-	-	-				**-**	6.65%	-	0	0
Southern	320300	320	Water Treatment Equipment	1,302,774	662	(33)	629	389,012	(19,451)	369,561	1,672,965	-	-	-	**1,672,965**	2.26%	37,809	19,615	18,905
Southern	330400	330	Dist Reservoirs & Standpipes	3,356,746	-	-	-	1,909,547	(95,477)	1,814,069	5,170,815	-	-	-	**5,170,815**	1.68%	86,870	41,785	43,435
Southern	330410		Dist Reservoirs & Standpipes - Tank Paint	2,818,267	-	-	-	-	-	-	2,818,267	-	-	-	**2,818,267**	7.52%	211,934	123,628	105,967
Southern	331400	331	T&D Mains	52,655,333	(480,959)	24,048	(456,911)	52,500	(2,625)	49,875	52,248,297	-	-	-	**52,248,297**	1.98%	1,034,516	605,818	517,258
Southern	333400	333	Services	15,432,271	(96,131)	4,807	(91,325)	735,143	(36,757)	698,385	16,039,332	-	-	-	**16,039,332**	3.83%	614,306	351,564	307,153
Southern	334400	334	Meters & Meter Installations	26,021	64,913	-	64,913	298,615	-	298,615	389,549	-	-	-	**389,549**	5.65%	22,010	6,848	11,005
Southern	334420		Meter Installations	1,625,159	-	-	-	-	-	-	1,625,159	-	-	-	**1,625,159**	3.41%	55,418	32,327	27,709
Southern	334430		Meters-ERT	1,553,446	-	-	-	-	-	-	1,553,446	-	-	-	**1,553,446**	2.82%	43,807	25,554	21,904
Southern	334440		Meters-Other	3,910,335	-	-	-	-	-	-	3,910,335	-	-	-	**3,910,335**	2.65%	103,624	60,447	51,812
Southern	335400	335	Hydrants	3,710,822	21,129	(1,056)	20,072	28,979	(1,449)	27,530	3,758,424	-	-	-	**3,758,424**	2.22%	83,437	48,363	41,719
Southern	336400	336	Backflow Prevention Devices	128,036	-	-	-	-	-	-	128,036	-	-	-	**128,036**	2.84%	3,636	2,121	1,818
Southern	339200	339	Oth Plnt & Misc Eq-SoS&Pump	406,607	-	-	-	-	-	-	406,607	-	-	-	**406,607**	2.86%	11,629	6,784	5,814
Southern	339400		Oth Plnt & Misc Eq-T&D	21,798	-	-	-	-	-	-	21,798	-	-	-	**21,798**	0.17%	37	22	19
Southern	340500	340	Office Furniture & Equipment	92,036	19	-	19	31,333	-	31,333	123,388	-	-	-	**123,388**	5.01%	6,182	3,148	3,091
Southern	340550		OF&E-Computer Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Southern	341500	341	Transportation Equipment	69,252	-	-	-	-	-	-	69,252	-	-	-	**69,252**	2.94%	2,036	1,188	1,018
Southern	342500	342	Stores Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	6.20%	-	0	0

Aqua New Jersey, Inc
Water Systems
Schedule of Utility Plant In Service by Division

Total By Division	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	$ 111,611,595	$ 1,978,989	$ (59,313)	$ 1,919,676	$ 5,966,997	$ (67,028)	$ 5,899,969	$ 119,431,240	$ -	$ -	$ -	**$ 119,431,240**	$ 3,384,408	$ 1,853,152	$ 1,692,204
Eastern	35,430,260	1,547,759	(16,805)	1,530,954	3,040,291	(135,517)	2,904,774	39,865,988	-	-	-	**39,865,988**	$ 1,257,412	$ 680,414	$ 628,706
Northern	107,146,730	2,130,186	(104,988)	2,025,198	3,273,731	(115,019)	3,158,712	112,330,639	10,399,990	(435,851)	9,964,139	**122,294,779**	$ 3,436,974	$ 1,828,386	$ 1,652,991
Southern	97,531,964	1,803,368	(77,630)	1,725,738	3,591,827	(163,094)	3,428,733	102,686,435	-	-	-	**102,686,435**	$ 2,667,791	$ 1,520,409	$ 1,333,895
Corporate	14,012,028	884,384	(5,317)	879,066	636,092	(8,852)	627,240	15,518,334	-	-	-	**15,518,334**	$ 528,779	$ 289,259	$ 264,389
Total	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	$ 11,275,363	$ 6,171,619	$ 5,572,185
Totals Based on Filter ----------->	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	11,275,363	6,171,619	5,572,185

Division	Account	Acct3	Description	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	Dep_Rate	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Southern	343500	343	Tools, Shop & Garage Equip	255,304	-	-	-	-	-	-	255,304	-	-	-	**255,304**	6.73%	17,182	10,023	8,591
Southern	344500	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	5.66%	-	0	0
Southern	345500	345	Power Operated Equipment	242,326	-	-	-	-	-	-	242,326	-	-	-	**242,326**	8.40%	20,355	11,874	10,178
Southern	346500	346	Communication Equipment	128,545	185,836	-	185,836	-	-	-	314,381	-	-	-	**314,381**	6.74%	21,189	8,707	10,595
Southern	347500	347	Miscellaneous Equipment	119,562	2	-	2	-	-	-	119,563	-	-	-	**119,563**	4.35%	5,201	3,034	2,601
Southern	348500	348	Other Tangible Plant	36,553	-	-	-	-	-	-	36,553	-	-	-	**36,553**	1.35%	493	288	247
Southern	252000	252	CAC - Net of FIT	(5,859,344)	-	-	-	-	-	-	(5,859,344)	-	-	-	**(5,859,344)**	1.41%	(82,617)	(48,193)	(41,308)
Southern	271000	271	CIAC	(9,523,806)	-	-	-	-	-	-	(9,523,806)	-	-	-	**(9,523,806)**	1.41%	(134,286)	(78,333)	(67,143)
Eastern	301100	301	Organization	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	$ -	0	0
Eastern	302100	302	Franchises	567	-	-	-	-	-	-	567	-	-	-	**567**	0.00%	-	0	0
Eastern	303210	303	Land & Land Rights-Source	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Eastern	303220		Land & Land Rights-Pumping	59,385	-	-	-	-	-	-	59,385	-	-	-	**59,385**	0.00%	-	0	0
Eastern	303300		Land & Land Rights-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Eastern	303400		Land & Land Rights-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Eastern	303510		Land & Land Rights-Office	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Eastern	304220	304	Structures & Imp-Pumping	-	31,616	(1,581)	30,035	-	-	-	30,035	-	-	-	**30,035**	1.89%	568	166	284
Eastern	304300		Structures & Imp-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	2.16%	-	0	0
Eastern	304400		Structures & Imp-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	1.85%	-	0	0
Eastern	304500		Structures & Imp-General	9,686,543	-	-	-	-	-	-	9,686,543	-	-	-	**9,686,543**	3.86%	373,901	218,109	186,950
Eastern	304510		Structures & Imp-Gen-Office	1,605	-	-	-	-	-	-	1,605	-	-	-	**1,605**	1.78%	29	17	14
Eastern	307200	307	Wells & Springs	1,391,782	-	-	-	-	-	-	1,391,782	-	-	-	**1,391,782**	1.79%	24,913	14,533	12,456
Eastern	309200	309	Supply Mains	12,400	-	-	-	-	-	-	12,400	-	-	-	**12,400**	2.19%	272	158	136
Eastern	310200	310	Power Generation Equip-Solar	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Eastern	310201		Power Generation Equip	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Eastern	310300		Power Generation Equip-Treat	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Eastern	310400		Power Generation Equip-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Eastern	311200	311	Pumping Equip-SoS&Pumping	939,555	-	-	-	-	-	-	939,555	-	-	-	**939,555**	1.68%	15,785	9,208	7,892
Eastern	311250		Pumping Equip-SoS&P-Diesel	1,137	-	-	-	-	-	-	1,137	-	-	-	**1,137**	1.68%	19	11	10
Eastern	311300		Pumping Equip-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	2.11%	-	0	0
Eastern	311400		Pumping Equip-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	2.11%	-	0	0
Eastern	320.PFAS	320	Water Treatment Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	6.65%	-	0	0
Eastern	320300	320	Water Treatment Equipment	5,184,387	30,808	(1,540)	29,268	609,268	(30,463)	578,805	5,792,459	-	-	-	**5,792,459**	2.26%	130,910	72,356	65,455
Eastern	330400	330	Dist Reservoirs & Standpipes	1,043,312	-	-	-	-	-	-	1,043,312	-	-	-	**1,043,312**	1.68%	17,528	10,224	8,764
Eastern	330410	330	Dist Reservoirs & Standpipes - Tank Paint	458,020	1,200,000	-	1,200,000	-	-	-	1,658,020	-	-	-	**1,658,020**	7.52%	124,683	46,412	62,342
Eastern	331400	331	T&D Mains	11,566,317	223,401	(11,170)	212,231	1,346,890	(67,345)	1,279,546	13,058,094	-	-	-	**13,058,094**	1.98%	258,550	142,206	129,275
Eastern	333400	333	Services	6,451,740	37,861	(1,893)	35,968	735,143	(36,757)	698,385	7,186,094	-	-	-	**7,186,094**	3.83%	275,227	152,346	137,614
Eastern	334400	334	Meters & Meter Installations	-	11,657	-	11,657	298,615	-	298,615	310,272	-	-	-	**310,272**	5.65%	17,530	5,113	8,765
Eastern	334420		Meter Installations	40,655	-	-	-	-	-	-	40,655	-	-	-	**40,655**	3.41%	1,386	809	693
Eastern	334430		Meters-ERT	760,564	-	-	-	-	-	-	760,564	-	-	-	**760,564**	2.82%	21,448	12,511	10,724
Eastern	334440		Meters-Other	1,091,226	-	-	-	-	-	-	1,091,226	-	-	-	**1,091,226**	2.65%	28,917	16,869	14,459
Eastern	335400	335	Hydrants	699,074	12,416	(621)	11,795	19,042	(952)	18,090	728,959	-	-	-	**728,959**	2.22%	16,183	9,247	8,091
Eastern	336400	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-	-	-	-	**-**	2.84%	-	0	0
Eastern	339200	339	Oth Plnt & Misc Eq-SoS&Pump	-	-	-	-	-	-	-	-	-	-	-	**-**	2.86%	-	0	0
Eastern	339400		Oth Plnt & Misc Eq-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	0.17%	-	0	0
Eastern	340500	340	Office Furniture & Equipment	7,941	-	-	-	31,333	-	31,333	39,274	-	-	-	**39,274**	5.01%	1,968	690	984
Eastern	340550		OF&E-Computer Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0

Aqua New Jersey, Inc
Water Systems
Schedule of Utility Plant In Service by Division

Total By Division	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	Post Test Year Additions (PTYA) Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Central	$ 111,611,595	$ 1,978,989	$ (59,313)	$ 1,919,676	$ 5,966,997	$ (67,028)	$ 5,899,969	$ 119,431,240	$ -	$ -	$ -	**$ 119,431,240**	$ 3,384,408	$ 1,853,152	$ 1,692,204
Eastern	35,430,260	1,547,759	(16,805)	1,530,954	3,040,291	(135,517)	2,904,774	39,865,988	-	-	-	**39,865,988**	$ 1,257,412	$ 680,414	$ 628,706
Northern	107,146,730	2,130,186	(104,988)	2,025,198	3,273,731	(115,019)	3,158,712	112,330,639	10,399,990	(435,851)	9,964,139	**122,294,779**	$ 3,436,974	$ 1,828,386	$ 1,652,991
Southern	97,531,964	1,803,368	(77,630)	1,725,738	3,591,827	(163,094)	3,428,733	102,686,435	-	-	-	**102,686,435**	$ 2,667,791	$ 1,520,409	$ 1,333,895
Corporate	14,012,028	884,384	(5,317)	879,066	636,092	(8,852)	627,240	15,518,334	-	-	-	**15,518,334**	$ 528,779	$ 289,259	$ 264,389
Total	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	$ 11,275,363	$ 6,171,619	$ 5,572,185
Totals Based on Filter ----------->	$ 365,732,576	$ 8,344,686	$ (264,054)	$ 8,080,632	$ 16,508,939	$ (489,511)	$ 16,019,428	$ 389,832,636	$ 10,399,990	$ (435,851)	$ 9,964,139	**$ 399,796,775**	11,275,363	6,171,619	5,572,185

Division	Account	Acct3	Description	Bal @ 09/30/2023	2023 Additions Gross	2023 Additions Retirements	2023 Additions Net	2024 Additions Gross	2024 Additions Retirements	2024 Additions Net	Bal @ 04/30/2024	PTYA Gross	PTYA Retirements	PTYA Net	ProForma Bal @ 04/30/2024	Dep_Rate	PF Depr_Exp	Accum_Depr1	Accum_Depr2
Eastern	341500	341	Transportation Equipment	91,883	-	-	-	-	-	-	91,883	-	-	-	**91,883**	2.94%	2,701	1,576	1,351
Eastern	342500	342	Stores Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	6.20%	-	0	0
Eastern	343500	343	Tools, Shop & Garage Equip	2,476	-	-	-	-	-	-	2,476	-	-	-	**2,476**	6.73%	167	97	83
Eastern	344500	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	5.66%	-	0	0
Eastern	345500	345	Power Operated Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	8.40%	-	0	0
Eastern	346500	346	Communication Equipment	24,756	-	-	-	-	-	-	24,756	-	-	-	**24,756**	6.74%	1,669	973	834
Eastern	347500	347	Miscellaneous Equipment	22,413	-	-	-	-	-	-	22,413	-	-	-	**22,413**	4.35%	975	569	487
Eastern	348500	348	Other Tangible Plant	-	-	-	-	-	-	-	-	-	-	-	**-**	1.35%	-	0	0
Eastern	252000	252	CAC - Net of FIT	(1,549,297)	-	-	-	-	-	-	(1,549,297)	-	-	-	**(1,549,297)**	1.41%	(21,845)	(12,743)	(10,923)
Eastern	271000	271	CIAC	(2,558,182)	-	-	-	-	-	-	(2,558,182)	-	-	-	**(2,558,182)**	1.41%	(36,070)	(21,041)	(18,035)
Corporate	301100	301	Organization	1,438	-	-	-	-	-	-	1,438	-	-	-	**1,438**	0.00%	$ -	0	0
Corporate	302100	302	Franchises	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	303210	303	Land & Land Rights-Source	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	303220		Land & Land Rights-Pumping	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	303300		Land & Land Rights-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	303400		Land & Land Rights-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	303510		Land & Land Rights-Office	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	304220	304	Structures & Imp-Pumping	-	56,200	(2,810)	53,390	-	-	-	53,390	-	-	-	**53,390**	1.89%	1,009	294	505
Corporate	304300		Structures & Imp-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	2.16%	-	0	0
Corporate	304400		Structures & Imp-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	1.85%	-	0	0
Corporate	304500		Structures & Imp-General	-	-	-	-	-	-	-	-	-	-	-	**-**	3.86%	-	0	0
Corporate	304510		Structures & Imp-Gen-Office	562,925	-	-	-	-	-	-	562,925	-	-	-	**562,925**	1.78%	10,020	5,845	5,010
Corporate	307200	307	Wells & Springs	-	-	-	-	-	-	-	-	-	-	-	**-**	1.79%	-	0	0
Corporate	309200	309	Supply Mains	-	-	-	-	-	-	-	-	-	-	-	**-**	2.19%	-	0	0
Corporate	310200	310	Power Generation Equip-Solar	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Corporate	310300		Power Generation Equip-Treat	-	-	-	-	-	-	-	-	-	-	-	**-**	2.46%	-	0	0
Corporate	311200	311	Pumping Equip-SoS&Pumping	-	-	-	-	-	-	-	-	-	-	-	**-**	1.68%	-	0	0
Corporate	311250		Pumping Equip-SoS&P-Diesel	-	-	-	-	-	-	-	-	-	-	-	**-**	1.68%	-	0	0
Corporate	311300		Pumping Equip-Treatment	-	-	-	-	-	-	-	-	-	-	-	**-**	2.11%	-	0	0
Corporate	311400		Pumping Equip-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	2.11%	-	0	0
Corporate	320300	320	Water Treatment Equipment	6,446	-	-	-	-	-	-	6,446	-	-	-	**6,446**	2.26%	146	85	73
Corporate	330400	330	Dist Reservoirs & Standpipes	-	-	-	-	-	-	-	-	-	-	-	**-**	1.68%	-	0	0
Corporate	331400	331	T&D Mains	-	-	-	-	-	-	-	-	-	-	-	**-**	1.98%	-	0	0
Corporate	333400	333	Services	-	-	-	-	-	-	-	-	-	-	-	**-**	3.83%	-	0	0
Corporate	334400	334	Meters & Meter Installations	-	-	-	-	-	-	-	-	-	-	-	**-**	5.65%	-	0	0
Corporate	334420		Meter Installations	-	-	-	-	-	-	-	-	-	-	-	**-**	3.41%	-	0	0
Corporate	334430		Meters-ERT	-	-	-	-	-	-	-	-	-	-	-	**-**	2.82%	-	0	0
Corporate	334440		Meters-Other	-	-	-	-	-	-	-	-	-	-	-	**-**	2.65%	-	0	0
Corporate	335400	335	Hydrants	-	-	-	-	-	-	-	-	-	-	-	**-**	2.22%	-	0	0
Corporate	336400	336	Backflow Prevention Devices	-	-	-	-	-	-	-	-	-	-	-	**-**	2.84%	-	0	0
Corporate	339200	339	Oth Plnt & Misc Eq-SoS&Pump	-	-	-	-	-	-	-	-	-	-	-	**-**	2.86%	-	0	0
Corporate	339400		Oth Plnt & Misc Eq-T&D	-	-	-	-	-	-	-	-	-	-	-	**-**	0.17%	-	0	0
Corporate	340500	340	Office Furniture & Equipment	2,118,113	713,679	-	713,679	459,055	-	459,055	3,290,847	-	-	-	**3,290,847**	5.01%	164,871	79,038	82,436
Corporate	340550		OF&E-Computer Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	0.00%	-	0	0
Corporate	340600		SAP Software	3,089,706	-	-	-	-	-	-	3,089,706	-	-	-	**3,089,706**	6.72%	207,628	121,116	103,814
Corporate	341500	341	Transportation Equipment	1,713,884	50,150	(2,507)	47,642	100,000	(5,000)	95,000	1,856,526	-	-	-	**1,856,526**	2.94%	54,582	30,616	27,291
Corporate	342500	342	Stores Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	6.20%	-	0	0
Corporate	343500	343	Tools, Shop & Garage Equip	8,695	-	-	-	-	-	-	8,695	-	-	-	**8,695**	6.73%	585	341	293
Corporate	344500	344	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	5.66%	-	0	0
Corporate	345500	345	Power Operated Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	8.40%	-	0	0
Corporate	346500	346	Communication Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	6.74%	-	0	0
Corporate	347500	347	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-	-	-	**-**	4.35%	-	0	0
Corporate	348500	348	Other Tangible Plant	9,293,670	64,355	-	64,355	77,037	(3,852)	73,185	9,431,210	-	-	-	**9,431,210**	1.35%	127,321	73,729	63,661
Corporate	348500		Other Tangible Plant	(3,089,706)	-	-	-	-	-	-	(3,089,706)	-	-	-	**(3,089,706)**	1.35%	(41,711)	-24,331	-20,856
Corporate	252000	252	CAC - Net of FIT	306,857	-	-	-	-	-	-	306,857	-	-	-	**306,857**	1.41%	4,327	2,524	2,163
Corporate	271000	271	CIAC	-	-	-	-	-	-	-	-	-	-	-	**-**	1.41%	-	0	0

EXHIBIT PT-1

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401___

DIRECT TESTIMONY OF

MARK MCKOY

With regard to an Overview of the Company's Request

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
MARK MCKOY

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Mark McKoy. My primary business address is 762 West Lancaster Avenue, Bryn Mawr, PA 19010.

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

A. I am employed by Essential Utilities, Inc. ("Essential") as the Vice President of Operations for its water and wastewater businesses. In that capacity, I have direct oversight of three subsidiary state utilities and have responsibilities in all operating divisions with an emphasis on operational excellence, employee engagement and safety. I am responsible for coordinating, directing and overseeing operations' activities across all eight of the states in which Essential's water and wastewater utilities operate, by ensuring continuous development and implementation of efficient operations and cost-effective solutions to meet current and future operations needs.

In addition to my role as Vice President of Operations, I am presently serving as the Interim President of Aqua New Jersey, Inc. ("Aqua" or the "Company"), having been named to that position on December 4, 2023 with the departure of the prior President. In that capacity, my business address is 10 Black Forest Road, Hamilton, New Jersey 08691. As Interim President of Aqua, I have overall responsibility for the day-to-day operations, business development and financial results of Aqua. Additionally, I lead our management team in developing and implementing the Company's vision, strategy, goals, and

objectives. Along with others, I am accountable for establishing and overseeing relations with, and reporting to, governmental agencies, providing quality water and wastewater service to our customers, and achieving the Company's financial goals.

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

A. I graduated in 1999 and 2008, respectively, from Monroe College, Bronx, New York, with a BA in Accounting and an MBA in Business Management.

I have over 20 years of experience in water utility finance, operations leadership and customer service. Before joining Essential in 2020, I served as vice president and general manager for SUEZ's (now known as Veolia) New Jersey water utility. While at SUEZ, I served in numerous roles of increasing responsibility, including Finance, Policies and Procedures Manager (2007-2010); Director, Finance Policy and Procedures and Treasury (2010-2011); Director, Revenue Integrity (2011); Director, Internal Audit (2011-2013); Senior Director, Corporate Revenue Management and New Jersey Customer Operations (2014-2017); and finally, Vice President and General Manager (2018-2020).

I also hold a Certification in Risk Management Assurance ("CRMA") from the Institute of Internal Auditors and am a member of several professional organizations including the American Water Works Association, the New Jersey Utilities Association, the National Association of Water Companies, and the Institute of Internal Auditors.

Q. Have you testified before the New Jersey Board of Public Utilities ("Board") before?

A. Yes. In certain of my prior roles at SUEZ, I testified before the Board. I have not, however, previously testified on behalf of Aqua or Essential before the Board.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide an overview of the Company and some of the challenges Aqua has faced since rates were last increased in June 2019. In particular, I want to address how recent policy changes to address items like lead service line ("LSL") replacement and PFAS treatment have impacted, and will continue impact, Aqua for the foreseeable future. In addition, I will provide an overview of the Company's filing and its requests in this proceeding, including, changes necessitated by the Company's recent changes to its incentive compensation plans.

Q. Was this Direct Testimony prepared by you or under your direct supervision?

A. Yes. This Direct Testimony was prepared by me or under my direct supervision and control. The source documents for my Direct Testimony are Company records and public documents. I also rely on my personal knowledge and experience.

II. OVERVIEW OF AQUA

Q. Please briefly describe the Company.

A. Aqua is a regulated public utility, incorporated under the laws of the State of New Jersey, and is a subsidiary of Essential. The Essential Utilities family of utility companies, which is comprised of water, wastewater and natural gas, provides service to approximately five million people across nine states, with more than three million of those served by its water and wastewater utilities.

Aqua is engaged in the business of treating and distributing potable water for both domestic use and fire protection service, as well as providing wastewater treatment and collection services. The Company was formed in 1969 under the name of Garden State Water Company through the merger of the Peoples Water Company of Phillipsburg, the

Hamilton Square Water Company, and the Blackwood Water Company. Garden State Water Company grew through the acquisition of numerous small privately-owned and municipally-owned water and wastewater systems, and ultimately was acquired by Consumers Water Company. In 1999, Philadelphia Suburban Water Company acquired Consumers Water Company and its subsidiaries, including Aqua. Philadelphia Suburban Water Company changed its name to Aqua America, Inc. in 2004, which changed its name to Essential in 2020.

Today, Aqua serves a total customer base of approximately 62,000, of which approximately 55,350 represent water service customers and approximately 6,600 represent wastewater service customers. Aqua consists of 25 separate public water systems and is organized into four geographically diverse operating divisions – one in the northwestern part of the state ("Northern Division"); one in the west-central part of the State ("Central Division"); the third in the southwestern part of the State ("Southern Division"); and the fourth in Ocean and Monmouth Counties ("Eastern Division"). Approximately 79% of Aqua's water sales are to residential customers. For the twelve months ending December 31, 2023, Aqua's annual production was approximately 5.012 million gallons, with water revenues for the same period of approximately $45,432,491 million.

III. RATE CASE SUMMARY

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

A. As will be discussed in detail in this filing, Aqua is requesting an increase in base rates of $8,329,647, or approximately 17.31% above the annual level of revenues for the test year ending April 30, 2024 (and inclusive of the DSIC surcharges implemented during the test

year period). Aqua is filing for a rate increase so that it has the opportunity to earn an adequate return of, and on, its capital invested to serve customers, and for recognition of the increasing expenses the Company incurs to provide safe, adequate and proper utility service to our customers.

In addition to our requested increase in base rates, the Company has also included a DSIC Foundational Filing, its Annual Update to the LSL Replacement Plan, and a proposal for the recovery of deferred costs related to the COVID-19 pandemic. Aqua's filing also seeks authority to defer certain costs related to PFAS treatment, as well as a request to change specific depreciation rates based on a comprehensive Depreciation Study.

Q. Please highlight some of the key factors driving the need for the requested rate increase.

A. As the Board is well aware, Aqua has not increased its base rates for water service since June 2019. Moreover, those rates were set based on costs in an historic test period. Thus, by the time of this filing, the costs reflected in the Company's rates will be nearly six years old. While this represents a significant period of rate stability for customers, the same cannot be said for Aqua. Instead, Aqua has encountered a number of significant challenges, some of which were truly unprecedented, including: the impacts of the COVID-19 global pandemic (and a multi-year shut-off moratorium), a legislative requirement to replace thousands of LSLs, inflationary pressures, supply chain disruptions, and new directives to test for and treat PFAS in water. In addition, the Company has continued its long-running program to invest in needed facilities such as replacing aging mains and services in support of the Water Quality Accountability Act's 150-year replacement rate. At the same time,

the Company has seen increases in its Operations & Maintenance ("O&M") expenses, some of which are quite significant due to inflation and other economic pressures, such as rising interest rates. Those specific increases will be discussed in the Direct Testimony of Company Witness Peslak. Taken together, these circumstances have necessitated that Aqua file a base rate case so that rates for water service may be updated to reflect the cost of providing that service to customers.

In summary, the Company is seeking rate relief to meet the increased investments and expenses that result from new and enhanced regulatory and environmental requirements, capital improvements, and increases in O&M costs due to inflation, interest rate increases and supply chain challenges. The rates requested by Aqua in this proceeding should allow the Company to recover its costs to provide water service and provide Aqua with the opportunity to earn a fair return on its investments to serve customers.

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

A. The Company has used a test year ending April 30, 2024, which contains five months of actual and seven months of projected data. Additionally, we have normalized certain expenses to reflect anticipated costs during the first year rates will be in effect, and reflected post-test year plant additions of $10,399,990, all of which are major in nature and consequence.

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

A. Under the proposed rates, the typical residential customer using 6,000 gallons per month will see a total monthly bill increase of $10.64 or 18.4% above the current monthly bill including the DSIC.

Q. You mentioned the challenges that Aqua has faced due to new regulatory and other requirements. Can you please elaborate.

A. Aqua faces two very significant challenges in the coming years: addressing LSL replacements and treatment for PFAS. In the case of LSL replacements, a structure for cost recovery was included in the LSL Replacement Law; however, the Company is still responsible for accomplishing the replacement, a process that involves identifying LSLs, educating customers about the need to replace them, conducting outreach to arrange for replacements, coordinating with state and local officials to schedule replacements around road work and paving programs, ensuring the replacement is done to appropriate standards, and completing site restoration once the LSL is replaced. This is a significant undertaking that will continue for several years. Obtaining full and timely cost recovery is critical for a company of Aqua's size.

At the same time, Aqua will be continuing its DSIC investments and addressing an evolving challenge: PFAS treatment. As will be explained in the Direct Testimony of Company Witness Burger, Aqua has some unique challenges given the number of small, independent systems it operates. In fact, Aqua may be required to install treatment at 29 separate well locations. Each installation will need to be tailored to the individual characteristics of each water supply source, including system size, water quality and site conditions. Once installed, the treatment facilities will need to be maintained and the treatment medium will need to be replaced on a regular basis. Clearly, this will be a complex and expensive undertaking—for which the Board has not created a cost recovery structure. In this case, the Company is requesting the authority to use deferred accounting

to create a regulatory asset to capture the incremental costs related to PFAS treatment and to seek the recovery of those costs in a future base rate case.

Q. Is there anything else about the Company's request in this case that you would like to address?

A. Yes. The Essential Utilities Short Term Incentive Plan – Aqua New Jersey ("NJ STIP") is a component of compensation for Essential's employees, including Aqua's employees, and are also common in the utility industry. The incentive compensation component of compensation drives performance in safety, reliability, cost control and customer service, all of which benefit customers. Aqua must provide a compensation package that is comparable to the market and is competitive in order to attract and retain the skilled employees needed to run its water system.

As part of the compensation setting process, Aqua evaluates total compensation paid to employees at other peer utilities and other companies and seeks to set its total compensation at the market level in order to be able to compete for talented employees. As a result, the NJ STIP is part of an Aqua employee's total compensation package. Incentive compensation plans are offered to a wide variety of Company employees and often represent a significant portion of an employee's overall compensation package. Accordingly, these labor costs are as much a cost of Aqua's provision of safe, adequate and proper service to its customers as are those labor costs comprised solely of the employee's annual salary amount.

Cognizant of the Board's historical disallowance of incentive compensation costs tied to a company's economic performance, *i.e.*, achievement of specific financial metrics such as share price or dividends, Aqua recently stripped out all financial performance

targets in the NJ STIP. Accordingly, effective January 1, 2024, the NJ STIP is 100% tied to the achievement of operational metrics that benefit customers, with the exception of the financial goal noted below (for which we are not seeking recovery). And, the NJ STIP does not contain an earnings or funding trigger. All NJ STIP costs are linked to achievement of goals that directly benefit our customers, such as: responsible spending, safety, reliability, and customer satisfaction. Accordingly, the Company believes that the portion of the NJ STIP costs tied to achievement of those goals is properly recoverable in customer rates.

IV. OVERVIEW OF THE COMPANY'S PETITION

Q. Please provide a summary of the Company's Petition and supporting Direct Testimony.

A. In addition to my Direct Testimony (marked as PT-1), this filing consists of the Petition seeking an increase in base rates for water service and other requests, supporting Exhibits and Schedules, and the Direct Testimony of eight other witness as follows:

Petition Testimony No.	Witness Name & Title	Topics Covered
PT-2	Dawn Peslak, Controller	Accounting Matters
PT-3	William C. Packer, Controller and Vice President of Regulatory Accounting	Accounting Matters
PT-4	Adam Burger, Director of Operations	Utility Plant in Service ("UPIS"); O&M; LSLRs; and PFAS
PT-5	Katherine Cipolla, State Engineer	UPIS and DSIC
PT-6	John Spanos, Gannett Fleming Valuation and Rate Consultants LLC ("Gannett")	Depreciation
PT-7	Greg Herbert, Gannett	Billing Analysis and Rate Design
PT-8	Constance E. Heppenstall, Gannett	Cost of Service
PT-9	Matthew Howard, ScottMadden, Inc.	Rate of Return; Capital Structure

V. CONCLUSION

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

A. Yes, it does, but I reserve my right to supplement my Direct Testimony as needed during this proceeding.

EXHIBIT PT-2

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401___

DIRECT TESTIMONY OF DAWN PESLAK

With regard to Certain Expenses,
Rate Base, COVID-19 Deferred Balance,
DSIC Surcharge, LSLR Surcharge, and
PFAS Deferral

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
DAWN PESLAK

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Dawn Peslak. My business address is 10 Black Forest Road, Hamilton, New Jersey, 08691.

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

A. I am employed by Aqua New Jersey, Inc. ("Aqua" or the "Company") as Controller. In this capacity, I am responsible for the day-to-day financial matters of the Company, including accounting and ratemaking functions.

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

A. I graduated from The College of New Jersey, Ewing, NJ, in 1994 with a Bachelor's in Statistics. In 2000, I earned a Master's in Business Administration from Monmouth University, West Long Branch, NJ. My work experience is detailed below.

In 1994, I joined Prudential Insurance as a Staff Accountant. I remained at Prudential until 2004, holding various positions, including Associate Manager of Financial and Statutory Reporting and Associate Manager of Expense Planning and Reporting. In 2004, I joined the Global Institute for Maximizing Potential as a Data Analyst and Office Manager. In February 2009, I joined Springpoint Senior Living as a Senior Accountant. From December 2010 through August 2019 I was at Berkley Life Sciences, holding the role of Accounts Receivable and Financial Reporting Manager. In 2013, I was promoted

to Controller. From August 2019 to present, I have been employed by Aqua as the Controller.

Q. Have you testified before the New Jersey Board of Public Utilities ("Board") before?

A. Yes, I provided Direct Testimony in connection with Aqua's 2020 Wastewater base rate case in BPU Docket No. WR20010056.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to support and explain several of the Company's accounting adjustments in this proceeding, and to support Aqua's rate base calculation. I will also address the COVID-19 deferred balance, the current Distribution System Improvement Charge ("DSIC") and the proposed DSIC, and the Lead Service Line ("LSLs") Replacement Surcharge.

II. ACCOUNTING SCHEDULES

Q. What accounting adjustments and exhibits are addressed in your Direct Testimony?

A. I will explain certain of the calculations of the revenue requirement and certain expense claims the Company has requested in this proceeding. Specifically, I will address:

- Summary of O&M Expenses – Exhibit 20, Page 1
- Labor Expense & Benefits Expense – Exhibit 20, Page 2
- Purchased Water Expense – Exhibit 20, Page 3
- Purchased Power Expense – Exhibit 20, Page 4
- Chemical Expense – Exhibit 20, Page 5
- Supplies Expense – Exhibit 20, Page 6
- Outside Contract Services – Exhibit 20, Page 7
- Lease, Transportation, Insurance, Other Expense – Exhibit 20, Page 8
- Bad Debt Expense – Exhibit 20, Page 9

- Rate Case Expense – Exhibit 20, Page 10
- Tank Painting Amortization – Exhibit 20, Page 11
- BPU Audit Amortization – Exhibit 20, Page 12
- Taxes Other than Income – Exhibit 21, Pages 1-5
- Amortization Adjustments– Exhibit 23, Page 1
- Interest Expense – Exhibit 25, Page 1
- Rate Base and Rate of Return – Exhibit 26, Pages 5-9

Q. Please discuss Exhibit 17 with regard to the Company's calculation of water revenue at present rates.

A. In Exhibit PT-7, Company Witness Gregory Herbert explains his calculations and the process he used to develop the Company's water revenue at present rates. I worked closely with Witness Herbert in the development of this calculation. As shown on Exhibit 13, Page 1, the Company's total operating revenues at Pro-Forma present rates are $48,117,443.

Q. Please provide an overview of how the Company developed its various claims for O&M Expenses.

A. As is required by the Board, the first point of measurement for the Company's O&M Expense claims is the projected test year ended April 30, 2024. This includes actual results from May 1, 2023 through September 30, 2023, and then includes projections of actual results through April 30, 2024. Utilizing this foundation, the Company then makes normalization and annualization adjustments to certain expenses to reflect expected known and measurable expense levels to be realized during the first year that rates are expected to be in effect.

In my experience, I would describe the State of New Jersey as an historical test year state, meaning that during the course of this proceeding the Company will update its

projections to a full actual test year. Expense claims that the Company can demonstrate to have "known and measurable" changes (in other words, adjustments that can be evidenced through proofs) are allowed and appropriate claims. In this proceeding, where the Company has made adjustments to the projected test year ended April 30, 2024, it is referred to as "Pro Forma Present Rates." The adjustments and resulting expense levels included in Pro Forma Present Rates reflect the Company's expectations of expense levels to be realized during the first year that new rates are in effect. These adjustments will be annualized when the Company updates the record in this proceeding to a fully actual test year (referred to as "12 + 0").

Q. Please describe Exhibit 20, Page 2, Labor and Benefits Expense?

A. To compute test year labor, I utilized the actual labor expense for the five months ended September 30, 2023, and then projected labor expense for the remaining seven months of the test year through April 30, 2024. Labor for the Pro Forma Present Rates includes full staff complement annualized expenses with vacancy credit. This expense also includes that portion of incentive compensation for Aqua's employees.

Q. Please describe Exhibit 20, Page 2, Benefits Expense, and its adjustments to selected benefits expense items (*i.e.*, Health, Dental and 401K).

A. The rates and the employee contributions for the test year are the actual costs in effect for 2023, and projected through the test year ending April 30, 2024. For the Pro Forma Present Rates, the Company is utilizing the rates effective January 1, 2024 and annualizing our claim for benefits. The Company provides its employees certain benefits in addition to those I made adjustments to, such as Long Term Disability Insurance, Accidental Death and Dismemberment, Life Insurance, Training, Pension, and Post-retirement Healthcare.

Specifically, my adjustments to Employee Health and Dental insurance reflect anticipated increases in coverage rates effective on January 1, 2024. Regarding the Company's 401K expense, I included an anticipated increase in this expense, which I will update specifically at a later date. During the course of this proceeding, and consistent with past regulatory practice in New Jersey, I will be updating this claim to reflect 12+0, and at that time, I will then annualize the actual rates being charged.

Q. Please explain the calculation of Exhibit 20, Page 3, Purchased Water Expense.

A. The test year for Purchased Water expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 combined from each entity from which the Company purchases water – the Riegelsville Water Company, Trenton Water Works and NJ American Water Company – and adding the projected expenditures for the remainder of the test year through April 30, 2024. The Pro Forma Present Rates Purchased Water Expense represents the anticipated expense for the first year new rates go into effect.

Q. Please explain the calculation of Exhibit 20, Pages 4 and 5, Purchased Power and Chemical Expense.

A. The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 and adding the projected expenditures for the remainder of the test year through April 30, 2024. The Pro Forma Present Rates Purchased Power and Chemical Expense represents the anticipated expense for the first year new rates go into effect based on cost per million gallons pumped

Q. Please explain the calculation of Exhibit 20, Page 6, Supplies.

A. The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023, and adding the projected expenditures for the remainder

of the test year through April 30, 2024. The Pro Forma Present Rates Supplies Expense represents the anticipated expense for the first year new rates go into effect.

Q. Please explain the calculation of Exhibit 20, Page 7, Outside Services.

A. The Company utilizes contract services for certain expenditures such as Auditing, Engineering, Lab Testing, Customer Billing, Contract Operations/Maintenance, and Legal. All of the aforementioned expenses were compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 and adding the projected expenditures for the remainder of the test year through April 30, 2024. The Pro Forma Present Rates Outside Services Expense represents the anticipated expense for the first year new rates go into effect.

Q. Regarding certain Outside Services, please describe Management Fees Expense, shown on Exhibit 20, Page 7.

A. Aqua is charged monthly for the services rendered to it by the employees of Aqua Services, Inc., which include primarily employees based in Aqua Services, Inc.'s corporate headquarters located in Bryn Mawr, Pennsylvania. For example, some of the services provided by Aqua Services, Inc. include, but are not limited to the following categories: Corporate Governance, Accounting, Legal, Engineering, Human Resources, Information Technology, Regulatory, Communications, Water Quality, Taxes, Treasury and Auditing. The Company's expense claim in this proceeding is based on the projected actual results through April 30, 2024, and then adjusted to a normalized level to include expense levels expected to be realized during the first year rates are in effect. This expense also includes that portion of incentive compensation for Essential's employees providing services to Aqua.

Q. Is there a document or agreement that specifies the services to be received by Aqua from Aqua Services, Inc. and how they are allocated and charged to Aqua?

A. Yes, services are provided to Aqua pursuant to an Affiliate Interest Agreement that was previously reviewed and approved by the Board in 2022.[1]

Q. How are the costs of those services charged out by Essential Utilities, Inc. ("Essential") to its subsidiaries?

A. Aqua Services personnel keep daily time records and, where appropriate, their time and related overheads are directly assigned to the subsidiary for which they are working. Where costs are incurred in rendering services to multiple companies in common and cannot be identified and related exclusively to a particular company, they are allocated to all such companies based on the number of customers served by each company at the end of the immediately preceding calendar year.

Q. Please explain the calculation of Exhibit 20, Page 8, Lease Expense.

A. Lease Expense for the Company is the cost of leasing office equipment. The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 and then projecting the expense for the remaining months of the test year through April 30, 2024. Pro Forma Present Rates Lease Expense represents the anticipated expense for the first year new rates go into effect.

[1] *See I/M/O the Request of Aqua New Jersey, Inc. and Aqua Water Holdings, Inc. for Approval of Intercompany Restructuring and of an Affiliated Interest Agreement*, BPU Docket No. WO21081067, Order Adopting Stipulation (dated February 22, 2022) (the "Restructuring/AIA Order").

Q. Please explain the calculation of Exhibit 20, Page 8, Transportation Expense.

A. Transportation expenses are the costs associated with the Company's fleet of vehicles and their associated operational costs (*e.g.*, fuel, maintenance, etc.). The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 20232 and then projecting the expense for the remaining months of the test year through April 30, 2024. Pro Forma Present Rates Transportation Expense represents the anticipated expense for the first year new rates go into effect.

Q. Please explain the calculation of Exhibit 20, Page 8, Insurance Expense.

A. Insurance expenses are the costs associated with the Company's insurance coverage for Workers Compensation, Auto & Property, General Liability and Executive Risk. The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 and then projecting the expense for the remaining months of the test year through April 30, 2024. Pro Forma Present Rates Insurance Expense represents the anticipated expense for the first year new rates go into effect.

The Company monitors this expense annually in terms of claims experience as analyzed in a multi-year average. There have been no significant claims for Aqua. Premium increases are largely the result of industry-wide (utility sector and otherwise) incidents, reduced insurance capacity, inflationary costs, and uncommonly high settlements, often referred to as nuclear verdicts. Essential is considered a "good risk" company from a corporate insurance perspective; however, premium pricing is all relative as Essential is assessed within the utility sector which brings with it industry-wide risks and exposures. The projected 2024 Insurance Expense for the Company is approximately $422,460.

Q. Please explain the calculation of Exhibit 20, Page 8, Other Expense.

A. Other Expenses primarily include a variety of Administrative and General expenses that are individually not material enough to be reported as a separate line item, but which are recurring and necessary expenditures of the Company in providing service to its customers. Some examples include: Office Supplies, Business Travel Expense, Office Utilities, Mail & Postage, and Bank Fees. The test year expense was compiled by taking the actual expenses for the period May 1, 2023 through September 30, 2023 and then projecting the expense for the remaining months of the test year through April 30, 2024. Pro Forma Present Rates Other Expense represents the anticipated expense for the first year new rates go into effect.

Q. Would you please explain Exhibit 20, Page 9, Bad Debt Expenses.

A. I have continued to average the bad debt percentages over a three-year period – for the calendar years ended 2021 through September 30, 2023 – and applied that percentage (0.6%) to the projected test year and normalized rate year period gross revenues to determine the bad debt expense. This average includes COVID-19 related bad debt. The new percentage is what Aqua believes best represents the level of bad debt expense incurred during the first year that rates are in effect based on historical experience and current trends. For example, the current percentage of the Company's accounts receivable over 90 days is higher than it was prior to Covid-19. During the course of this proceeding, I will update this calculation to 12+0 and propose to utilize the result as a basis for the final adjustment to Bad Debt Expense.

Q. Please describe Exhibit 20, Page 10, Rate Case Expense.

A. Exhibit 20, Page 10 shows rate case expenses detailed by category based on the Company's best estimate at the date of filing and assumes a fully litigated rate case. I will update this schedule periodically as the case progresses. The Company is requesting a two (2) year amortization period for rate case expenses, which is a decrease in the amortization period requested and approved in the Company's last water base rate case. This change is due to the Company anticipating filing a rate case every two years, given anticipated increased capital spending on PFAS treatment and lead service line replacements.

Q. Please describe Exhibit 20, Page 11, Tank Painting Amortization.

A. In prior base rate cases, Aqua has recovered Tank Painting costs by way of an O&M expense amortization. Previously, the Company was advised by Board Staff that this treatment was required by the Board's use of a version of the Uniform System of Accounts ("USOA") dating from the 1950s. In this case, the Company is once again requesting that tank painting be capitalized. With the Board's adoption of the USOA promulgated by the National Association of Regulatory Utility Commissioners, the prior USOA is no longer an impediment to Aqua's approach and the Company now proposes to capitalize the costs of tank painting. Accordingly, there is no tank painting amortization in the Company's expenses in this case.

Q. Please explain Exhibit 21, Pages 1 through 5, Taxes other than Income.

A. The Company pays various taxes, assessments, and other fees included in Exhibit 21, Pages 1 through 5. Those include: Regulatory Assessments, Payroll Taxes, Revenue Taxes, Property Taxes and various Water Allocation Fees/Safe Drinking Water Act Fees. The Regulatory Assessments from the Board and the Division of Rate Counsel are assessed

based on a percentage of utility revenue. The test year and the pro forma period are based on the most recent actual assessment percentages. We are not currently projecting any changes in the assessment percentages, but will appropriately revise these sheets if any changes occur in the assessment percentages. Certain expense adjustments and revenue implications of the instant proceeding have an effect on the aforementioned taxes and are detailed in Exhibit 21.

Q. Please explain Exhibit 23, Amortization Adjustments.

A. Exhibit 23 provides a summary of various positive and negative Utility Plant Acquisition Adjustments recorded with the acquisition of certain water systems previously approved by the Board, as well as amortization of COVID-19 expenses for which the Company is seeking recovery in this case. Aqua has not made any new acquisitions since its last water base rate case, but it does continue to amortize acquisition adjustments from prior transactions. Please also refer to Exhibit 26, Page 7 for a breakdown of individual Utility Plant Acquisition Adjustments.

Q. Please describe Exhibit 25, Interest Expense.

A. On Exhibit 25 the Company has calculated the Interest Expense claim being used in this petition and synchronized this calculation with rate base. In other words, the Company is seeking recovery of interest expenses to the extent those expenses were incurred to finance (with debt) the rate base being requested in this case. The weighted average cost of debt used in the calculation is derived from the Company's pro forma Exhibit 14, Page 1, whereby the Company has shown the requested Capital Structure. Further, Exhibit 14 shows the various instruments of debt and their respective cost rates that were then used to calculate the effective cost of debt "requested" which is 4.25%.

Q. Please describe the Company's claim for Rate Base, as detailed in Exhibit 26.

A. The Company's rate base claim as of the end of the test year April 30, 2024 is $279.0 million. The Company summarizes the components of Rate Base requested in this proceeding on Exhibit 26, Page 1. For all of the components, the Company started with actual results as of September 30, 2023 and then projected activity through the remainder of the test year through April 30, 2024. The largest and most significant component is Utility Plant in Service (test year and post-test year capital), shown specifically on Pages 2 through 4, which I worked closely with Company Witness Katherine Cipolla to develop. Utility Plant additions are supported in Witness Cipolla's Direct Testimony. With regard to the post-test year additions adjustment, shown on Exhibit 26, Page 4, the Board has in the past recognized post-test year additions for certain capital improvements that will be in service up to 6 months beyond the test year, in this case by October 31, 2024, provided those projects are (1) major in nature and consequence, (2) known and measurable, and (3) able to be evidenced by proofs. Having said that, the Company has included five projects that we feel meet that criteria. These projects are:

Bunnvale North PFAS Treatment	$	1,268,975
Summit Lake Permanent PFAS Treatment		414,000
Lifetime 1 4 Dioxane Treatment		1,636,170
Southern Well Upgrade		1,845,978
Woolwich Elevated Tank (Rt 322)		5,234,867
	$	10,399,990

Q. Please continue with a description of Exhibit 26, Pages 5 through 7.

A. Exhibit 26, Page 5 deals with Material and Supplies inventory. These are items that are stored at Aqua's facilities for day-to-day operations, emergency activities, and chemical inventories. For this rate base item, and consistent with past practice, I have utilized a 13-month average to determine the balance to be used as of April 30, 2024. The same 13-

month average calculation was utilized for Prepaid Expense Balances that the Company incurs during the normal course of business, shown on Exhibit 26, Page 6. I previously mentioned Utility Plant Acquisition Adjustment Amortizations, the unamortized balance of which is shown on Exhibit 26, Page 7. All of the Acquisition Adjustments were previously reviewed by the Board and approved as rate base.

Q. Please discuss Exhibit 26, Pages 8 through 10.

A. The remaining Pages in Exhibit 26 deal with typical deductions to rate base. Those include Accumulated Depreciation, Page 8; Customer Advances ("CAC") and Contributions in Aid of Construction ("CIAC"), Page 9; and Deferred Income Taxes, Tank Maintenance Reserves and Customer Deposits, Page 10.

On Exhibit 26, Page 8, the Company is detailing its roll-forward of the balance of Accumulated Depreciation of Utility Plant, net of Customer Advances and Contributed Property. The rates used in the calculation of depreciation expense are shown on Exhibit 26, Page 2, and the resulting annualized depreciation expense claim is shown on Exhibit 13; the rates utilized are those as newly proposed in this proceeding. The test year reserve for the depreciation balance on Exhibit 26, Page 8, includes an increase in the rates utilized for depreciation expense from October 1, 2023 through April 30, 2024 as reflected in the Study performed by Company Witness John Spanos.

Regarding Exhibit 26, Page 9, CAC and CIAC, the Company again started with September 30, 2023 balances and brought them forward with no activity through April 30, 2024. Both CAC and CIAC represent utility plant that the Company did not pay for, except to the extent refunds were paid on CAC balances, which are specified in agreements between the Company and developers.

Exhibit 26, Page 10, reflects balances for Tank Maintenance Reserves, Customer Deposits, and Federal Deferred Taxes. The Tank Maintenance Reserve has been zeroed out to reflect the Company's proposed reclassification of such expenses to capital; these expenses are reflected in the appropriate UPIS account as shown on Exhibit 26, Page 2. Further detail regarding Federal Deferred Tax balances is covered by Company Witness William Packer in his Direct Testimony.

Q. Has the Company performed the calculation of a Consolidated Tax Adjustment ("CTA") and included its result as an adjustment to rate base?

A. Yes. The Company has included the value of a CTA adjustment (in the amount of $0) on Exhibit 26, Page 1. The result of the CTA calculation for Aqua is zero, since Aqua is in a net operating loss position. This adjustment is described by Company Witness William Packer in his Direct Testimony.

III. COVID-19 DEFERRED COSTS

Q. What is Aqua's proposal regarding the recovery of COVID-19 deferred costs?

A. In response to the COVID-19 global pandemic, Governor Murphy issued various Executive Orders directing State agencies to take actions to protect the public given the statewide public health emergency. Following these orders, the Board implemented a series of measures to protect the public, including a moratorium on shut-offs for non-payment, reinstatement of utility service where it had been terminated for non-payment, and a prohibition on the imposition of reconnection charges. The Board acknowledged that these actions could cause New Jersey utilities to incur significant costs, and authorized utilities to create a COVID-19 regulatory asset to include incremental costs related to

COVID-19 beginning on March 9, 2020. The Board authorized utilities to seek recovery of the regulatory asset either in a separate proceeding or in a base rate case.

On March 5, 2023, Aqua advised the Board that it would seek recovery of its COVID-19 regulatory asset balance in its next base rate case, *i.e.*, the instant proceeding. At this time, Aqua has an arrearage balance of $106,354[2] and also incurred non-arrearage expenses of $518,924 consisting primarily of lost reconnection fees and the costs incurred to distribute several versions of the Customer Bill of Rights during the course of the pandemic. In this case, Aqua proposes to amortize the COVID-19 regulatory asset (in the amount of $625,278) over two years and has reflected that adjustment on Exhibit 23.

IV. DSIC

Q. How is the DSIC reflected in this filing?

A. The DSIC is reflected in this proceeding in a few ways. First, Aqua was authorized by the Board to implement a DSIC beginning in December 2022.[3] The Company has made its first semi-annual cost recovery filing for the six-month period ending June 2023, and made its second cost recovery filing on January 16, 2024. A third cost recovery request may be made during the pendency of this proceeding. In each case, the Company requests that the Board determine that the DSIC investments were reasonable and prudent, find that all DSIC charges imposed by the Company are final and not subject to refund, and authorize

[2] Pursuant to Paragraph 7 of the Restructuring/AIA Order, this balance includes the required reduction of $150,000 from the arrearage balance sought for recovery.

[3] *See I/M/O the Petition of Aqua New Jersey, Inc.'s 2022 Distribution System Improvement Charge Foundational Filing*, BPU Docket No. WR22050360, Order Adopting Stipulation (dated December 21, 2022) (the "DSIC Foundational Order").

Aqua to include DSIC rates in the base rates set in this proceeding and reset the DSIC surcharge to zero.

Second, Aqua has included a new Foundational Filing for a new DSIC program to begin at the conclusion of this case (see Exhibit 2 to the Petition). Aqua requests that the Board review and approve the new Foundational Filing and authorize the Company to implement a new DSIC surcharge in semi-annual filings consistent with the requirements of *N.J.A.C.* 14:9-10.1 *et seq.*

V. LEAD SERVICE LINE REPLACEMENT ("LSLR") SURCHARGE

Q. Please explain the Company's request regarding the LSLR Surcharge.

A. On December 23, 2022, Aqua filed with the Board its initial plan for addressing the replacement of LSLs, as well as the Company's approach to cost recovery of LSLR costs.[4] On July 12, 2023, the Board approved Aqua's initial plan and authorized the Company to seek recovery through its DSIC of the "total cost of the replacement of Company-owned LSLs made since May 31, 2022," as well the "total cost of customer notifications," the costs of LSL inventorying that requires excavation to determine LSL composition, and other incremental costs incurred to comply with the LSLR Law.[5] Aqua seeks the Board's review of these LSLR costs that are currently included in the DSIC, and a finding that those costs are reasonable and prudent and should be included in rate base.

---

[4] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval to Defer Certain Costs Related to the Replacement of Lead Service Lines and Other Related Approvals*, BPU Docket No. WR22120745, Order Adopting Stipulation (dated July 12, 2023), at 2.

[5] *Id.* at 3.

In its initial plan, Aqua also requested and received authorization to defer certain customer-owned LSLR costs and to seek their recovery in its next filed base rate case.[6] Consistent with this authority, Aqua has deferred the "total cost of the replacement of customer-owned LSLs" and "interest on the project costs of customer-owned LSL replacements," and now seeks the recovery of those deferred costs in this proceeding. Aqua has deferred customer-owned LSLR costs and interest of $11,028,422 as of September 30, 2023 and anticipates that it will incur an additional $500,000 in deferred costs during the pendency of this case. To recover these and future customer-owned LSLR costs, Aqua has proposed the implementation of an LSLR Surcharge to appear as a separate line item on the monthly bills of customers. Aqua also proposes to update the LSLR Surcharge on a semi-annual basis to reflect the actual replacement costs and interest the Company has incurred in the prior six-month period. Details regarding the Company's cost recovery proposal are discussed in the Direct Testimony of Company Witness Burger and included in the Annual Update to the LSLR Plan,[7] which is attached as Exhibit 3 to the Petition.

VI. PFAS Treatment Deferral

Q. Is there anything you wish to add regarding the proposed PFAS Treatment cost deferral?

A. Yes. The Company is seeking to capture costs related to PFAS Treatment, which are anticipated to be significant over the coming years as described by Company Witness

[6] *Id.* at 2-3.

[7] Please note that the Annual Update to the LSLR Plan meets the Company's obligation pursuant to *N.J.S.A.* 52:12A-44 (a).

Burger in his Direct Testimony, through the creation of a regulatory asset. The Company intends to recover those costs included in the regulatory asset in its next base rate case.

VII. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

EXHIBIT PT-3

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401___

DIRECT TESTIMONY OF WILLIAM C. PACKER

With regard to Certain Accounting Matters, Tax Treatment of Repair Deductions, and PFAS Treatment Costs

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
WILLIAM C. PACKER

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010.

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

A. I am employed by Essential Utilities, Inc. ("Essential"), as Vice President, Regulatory Accounting and Regional Controller. In this capacity, I am the Regional Controller of Aqua Pennsylvania, Inc. ("Aqua PA") and Aqua New Jersey, Inc. ("Aqua" or the "Company") as Vice President – Controller. Additionally, I oversee rate issues for all subsidiaries of Essential.

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

A. I graduated from the Richard Stockton College of New Jersey in 1998 with a Bachelor of Science degree in Business Studies with a concentration in accounting. In 1998, I joined GE Capital Mortgage Services Inc. as a staff accountant. In September 1999, I joined New Jersey American Water Company ("American") as a General Staff Accountant responsible for financial statement preparation, account reconciliation, financial support for rate cases, and account analysis. In September 2001, I was transferred to American's Service Company, in its Shared Services operation located in Mt. Laurel, New Jersey. I was employed there for four years in several roles, including Senior Fixed Assets/Job Cost Accountant, Financial Support Analyst, and Accounting Supervisor Fixed Assets. At

American, I had the opportunity to support the rate-making process by working closely with operating subsidiaries in 23 states, preparing schedules and answering interrogatories.

In March 2005, I joined Aqua and served as Assistant Controller until December 2006, when I transferred to Aqua America, Inc. In July 2008, I was promoted to the position of Mid-Atlantic Manager of Rates and since then have assumed increasing levels of responsibility and promotions. In April 2017, I became the Vice President - Controller of Aqua PA. In 2020, I was promoted to my current position of Vice President, Regulatory Accounting and Regional Controller where I have additional responsibilities to oversee rates and regulatory accounting matters of Essential.

Lastly, in addition to my corporate experience, I served three terms as a Councilman in the Borough of Woodbury Heights, New Jersey, and was elected Mayor of the Borough in November 2018—a position I continue to hold. The Borough is one of 565 municipalities in New Jersey and has a population of approximately 3,000 residents.

Q. Have you testified before the New Jersey Board of Public Utilities ("Board") before?

A. Yes. I have testified in the Company's previous 10 base rate cases filed since 2005.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide support for certain of the Company's accounting exhibits. I also provide an explanation of the Company's tax accounting method change for deducting expenditures as repairs for tax purposes which was previously approved by the Board, and explain how flow through accounting has been used to reflect the tax benefit in rates. In addition, I provide support for the Company's request to use deferred accounting to address the very significant costs the Company will incur to comply with new regulations regarding the allowed levels of PFAS in drinking water.

Finally, I will discuss the Company's reclassification of tank painting from regulatory assets to utility plant in service.

Q. Was this Direct Testimony prepared by you or under your direct supervision?

A. Yes. This Direct Testimony was prepared by me or under my direct supervision and control. The source documents for my Direct Testimony are Company records and public documents. I also rely on my personal knowledge and experience.

II. ACCOUNTING EXHIBITS

Q. What accounting exhibits are addressed in your Direct Testimony?

A. I am sponsoring Exhibits 14, 15, 22, and Pages 1 (portions) and 10 of Exhibit 26.

Q. Please explain Exhibit 14.

A. In Exhibit 14, in conjunction with Company Witness Matthew Howard (PT-9), I support the Company's claim for a capital structure consisting of 47% debt and 53% equity. Exhibit 14 shows the detailed components of Aqua's requested ratios of debt and equity financing and the calculation of the weighted average cost of capital.

Q. Please discuss Exhibit 15, the Revenue Increase Calculation.

A. Exhibit 15 shows the detailed components of the revenue requirement and provides the calculation of the requested increase in base rate revenues in this proceeding. Pro Forma Rate Base is shown on Exhibit 6 and amounts to $278,960,356. The Company's proposed overall Rate of Return ("ROR") is 7.91%, which incorporates a Return on Equity ("ROE") of 11.15%, which is the ROE recommended by Company Witness Howard. The application of the ROR to Rate Base produces Operating Income at Proposed Rates, which, when compared to Operating Income at Pro Forma Present Rates, results in an Operating Income Deficit of $5,636,945, which produces the Revenue Increase requested in this case of $8,329,647, as shown on Exhibit 15.

Q. How did Aqua determine its requested ROE of 11.15%?

A. The Company relied on the detailed analysis and recommendations of Company Witness Howard. As the Board is well aware, interest rates and inflation have risen significantly since the Company's last rate increase in June 2019. At the same time, numerous new regulatory requirements have been imposed on Aqua that significantly increased the Company's need for capital. In consideration of these factors, and the analyses by Company Witness Howard in his Direct Testimony, I believe that Aqua merits an ROE of 11.15

Q. Please explain Exhibit 22, Federal Income Tax.

A. The calculation of federal income tax expense for both the test year and the Pro Forma period is detailed on Exhibit 22. I have utilized a 21% Federal Income Tax rate for Aqua as a member company of a consolidated tax group with a tax sharing/allocation agreement. Note that I have synchronized interest with the Company's proposed capital structure for the purposes of calculating federal income tax expense.

Q. Please explain which portion of Exhibit 26, Page 1 you are sponsoring and what it reflects.

A. Sure. The Company has calculated and included the value of a Consolidated Tax Adjustment ("CTA") adjustment in Exhibit 26, Page 1, which adjustment is consistent with the Board's regulations regarding the CTA.[1] The result of the calculation for Aqua New Jersey, Inc. is zero, since Aqua New Jersey, Inc. is in a net operating loss position.

[1] *See* N.J.A.C. 14:1-5.12(a)(10).

Q. Please explain Exhibit 26, Page 10.

A. Exhibit 26, Page 10, shows three components of rate base: Accumulated Deferred Income Taxes, the Tank Painting Regulatory Asset, and Customer Deposits. The balances of all three of these accounts have been rolled forward to an April 30, 2024 projected test year.

Q. Regarding Exhibit 26, Page 10, is there any additional color you would like to add at this time?

A. Yes. I wanted to discuss the Company's reclassification of the outstanding balance of deferred tank paintings. For background, Aqua's accounting and ratemaking treatment of costs related to the painting of water storage tanks has been to request and receive a specific estimated amount in operating expenses for the annual cost of tank painting. The Company has then compared actual tank painting costs to the amount of the annual estimated tank painting expense included in base rates, and used deferred accounting to track the differences between actual and estimated tank painting cost levels as either a regulatory asset or a regulatory liability. Over the past 20 years, the Company has been in both a regulatory asset position (*i.e*, actual accumulated costs greater than accrued costs through operating expense) and a regulatory liability position (*i.e*, actual accumulated costs less than accrued costs through operating expense). Since about 2008, the Company has been in a regulatory asset position due to the increasing cost of tank painting expense and associated lead removal requirements.

In the Company's 2018 rate case, the Company proposed to reclassify the accumulated cost of the tank painting regulatory asset to utility plant in service. That case was ultimately settled; however, the Company's tank painting proposal was rejected by the parties to the proceeding based on a belief that the version of the National

Association of Regulatory Utility Commissioners' Uniform System of Accounts ("USOA") then-adopted by the BPU did not allow for such treatment. Since that 2018 Case, the BPU has adopted the most recent 1996 version of the USOA, which permits the capitalization of tank painting costs.

As such, the Company has made the appropriate reclassification of the accumulated balance of deferred tank painting costs (in the amount of $6,794,496) to utility plant in service (Account# 330 – Distribution Reservoirs and Standpipes). Additionally, the Company has removed the annual expense accrual for tank painting cost that was previous set at approximately $480,000 per year, as shown on Exhibit 20, Page 1. This treatment is consistent with both GAAP guidelines and the Company's capitalization policy regarding asset improvements.

III. TAX TREATMENT OF REPAIR DEDUCTIONS

Q. Aqua previously obtained Board approval to change its tax accounting method for its unit of property in calculating its repair and maintenance deductions for tax purposes.[2] Can you please explain why and provide a status update?

A. By way of background, in September 2013, the IRS issued Treasury Decision 9636, or the Tangible Property "Repair" Regulations to provide taxpayers in determining which costs must be capitalized and depreciated for tax purposes, and which can be deducted as repairs and maintenance expenses. The Company carefully evaluated the regulations and their application to the facts and circumstances of the Company's network assets as they would have a significant impact on rate base, cost of service and the timing of the filing of future

[2] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2018)*, BPU Docket No. WR18121351 ("2018 Rate Case"), Order Approving Stipulation (dated May 28, 2019) at 4 (citing Stipulation ¶ 13).

base rate requests. Aqua filed a tax accounting method change to adopt a unit of property in the calculation of repair deductions for tax purposes on its 2022 Federal tax return.[3]

Q. Please explain what qualifies as a repair for tax purposes.

A. Work performed on an asset to keep it in its normal working condition which does not materially extend its life, increase its value, or change its use generally qualifies as a repair for tax purposes.

Q. What is the usual tax treatment of repair costs?

A. Expenditures for incidental repairs are deductible as incurred for tax purposes.

Q. What is a unit of property?

A. A "unit of property" is the asset to which the "repair" test is applied. Consequently, the concept of a unit of property is critical for distinguishing between repairs (which are currently deductible) and capital costs (which are capitalized and depreciated over a period of time). An illustration will help to make this clear. Take the changing of a truck's spark plugs. If each spark plug is defined as a separate unit of property, then the changing of six spark plugs represents the retirement of six units of property and the installation of six new units of property. Because the removal of a unit of property does not, by definition, keep that unit in its normal operating condition, the installation of a new unit of property is a capital cost and not a repair. Consequently, the installation of each spark plug would be a capital addition that would be depreciated over the tax life of the asset. By contrast, if the truck was defined as the unit of property, then the changing of spark plugs would not constitute the installation of new units of property. Because a tune-up (of which the spark

[3] *2018 Rate Case*, Letter dated January 20, 2023 ("The Company decided to make the Tax Repair Election and that election was accomplished via making the appropriate filing with the IRS on December 23, 2022.").

plug replacements are a part) keeps the truck in its normal operating condition, it would meet the definition of a repair and, as such, the costs of spark plug replacements would be fully deductible when the repair occurs. Thus, the same work can produce radically different tax results depending on the definition of a unit of property.

Q. What does this example illustrate about "units of property?"

A. It demonstrates the fundamental characteristic that the larger the unit of property, the more likely it is that projects associated with that asset will qualify as deductible repairs.

Q. Are there specific rules that govern how taxpayers must define their units of property?

A. The current Treasury Regulations provide several helpful definitions and examples. However, with respect to network assets such as gas and oil pipelines, electric lines, railroad track and water and wastewater systems, the regulations are singularly unhelpful. In this regard, they state:

> (B) Unit of property for network assets. In the case of network assets, the unit of property is determined by the taxpayer's particular facts and circumstances expect as otherwise provide in published guidance in the federal register or in the Internal Revenue Bulletin **((**see §601.601(d)(2)(ii)(b) of this chapter). For these purposes, the functional interdependence standard provided in paragraph (e)(3)(i) of this section is not determinative.[4]

Q. Has the IRS provided any guidelines with respect to network assets?

A. It has for some types of network assets in the electric and gas industries, but not for water and wastewater network assets.

[4] Treasury Regulations §1.263-3(e)(3)(iii)(B).

Q. Before making the tax accounting method change, what units of property did Aqua use for determining whether a particular cost was a repair or a capital expenditure?

A. Aqua used the same units of property for tax purposes that it used for book purposes. That is, the Company followed its books in determining what expenditures were or were not repairs for tax purposes.

Q. What caused Aqua to change its units of property for tax purposes?

A. In 2008, the IRS issued regulations regarding the determination of units of property that provided principles and examples but did not address network assets. Instead, the preamble to the regulations included the following statement:

> The IRS and Treasury Department generally think that the unit of property rules for network assets should be addressed on an industry by industry basis in internal revenue bulletin guidance. Industries are invited to submit requests for guidance under the industry issue resolution ("IIR") program after these regulations are finalized.

This statement indicates that the final determination of units of property for network assets has to be negotiated for each industry group interested in pursuing a common definition for that industry.

Q. Is there a tax rule that creates a particular problem for linear units of property?

A. Yes, there is. One historical tax rule has been that the replacement of a material portion of a linear unit of property is a capital expenditure — not a repair. When a taxpayer uses large units of property, this requires that one must be able to draw a line that divides a material replacement from a non-material replacement. The dividing line is a percentage of the unit of property. Unfortunately, there is no specific percentage that the IRS has identified as being acceptable. It could be 5%, 10%, 20%, or some other percentage. Thus, even were the units of property are certain, the identification of repairs remains uncertain.

Q. Have any of the segments of the utility industry reached agreement with the IRS regarding the appropriate units of property and the threshold for material replacements for network assets?

A. Yes, both the electric and gas industry have reached agreement with the IRS for certain types of network assets in the past. In that regard, most recently, on April 14, 2023, the Gas Safe Harbor rules under Rev. Proc. 2023-15 for Gas Transmission and Distribution were published.

Q. Have the water and wastewater industries commenced a process to reach agreement with the IRS?

A. No they have not, meaning they have not filed an IIR, as both the electric and gas industries have previously.

Q. How have other Aqua subsidiaries changed their treatment for repairs?

A. Aqua's affiliate water subsidiaries in Pennsylvania, North Carolina, and Ohio, as well as its gas utility affiliates in Pennsylvania and Kentucky, have all changed their method of tax accounting treatment for repairs.

Q. How was the change in accounting method recorded on Aqua's 2022 Federal income tax return?

A. The change had two components. First, all costs incurred in 2023 that qualified as repairs under the Company's new accounting method (that is, its use of larger units of property) were deducted. This enhanced deduction will continue each year into the future. The second component is referred to as a "Section 481(a)" adjustment. It is a "one time" deduction. When a taxpayer changes a tax accounting method, its tax books and records are essentially restated to conform to what they would have looked like had the taxpayer

always used its new method. The Company restated the tax basis of its assets as if it had always deducted those projects that would have been repairs had its new unit of property definition been in use for all prior years. The Company is required to go back as far as its books and records can support, and determine what projects it capitalized that would have qualified as repairs under its new unit of property definition. However, since the costs of those projects had, in fact, been capitalized and depreciated for tax purposes, the cumulative incremental repair amount must be reduced by the tax depreciation already claimed to arrive at a net amount by which the tax basis of the distribution assets will be reduced. Because reducing the tax basis will deprive the utility of the ability to ever claim a deduction for the costs reflected in this basis reduction, the tax rules allow the Company to claim the entire amount as a deduction in the year in which the change is made. The Section 481(a) adjustment is, in reality, a "catch-up" adjustment.

Q. How much was the Section 481(a) adjustment?

A. The Section 481(a) adjustment was approximately $52.4 million for water. This amount was claimed as a deduction on the Company's 2022 Federal income tax returns.

Q. How does all of this background relate to the treatment of tax repairs in this case?

A. In the Company's last base rate case,[5] Aqua indicated there was the potential that the Company would change its tax accounting method for deducting repairs and maintenance expenses. Although Aqua had not changed its accounting method at the time that case was settled, the Parties included provisions in the Board-approved Stipulation of Settlement in the event the Company made the Tax Repair method change, including:

[5] *See* 2018 Rate Case Order.

1. Should the Company decide to make the Tax Repair Election, it would notify the Staff of the Board and the Division of Rate Counsel

2. Any "catch-up" deductions would be amortized over ten (10) years;

3. The Company will be permitted to utilize flow-through accounting;

4. The Company would not file a request to increase base rates before June 1, 2023; and

5. The Company was permitted to implement a Distribution System Improvement Charge ("DSIC"), but not before May 31, 2022.[6]

Q. Has Aqua complied fully with these provisions?

A. Yes, it has. Aqua made the Tax Repair method change for tax year 2022, and filed it with the IRS in 2023. The ten year amortization of the Section 481(a) Adjustment commenced in 2022 and the Company has continued the amortization through 2023, thus completing two full years of amortization. The remaining amortization has been included in rates for income tax expense in this case shown on Exhibit 22, Page 1. Based on the nature of the Company's future capital expenditures that fall in repair eligible categories, the repair deduction is estimated to be approximately $15 million per year. The current and ongoing benefit from this tax repair deduction is also reducing income tax expense. Pursuant to the prior stipulation, the Company's treatment of these tax benefits are accounted for utilizing flow-through accounting, whereby the tax benefits relative to the future tax deductions, as well as the catch-up deduction amortization are reducing income tax expense when determining cost of service income tax expense recovery from customers.

In this instance, the total tax benefits being reflected have reduced income tax expense (normally at 21% federal rate) to an effective income tax rate of -6.76%. Said

[6] *Id.*, Order at 4.

another way, the Company is providing a tax benefit in the revenue requirement versus an income tax expense, in essence pre-funding the income tax benefit realized by the Company on its tax returns. The tax benefit is being pre-funded to customers because the Company has, and continues to incur, a net operating loss (*i.e.*, tax deductions > taxable income) for which the Company has yet to receive any cash benefit from the IRS.

Q. Are there any rate base implications relative to this change?

A. Yes, in accordance with GAAP and the IRS normalization rules, the Company has reflected the associated impacts of its repair method change to record the necessary accumulated deferred income taxes associated with repairs, the associated FAS109 regulatory tax asset attributable to tax repairs, any related tax gross-up required, and lastly the Company's portion of the normalized net operating loss incurred to date. Those impacts must all be accounted for in the Company's projected April 30, 2024 test year ended balance of $18.2 million shown in Exhibit 26, Page 10.

IV. PFAS TREATMENT DEFERRED ACCOUNTING

Q. What is the Company's request with respect to the treatment of costs related to the installation and maintenance of PFAS Treatment?

A. As explained in detail in the Direct Testimony of Company Witnesses McKoy and Burger, new environmental regulations regarding the treatment of PFAS and other related "forever chemicals" will have a significant impact from both a financial and operational perspective on the Company. Currently, Aqua anticipates that PFAS treatment may be needed at 29 separate locations at a total capital cost ranging from $60 million to $90 million. The treatment equipment necessary to treat water for PFAS is either granular activated carbon or anion exchange resin. Both of which have very short service periods before their efficacy is diminished and thus requiring changeout. In absolute terms, that is a significant

expense, but for an entity the size of Aqua, those costs are staggering. The recovery of these costs, the equipment and treatment media will be recovered over different time periods. Specifically regarding the treatment media, the estimated cost of a changeout is approximately 5% of the original cost of the equipment installation. In this example, assuming a cumulative $90 million project cost, changing out all of the media is currently estimated at $4.5 million, if all the units were changed at once. It is estimated that changeouts will need to be incurred in a relatively short period of one to five years depending on a given well's operating conditions and quality. In addition, once treatment is installed, there will be on-going incremental costs to maintain the treatment facilities, including incremental labor expenses and the costs related to changing and disposing of the treatment medium. At present, none of these costs are in rate base but Aqua knows they are on the near-term horizon. Given the magnitude of these costs, their potential impact on Aqua's financial health and stability, and the volatile and currently unknown nature of the costs, Aqua seeks the Board's authority to use deferred accounting to identify and track PFAS treatment costs and to seek their recovery in a future base rate case or other cost-recovery proceeding. Aqua believes that the unique nature of the PFAS treatment challenge merits the use of deferred accounting and its request in this case fully satisfies the standards the Board has used in allowing deferred accounting in other circumstances.

Q. Has the Company received deferred accounting authority in previous rate cases for anything similar?

A. Yes, in BPU Docket No. WR06120897, the Company was authorized to defer costs related to the installation of water treatment equipment related to radium. The circumstances surrounding the treatment of radium in 2006 are the same as those circumstances faced by

the Company relative to PFAS. The capital costs for both are significant, even more so for PFAS since there are more affected wells. In addition, the frequency of changeout of the treatment media is equally burdensome.

Q. Is deferred accounting appropriate given these circumstances?

A. Yes. Deferred accounting authorization is prudent and necessary in circumstances like this, whereby, absent the ability to defer these significant costs to future recovery in base rate cases, the Company would be denied its right to an opportunity to earn a fair rate of return on its investments. The Company can only increase its charges to customers in its tariff through a base rate proceeding, which takes 9 – 12 months. The costs facing the Company are so significant, that absent deferral, the costs would be charged currently to operating income and deny a reasonable opportunity to earn a fair returns on investment. Absent deferred accounting authorization, the Company could only partially improve those financial impacts by filing rate cases back-to-back with no stay out period in between. Even then, recovery would not be adequately matched so as to restore the opportunity to earn a reasonable rate of return as part of the regulatory compact to which the Company operates. The costs related to the treatment of PFAS are extraordinary, even more so than radium, as such, the Company is requesting authorization to defer the costs of PFAS treatment that are not reflected this rate case for future recovery and consistent with Board precedent.

Q. Does Aqua believe there is an alternative to deferred accounting to address the costs related to PFAS treatment?

A. Yes. If the Board is not inclined to grant Aqua's request for deferred accounting, then in the alternative the Company would propose the implementation of a PFAS Treatment

Surcharge that would enable the Company to recover PFAS costs as they are incurred.

Q. How would such a PFAS Surcharge work?

A. The Board has several programs that could act as a model for a PFAS Treatment Surcharge, including the DSIC and the Infrastructure Investment Program. Among the features these programs share is the preparation and approval of an initial program plan and regular cost recovery filings and rate increases reflecting investments placed in service during a stated timeframe. All of these elements would need to be in place to ensure Aqua has the ability to tackle the challenges of PFAS treatment.

Q. Does the Resiliency and Environmental System Investment Charge ("RESIC") Program approved by the New Jersey Legislature and signed by Governor Murphy change this request?

A. I am aware of recent legislation in New Jersey for a RESIC, which as I understand it, is similar in its recovery principles as the DSIC already in place for New Jersey, but would be applicable to water treatment projects for emerging contaminants like PFAS. At this time however, while this legislation was just enacted on January 16, 2024, the process for requesting a RESIC has not yet been determined. As such, at this time, it is not a viable alternative in lieu of the Company's request for deferred accounting, and is therefore not anticipated to change the Company's request.

V. CONCLUSION

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

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

EXHIBIT PT-4

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401___

DIRECT TESTIMONY OF ADAM BURGER

With regard to Capital Additions, O&M,
The LSLR Program, and
PFAS Treatment Challenges

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
ADAM BURGER

I. INTRODUCTION

Q. Please state your name and business address.

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

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

A. I am employed by Aqua New Jersey, Inc. ("Aqua" or the "Company") as Director of Operations.

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

A. I hold a Bachelor of Science degree in Chemical Engineering from Drexel University. I am currently completing the final two terms of a Master's in Business Administration from the Jack Welch Management Institute at Strayer University. I was hired as the Director of Operations for Aqua in April of 2019, and in that capacity have overall responsibility for the day-to-day operations, business development and financial results of Aqua. Along with others, I am accountable for establishing and overseeing relations and reporting with governmental agencies, providing quality water and wastewater service to our customers, and achieving the Company's financial goals. I am responsible for the overall operations of the Company's four divisions including all aspects of water treatment and distribution, wastewater treatment and collection, water quality, and customer service.

My industry related experience, prior to joining Aqua, is as follows:

- 2007 to 2012 Philadelphia Water Department - Process Engineer at the Southwest Water Pollution Control plant. Working on a variety of projects to optimize treatment and maintain compliance of the large treatment facility.
- 2012 to 2015 Philadelphia Water Department - Assistant Plant Manager of the Belmont Water Treatment Plant. Overseeing all operations, maintenance and capital project work for a 55 MGD facility.
- 2015 to 2017 Philadelphia Water Department - Plant Manager of the Belmont Water Treatment Plant. Responsibilities included hiring, union relations, capital and operational budgeting and planning as well as ensuring the operation of the water plant providing water to over 750,000 customers.
- 2017 to 2019 Philadelphia Water Department - Plant Manager Northeast Water Pollution Control Plant (210 MGD wastewater plant). Responsibilities included capital project management, process startup, hiring and training new engineers, environmental compliance and record keeping.

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

A. Yes. I hold T-4 Water Treatment and S-4 Wastewater Treatment, W-3 Distribution, and C-2 Collections licenses from the New Jersey Department of Environmental Protection ("NJ DEP"). I also hold a Professional Engineer License in New Jersey and Pennsylvania.

Q. Have you testified before the New Jersey Board of Public Utilities ("Board") before?

A. Yes. I previously provided Direct Testimony in the Company's 2020 Wastewater base rate case in BPU Docket No. WR20010056.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to support the Company's Petition in this proceeding regarding (i) capital relative to operating costs, (ii) Aqua's approach to Lead Service Line Replacement ("LSLR"), and (iii) the Company's Annual Update to the LSLR Program (attached as Exhibit C to the Petition), and (iv) the challenges Aqua faces in the installation of PFAS treatment throughout its system.

Q. Was this Direct Testimony prepared by you or under your direct supervision?

A. Yes. This Direct Testimony was prepared by me or under my direct supervision and control. The source documents for my Direct Testimony are Company records and public documents. I also rely on my personal knowledge and experience.

Q. Are you sponsoring any exhibits as part of your Direct Testimony?

A. Yes. I am sponsoring Exhibit 3 to the Petition, which was prepared by me or under my direct supervision and direction.

II. DRIVERS OF OPERATING COST INCREASES

Q. What significant cost increases has the Company experienced since the 2018 base rate case filing?

A. Since the 2018 filing, Aqua has seen significant cost increases in a number of categories. Most impactful is chemicals, which have risen in commodity cost driving pricing up almost 160%. Labor and transportation costs have both escalated nearly 30% since 2018. Bad debt balances have also been significantly impacted with larger arrearage balances after the COVID-19 pandemic and shutoff moratoriums.

Q. What major capital improvements have been made since the last filing?

A. Since the last rate case filing, Aqua has painted six water storage tanks throughout its footprint. The water main program aggressively replaced aging infrastructure, adding over $36 million in critical underground infrastructure providing reliable service to our customers for years to come. The Company has also focused on replacement of water services (service lines that connect the property to the water main) in 2022, with a total of $23 million water services added since the last filing. Additionally, Aqua has begun installing PFAS filtration systems to ensure that our customers continue to receive safe and adequate water service.

III. AQUA'S LSLR PROGRAM

Q. Please provide some background on Aqua's approach to the LSLR Program.

A. The LSLR Law was signed by Governor Murphy in July 2021 and required New Jersey's water utilities to inventory and replace all LSLs, including those on private property that are owned by the customer. The LSLR Law directed utilities to submit to the Board an initial plan for replacing LSLs, which Aqua did on December 23, 2022.[1]

Q. Was the Company's Initial LSLR Plan approved by the Board?

A. Yes, on July 12, 2023, the Board approved Aqua's initial plan and authorized the Company to seek recovery through its DSIC of the "total cost of the replacement of Company-owned LSLs made since May 31, 2022," as well as the "total cost of customer notifications," the

[1] *See I/M/O the Petition of Aqua New Jersey, Inc. for Approval to Defer Certain Costs Related to the Replacement of Lead Service Lines and Other Related Approvals*, BPU Docket No. WR22120745, Order Adopting Stipulation (dated July 12, 2023), at 2.

costs of LSL inventorying that requires excavation to determine LSL composition, and other incremental costs incurred to comply with the LSLR Law.[2]

In its initial plan, Aqua also requested, and received, authorization to defer certain customer-owned LSLR costs and to seek their recovery in its next filed base rate case.[3] Consistent with this authority, Aqua deferred the "total cost of the replacement of customer-owned LSLs" and "interest on the project costs of customer-owned LSL replacements," and now seeks the recovery of those deferred costs in this proceeding. As explained by Company Witness Dawn Peslak, Aqua has deferred customer-owned LSLR costs and interest of $11,028,422 as of September 30, 2023 and anticipates that it will incur an additional $500,000 in deferred costs during the pendency of this case. To recover these and future customer-owned LSLR costs, Aqua has proposed the implementation of an LSLR Surcharge to appear as a separate line item on the monthly bills of customers. Aqua also proposes to update the LSLR Surcharge on a semi-annual basis to reflect the actual costs and interest the Company has incurred in the prior six-month period.

Q. Please provide an overview of Aqua's LSLR challenges.

A. As required, Aqua has conducted a comprehensive review of Company records to attempt to determine the composition of service lines—both Company-owned and customer-owned—in its service territory. Current estimates based on that effort are that there are approximately 2,000 Company-owned LSLs and 4,000 customer-owned LSLs that will need to be replaced. I would note that this is an estimate and it may change as further

[2] *Id.* at 3.
[3] *Id.* at 2-3.

inventorying and testing of the composition of unknown service lines is completed. Presently, Aqua has 10,000 service lines with unknown composition remaining.

Q. Where in the Aqua system are LSLs predominantly located?

A. Aqua has encountered greater concentrations of LSLs in the older parts of its systems, such as in Phillipsburg and Blackwood. This is not surprising given when those systems were built and the building materials that were commonly used at that time. Table 1 in the Updated LSLR Plan (see **Exhibit 3** to the Petition) shows a current breakdown of LSLs by system.

Q. What average costs are typically incurred in replacing LSLs?

A. As noted above, Aqua has replaced approximately 2,200 LSLs and based on that experience has made some general estimates of the average cost of replacing LSLs. Where a full LSL replacement is required, *i.e.*, both the Company-owned and customer-owned portions, the average cost for that full replacement has generally been approximately $8,000. In instances in which only the Company-side is replaced, the average cost has generally been approximately $4,200. In situations in which only the customer-side is replaced, the average cost has generally been approximately $5,100.

Q. Why is there a difference in the average cost to replace a Company-owned versus a customer-owned LSL?

A. There are many factors that influence cost, but one difference between Company-owned and customer-owned LSLR costs is due to the fact that Company-owned LSLs tend to be shorter, running from the water main to the curb. There is also less likelihood of encountering landscaping and other conditions which can impact the ease of replacement, *e.g.*, mature trees with large root systems and hardscaping. Additionally, challenges

include local plumbing permits and inspections and access to pipes that were originally installed in basement slabs.

Q. What other factors influence the LSLR costs?

A. Some of the more significant factors impacting costs are: (i) whether the work is completed as part of a main replacement program in a targeted area versus as a one-off replacement; (ii) local ordinances, codes and requirements; (iii) property site conditions; and (iv) the scope of work, if any, performed through building foundation walls.

Q. How quickly does Aqua plan to complete the LSLR in its service territory?

A. The Company estimates that it could replace up to 2,000 LSLs per year depending on access to the LSLs, municipal moratoriums on street excavation work, and contractor and equipment availability. Coordinating this critical work with the municipalities and other utilities' work in the area is an important facet of this project, as restoration costs and road opening moratoriums are important considerations for cost and service territory relationship reasons.

Q. Has the Company been able to secure any funding or grants to offset LSLR costs?

A. Aqua's Blackwood system has been selected as part of the US Environmental Protection Agency's ("EPA") Lead Line Accelerator Program. This pilot program will lend financial, engineering and administrative support to utilities and should increase the speed of implementation of the LSLR program in the Blackwood system. The Company anticipates selection to this program will save Aqua customers approximately $6 million.

In addition, the Company has two pending applications (for Phillipsburg and Blackwood) with the New Jersey Infrastructure Bank ("IBank") to take advantage of principle forgiveness related to the costs of LSLR, as well as the low interest rates typically

offered by IBank loan programs. The IBank application process tends to take several months to complete, and the Company has not yet had a definitive response on either application. Should that change during this case, we will advise the Board.

Q. Do you have any comments on the challenges Aqua faces in its LSLR program?

A. Yes, I do. From a technical, operational, engineering and financial perspective, replacing thousands of LSLs is a complex and expensive undertaking—particularly for a company the size of Aqua. Most of the LSLRs are performed by contractors, but Aqua is still required to contract for and supervise these activities. In addition, Aqua must educate and interact with customers and municipal and state officials to secure needed permissions to perform work—this task alone is very time consuming—and then schedule contractor activities. Finally, Aqua pays for all of this work before it is included in the rates charged to customers. At a time when the Company is also facing the prospect of spending millions of dollars to treat PFAS, LSLR costs are another significant source of financial pressure on Aqua, which costs are unavoidable in order to ensure compliance with federal and state mandates regarding replacements. Consequently, it is absolutely vital that the Company receive full and timely cost recovery for LSLR costs as described in the Direct Testimony of Company Witness Peslak.

Q. Has Aqua updated its LSLR Plan as required?

A. Yes, Exhibit 3 to the Petition is the Updated LSLR Plan, which was prepared by me, and is submitted in this proceeding in compliance with the annual update requirement.

IV. PFAS TREATMENT CHALLENGES

Q. Please provide an overview of the PFAS treatment issue.

A. Both the EPA and the NJ DEP have promulgated standards that require water utilities to test for, and treat, PFAS in drinking water supplies. Aqua currently anticipates that it will be required to install PFAS treatment at 29 individual locations. The most effective and commonly used treatment technologies are granular activated carbon, high pressure membrane separation (*e.g.*, nanofiltration or reverse osmosis), and ion exchange. Depending on the specific characteristics of the individual wells, treatment technologies can vary significantly and costs can range from $250,000 to $ 10,000,000 per installation. In addition, some well sites are fairly small and may not have enough space to install treatment. In those instances, the Company may need to purchase adjacent property to install treatment facilities.

Q. Can you provide the Company's current estimate of the cost of PFAS treatment?

A. In total, I currently estimate that Aqua may incur between $60 and $90 million in costs to install mandated treatment by the 2027 EPA deadline. I would note, however, that this estimate is simply that—an approximation of costs. I am concerned that imposition of PFAS treatment requirements nationwide may create significant upward pressure on costs as thousands of water systems compete for access to the same vendors and contractors who sell and install treatment systems.

Q. Beyond the cost of the treatment facilities, what costs will the Company incur to treat for PFAS?

A. Additional costs include incremental, on-going operations and maintenance ("O&M") costs to keep the treatment facilities in working order and to replace and properly dispose

of the medium that is used in the treatment facilities. At this time, Aqua has had limited experience with PFAS treatment facility installation and operation; however, that experience has caused the Company to conclude that the installation and on-going O&M costs will be significant—particularly to a company of Aqua's size.

Q. How does Aqua propose to deal with this uncertainty?

A. As explained in the Direct Testimony of Company Witness William Packer, at this time the Company is requesting authority to use deferred accounting to create a regulatory asset to capture the costs related to PFAS treatment. Given the magnitude of, and knowledge that there will be, increased costs, this is a reasonable approach to enabling Aqua to meet water quality requirements while also balancing cost recovery concerns. Any regulatory asset would be subject to review for reasonableness and prudency in a future base rate proceeding before it was reflected in rates.

IV. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. I do, however, reserve the right to supplement this Direct Testimony as this proceeding progresses.

EXHIBIT PT-5

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401_____

DIRECT TESTIMONY OF KATHERINE CIPOLLA

With Regard To
The Distribution System, Additions To Utility Plant In Service,
and the Distribution System Improvement Charge

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
KATHERINE CIPOLLA

I. INTRODUCTION

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

A. My name is Katherine Cipolla. My business address is 10 Black Forest Road, Hamilton, New Jersey 08691.

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

A. I am employed by Aqua New Jersey, Inc. ("Aqua" or the "Company") as State Engineer.

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

A. I graduated from The College of New Jersey in 2016 with a Bachelor of Science Degree in Mechanical Engineering. In March 2017, I began working at MidAtlantic Engineering Partners, LLC as a Design Engineer. My focus was on site designs for residential developments across the New Jersey. In November 2018, I began working at T&M Associates as a Design Engineer. I was part of the private site group where my focus was designing site plans for residential developments, offices, hospitals, restaurants, warehouses, solar fields and more.

I joined Aqua in June 2022 as the State Engineer. As State Engineer, I am responsible for the short-term and long-term capital planning, budgeting, designing and implementation of all capital projects in New Jersey.

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

A. No, I am an Engineer in Training.

Q. Have you testified before the New Jersey Board of Public Utilities ("Board") before?

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

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide an overview of the Company's sources of supply and storage, to support and explain the Company's capital additions to Utility Plant in Service ("UPIS") in this proceeding, and to discuss the Company's Distribution System Improvement Charge ("DSIC").

Q. Was this Direct Testimony prepared by you or under your direct supervision?

A. Yes. This Direct Testimony was prepared by me or under my direct supervision and control. The source documents for my Direct Testimony are Company records and public documents. I also rely on my personal knowledge and experience.

Q. Are you sponsoring any exhibits as part of your Direct Testimony?

A. Yes. I am partially sponsoring Exhibit 26, with Company Witness Dawn Peslak (PT-4), which displays the Company's UPIS by account. Exhibit 26 was prepared by me or under my direct supervision and direction.

II. SYSTEM SUPPLY OVERVIEW

Q. Please describe the Company's sources of supply and storage facilities.

A. The Company's source of supply is groundwater from wells located throughout our service territories. Additional supplies are purchased as needed from neighboring sources. Storage facilities include eight elevated tanks, five ground tanks, fifteen standpipes, and six reservoirs. Water treatment includes chlorination at all locations, pH adjustment where necessary, corrosion control where necessary, and fluoridation (locally mandated) in the

Central Division. Since 2006, the Company has installed six radium removal treatment systems. The Company maintains three active interconnections with neighboring systems in the Southern Division, three emergency interconnections with the City of Trenton and one with the Borough of Allentown in the Central Division and is capable of an emergency interconnection with the City of Easton, PA in the Northern Division. The Eastern Division has two interconnections with the Borough of Ocean Gate and Berkeley Township. This UPIS has been included as rate base in this case. In this Direct Testimony, I will discuss the details of our ongoing investment in rate base during the test year as well as the pro forma period.

III. UPIS SCHEDULES

Q. You mentioned you are partially sponsoring Exhibit 26. What exactly are you supporting?

A. Specifically, I will be supporting the need for the Company's projected investment in rate base for the test year ended April 30, 2024 and post-test year period, through October 31, 2024.

Q. Please describe Exhibit 26, Sheets 2-4, regarding the capital additions that are a part of the Company's rate base in this case.

A. Exhibit 26, Sheets 2 to 4 contain schedules showing, by plant account, the Company's (i) actual plant balance at September 30, 2023, (ii) the adjusted test year plant balance (reflecting net additions and retirements through April 30, 2024), as well as (iii) post-test year plant additions through October 31, 2024. Sheet 2 summarizes the Company's calculation of UPIS and depreciation expense to be included in rates in this proceeding.

Sheet 3 provides additional detail by plant account regarding plant additions and retirements through April 30, 2024, the end of the test year. Sheet 4 shows plant additions through October 31, 2024, the end of the post-test year period. All additions shown on Exhibit 26 are Company-funded and therefore exclude contributions in aid of construction ("CIAC").

IV. DSIC PROGRAM AND FOUNDATIONAL FILING

Q. Has the DSIC program had an impact on the Company's capital investments?

A. Yes. Over the years, the Company has used the DSIC program for some of its larger capital investments, such as efforts in the Northern Division to identify and address sources of non-revenue water. Aqua's current DSIC program was approved in December 2022, and we will continue to execute on the projects included in that Foundational Filing during this case.[1] In addition to the DSIC programs the Company identified in its Foundational Filing, costs related to lead service line replacement ("LSLR") for Company-owned LSLs are also being recovered in the DSIC, along with the costs of (i) customer notification, (ii) LSL inventorying that require excavation, and (iii) other LSLR-related costs.

Q. Do you have any concerns about including LSLR costs in the DSIC?

A. While I think allowing the Company to recover certain LSLR costs on a regular basis in the DSIC is both reasonable and fair, I would also note that the cap on DSIC spending has not been revised to reflect this new category of costs. As a result, it seems possible that the types of projects that were previously funded through the DSIC may not receive the

[1] *See I/M/O the Petition of Aqua New Jersey, Inc.'s 2022 Distribution System Improvement Charge Foundational Filing*, BPU Dkt. No. WR22050360, Decision and Order Adopting Stipulation (dated December 21, 2022).

same level of attention and funding.

Q. What are the Company's requests regarding the DSIC in this filing?

A. As explained by Company Witness Dawn Peslak in her Direct Testimony, Aqua has made two DSIC surcharge cost recovery filings, and will possible make a third prior to the conclusion of this case. Aqua seeks a finding from the Board that those interim DSIC surcharges are final and not subject to refund, and that the DSIC rate shall be reset to zero with the implementation of new base rates in this case. Aqua also requests that the DSIC projects that have been completed and placed into service will be included in the rate base set in this proceeding. In addition, Aqua has included a new DSIC Foundational Filing (*see* **Exhibit 2** to the Petition) and requests that the Board approve it as part of this base rate case.

Q. Please elaborate on the Foundational Filing.

A. This proposed Foundational Filing builds on the currently approved Foundational Filing and includes certain projects that were not completed from the current Foundational Filing, as well as some new projects. The Company requests that the proposed Foundational Filing be made effective as of the last day of the DSIC recovery period for which a DSIC surcharge has been implemented at the time of this case. As the Board is aware, the purpose of this timing request is to avoid any "gap" period during which the Company's DSIC-eligible investments are excluded from calculations of both "base" and DSIC spending.

V. RATE BASE ADDITIONS

Q. Please describe the larger dollar value projects included in the Company's request.

A. Sure. There are four projects that have a large capital spend for the Company. First, is the

Strykers Road gridding project, which began construction in December 2022 and was completed in September 2023. This project consisted of a water main extension, including a horizontal directional drill under the Lopatcong Creek to Uniontown Road as part of planned water network gridding and redundancy to the benefit of the water network and Aqua's broader customer base. The cost of this construction project was $2.7 million. Second, the PFC Treatment project, also known as Lawrenceville Green Ave. Wells 4, 5 & 8 PFAS Treatment project, was started in 2022 and is expected to be complete in March 2024. The project consists of a new building to provide adequate space for equipment to treat PFAS. The estimated construction cost for this project is approximately $2 million. Third, the Musconetcong River Directional Drill project, also known as the Bloomsbury Directional Drill project, consists of the installation of 480-linear feet of 8-inch CLDIP pipe and 250-linear feet of 10-inch HDPE pipe, to be installed using the directional drilling method. This installation will be done to replace the existing 6-inch CI pipeline under the Musconetcong River. Construction will begin in January 2024. The estimated construction cost for this project is nearly $750,000. Finally, the North Main Street Watermain Replacement consists of replacing an existing 4-inch CI pipeline with an 8-inch CLDIP on North Main Street in Phillipsburg, NJ. Construction will begin January 2024 and is expected to be complete in April 2024. The estimated construction cost for this project is approximately $430,000.

Q. What is included in the balance of the capital additions?

A. The balance of the rate base additions are in all divisions and generally relate to overall system upgrades and/or operational improvements such as for grid reinforcements,

replacements of pumping units, renewal of services, meters, hydrants and the upgrading or replacement of other equipment, as detailed on Exhibit 26. In addition, as discussed further in the Direct Testimony of Company Witness William Packer, rate base additions include tank painting expenses for all divisions, which are accounted for in the Company's capital budget and which amount to approximately $6.8 million in aggregate, through December 2023. They are all necessary projects, and I have analyzed each project's merit before including them in our plans and budget. These are all the kind of projects that need to be completed in order to maintain Aqua's system reliability to serve its customers.

Q. Do the proposed test year projects and those you have included in rate base as post-test year additions accurately reflect the plant in service that will serve Aqua customers during the time these proposed rates will be in effect?

A. Yes, they do. State and federal environmental requirements, the operational needs of the system, and the Company's obligation to manage an efficient water supply system all combine to require that certain construction projects need to be performed in a planned and consistent manner. The rate base included on the schedules in this case reflects the plant which will provide quality service to customers during the time these proposed rates will be in effect. At this time, I expect that each of the projects I have discussed will be in service on the schedule indicated above. All projects will be updated as the rate case proceeds.

Q. Please describe the capital additions that were included in the Post-Test Year Period (5/1/2024 – 10/31/2024).

A. There are five projects that will be included in Post-Test Year Period. These projects are

Bunnvale Well 4 North Road PFAS Treatment, Summit Lake Well 1 PFAS Treatment, Lifetime Well Treatment Plant, Southern Well Upgrades and Woolwich Elevated Tank. The Bunnvale Well 4 North Road PFAS Treatment project consists of constructing a raw water transmission main from the existing well to the existing Boulderfield Treatment Facility where Ion Exchange equipment has been installed and is successfully operating. A new pressure reducing and sustaining valve chamber will also be constructed within North Road. The Summit Lake Well 1 PFAS Treatment project consists of temporary treatment that will be installed prior to the installation of permanent treatment, prefabricated steel building, water storage tank, and two backwash waste tanks. The Lifetime Well Treatment Plant project consists of installation of an advanced oxidation process treatment system for the removal of 1, 4-Dioxane utilizing a hydrogen peroxide solution, ultraviolet light disinfection system, and post-quenching of residual hydrogen peroxide. Additional installation includes all necessary process piping, valves, appurtenances, electric, instrumentation and controls, connections to the existing system, construction of new building modifications and structural improvements necessary to support the structures. The project also includes demolition of existing structures and process pipe. Southern Well Upgrades, also referred to as Blackwood Well 22, consists of installing and testing a production well and construction of a building. Finally, the Woolwich Elevated Tank project consists of constructing a new elevated 0.4MG spheroidal type water storage tank and appurtenant facilities. Anticipated costs for these projects are detailed in the Direct Testimony of Company Witness Dawn Peslak.

Q. Are these projects "major in nature and consequence?"

A. Yes. They are major projects from Aqua's perspective given Aqua's size and the scope and complexity of the various projects. These post-test year projects are needed so that the Company can continue to meet its obligation to provide safe, adequate and proper utility service. Therefore, it is important that they are included for cost recovery in this proceeding.

VI. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

EXHIBIT PT-6

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

BPU DOCKET NO. WR2401____

DIRECT TESTIMONY OF JOHN J. SPANOS

With regard to Depreciation

January 19, 2024

Table of Contents

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
JOHN J. SPANOS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania, 17011.

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

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming") as President.

Q. Please describe your educational background and qualifications.

A. I have Bachelor of Science degree in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration degree from York College. I have over 37 years of depreciation experience, which includes giving expert testimony in more than 450 cases before 46 state regulatory commissions, including the New Jersey Board of Public Utilities (the "BPU" or "Board"), as well as the Federal Energy Regulatory Commission ("FERC") and Canadian regulatory bodies. These cases have included depreciation studies in the electric, gas, water, wastewater and pipeline industries. In addition to cases where I have submitted testimony, I have also supervised over 800 other depreciation or valuation assignments. Please refer to Exhibit JJS-1 for my qualifications statement, which includes further information with respect to my work history, case experience, and leadership in the Society of Depreciation Professionals.

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

A. I was asked to recommend depreciation rates for Aqua New Jersey, Inc.'s ("Aqua" or the "Company") Water Plant Accounts. My Direct Testimony will explain the methods and procedures of my depreciation analysis related to Aqua's water plant as of June 30, 2023 (the "Depreciation Study" or "Study") and sets forth the annual depreciation rates as of June 30, 2023 for water plant. I will also explain how depreciation rates as of April 30, 2024 were developed. The recommended depreciation rates for Aqua are set forth on pages i and ii of Exhibit JJS-3. My Depreciation Study will be explained in Part II of my Direct Testimony.

Q. Please summarize the principal conclusion of your Depreciation Study.

A. The principal conclusion of the Depreciation Study is that Aqua's current depreciation rates must be updated as the parameters upon which those rates are based are no longer appropriate. I have proposed updated depreciation accrual rates by plant account in the Depreciation Study. Generally, my recommended rates are based on a combination of my review of historical data and Aqua's operating practices, as well as the application of informed judgment. Exhibit JJS-4 sets forth a comparison of the proposed rates vs. current rates as of April 30, 2024.

Q. Are you sponsoring any exhibits with your Direct Testimony?

A. Yes. I am sponsoring Exhibit JJS-1, which is a statement of my qualifications; Exhibit JJS-2, which states the results of the Depreciation Study; Exhibit JJS-3, which sets forth the depreciation rates for the Test Year ending April 30, 2024; and Exhibit JJS-4, which provides a comparison of the proposed depreciation rates vs. current rates as of April 30, 2024. These exhibits were prepared by me or under my direct supervision and control.

II. METHODS USED IN THE DEPRECIATION STUDY

Q. Please define the concept of depreciation.

A. Depreciation refers to the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation, against which the Company is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and the requirements of public authorities.

Q. In preparing the Depreciation Study, did you follow generally accepted practices in the field of depreciation and valuation?

A. Yes.

Q. Please describe the contents of the Depreciation Study.

A. The Depreciation Study, Exhibit JJS-2, is presented in nine parts. Part I, Introduction, presents the scope and basis for the Depreciation Study. Part II, Estimation of Survivor Curves, includes descriptions of the methodology of estimating a survivor curve. Parts III and IV set forth the analysis for determining life and net salvage estimates. Part V, Calculation of Annual and Accrued Depreciation, includes the concepts of depreciation and amortization using the remaining life. Part VI, Results of Study, presents a description of the results of my analysis and a summary of the depreciation calculations. Table 1, on pages VI-5 and VI-6, presents the estimated survivor curve, net salvage percentage, the original cost as of June 30, 2023, the calculated annual depreciation accrual amount and rate, book depreciation reserve, future accruals and the composite remaining life for each account or subaccount. Parts VII, VIII and IX include graphs and tables that relate to the service life and net salvage analyses and the detailed depreciation

calculations by account. Specifically, the results of the retirement rate analyses prepared as the historical bases for the service life estimates are found beginning on page VII-2; the results of the analyses of historical net salvage data can be found on beginning on page VIII-2; and the depreciation calculations related to surviving original cost as of June 30, 2023 are found beginning on page IX-2.

Q. Please identify the depreciation method that you used.

A. I used the straight line remaining life method of depreciation, utilizing the average service life procedure. This is the same method Aqua used in its most recent base rate proceedings. This method of depreciation aims to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit or group of assets in a systematic and rational manner.

For General Plant Accounts 340.50, 340.55, 340.60, 342.50, 343.50, 344.50, 346.50, 347.50 and 348.50, I used the straight line remaining life method of amortization, which is consistent with current practices for Aqua. The annual amortization is based on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage. Amortization accounting for certain accounts is recommended because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented on pages V-4 and V-5 of Exhibit JJS-2.

Q. What are your recommended annual depreciation accrual rates for Aqua?

A. My recommended annual depreciation accrual rates as of April 30, 2024 for Aqua are set forth on pages i and ii of Exhibit JJS-3. These rates are developed based on the methods and procedures consistent with the calculations presented in Exhibit JJS-2.

Q. How did you determine the recommended annual depreciation accrual rates?

A. I did this in two phases. In the first phase, I estimated the service life and net salvage characteristics for each depreciable group (*i.e.,* each plant account or subaccount identified as having similar characteristics). In the second phase, I then calculated the composite remaining lives and annual depreciation accrual rates based on the service life and net salvage estimates determined in the first phase.

Q. Please describe the first phase of the Depreciation Study, in which you estimated the service life characteristics for each depreciable group.

A. The service life study consisted of compiling historic data from records related to Aqua's water plant; analyzing these data to obtain historic trends of survivor characteristics; obtaining supplementary information from management and operating personnel concerning practices and plans as they relate to plant operations; and interpreting the above data and the estimates used by other water utilities to form judgments of average service life characteristics.

Q. What historic data did you analyze for the purpose of estimating service life characteristics?

A. I analyzed the Company's accounting entries that record plant transactions during the 23-year period 2000 through 2022 for all water assets. The transactions included additions, retirements, transfers and related balances. The Company records also included surviving dollar value by year installed for each plant account as of December 31, 2022.

Q. What method did you use to analyze this service life data?

A. I used the retirement rate method for all accounts. This is the most appropriate method when aged retirement data are available, because it determines the average rates of retirement actually experienced by the Company during the period covered by the Study.

Q. Please explain how you used the retirement rate method to analyze Aqua's service life data.

A. I applied the retirement rate method to each different group of property in the Study. For each property group, I used the retirement rate method to form a life table which, when plotted, shows an original survivor curve for that property group. Each original survivor curve represents the average survivor pattern experienced by the several vintage groups during the experience band studied. The survivor patterns do not necessarily describe the life characteristics of the property group; therefore, interpretation of the original survivor curves is required in order to use them as valid considerations in estimating service life. The Iowa-type survivor curves were used to perform these interpretations.

Q. What is an "Iowa-type survivor curve" and how did you use such curves to estimate the service life characteristics for each property group?

A. Iowa-type curves are a widely used group of generalized survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. The Iowa curves were developed at the Iowa State University College of Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa-type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in the Study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements. As I will explain, the use of truncated curves is appropriate to reflect retirements of plant components that may not be fully depreciated at the time a plant is retired.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 55-R3 indicates an average service life of fifty-five years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 3, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. Have you physically observed Aqua's assets as part of your Depreciation Study?

A. Yes. I made field reviews of Aqua's property on November 20 and 21, 2023 to update my analyses on a representative portion of plant. I have previously conducted field visits as part of prior studies completed in 2011. Field reviews are conducted to become familiar with Company operations and obtain an understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements. For example, I had detailed discussions with Company personnel regarding the different forces of retirement for some of Aqua's regions. This knowledge, as well as information from other discussions with management, was incorporated into my statistical analyses.

Q. How did your experience in development of other depreciation studies affect your work in this case?

A. Because I customarily conduct field reviews for my depreciation studies, I have had the opportunity to visit scores of similar plants and meet with operations personnel at other companies. The knowledge accumulated from those visits and meetings provide me with useful information that I can draw on to confirm or challenge my numerical analyses concerning plant condition and remaining life estimates.

Q. Would you please explain the concept of "net salvage"?

A. Net salvage is a component of the service value of capital assets that is recovered through depreciation rates. The service value of an asset is its original cost less its net salvage. Net salvage is the salvage value received for the asset upon retirement less the cost to retire the asset. When the cost to retire exceeds the salvage value, the result is negative net salvage.

Inasmuch as depreciation expense is the loss in service value of an asset during a defined period, *e.g.,* one year, it must include a ratable portion of both the original cost and the net salvage. That is, the net salvage related to an asset should be incorporated in the cost of service during the same period as its original cost so that customers receiving service from the asset pay rates that include a portion of both elements of the asset's service value, the original cost and the net salvage value.

For example, the full recovery of the service value of a $5,000 pump will include not only the $5,000 of original cost, but also, on average, $300 to remove at the end of its life and $50 in salvage value. In this example, the net salvage component is negative $250 ($50 - $300), and the net salvage percent is negative 5% (($50 - $300)/$5,000).

Q. Have you included a net salvage percentage as part of the depreciation accrual rate?

A. Yes, in order to be consistent with the most common practice for determining accrual accounting. However, due to the recent practices by the Board, the net salvage percentage accrual has been replaced by a net salvage normalization amount. The net salvage normalization method is a backward looking average of experienced net salvage costs. I do not believe it is an appropriate and reasonable method for recovery of the net salvage costs.

Q. Please describe the process that you used in the Depreciation Study to calculate composite remaining lives and annual depreciation accrual rates.

A. After I estimated the service life characteristics for each depreciable property group, I calculated the annual depreciation accrual rates for each group based on the straight line remaining life method, using remaining lives weighted consistent with the average service life procedure. The annual depreciation accrual rates were developed as of June 30, 2023.

Q. Please describe the straight line remaining life method of depreciation.

A. The straight line remaining life method of depreciation allocates the original cost of the property, less accumulated depreciation, less future net salvage, in equal amounts to each year of remaining service life.

Q. Please describe the average service life procedure for calculating remaining life accrual rates.

A. The average service life procedure defines the group for which the remaining life annual accrual is determined. Under this procedure, the annual accrual rate is determined for the entire group or account based on its average remaining life and this rate is applied to the surviving balance of the group's cost. The average remaining life of the group is calculated by first dividing the future book accruals (original cost less allocated book reserve less future net salvage) by the average remaining life for each vintage. The average remaining life for each vintage is derived from the area under the survivor curve between the attained age of the vintage and the maximum age. Then, the sum of the future book accruals is divided by the sum of the annual accruals to determine the average remaining life of the entire group for use in calculating the annual depreciation accrual rate.

Q. You stated earlier that for general plant accounts you continued the use of amortization accounting to calculate proposed deprecation rates. Could you please describe amortization accounting?

A. Yes. In amortization accounting, units of property are capitalized in the same manner as they are in depreciation accounting. However, amortization accounting is more appropriate than depreciation accounting for accounts with a large number of units, but small asset values. This is true because in order to properly reflect plant in service, depreciation accounting requires periodic inventories, which is a difficult and burdensome task for these assets (*i.e.,* large number of units, but small values). Consequently, a more accurate method is to record retirements when a vintage is fully amortized rather than as the units are removed from service. As a result, there is no dispersion of retirement. All units are retired when the age of the vintage reaches the amortization period. Each plant account or group of assets is assigned a fixed period which represents an anticipated life over which the asset will render full benefit. For example, in amortization accounting, assets that have a 15-year amortization period will be fully recovered after 15 years of service and taken off the Company's books, but not necessarily removed from service. In contrast, assets that are taken out of service before 15 years remain on the books until the amortization period for that vintage has expired.

Q. Can you explain why you recommend amortization accounting?

A. Amortization accounting has been implemented by almost all utility companies across the United States and Canada over the past 25-30 years. I have presented this methodology in the depreciation study in order to smooth the annual depreciation accrual rate over time for the specific asset classes described in general plant as well as to

improve record keeping practices for a large number of assets that have a small utility plant in service value.

Q. For which plant accounts is amortization accounting being implemented?

A. Amortization accounting is only appropriate for certain General Plant accounts. These are accounts 340.50 340.55, 340.60, 342.50, 343.50, 344.50, 346.50, 347.50 and 348.50 for water plant. They represent slightly less than four percent of Aqua's water depreciable plant.

Q. Please use an example to illustrate the development of the annual depreciation accrual rate for a particular group of property in your Depreciation Study.

A. I will use Water Account 333.40, Services, as an example because it is one of the largest depreciable groups and represents approximately 17% of depreciable plant for Aqua's water plant in service.

I used the retirement rate method to analyze the survivor characteristics of this property group. I compiled aged plant accounting data from 2000 through 2022 and analyzed the data for periods that best represent the overall service life of the property. I present the life tables for the 2000-2022 and 2012-2022 experience bands on pages VII-43 through VII-45 of Exhibit JJS-2. The life table displays the retirement and surviving ratios of the aged plant data exposed to retirement by age interval. For example, page VII-43 shows $5,737 retired during age interval 0.5-1.5 with $51,307,425 exposed to retirement at the beginning of the interval. Consequently, the retirement ratio is 0.0001 ($5,737/$1,307,425) and the surviving ratio is 0.9999 (1-.0001). The percent surviving at age 0.5 of 1.0000 percent is multiplied by the survivor ratio of 99.99 to derive the percent surviving at age 1.5 of 99.99 percent. This process continues for the remaining age intervals for which plant was exposed to retirement during the period 2000-2022.

The resultant life table, or original survivor curve, is plotted along with the estimated smooth survivor curve, the 35-R2.5 on page VII-42.

The net salvage percent is presented on pages VIII-13 and VIII-14 of Exhibit JJS-2. The percentage is based on the result of annual gross salvage minus the cost to remove plant assets as compared to the original cost of plant retired during the period 2000 through 2022. The 23-year period experienced negative $2,525,580 ($0-$2,525,580) in net salvage for $10,371,300 of plant retired. The result is negative net salvage of 24% ($2,525,580/$10,371,300). Based on the statistics for this account, as well as the three-year rolling averages, most recent five-year average, and the estimates of others in the industry, the recommended net salvage for services is negative 20%.

I provide my calculation of the annual depreciation related to original cost of Account 333.40, Services, as of June 30, 2023, on pages IX-26 through IX-28 Exhibit JJS-2. The calculation is based on the 35-R2.5 survivor curve, negative 20% net salvage, the attained age, and the allocated book reserve. The tabulation sets forth the installation year, the original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual. These totals are brought forward to Table 1 on page VI-5.

Q. Can you summarize any major changes to individual or group depreciation rates in the Study, as compared to current depreciation rates?

A. There were many changes to service lives and net salvage percentages that changes depreciation rates. The most significant is the longer lives for Account 334.44, Meters and Meter Installations – Other Meters and Account 348.50, Other Tangible Plant. Both have longer lives and lower resulting depreciation rates.

Q. Please explain the contents of Exhibit JJS-3.

A. Exhibit JJS-3 sets forth the developed annual depreciation accrual rates as of April 30, 2024. The plant and reserve are brought forward from June 30, 2023 to April 30, 2024 in order to calculate depreciation rates as of April 30, 2024.

Q. How was the plant in service brought forward from June 30, 2023 to April 30, 2024?

A. The plant in service from June 30, 2023 in Exhibit JJS-2 was the starting balance. Then additions and retirements projected for the 10 months by account were added to the starting plant balance to establish the projected April 30, 2024 balance by account.

Q. How was the book reserve as of April 30, 2024 estimated?

A. The book reserve as of April 30, 2024, by account, was projected by adding estimated accruals and gross salvage and subtracting estimated retirements and cost of removal from the book reserve as of June 30, 2023 for the 10 months ended April 30, 2024. Annual accruals were calculated based on average yearly or monthly plant balances. For most accounts, gross salvage and cost of removal were estimated by: (1) expressing actual gross salvage and cost of removal as a percent of retirements, by account, for the most recent five-year period; and (2) applying those percentages to the projected retirements by account. The projected book reserve, by account, was allocated to vintages for the purpose of the annual accrual calculation based on calculated accrued depreciation as of April 30, 2024.

Q. Are the depreciation rates set forth in Exhibit JJS-3 the manner at which Aqua should recover the service value of their assets in the case?

A. Yes. The rates set forth on pages i and ii of Exhibit JJS-3 are the depreciation rates recommended for Aqua in this case.

III. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

Exhibit JJS-1

JOHN SPANOS

DEPRECIATION EXPERIENCE

Q. Please state your name.

A. My name is John J. Spanos.

Q. What is your educational background?

A. I have Bachelor of Science degrees in Industrial Management and Mathematics from Carnegie-Mellon University and a Master of Business Administration from York College.

Q. Do you belong to any professional societies?

A. Yes. I am a member and past President of the Society of Depreciation Professionals and a member of the American Gas Association/Edison Electric Institute Industry Accounting Committee.

Q. Do you hold any special certification as a depreciation expert?

A. Yes. The Society of Depreciation Professionals has established national standards for depreciation professionals. The Society administers an examination to become certified in this field. I passed the certification exam in September 1997 and was recertified in August 2003, February 2008, January 2013, February 2018 and February 2023.

Q. Please outline your experience in the field of depreciation.

A. In June 1986, I was employed by Gannett Fleming Valuation and Rate Consultants, Inc. as a Depreciation Analyst. During the period from June 1986 through December 1995, I helped prepare numerous depreciation and original cost studies for utility companies in various industries. I helped perform depreciation studies for the following telephone companies: United Telephone of Pennsylvania, United Telephone of New Jersey, and Anchorage Telephone Utility. I helped perform depreciation studies for the following companies in

the railroad industry: Union Pacific Railroad, Burlington Northern Railroad, and Wisconsin Central Transportation Corporation.

I helped perform depreciation studies for the following organizations in the electric utility industry: Chugach Electric Association, The Cincinnati Gas and Electric Company (CG&E), The Union Light, Heat and Power Company (ULH&P), Northwest Territories Power Corporation, and the City of Calgary - Electric System.

I helped perform depreciation studies for the following pipeline companies: TransCanada Pipelines Limited, Trans Mountain Pipe Line Company Ltd., Interprovincial Pipe Line Inc., Nova Gas Transmission Limited and Lakehead Pipeline Company.

I helped perform depreciation studies for the following gas utility companies: Columbia Gas of Pennsylvania, Columbia Gas of Maryland, The Peoples Natural Gas Company, T. W. Phillips Gas & Oil Company, CG&E, ULH&P, Lawrenceburg Gas Company and Penn Fuel Gas, Inc.

I helped perform depreciation studies for the following water utility companies: Indiana-American Water Company, Consumers Pennsylvania Water Company and The York Water Company; and depreciation and original cost studies for Philadelphia Suburban Water Company and Pennsylvania-American Water Company.

In each of the above studies, I assembled and analyzed historical and simulated data, performed field reviews, developed preliminary estimates of service life and net salvage, calculated annual depreciation, and prepared reports for submission to state public utility commissions or federal regulatory agencies. I performed these studies under the general direction of William M. Stout, P.E.

In January 1996, I was assigned to the position of Supervisor of Depreciation Studies. In July 1999, I was promoted to the position of Manager, Depreciation and

Valuation Studies. In December 2000, I was promoted to the position as Vice-President of Gannett Fleming Valuation and Rate Consultants, Inc., in April 2012, I was promoted to the position as Senior Vice President of the Valuation and Rate Division of Gannett Fleming Inc. (now doing business as Gannett Fleming Valuation and Rate Consultants, LLC) and in January of 2019, I was promoted to my present position of President of Gannett Fleming Valuation and Rate Consultants, LLC. In my current position I am responsible for conducting all depreciation, valuation and original cost studies, including the preparation of final exhibits and responses to data requests for submission to the appropriate regulatory bodies.

Since January 1996, I have conducted depreciation studies similar to those previously listed including assignments for Pennsylvania-American Water Company; Aqua Pennsylvania; Kentucky-American Water Company; Virginia-American Water Company; Indiana-American Water Company; Iowa-American Water Company; New Jersey-American Water Company; Hampton Water Works Company; Omaha Public Power District; Enbridge Pipe Line Company; Inc.; Columbia Gas of Virginia, Inc.; Virginia Natural Gas Company National Fuel Gas Distribution Corporation - New York and Pennsylvania Divisions; The City of Bethlehem - Bureau of Water; The City of Coatesville Authority; The City of Lancaster - Bureau of Water; Peoples Energy Corporation; The York Water Company; Public Service Company of Colorado; Enbridge Pipelines; Enbridge Gas Distribution, Inc.; Reliant Energy-HLP; Massachusetts-American Water Company; St. Louis County Water Company; Missouri-American Water Company; Chugach Electric Association; Alliant Energy; Oklahoma Gas & Electric Company; Nevada Power Company; Dominion Virginia Power; NUI-Virginia Gas Companies; Pacific Gas & Electric Company; PSI Energy; NUI - Elizabethtown Gas Company; Cinergy Corporation – CG&E; Cinergy

Corporation – ULH&P; Columbia Gas of Kentucky; South Carolina Electric & Gas Company; Idaho Power Company; El Paso Electric Company; Aqua North Carolina; Aqua Ohio; Aqua Texas, Inc.; Aqua Illinois, Inc.; Ameren Missouri; Central Hudson Gas & Electric; Centennial Pipeline Company; CenterPoint Energy-Arkansas; CenterPoint Energy – Oklahoma; CenterPoint Energy – Entex; CenterPoint Energy - Louisiana; NSTAR – Boston Edison Company; Westar Energy, Inc.; United Water Pennsylvania; PPL Electric Utilities; PPL Gas Utilities; Wisconsin Power & Light Company; TransAlaska Pipeline; Avista Corporation; Northwest Natural Gas; Allegheny Energy Supply, Inc.; Public Service Company of North Carolina; South Jersey Gas Company; Duquesne Light Company; MidAmerican Energy Company; Laclede Gas; Duke Energy Company; E.ON U.S. Services Inc.; Elkton Gas Services; Anchorage Water and Wastewater Utility; Kansas City Power and Light; Duke Energy North Carolina; Duke Energy South Carolina; Monongahela Power Company; Potomac Edison Company; Duke Energy Ohio Gas; Duke Energy Kentucky; Duke Energy Indiana; Duke Energy Progress; Northern Indiana Public Service Company; Tennessee- American Water Company; Columbia Gas of Maryland; Maryland-American Water Company; Bonneville Power Administration; NSTAR Electric and Gas Company; EPCOR Distribution, Inc.; B. C. Gas Utility, Ltd; Entergy Arkansas; Entergy Texas; Entergy Mississippi; Entergy Louisiana; Entergy Gulf States Louisiana; the Borough of Hanover; Louisville Gas and Electric Company; Kentucky Utilities Company; Madison Gas and Electric; Central Maine Power; PEPCO; PacifiCorp; Minnesota Energy Resource Group; Jersey Central Power & Light Company; Cheyenne Light, Fuel and Power Company; United Water Arkansas; Central Vermont Public Service Corporation; Green Mountain Power; Portland General Electric Company; Atlantic City Electric; Nicor Gas Company; Black Hills Power; Black Hills Colorado Gas; Black Hills Energy Arkansas, Inc.; Black Hills Kansas

Gas; Black Hills Service Company; Black Hills Utility Holdings; Public Service Company of Oklahoma; City of Dubois; Peoples Gas Light and Coke Company; North Shore Gas Company; Connecticut Light and Power; New York State Electric and Gas Corporation; Rochester Gas and Electric Corporation; Greater Missouri Operations; Tennessee Valley Authority; Omaha Public Power District; Indianapolis Power & Light Company; Vermont Gas Systems, Inc.; Metropolitan Edison; Pennsylvania Electric; West Penn Power; Pennsylvania Power; PHI Service Company - Delmarva Power and Light; Atmos Energy Corporation; Citizens Energy Group; PSE&G Company; Berkshire Gas Company; Alabama Gas Corporation; Mid-Atlantic Interstate Transmission, LLC; SUEZ Water; WEC Energy Group; Rocky Mountain Natural Gas, LLC; Illinois-American Water Company; Northern Illinois Gas Company; Public Service of New Hampshire; FirstEnergy Service Corporation; Northeast Ohio Natural Gas Corporation; Blue Granite Water Company; Spire Missouri, Inc.; Dominion Energy South Carolina, Inc.; South FirstEnergy Operating Companies; Dayton Power and Light Company; Liberty Utilities; East Kentucky Power Cooperative; Bangor Natural Gas; Hanover Borough Municipal Water Works; West Virginia American Water Company; Evergy Metro; Evergy Missouri West; Granite State Electric; Bluegrass Water; The Borough of Ambler; Newtown Artesian Water Company and Connecticut Water Company.

My additional duties include determining final life and salvage estimates, conducting field reviews, presenting recommended depreciation rates to management for its consideration and supporting such rates before regulatory bodies.

Q. Have you submitted testimony to any state utility commission on the subject of utility plant depreciation?

A. Yes. I have submitted testimony to the Pennsylvania Public Utility Commission; the

Commonwealth of Kentucky Public Service Commission; the Public Utilities Commission of Ohio; the Nevada Public Utility Commission; the Public Utilities Board of New Jersey; the Missouri Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Alberta Energy & Utility Board; the Idaho Public Utility Commission; the Louisiana Public Service Commission; the State Corporation Commission of Kansas; the Oklahoma Corporate Commission; the Public Service Commission of South Carolina; Railroad Commission of Texas – Gas Services Division; the New York Public Service Commission; Illinois Commerce Commission; the Indiana Utility Regulatory Commission; the California Public Utilities Commission; the Federal Energy Regulatory Commission ("FERC"); the Arkansas Public Service Commission; the Public Utility Commission of Texas; Maryland Public Service Commission; Washington Utilities and Transportation Commission; The Tennessee Regulatory Commission; the Regulatory Commission of Alaska; Minnesota Public Utility Commission; Utah Public Service Commission; District of Columbia Public Service Commission; the Mississippi Public Service Commission; Delaware Public Service Commission; Virginia State Corporation Commission; Colorado Public Utility Commission; Oregon Public Utility Commission; South Dakota Public Utilities Commission; Wisconsin Public Service Commission; Wyoming Public Service Commission; the Public Service Commission of West Virginia; Maine Public Utility Commission; Iowa Utility Board; Connecticut Public Utilities Regulatory Authority; New Mexico Public Regulation Commission; Commonwealth of Massachusetts Department of Public Utilities; Rhode Island Public Utilities Commission and the North Carolina Utilities Commission.

Q. Have you had any additional education relating to utility plant depreciation?

A. Yes. I have completed the following courses conducted by Depreciation Programs, Inc.:

"Techniques of Life Analysis," "Techniques of Salvage and Depreciation Analysis," "Forecasting Life and Salvage," "Modeling and Life Analysis Using Simulation," and "Managing a Depreciation Study." I have also completed the "Introduction to Public Utility Accounting" program conducted by the American Gas Association.

Q. Does this conclude your qualification statement?

A. Yes.

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY

	Year	Jurisdiction	Docket No.	Client Utility	Subject
01.	1998	PA PUC	R-00984375	City of Bethlehem – Bureau of Water	Original Cost and Depreciation
02.	1998	PA PUC	R-00984567	City of Lancaster	Original Cost and Depreciation
03.	1999	PA PUC	R-00994605	The York Water Company	Depreciation
04.	2000	D.T.&E.	DTE 00-105	Massachusetts-American Water Company	Depreciation
05.	2001	PA PUC	R-00016114	City of Lancaster	Original Cost and Depreciation
06.	2001	PA PUC	R-00017236	The York Water Company	Depreciation
07.	2001	PA PUC	R-00016339	Pennsylvania-American Water Company	Depreciation
08.	2001	OH PUC	01-1228-GA-AIR	Cinergy Corp – Cincinnati Gas & Elect Company	Depreciation
09.	2001	KY PSC	2001-092	Cinergy Corp – Union Light, Heat & Power Co.	Depreciation
10.	2002	PA PUC	R-00016750	Philadelphia Suburban Water Company	Depreciation
11.	2002	KY PSC	2002-00145	Columbia Gas of Kentucky	Depreciation
12.	2002	NJ BPU	GF02040245	NUI Corporation/Elizabethtown Gas Company	Depreciation
13.	2002	ID PUC	IPC-E-03-7	Idaho Power Company	Depreciation
14.	2003	PA PUC	R-0027975	The York Water Company	Depreciation
15.	2003	IN URC	R-0027975	Cinergy Corp – PSI Energy, Inc.	Depreciation
16.	2003	PA PUC	R-00038304	Pennsylvania-American Water Company	Depreciation
17.	2003	MO PSC	WR-2003-0500	Missouri-American Water Company	Depreciation
18.	2003	FERC	ER03-1274-000	NSTAR-Boston Edison Company	Depreciation
19.	2003	NJ BPU	BPU 03080683	South Jersey Gas Company	Depreciation
20.	2003	NV PUC	03-10001	Nevada Power Company	Depreciation
21.	2003	LA PSC	U-27676	CenterPoint Energy – Arkla	Depreciation
22.	2003	PA PUC	R-00038805	Pennsylvania Suburban Water Company	Depreciation
23.	2004	AB En/Util Bd	1306821	EPCOR Distribution, Inc.	Depreciation
24.	2004	PA PUC	R-00038168	National Fuel Gas Distribution Corp (PA)	Depreciation
25.	2004	PA PUC	R-00049255	PPL Electric Utilities	Depreciation
26.	2004	PA PUC	R-00049165	The York Water Company	Depreciation
27.	2004	OK Corp Cm	PUC 200400187	CenterPoint Energy – Arkla	Depreciation
28.	2004	OH PUC	04-680-El-AIR	Cinergy Corp. – Cincinnati Gas and Electric Company	Depreciation
29.	2004	RR Com of TX	GUD#	CenterPoint Energy – Entex Gas Services Div.	Depreciation
30.	2004	NY PUC	04-G-1047	National Fuel Gas Distribution Gas (NY)	Depreciation
31.	2004	AR PSC	04-121-U	CenterPoint Energy – Arkla	Depreciation
32.	2005	IL CC	05-ICC-06	North Shore Gas Company	Depreciation
33.	2005	IL CC	05-ICC-06	Peoples Gas Light and Coke Company	Depreciation
34.	2005	KY PSC	2005-00042	Union Light Heat & Power	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
35.	2005	IL CC	05-0308	MidAmerican Energy Company	Depreciation
36.	2005	MO PSC	GF-2005	Laclede Gas Company	Depreciation
37.	2005	KS CC	05-WSEE-981-RTS	Westar Energy	Depreciation
38.	2005	RR Com of TX	GUD #	CenterPoint Energy – Entex Gas Services Div.	Depreciation
39.	2005	US District Court	Cause No. 1:99-CV-1693-LJM/VSS	Cinergy Corporation	Accounting
40.	2005	OK CC	PUD 200500151	Oklahoma Gas and Electric Company	Depreciation
41.	2005	MA Dept Tele-com & Ergy	DTE 05-85	NSTAR	Depreciation
42.	2005	NY PUC	05-E-934/05-G-0935	Central Hudson Gas & Electric Company	Depreciation
43.	2005	AK Reg Com	U-04-102	Chugach Electric Association	Depreciation
44.	2005	CA PUC	A05-12-002	Pacific Gas & Electric	Depreciation
45.	2006	PA PUC	R-00051030	Aqua Pennsylvania, Inc.	Depreciation
46.	2006	PA PUC	R-00051178	T.W. Phillips Gas and Oil Company	Depreciation
47.	2006	NC Util Cm.	G-5, Sub522	Pub. Service Company of North Carolina	Depreciation
48.	2006	PA PUC	R-00051167	City of Lancaster	Depreciation
49.	2006	PA PUC	R00061346	Duquesne Light Company	Depreciation
50.	2006	PA PUC	R-00061322	The York Water Company	Depreciation
51.	2006	PA PUC	R-00051298	PPL GAS Utilities	Depreciation
52.	2006	PUC of TX	32093	CenterPoint Energy – Houston Electric	Depreciation
53.	2006	KY PSC	2006-00172	Duke Energy Kentucky	Depreciation
54.	2006	SC PSC		SCANA	Accounting
55.	2006	AK Reg Com	U-06-6	Municipal Light and Power	Depreciation
56.	2006	DE PSC	06-284	Delmarva Power and Light	Depreciation
57.	2006	IN URC	IURC43081	Indiana American Water Company	Depreciation
58.	2006	AK Reg Com	U-06-134	Chugach Electric Association	Depreciation
59.	2006	MO PSC	WR-2007-0216	Missouri American Water Company	Depreciation
60.	2006	FERC	IS05-82-002, et al	TransAlaska Pipeline	Depreciation
61.	2006	PA PUC	R-00061493	National Fuel Gas Distribution Corp. (PA)	Depreciation
62.	2007	NC Util Com.	E-7 SUB 828	Duke Energy Carolinas, LLC	Depreciation
63.	2007	OH PSC	08-709-EL-AIR	Duke Energy Ohio Gas	Depreciation
64.	2007	PA PUC	R-00072155	PPL Electric Utilities Corporation	Depreciation
65.	2007	KY PSC	2007-00143	Kentucky American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
66.	2007	PA PUC	R-00072229	Pennsylvania American Water Company	Depreciation
67.	2007	KY PSC	2007-0008	NiSource – Columbia Gas of Kentucky	Depreciation
68.	2007	NY PSC	07-G-0141	National Fuel Gas Distribution Corp (NY)	Depreciation
69.	2008	AK PSC	U-08-004	Anchorage Water & Wastewater Utility	Depreciation
70.	2008	TN Reg Auth	08-00039	Tennessee-American Water Company	Depreciation
71.	2008	DE PSC	08-96	Artesian Water Company	Depreciation
72.	2008	PA PUC	R-2008-2023067	The York Water Company	Depreciation
73.	2008	KS CC	08-WSEE1-RTS	Westar Energy	Depreciation
74.	2008	IN URC	43526	Northern Indiana Public Service Company	Depreciation
75.	2008	IN URC	43501	Duke Energy Indiana	Depreciation
76.	2008	MD PSC	9159	NiSource – Columbia Gas of Maryland	Depreciation
77.	2008	KY PSC	2008-000251	Kentucky Utilities	Depreciation
78.	2008	KY PSC	2008-000252	Louisville Gas & Electric	Depreciation
79.	2008	PA PUC	2008-20322689	Pennsylvania American Water Co. - Wastewater	Depreciation
80.	2008	NY PSC	08-E887/08-00888	Central Hudson	Depreciation
81.	2008	WV TC	VE-080416/VG-8080417	Avista Corporation	Depreciation
82.	2008	IL CC	ICC-09-166	Peoples Gas, Light and Coke Company	Depreciation
83.	2009	IL CC	ICC-09-167	North Shore Gas Company	Depreciation
84.	2009	DC PSC	1076	Potomac Electric Power Company	Depreciation
85.	2009	KY PSC	2009-00141	NiSource – Columbia Gas of Kentucky	Depreciation
86.	2009	FERC	ER08-1056-002	Entergy Services	Depreciation
87.	2009	PA PUC	R-2009-2097323	Pennsylvania American Water Company	Depreciation
88.	2009	NC Util Cm	E-7, Sub 090	Duke Energy Carolinas, LLC	Depreciation
89.	2009	KY PSC	2009-00202	Duke Energy Kentucky	Depreciation
90.	2009	VA St. CC	PUE-2009-00059	Aqua Virginia, Inc.	Depreciation
91.	2009	PA PUC	2009-2132019	Aqua Pennsylvania, Inc.	Depreciation
92.	2009	MS PSC	Docket No. 2011-UA-183	Entergy Mississippi	Depreciation
93.	2009	AK PSC	09-08-U	Entergy Arkansas	Depreciation
94.	2009	TX PUC	37744	Entergy Texas	Depreciation
95.	2009	TX PUC	37690	El Paso Electric Company	Depreciation
96.	2009	PA PUC	R-2009-2106908	The Borough of Hanover	Depreciation
97.	2009	KS CC	10-KCPE-415-RTS	Kansas City Power & Light	Depreciation
98.	2009	PA PUC	R-2009-	United Water Pennsylvania	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
99.	2009	OH PUC		Aqua Ohio Water Company	Depreciation
100.	2009	WI PSC	3270-DU-103	Madison Gas & Electric Company	Depreciation
101.	2009	MO PSC	WR-2010	Missouri American Water Company	Depreciation
102.	2009	AK Reg Cm	U-09-097	Chugach Electric Association	Depreciation
103.	2010	IN URC	43969	Northern Indiana Public Service Company	Depreciation
104.	2010	WI PSC	6690-DU-104	Wisconsin Public Service Corp.	Depreciation
105.	2010	PA PUC	R-2010-2161694	PPL Electric Utilities Corp.	Depreciation
106.	2010	KY PSC	2010-00036	Kentucky American Water Company	Depreciation
107.	2010	PA PUC	R-2009-2149262	Columbia Gas of Pennsylvania	Depreciation
108.	2010	MO PSC	GR-2010-0171	Laclede Gas Company	Depreciation
109.	2010	SC PSC	2009-489-E	South Carolina Electric & Gas Company	Depreciation
110.	2010	NJ BD OF PU	ER09080664	Atlantic City Electric	Depreciation
111.	2010	VA St. CC	PUE-2010-00001	Virginia American Water Company	Depreciation
112.	2010	PA PUC	R-2010-2157140	The York Water Company	Depreciation
113.	2010	MO PSC	ER-2010-0356	Greater Missouri Operations Company	Depreciation
114.	2010	MO PSC	ER-2010-0355	Kansas City Power and Light	Depreciation
115.	2010	PA PUC	R-2010-2167797	T.W. Phillips Gas and Oil Company	Depreciation
116.	2010	PSC SC	2009-489-E	SCANA – Electric	Depreciation
117.	2010	PA PUC	R-2010-22010702	Peoples Natural Gas, LLC	Depreciation
118.	2010	AK PSC	10-067-U	Oklahoma Gas and Electric Company	Depreciation
119.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Company - NIFL	Depreciation
120.	2010	IN URC	Cause No. 43894	Northern Indiana Public Serv. Co. - Kokomo	Depreciation
121.	2010	PA PUC	R-2010-2166212	Pennsylvania American Water Co. - WW	Depreciation
122.	2010	NC Util Cn.	W-218,SUB310	Aqua North Carolina, Inc.	Depreciation
123.	2011	OH PUC	11-4161-WS-AIR	Ohio American Water Company	Depreciation
124.	2011	MS PSC	EC-123-0082-00	Entergy Mississippi	Depreciation
125.	2011	CO PUC	11AL-387E	Black Hills Colorado	Depreciation
126.	2011	PA PUC	R-2010-2215623	Columbia Gas of Pennsylvania	Depreciation
127.	2011	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Depreciation
128.	2011	IN URC	43114 IGCC 4S	Duke Energy Indiana	Depreciation
129.	2011	FERC	IS11-146-000	Enbridge Pipelines (Southern Lights)	Depreciation
130.	2011	IL CC	11-0217	MidAmerican Energy Corporation	Depreciation
131.	2011	OK CC	201100087	Oklahoma Gas & Electric Company	Depreciation
132.	2011	PA PUC	2011-2232243	Pennsylvania American Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
133.	2011	FERC	RP11-___-000	Carolina Gas Transmission	Depreciation
134.	2012	WA UTC	UE-120436/UG-120437	Avista Corporation	Depreciation
135.	2012	AK Reg Cm	U-12-009	Chugach Electric Association	Depreciation
136.	2012	MA PUC	DPU 12-25	Columbia Gas of Massachusetts	Depreciation
137.	2012	TX PUC	40094	El Paso Electric Company	Depreciation
138.	2012	ID PUC	IPC-E-12	Idaho Power Company	Depreciation
139.	2012	PA PUC	R-2012-2290597	PPL Electric Utilities	Depreciation
140.	2012	PA PUC	R-2012-2311725	Borough of Hanover – Bureau of Water	Depreciation
141.	2012	KY PSC	2012-00222	Louisville Gas and Electric Company	Depreciation
142.	2012	KY PSC	2012-00221	Kentucky Utilities Company	Depreciation
143.	2012	PA PUC	R-2012-2285985	Peoples Natural Gas Company	Depreciation
144.	2012	DC PSC	Case 1087	Potomac Electric Power Company	Depreciation
145.	2012	OH PSC	12-1682-EL-AIR	Duke Energy Ohio (Electric)	Depreciation
146.	2012	OH PSC	12-1685-GA-AIR	Duke Energy Ohio (Gas)	Depreciation
147.	2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Depreciation
148.	2012	PA PUC	R-2012-2321748	Columbia Gas of Pennsylvania	Depreciation
149.	2012	FERC	ER-12-2681-000	ITC Holdings	Depreciation
150.	2012	MO PSC	ER-2012-0174	Kansas City Power and Light	Depreciation
151.	2012	MO PSC	ER-2012-0175	KCPL Greater Missouri Operations Company	Depreciation
152.	2012	MO PSC	GO-2012-0363	Laclede Gas Company	Depreciation
153.	2012	MN PUC	G007,001/D-12-533	Integrys – MN Energy Resource Group	Depreciation
154.	2012	TX PUC	SOAH 582-14-1051/ TECQ 2013-2007-UCR	Aqua Texas	Depreciation
155.	2012	PA PUC	2012-2336379	York Water Company	Depreciation
156.	2013	NJ BPU	ER12121071	PHI Service Company– Atlantic City Electric	Depreciation
157.	2013	KY PSC	2013-00167	Columbia Gas of Kentucky	Depreciation
158.	2013	VA St CC	2013-00020	Virginia Electric and Power Company	Depreciation
159.	2013	IA Util Bd	2013-0004	MidAmerican Energy Corporation	Depreciation
160.	2013	PA PUC	2013-2355276	Pennsylvania American Water Company	Depreciation
161.	2013	NY PSC	13-E-0030, 13-G-0031, 13-S-0032	Consolidated Edison of New York	Depreciation
162.	2013	PA PUC	2013-2355886	Peoples TWP LLC	Depreciation
163.	2013	TN Reg Auth	12-0504	Tennessee American Water	Depreciation
164.	2013	ME PUC	2013-168	Central Maine Power Company	Depreciation
165.	2013	DC PSC	Case 1103	PHI Service Company – PEPCO	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
166.	2013	WY PSC	2003-ER-13	Cheyenne Light, Fuel and Power Company	Depreciation
167.	2013	FERC	ER13-2428-0000	Kentucky Utilities	Depreciation
168.	2013	FERC	ER13- -0000	MidAmerican Energy Company	Depreciation
169.	2013	FERC	ER13-2410-0000	PPL Utilities	Depreciation
170.	2013	PA PUC	R-2013-2372129	Duquesne Light Company	Depreciation
171.	2013	NJ BPU	ER12111052	Jersey Central Power and Light Company	Depreciation
172.	2013	PA PUC	R-2013-2390244	Bethlehem, City of – Bureau of Water	Depreciation
173.	2013	OK CC	UM 1679	Oklahoma, Public Service Company of	Depreciation
174.	2013	IL CC	13-0500	Nicor Gas Company	Depreciation
175.	2013	WY PSC	20000-427-EA-13	PacifiCorp	Depreciation
176.	2013	UT PSC	13-035-02	PacifiCorp	Depreciation
177.	2013	OR PUC	UM 1647	PacifiCorp	Depreciation
178.	2013	PA PUC	2013-2350509	Dubois, City of	Depreciation
179.	2014	IL CC	14-0224	North Shore Gas Company	Depreciation
180.	2014	FERC	ER14- -0000	Duquesne Light Company	Depreciation
181.	2014	SD PUC	EL14-026	Black Hills Power Company	Depreciation
182.	2014	WY PSC	20002-91-ER-14	Black Hills Power Company	Depreciation
183.	2014	PA PUC	2014-2428304	Borough of Hanover – Municipal Water Works	Depreciation
184.	2014	PA PUC	2014-2406274	Columbia Gas of Pennsylvania	Depreciation
185.	2014	IL CC	14-0225	Peoples Gas Light and Coke Company	Depreciation
186.	2014	MO PSC	ER-2014-0258	Ameren Missouri	Depreciation
187.	2014	KS CC	14-BHCG-502-RTS	Black Hills Service Company	Depreciation
188.	2014	KS CC	14-BHCG-502-RTS	Black Hills Utility Holdings	Depreciation
189.	2014	KS CC	14-BHCG-502-RTS	Black Hills Kansas Gas	Depreciation
190.	2014	PA PUC	2014-2418872	Lancaster, City of – Bureau of Water	Depreciation
191.	2014	WV PSC	14-0701-E-D	First Energy – MonPower/PotomacEdison	Depreciation
192	2014	VA St CC	PUC-2014-00045	Aqua Virginia	Depreciation
193.	2014	VA St CC	PUE-2013	Virginia American Water Company	Depreciation
194.	2014	OK CC	PUD201400229	Oklahoma Gas and Electric Company	Depreciation
195.	2014	OR PUC	UM1679	Portland General Electric	Depreciation
196.	2014	IN URC	Cause No. 44576	Indianapolis Power & Light	Depreciation
197.	2014	MA DPU	DPU. 14-150	NSTAR Gas	Depreciation
198.	2014	CT PURA	14-05-06	Connecticut Light and Power	Depreciation
199.	2014	MO PSC	ER-2014-0370	Kansas City Power & Light	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
200.	2014	KY PSC	2014-00371	Kentucky Utilities Company	Depreciation
201.	2014	KY PSC	2014-00372	Louisville Gas and Electric Company	Depreciation
202.	2015	PA PUC	R-2015-2462723	United Water Pennsylvania Inc.	Depreciation
203.	2015	PA PUC	R-2015-2468056	NiSource - Columbia Gas of Pennsylvania	Depreciation
204.	2015	NY PSC	15-E-0283/15-G-0284	New York State Electric and Gas Corporation	Depreciation
205.	2015	NY PSC	15-E-0285/15-G-0286	Rochester Gas and Electric Corporation	Depreciation
206.	2015	MO PSC	WR-2015-0301/SR-2015-0302	Missouri American Water Company	Depreciation
207.	2015	OK CC	PUD 201500208	Oklahoma, Public Service Company of	Depreciation
208.	2015	WV PSC	15-0676-W-42T	West Virginia American Water Company	Depreciation
209.	2015	PA PUC	2015-2469275	PPL Electric Utilities	Depreciation
210.	2015	IN URC	Cause No. 44688	Northern Indiana Public Service Company	Depreciation
211.	2015	OH PSC	14-1929-EL-RDR	First Energy-Ohio Edison/Cleveland Electric/ Toledo Edison	Depreciation
212.	2015	NM PRC	15-00127-UT	El Paso Electric	Depreciation
213.	2015	TX PUC	PUC-44941; SOAH 473-15-5257	El Paso Electric	Depreciation
214.	2015	WI PSC	3270-DU-104	Madison Gas and Electric Company	Depreciation
215.	2015	OK CC	PUD 201500273	Oklahoma Gas and Electric	Depreciation
216.	2015	KY PSC	Doc. No. 2015-00418	Kentucky American Water Company	Depreciation
217.	2015	NC UC	Doc. No. G-5, Sub 565	Public Service Company of North Carolina	Depreciation
218.	2016	WA UTC	Docket UE-17	Puget Sound Energy	Depreciation
219.	2016	NY PSC	Case No. 16-W-0130	SUEZ Water New York, Inc.	Depreciation
220.	2016	MO PSC	ER-2016-0156	KCPL – Greater Missouri	Depreciation
221.	2016	WI PSC		Wisconsin Public Service Corporation	Depreciation
222.	2016	KY PSC	Case No. 2016-00026	Kentucky Utilities Company	Depreciation
223.	2016	KY PSC	Case No. 2016-00027	Louisville Gas and Electric Company	Depreciation
224.	2016	OH PUC	Case No. 16-0907-WW-AIR	Aqua Ohio	Depreciation
225.	2016	MD PSC	Case 9417	NiSource - Columbia Gas of Maryland	Depreciation
226.	2016	KY PSC	2016-00162	Columbia Gas of Kentucky	Depreciation
227.	2016	DE PSC	16-0649	Delmarva Power and Light Company – Electric	Depreciation
228.	2016	DE PSC	16-0650	Delmarva Power and Light Company – Gas	Depreciation
229.	2016	NY PSC	Case 16-G-0257	National Fuel Gas Distribution Corp – NY Div	Depreciation
230.	2016	PA PUC	R-2016-2537349	Metropolitan Edison Company	Depreciation
231.	2016	PA PUC	R-2016-2537352	Pennsylvania Electric Company	Depreciation
232.	2016	PA PUC	R-2016-2537355	Pennsylvania Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
233.	2016	PA PUC	R-2016-2537359	West Penn Power Company	Depreciation
234.	2016	PA PUC	R-2016-2529660	NiSource - Columbia Gas of PA	Depreciation
235.	2016	KY PSC	Case No. 2016-00063	Kentucky Utilities / Louisville Gas & Electric Co	Depreciation
236.	2016	MO PSC	ER-2016-0285	KCPL Missouri	Depreciation
237.	2016	AR PSC	16-052-U	Oklahoma Gas & Electric Co	Depreciation
238.	2016	PSCW	6680-DU-104	Wisconsin Power and Light	Depreciation
239.	2016	ID PUC	IPC-E-16-23	Idaho Power Company	Depreciation
240.	2016	OR PUC	UM1801	Idaho Power Company	Depreciation
241.	2016	ILL CC	16-	MidAmerican Energy Company	Depreciation
242.	2016	KY PSC	Case No. 2016-00370	Kentucky Utilities Company	Depreciation
243.	2016	KY PSC	Case No. 2016-00371	Louisville Gas and Electric Company	Depreciation
244.	2016	IN URC	Cause No. 45029	Indianapolis Power & Light	Depreciation
245.	2016	AL RC	U-16-081	Chugach Electric Association	Depreciation
246.	2017	MA DPU	D.P.U. 17-05	NSTAR Electric Company and Western Massachusetts Electric Company	Depreciation
247.	2017	TX PUC	PUC-26831, SOAH 973-17-2686	El Paso Electric Company	Depreciation
248.	2017	WA UTC	UE-17033 and UG-170034	Puget Sound Energy	Depreciation
249.	2017	OH PUC	Case No. 17-0032-EL-AIR	Duke Energy Ohio	Depreciation
250.	2017	VA SCC	Case No. PUE-2016-00413	Virginia Natural Gas, Inc.	Depreciation
251.	2017	OK CC	Case No. PUD201700151	Public Service Company of Oklahoma	Depreciation
252.	2017	MD PSC	Case No. 9447	Columbia Gas of Maryland	Depreciation
253.	2017	NC UC	Docket No. E-2, Sub 1142	Duke Energy Progress	Depreciation
254.	2017	VA SCC	Case No. PUR-2017-00090	Dominion Virginia Electric and Power Company	Depreciation
255.	2017	FERC	ER17-1162	MidAmerican Energy Company	Depreciation
256.	2017	PA PUC	R-2017-2595853	Pennsylvania American Water Company	Depreciation
257.	2017	OR PUC	UM1809	Portland General Electric	Depreciation
258.	2017	FERC	ER17-217-000	Jersey Central Power & Light	Depreciation
259.	2017	FERC	ER17-211-000	Mid-Atlantic Interstate Transmission, LLC	Depreciation
260.	2017	MN PUC	Docket No. G007/D-17-442	Minnesota Energy Resources Corporation	Depreciation
261.	2017	IL CC	Docket No. 17-0124	Northern Illinois Gas Company	Depreciation
262.	2017	OR PUC	UM1808	Northwest Natural Gas Company	Depreciation
263.	2017	NY PSC	Case No. 17-W-0528	SUEZ Water Owego-Nichols	Depreciation
264.	2017	MO PSC	GR-2017-0215	Laclede Gas Company	Depreciation
265.	2017	MO PSC	GR-2017-0216	Missouri Gas Energy	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
266.	2017	ILL CC	Docket No. 17-0337	Illinois-American Water Company	Depreciation
267.	2017	FERC	Docket No. ER18-22-000	PPL Electric Utilities Corporation	Depreciation
268.	2017	IN URC	Cause No. 44988	Northern Indiana Public Service Company	Depreciation
269.	2017	NJ BPU	BPU Docket No. WR17090985	New Jersey American Water Company, Inc.	Depreciation
270.	2017	RI PUC	Docket No. 4800	SUEZ Water Rhode Island	Depreciation
271.	2017	OK CC	Cause No. PUD 201700496	Oklahoma Gas and Electric Company	Depreciation
272.	2017	NJ BPU	ER18010029 & GR18010030	Public Service Electric and Gas Company	Depreciation
273.	2017	NC Util Com.	Docket No. E-7, SUB 1146	Duke Energy Carolinas, LLC	Depreciation
274.	2017	KY PSC	Case No. 2017-00321	Duke Energy Kentucky, Inc.	Depreciation
275.	2017	MA DPU	D.P.U. 18-40	Berkshire Gas Company	Depreciation
276.	2018	IN IURC	Cause No. 44992	Indiana-American Water Company, Inc.	Depreciation
277.	2018	IN IURC	Cause No. 45029	Indianapolis Power and Light	Depreciation
278.	2018	NC Util Com.	Docket No. W-218, Sub 497	Aqua North Carolina, Inc.	Depreciation
279.	2018	PA PUC	Docket No. R-2018-2647577	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
280.	2018	OR PUC	Docket UM 1933	Avista Corporation	Depreciation
281.	2018	WA UTC	Docket No. UE-108167	Avista Corporation	Depreciation
282.	2018	ID PUC	AVU-E-18-03, AVU-G-18-02	Avista Corporation	Depreciation
283.	2018	IN URC	Cause No. 45039	Citizens Energy Group	Depreciation
284.	2018	FERC	Docket No. ER18-	Duke Energy Progress	Depreciation
285.	2018	PA PUC	Docket No. R-2018-3000124	Duquesne Light Company	Depreciation
286.	2018	MD PSC	Case No. 948	NiSource - Columbia Gas of Maryland	Depreciation
287.	2018	MA DPU	D.P.U. 18-45	NiSource - Columbia Gas of Massachusetts	Depreciation
288.	2018	OH PUC	Case No. 18-0299-GA-ALT	Vectren Energy Delivery of Ohio	Depreciation
289.	2018	PA PUC	Docket No. R-2018-3000834	SUEZ Water Pennsylvania Inc.	Depreciation
290.	2018	MD PSC	Case No. 9847	Maryland-American Water Company	Depreciation
291.	2018	PA PUC	Docket No. R-2018-3000019	The York Water Company	Depreciation
292.	2018	FERC	ER-18-2231-000	Duke Energy Carolinas, LLC	Depreciation
293.	2018	KY PSC	Case No. 2018-00261	Duke Energy Kentucky, Inc.	Depreciation
294.	2018	NJ BPU	BPU Docket No. WR18050593	SUEZ Water New Jersey	Depreciation
295.	2018	WA UTC	Docket No. UE-180778	PacifiCorp	Depreciation
296.	2018	UT PSC	Docket No. 18-035-36	PacifiCorp	Depreciation
297.	2018	OR PUC	Docket No. UM-1968	PacifiCorp	Depreciation
298.	2018	ID PUC	Case No. PAC-E-18-08	PacifiCorp	Depreciation
299.	2018	WY PSC	20000-539-EA-18	PacifiCorp	Depreciation
300.	2018	PA PUC	Docket No. R-2018-3003068	Aqua Pennsylvania, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
301.	2018	IL CC	Docket No. 18-1467	Aqua Illinois, Inc.	Depreciation
302.	2018	KY PSC	Case No. 2018-00294	Louisville Gas & Electric Company	Depreciation
303.	2018	KY PSC	Case No. 2018-00295	Kentucky Utilities Company	Depreciation
304.	2018	IN URC	Cause No. 45159	Northern Indiana Public Service Company	Depreciation
305.	2018	VA SCC	Case No. PUR-2019-00175	Virginia American Water Company	Depreciation
306.	2019	PA PUC	Docket No. R-2018-3006818	Peoples Natural Gas Company, LLC	Depreciation
307.	2019	OK CC	Cause No. PUD201800140	Oklahoma Gas and Electric Company	Depreciation
308.	2019	MD PSC	Case No. 9490	FirstEnergy – Potomac Edison	Depreciation
309.	2019	SC PSC	Docket No. 2018-318-E	Duke Energy Progress	Depreciation
310.	2019	SC PSC	Docket No. 2018-319-E	Duke Energy Carolinas	Depreciation
311.	2019	DE PSC	DE 19-057	Public Service of New Hampshire	Depreciation
312.	2019	NY PSC	Case No. 19-W-0168 & 19-W-0269	SUEZ Water New York	Depreciation
313.	2019	PA PUC	Docket No. R-2019-3006904	Newtown Artesian Water Company	Depreciation
314.	2019	MO PSC	ER-2019-0335	Ameren Missouri	Depreciation
315.	2019	MO PSC	EC-2019-0200	KCP&L Greater Missouri Operations Company	Depreciation
316.	2019	MN DOC	G011/D-19-377	Minnesota Energy Resource Corp.	Depreciation
317.	2019	NY PSC	Case 19-E-0378 & 19-G-0379	New York State Electric and Gas Corporation	Depreciation
318.	2019	NY PSC	Case 19-E-0380 & 19-G-0381	Rochester Gas and Electric Corporation	Depreciation
319.	2019	WA UTC	Docket UE-190529 / UG-190530	Puget Sound Energy	Depreciation
320.	2019	PA PUC	Docket No. R-2019-3010955	City of Lancaster	Depreciation
321.	2019	IURC	Cause No. 45253	Duke Energy Indiana	Depreciation
322.	2019	KY PSC	Case No. 2019-00271	Duke Energy Kentucky, Inc.	Depreciation
323.	2019	OH PUC	Case No. 18-1720-GA-AIR	Northeast Ohio Natural Gas Corp	Depreciation
324.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Carolinas	Depreciation
325.	2019	FERC	Docket No. ER20-277-000	Jersey Central Power & Light Company	Depreciation
326.	2019	MA DPU	D.P.U. 19-120	NSTAR Gas Company	Depreciation
327.	2019	SC PSC	Docket No. 2019-290-WS	Blue Granite Water Company	Depreciation
328.	2019	NC Util.	Docket No. E-2, Sub 1219	Duke Energy Progress	Depreciation
329.	2019	MD PSC	Case No. 9609	NiSource Columbia Gas of Maryland, Inc.	Depreciation
330.	2019	HI PUC	Docket No. 2019-0117	Young Brothers, LLC	Depreciation
331.	2020	NJ BPU	Docket No. ER20020146	Jersey Central Power & Light Company	Depreciation
332.	2020	PA PUC	Docket No. R-2020-3018835	NiSource - Columbia Gas of Pennsylvania, Inc.	Depreciation
333.	2020	PA PUC	Docket No. R-2020-3019369	Pennsylvania-American Water Company	Depreciation
334.	2020	PA PUC	Docket No. R-2020-3019371	Pennsylvania-American Water Company	Depreciation
335.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation
336.	2020	NM PRC	Case No. 20-00104-UT	El Paso Electric Company	Depreciation
337.	2020	MD PSC	Case No. 9644	Columbia Gas of Maryland, Inc.	Depreciation
338.	2020	MO PSC	GO-2018-0309, GO-2018-0310	Spire Missouri, Inc.	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
339.	2020	VA St CC	Case No. PUR-2020-00095	Virginia Natural Gas Company	Depreciation
340.	2020	SC PSC	Docket No. 2020-125-E	Dominion Energy South Carolina, Inc.	Depreciation
341.	2020	WV PSC	Case No. 20-0745-G-D	Hope Gas, Inc. d/b/a Dominion Energy West	Depreciation
342.	2020	VA St CC	Case No. PUR-2020-00106	Aqua Virginia, Inc.	Depreciation
343.	2020	PA PUC	Docket No. R-2020-3020256	City of Bethlehem – Bureau of Water	Depreciation
344.	2020	NE PSC	Docket No. NG-109	Black Hills Nebraska	Depreciation
345.	2020	NY PSC	Case No. 20-E-0428 & 20-G-0429	Central Hudson Gas & Electric Corporation	Depreciation
346.	2020	FERC	ER20-598	Duke Energy Indiana	Depreciation
347.	2020	FERC	ER20-855	Northern Indiana Public Service Company	Depreciation
348.3	2020	OR PSC	UE 374	PacifiCorp	Depreciation
349.	2020	MD PSC	Case No. 9490 Phase II	Potomac Edison – Maryland	Depreciation
350.	2020	IN URC	Case No. 45447	Southern Indiana Gas and Electric Company	Depreciation
351.	2020	IN URC	IURC Cause No. 45468	Indiana Gas Company, Inc. d/b/a Vectren Energy	Depreciation
352.	2020	KY PSC	Case No. 2020-00349	Kentucky Utilities Company	Depreciation
353.	2020	KY PSC	Case No. 2020-00350	Louisville Gas and Electric Company	Depreciation
354.	2020	FERC	Docket No. ER21- 000	South FirstEnergy Operating Companies	Depreciation
355.	2020	OH PUC	Case Nos 20-1651-EL-AIR, 20-1652-EL-AAM & 20-1653-EL-ATA	Dayton Power and Light Company	Depreciation
356.	2020	OR PSC	UG 388	Northwest Natural Gas Company	Depreciation
357.	2020	MO PSC	Case No. GR-2021-0241	Ameren Missouri Gas	Depreciation
358.	2021	KY PSC	Case No. 2021-00103	East Kentucky Power Cooperative	Depreciation
359.	2021	MPUC	Docket No. 2021-00024	Bangor Natural Gas	Depreciation
360.	2021	PA PUC	Docket No. R-2021-3024296	Columbia Gas of Pennsylvania, Inc.	Depreciation
361.	2021	NC Util.	Doc. No. G-5, Sub 632	Public Service of North Carolina	Depreciation
362.	2021	MO PSC	ER-2021-0240	Ameren Missouri	Depreciation
363.	2021	PA PUC	Docket No. R-2021-3024750	Duquesne Light Company	Depreciation
364.	2021	KS PSC	21-BHCG-418-RTS	Black Hills Kansas Gas	Depreciation
365.	2021	KY PSC	Case No. 2021-00190	Duke Energy Kentucky	Depreciation
366.	2021	OR PSC	Docket UM 2152	Portland General Electric	Depreciation
367.	2021	ILL CC	Docket No. 20-0810	North Shore Gas Company	Depreciation
368.	2021	FERC	ER21-1939-000	Duke Energy Progress	Depreciation
369.	2021	FERC	ER21-1940-000	Duke Energy Carolina	Depreciation
370.	2021	KY PSC	Case No. 2021-00183	NiSource Columbia Gas of Kentucky	Depreciation
371.	2021	MD PSC	Case No. 9664	NiSource Columbia Gas of Maryland	Depreciation
372.	2021	OH PUC	Case No. 21-0596-ST-AIR	Aqua Ohio	Depreciation
373.	2021	PA PUC	Docket No. R-2021-3026116	Hanover Borough Municipal Water Works	Depreciation
374.	2021	OR PSC	UM-2180	Idaho Power Company	Depreciation
375.	2021	ID PUC	Case No. IPC-E-21-18	Idaho Power Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
376.	2021	WPSC	6690-DU-104	Wisconsin Public Service Company	Depreciation
377.	2021	PAPUC	Docket No. R-2021-3026116	Borough of Hanover	Depreciation
378.	2021	OH PUC	Case No. 21-637-GA-AIR; Case No. 21-638-GA-ALT; Case No. 21-639-GA-UNC; Case No. 21-640-GA-AAM	NiSource Columbia Gas of Ohio	Depreciation
379.	2021	TX PUC	Texas PUC Docket No. 52195; SOHA Docket No. 473-21-2606	El Paso Electric	Depreciation
380.	2021	MO PSC	Case No. GR.2021-0108	Spire Missouri	Depreciation
381.	2021	WV PSC	Case No. 21-0215-WS-P	West Virginia American Water Company	Depreciation
382.	2021	FERC	ER21-2736	Duke Energy Carolinas	Depreciation
383.	2021	FERC	ER21-2737	Duke Energy Progress	Depreciation
384.	2021	IN URC	Cause #45621	Northern Indiana Public Service Company	Depreciation
385.	2021	PA PUC	Docket No. R-2021-3026682	City of Lancaster	Depreciation
386.	2021	OH PUC	Case No. 21-887-EL-AIR; Case No. 21-888-EL-ATA; Case No. 889-El-AAM	Duke Energy Ohio	Depreciation
387.	2021	AK PSC	Docket No. 21-097-U	Black Hills Energy Arkansas, Inc.	Depreciation
388.	2021	OK CC	Cause No. PUD202100164	Oklahoma Gas & Electric	Depreciation
389.	2021	FERC	Case ER-22-392-001	El Paso Electric	Depreciation
390.	2021	FERC	Case ER-21-XXX	MidAmerican Electric	Depreciation
391.	2021	PA PUC	Docket Nos. R-2021-3027385, R-2021-3027386	Aqua Pennsylvania, Inc. Aqua Pennsylvania Wastewater, Inc.	Depreciation
392.	2022	FERC	Case ER-22-282-000	El Paso Electric	Depreciation
393.	2022	ILL CC	Docket No. 22-0154	MidAmerican Gas	Depreciation
394.	2022	MO PSC	Case No. ER-2022-0129	Evergy Metro	Depreciation
395.	2022	MO PSC	Case No. ER-2022-0130	Evergy Missouri West	Depreciation
396.	2022	PA PUC	Docket No. R-2022-3031211	NiSource Columbia Gas of Pennsylvania, Inc.	Depreciation
397.	2022	MA DPU	D.P.U. 22-20	The Berkshire Gas Company	Depreciation
398.	2022	PA PUC	R-2022-3031672; R-2022-3031673	Pennsylvania-American Water Company	Depreciation
399.	2022	SD PUC	Docket No. NG22-	MidAmerican Gas	Depreciation
400.	2022	MD PSC	Case No. 9680	NiSource Columbia Gas of Maryland	Depreciation
401.	2022	WYPSC	Docket No. 20003-214-ER-22	Black Hills Energy – Cheyenne Light, Fuel and	Depreciation
402.	2022	MA DPU	D.P.U. 22.22	NSTAR Electric Company d/b/a Eversource Energ	Depreciation
403.	2022	NC Util Com	Docket No. W-218, Sub 573	Aqua North Carolina, Inc.	Depreciation
404.	2022	OR PUC	UM2213	Northwest Natural Gas	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
405.	2022	OR PUC	UM2214	Northwest Natural Gas	Depreciation
406.	2022	ME PUC	Docket No. 2022-00152	Central Maine Power	Depreciation
407.	2022	SC PSC	Docket No. 2022-254-E	Duke Energy Progress	Depreciation
408.	2022	NC Util Com	Docket No. E-2, SUB 1300	Duke Energy Progress	Depreciation
409.	2022	IN URC	Cause #45772	Northern Indiana Public Service Company	Depreciation
410.	2022	PA PUC	R-2022-3031340	The York Water Company	Depreciation
411.	2022	PA PUC	R-2022-3032806	The York Water Company	Depreciation
412.	2022	PA PUC	R-2022-3031704	Borough of Ambler	Depreciation
413.	2022	MO PSC	ER-2022-0337	Ameren Missouri	Depreciation
414.	2022	OH PUC	Case No. 22-507-GA-AIR	Duke Energy Ohio	Depreciation
415.	2022	PA PUC	R-2022-3035730	National Fuel Gas Distribution Corporation – PA	Depreciation
416.	2022	WY PSC	20003-214-ER-22	Cheyenne Light, Fuel and Power Company	Depreciation
417.	2022	NJ BPU	BPU Docket No. ER2303144	Jersey Central Power & Light Company	Depreciation
418.	2022	KY PSC	Case No. 2022-00372	Duke Energy Kentucky	Depreciation
419.	2022	TX PUC	SOAH Docket No. 473-23-04521	Aqua Texas, Inc.	Depreciation
420.	2022	NC Util Com	Docket No. E-7, Sub 1276	Duke Energy Carolinas, LLC	Depreciation
421.	2022	KY PSC	Case No. 2022-00432	Bluegrass Water	Depreciation
422.	2023	ILL CC	Docket No. 23-0069	The Peoples Gas Light and Coke Company	Depreciation
423.	2023	ILL CC	Docket No. 23-0068	North Shore Gas Company	Depreciation
424.	2023	WV PSC	Case No. 23-0030-E-D	Monongahela Power Company and The Potomac	Depreciation
425.	2023	ID PUC	AVU-E-23-01; AVU-G-23-01	Avista Corporation	Depreciation
426.	2023	ILL CC	Docket No. 23-0066	Northern Illinois Gas Company d/b/a Nicor Gas	Depreciation
427.	2023	SC PSC	Docket No. 2023-70-G	Dominion Energy South Carolina, Inc.	Depreciation
428.	2023	FERC	Docket No. ER23-xxx-00	Duke Energy Ohio, Inc.	Depreciation
429.	2023	WY PSC	Docket No. 30036-78-GR-23	Black Hills Wyoming Gas Company d/b/a Black Hi	Depreciation
430.	2023	PSC MD	Case No. 9695	The Potomac Edison Company	Depreciation
431.	2023	OR PUC	Case No. UM2277	Avista Corporation	Depreciation
432.	2023	FERC	Docket No. ER23-xxx-000	PPL Electric Utilities	Depreciation
433.	2023	OH PUC	Case No. 23-0154-GA-AIR	Northeast Ohio Natural Gas Corporation	Depreciation
434.	2023	DE PSC	PSC Docket No. 23-0601	Artesian Water Company	Depreciation
435.	2023	CO PUC	No. 23AL-0231G	Black Hills Colorado d/b/a Black Hills Energy	Depreciation
436.	2023	NH PUC	Docket No. DE 23-039	Granite State Electric d/b/a Liberty Utilities	Depreciation
437.	2023	MD PSC	Case No. 9701	Columbia Gas of Maryland	Depreciation
438.	2023	NY PSC	Case Nos. 23-E-0418; 23-G-0419	Central Hudson Gas and Electric	Depreciation
439.	2023	FERC	Docket No. ER23-xxx-000	Central Maine Power Company	Depreciation
440.	2023	SD PUC	Docket Number EL23-016	Northwestern Energy	Depreciation
441.	2023	CT PURA	Docket No. 23-08-32	Connecticut Water Company	Depreciation

LIST OF CASES IN WHICH JOHN J. SPANOS SUBMITTED TESTIMONY, cont.

	Year	Jurisdiction	Docket No.	Client Utility	Subject
442.	2023	OH PUC	Case 23-0894-GA-AIR	The East Ohio Gas Company d/b/a Dominion	Depreciation
443.	2023	IN URC	Cause No. 45911	Indianapolis Power & Light	Depreciation
444.	2023	IN URC	Cause No. 45967	Northern Indiana Public Service Company	Depreciation
445.	2023	PA PUC	Docket No. R-2023-3043189 and Docket No. R-2023-3043190	Pennsylvania-American Water Company	Depreciation
446.	2023	IN URC	Cause No. 45988	Citizens Energy Group	Depreciation
447.	2023	NY PSC	Case No. 23-G-0627	National Fuel Gas Distribution Corporation	Depreciation
448.	2023	IN URC	Cause No. 45990	Southern Indiana Gas and Electric Company d/b/ Centerpoint Energy Indiana South	Depreciation
449.	2023	PA PUC	Docket No. R-2023-3044549	Peoples Natural Gas Company LLC	Depreciation
450.	2023	OR PUC	Docket No. UM-2312	Northwest Natural Gas Company	Depreciation
451.	2023	AZ PCC	Docket No. WS-21182A-23-2092	Northwest Natural Water Company, LLC	Depreciation
452.	2023	SC PSC	Docket No. 2023-388-E	Duke Energy Carolinas	Depreciation
453.	2023	ILL CC	Docket No. 23-	North Shore Gas Company	Depreciation
454.	2023	ILL CC	Docket No. 23-	The Peoples Gas Light and Coke Company	Depreciation

Exhibit JJS-2

AQUA SM | An Essential Utilities Company

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

Prepared by:

GANNETT FLEMING

Excellence Delivered As Promised

AQUA NEW JERSEY, INC.
Hamilton, New Jersey

2023 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION
ACCRUALS RELATED TO WATER PLANT
AS OF JUNE 30, 2023

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

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

January 18, 2024

Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691

Attention William C. Packer, Jr.

Ladies and Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the water plant of Aqua New Jersey, Inc. as of June 30, 2023. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual depreciation accrual rates, the statistical support for the service life and net salvage estimates and the detailed tabulations of annual and accrued depreciation.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

JOHN J. SPANOS
President

JJS:jmr

076287.100

TABLE OF CONTENTS

TABLE OF CONTENTS, cont.

EXECUTIVE SUMMARY

Pursuant to Aqua New Jersey, Inc. (“Aqua”) request, Gannett Fleming Valuation and Rate Consultants, LLC (“Gannett Fleming”) has conducted a depreciation study related to water plant as of June 30, 2023. The purpose of this study was to determine the annual depreciation accrual rates and amounts for book and ratemaking purposes.

The depreciation rates are based on the straight line method using the average service life (“ASL”) procedure and were applied on a remaining life basis. The calculations were based on attained ages and estimated average service life and forecasted net salvage characteristics for each depreciable group of assets.

Aqua’s accounting policy has not changed since the previous depreciation study was prepared. However, some average service life estimates and net salvage percentages proposed in this study have changed from the currently approved estimates. The overall depreciation accrual rate has decreased since the last study was performed.

Gannett Fleming recommends the calculated annual depreciation accrual rates proposed herein apply specifically to Aqua’s water plant in service as of June 30, 2023 as summarized in Table 1 of the study. The study sets forth a total annual depreciation expense of $10.7 million as applied to the depreciable original cost of $411 million as of June 30, 2023.

SUMMARY OF ORIGINAL COST, ACCRUAL RATES AND AMOUNTS

FUNCTION	ORIGINAL COST AS OF JUNE 30, 2023	PROPOSED RATE	PROPOSED EXPENSE
Supply and Pumping Plant	$ 70,752,227.52	2.25	$ 1,593,190
Distribution Plant	322,241,618.46	2.59	8,353,610
General Plant	17,993,723.36	3.93	706,587
Total Depreciable Plant	**$410,987,569.34**	**2.59**	**$10,653,387**
Contributions in Aid of Construction	62,688,613.76	1.42	890,560
Total Depreciable Contributions in Aid of Construction	**$62,688,613.76**	**1.42**	**$890,560**
Total Depreciable Utility Plant	**$348,298,955.58**		**$9,762,827**

PART I. INTRODUCTION

AQUA NEW JERSEY, INC.
DEPRECIATION STUDY

PART I. INTRODUCTION

SCOPE

This report presents the results of the depreciation study prepared for Aqua New Jersey, Inc. as applied to water plant in service as of June 30, 2023. It relates to the concepts, methods, and basic judgments which underlie recommended annual depreciation accrual rates related to current utility plant in service.

The service life and net salvage estimates resulting from the study were based on informed judgment which incorporated analyses of historical plant retirement data as recorded through 2022; a review of Company practice and outlook as they relate to plant operation and retirement; and consideration of current practice in the water industry, including knowledge of service life estimates used for other water properties.

PLAN OF REPORT

Part I, Introduction, contains statements with respect to the plan of the report, and the basis of the study. Part II, Estimation of Survivor Curves, presents descriptions of the considerations and the methods used in the service life studies. Part III, Service Life Considerations, presents the factors and judgment utilized in the average service life analysis. Part IV, Net Salvage Considerations, presents the judgment utilized of the net salvage study. Part V, Calculation of Annual and Accrued Depreciation, describes the procedures used in the calculation of group depreciation. Part VI, Results of Study, presents summaries by depreciable group of annual depreciation accrual rates and amounts, as well as composite remaining lives. Part VII, Service Life Statistics presents the statistical analysis of service life estimates. Part VIII, Net Salvage Statistics sets forth

the statistical indications of net salvage precents, and Part IX, Detailed Depreciation Calculations presents the detailed tabulations of annual depreciation.

BASIS OF THE STUDY

Depreciation

Depreciation, in public utility regulation, is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among causes to be given consideration are wear and tear, deterioration, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirements of public authorities.

Depreciation, as used in accounting, is a method of distributing fixed capital costs, less net salvage, over a period of time by allocating annual amounts to expense. Each annual amount of such depreciation expense is part of that year's total cost of providing water utility service. Normally, the period of time over which the fixed capital cost is allocated to the cost of service is equal to the period of time over which an item renders service, that is, the item's service life. The most prevalent method of allocation is to distribute an equal amount of cost to each year of service life. This method is known as the straight line method of depreciation.

For most accounts, the annual depreciation was calculated by the straight line method using the average service life procedure and the remaining life basis. For certain General Plant accounts, the annual depreciation is based on amortization accounting. Both types of calculations were based on original cost, attained ages, and estimates of service lives.

The straight line method, average service life procedure is a commonly used depreciation calculation procedure that has been widely accepted in jurisdictions throughout North America. Gannett Fleming recommends its continued use. Amortization accounting is used for certain General Plant accounts because of the disproportionate plant accounting effort required when compared to the minimal original cost of the large number of items in these accounts. An explanation of the calculation of annual and accrued amortization is presented beginning on page V-4 of the report.

Service Life Estimates and Net Salvage Estimates

The service life and net salvage estimates used in the depreciation and amortization calculations were based on informed judgment which incorporated a review of management's plans, policies and outlook, a general knowledge of the water utility industry, and comparisons of the service life and net salvage estimates from our studies of other water utilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for water plant. Iowa type survivor curves were used to depict the estimated survivor curves for the plant accounts not subject to amortization accounting.

The procedure for estimating service lives consisted of compiling historical data for the plant accounts or depreciable groups, analyzing this history through the use of widely accepted techniques, and forecasting the survivor characteristics for each depreciable group on the basis of interpretations of the historical data analyses and the probable future. The combination of the historical experience and the estimated future yielded estimated survivor curves from which the average service lives were derived.

The estimates of net salvage by account incorporated a review of experienced costs of removal and gross salvage related to plant retirements, and consideration of trends exhibited by the historical data.

An understanding of the function of the plant and information with respect to the reasons for past retirements and the expected causes of future retirements was obtained through field trips and discussions with operating and management personnel. The supplemental information obtained in this manner was considered in the interpretation and extrapolation of the statistical analyses.

PART II. ESTIMATION OF SURVIVOR CURVES

PART II. ESTIMATION OF SURVIVOR CURVES

The calculation of annual depreciation based on the straight line method requires the estimation of survivor curves and the selection of group depreciation procedures. The estimation of survivor curves is discussed below and the development of net salvage is discussed in later sections of this report.

SURVIVOR CURVES

The use of an average service life for a property group implies that the various units in the group have different lives. Thus, the average life may be obtained by determining the separate lives of each of the units or by constructing a survivor curve by plotting the number of units which survive at successive ages.

The survivor curve graphically depicts the amount of property existing at each age throughout the life of an original group. From the survivor curve, the average life of the group, the remaining life expectancy, the probable life, and the frequency curve can be calculated. In Figure 1, a typical smooth survivor curve and the derived curves are illustrated. The average life is obtained by calculating the area under the survivor curve, from age zero to the maximum age, and dividing this area by the ordinate at age zero. The remaining life expectancy at any age can be calculated by obtaining the area under the curve, from the observation age to the maximum age, and dividing this area by the percent surviving at the observation age. For example, in Figure 1, the remaining life at age 30 is equal to the crosshatched area under the survivor curve divided by 29.5 percent surviving at age 30. The probable life at any age is developed by adding the age and remaining life. If the probable life of the property is calculated for each year of age, the probable life curve shown in the chart can be developed. The frequency curve presents the number of units retired in each age interval. It is derived by obtaining the differences between the amount of property surviving at the beginning and at the end of each interval.

This study has incorporated the use of Iowa curves developed from a retirement rate analysis of historical retirement history. A discussion of the concepts of survivor curves and of the development of survivor curves using the retirement rate method is presented below.

Iowa Type Curves

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized survivor curves known as the Iowa type curves. There are four families in the Iowa system, labeled in accordance with the location of the modes of the retirements (or the portion of the frequency curve with the highest level of retirements) in relationship to the average life and the relative height of the modes. The left moded curves, presented in Figure 2, are those in which the greatest frequency of retirement occurs to the left of, or prior to, average service life. The symmetrical moded curves, presented in Figure 3, are those in which the greatest frequency of retirement occurs at average service life. The right moded curves, presented in Figure 4, are those in which the greatest frequency occurs to the right of, or after, average service life. The origin moded curves, presented in Figure 5, are those in which the greatest frequency of retirement occurs at the origin, or immediately after age zero. The letter designation of each family of curves (L, S, R or O) represents the location of the mode of the associated frequency curve with respect to the average service life. The numbers represent the relative heights of the modes of the frequency curves within each family. A higher number designates a higher mode curve.

The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observation and classification of the ages at which industrial property had been retired. A report of the study which resulted in the classification of property survivor characteristics into 18 type curves, which constitute three of the four families, was published in 1935 in the form of the Experiment Station's Bulletin 125.

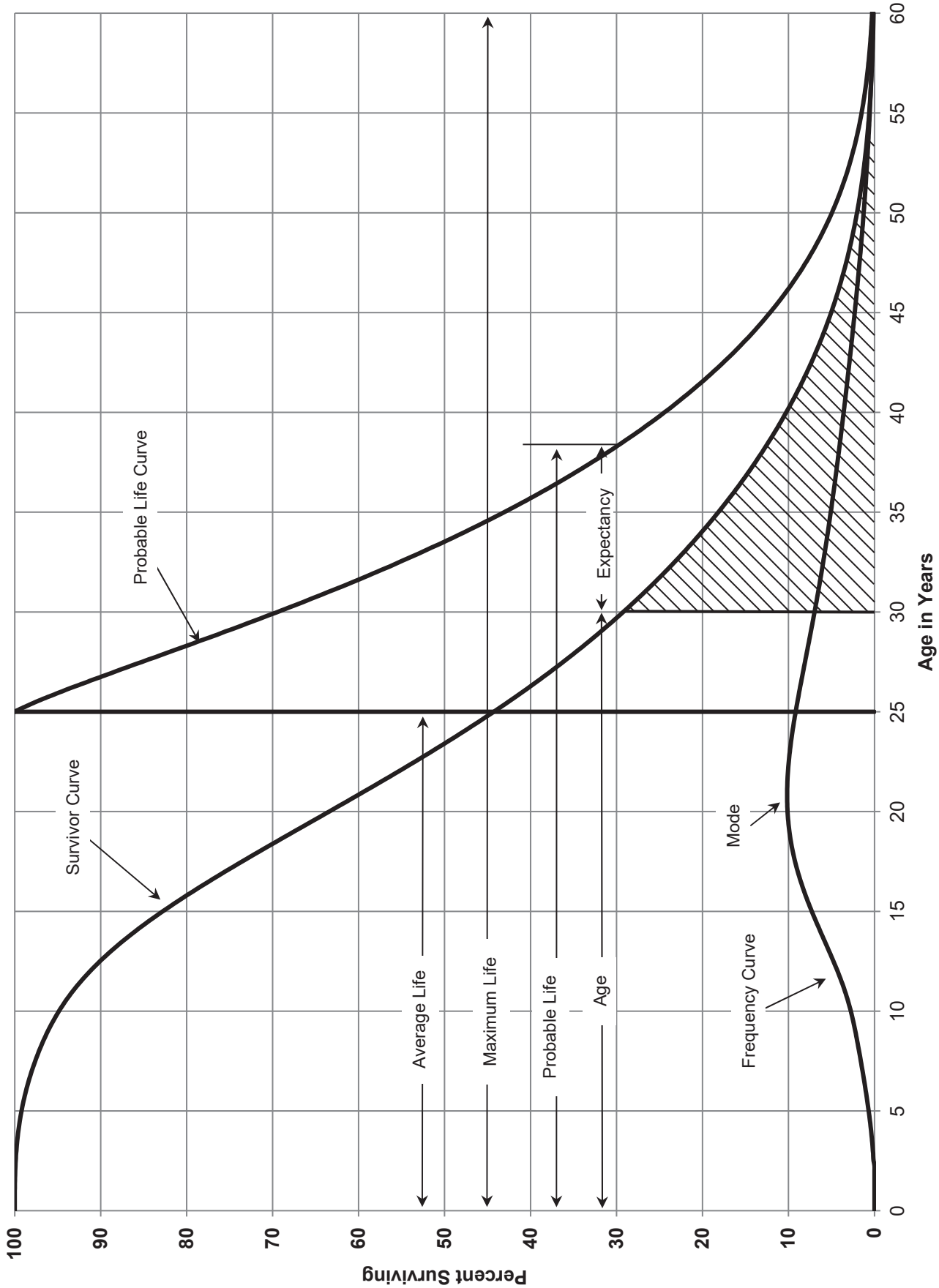


FIGURE 1. TYPICAL SURVIVOR CURVE AND DERIVED CURVES

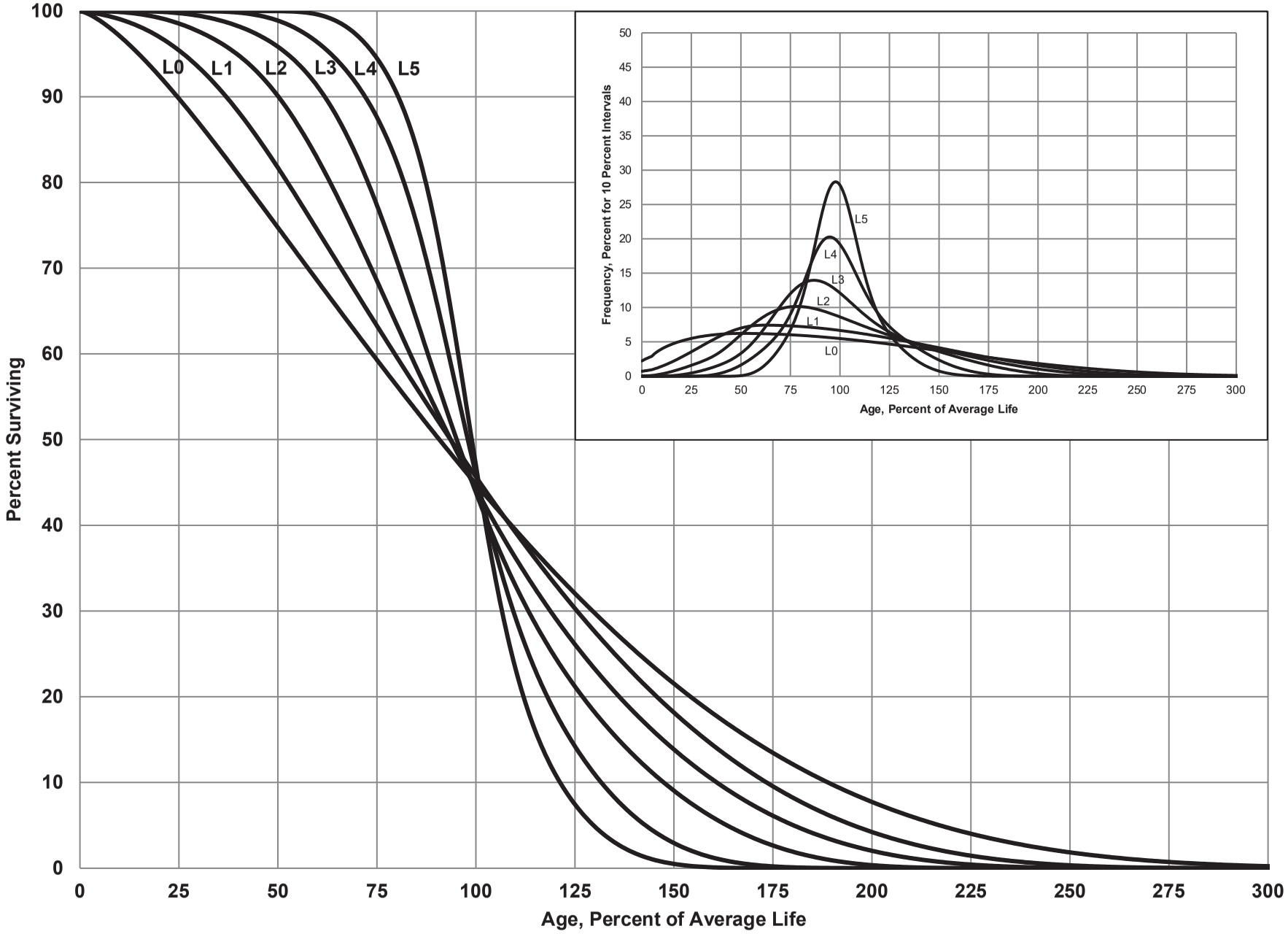


FIGURE 2. LEFT MODAL OR "L" IOWA TYPE SURVIVOR CURVES

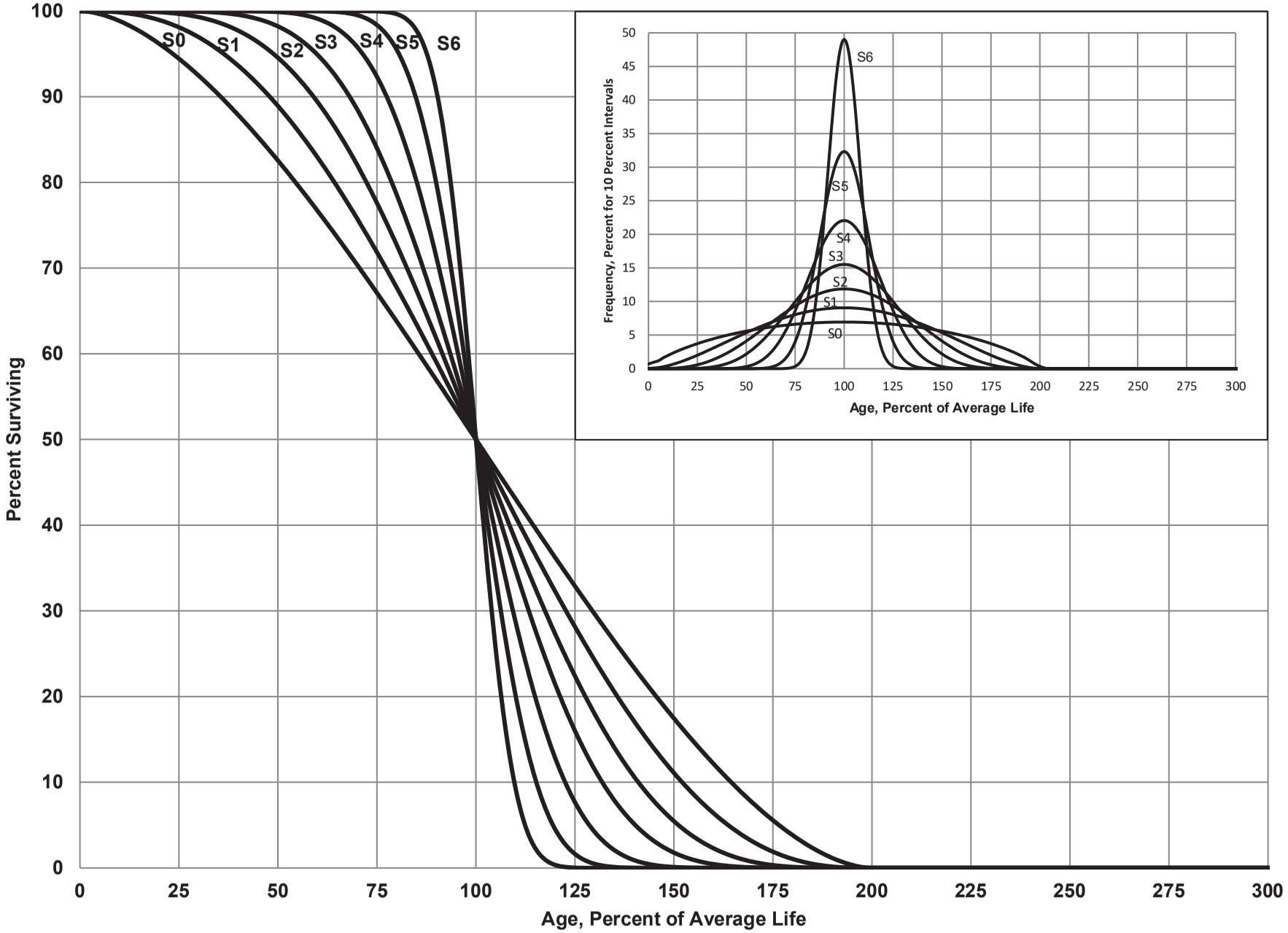


FIGURE 3. SYMMETRICAL OR "S" IOWA TYPE SURVIVOR CURVES

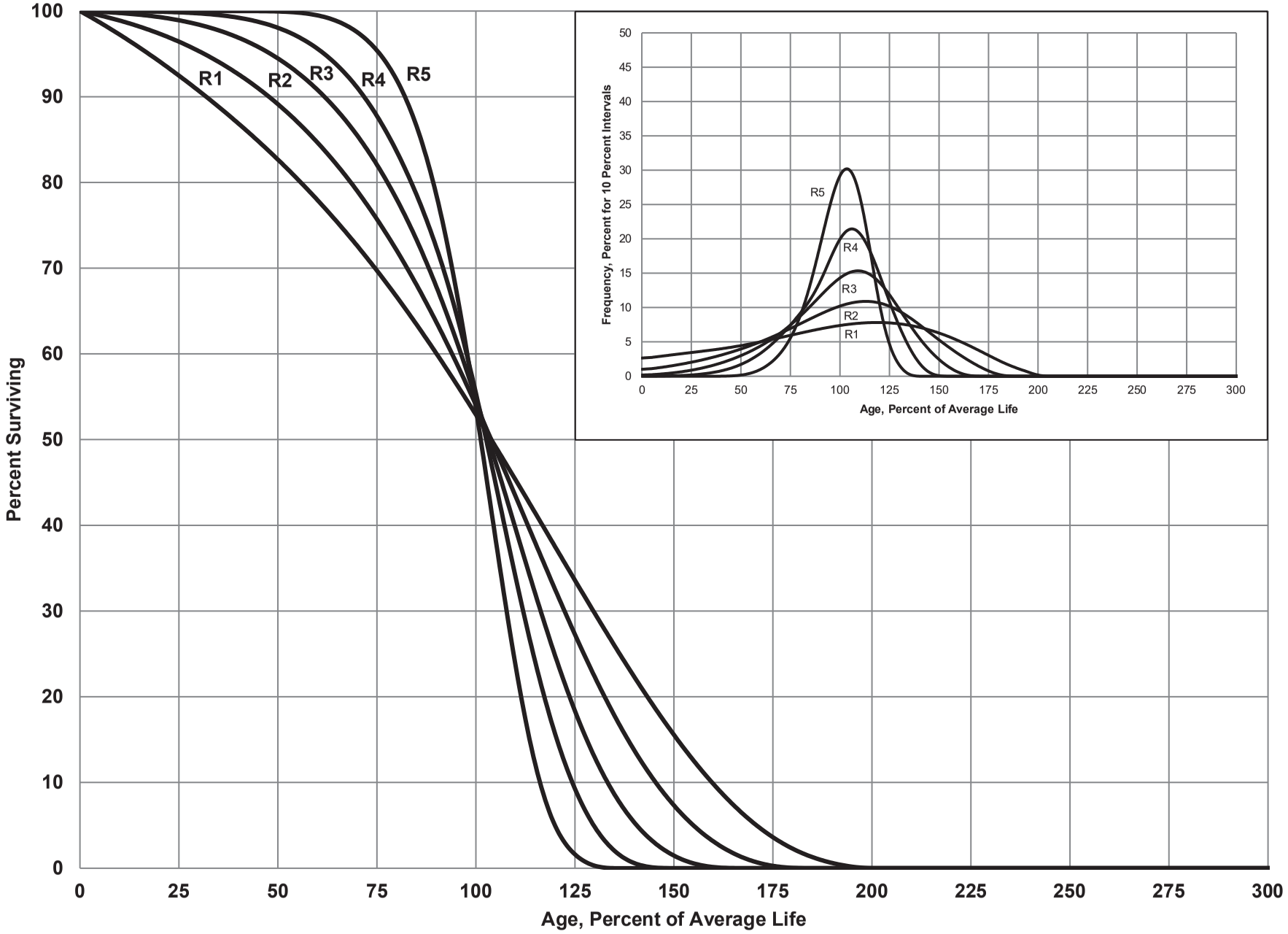


FIGURE 4. RIGHT MODAL OR "R" IOWA TYPE SURVIVOR CURVES

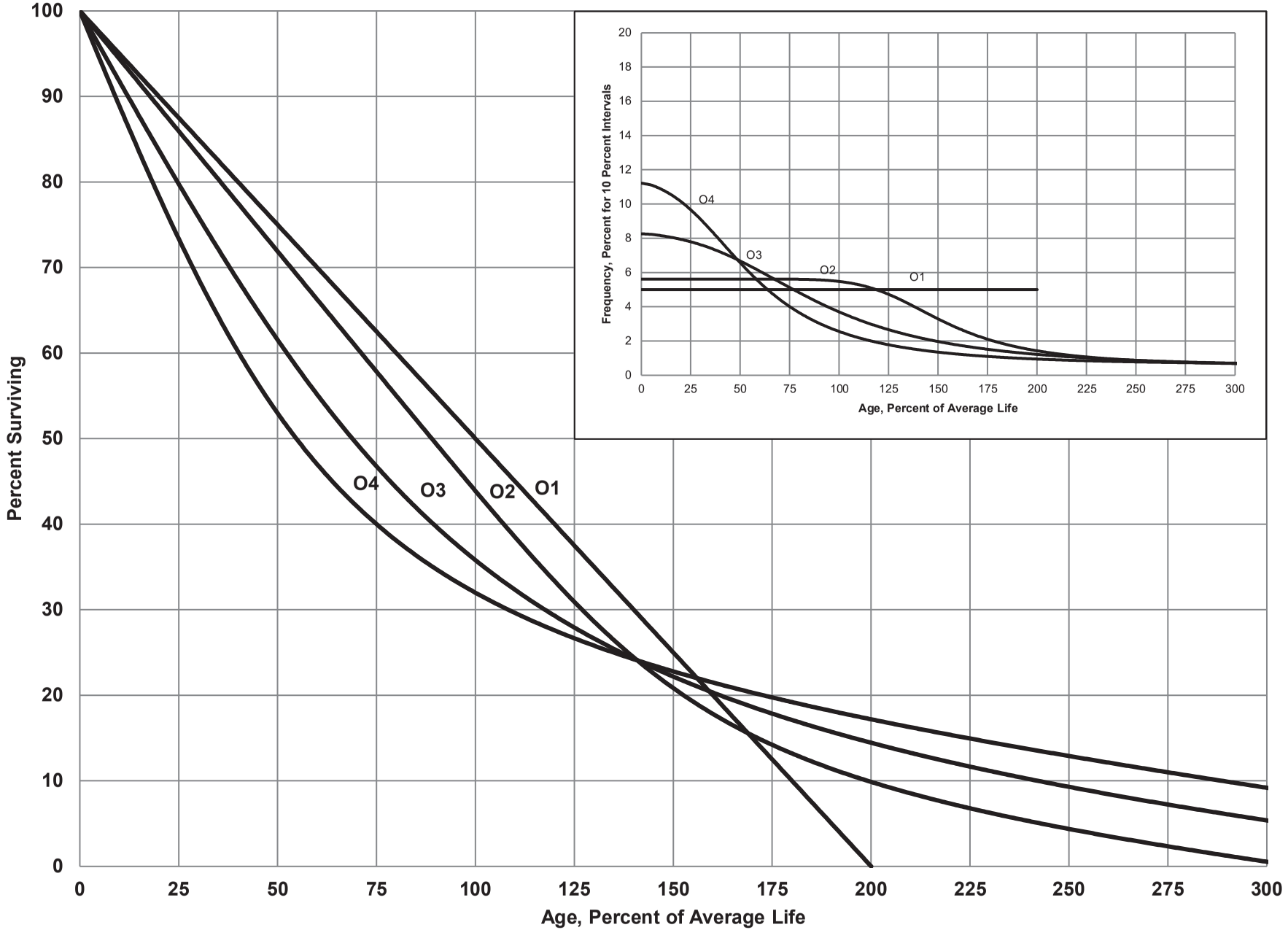


FIGURE 5. ORIGIN MODAL OR "O" IOWA TYPE SURVIVOR CURVES

These curve types have also been presented in subsequent Experiment Station bulletins and in the text, "Engineering Valuation and Depreciation."[1] In 1957, Frank V. B. Couch, Jr., an Iowa State College graduate student, submitted a thesis presenting his development of the fourth family consisting of the four O type survivor curves.

Retirement Rate Method of Analysis

The retirement rate method is an actuarial method of deriving survivor curves using the average rates at which property of each age group is retired. The method relates to property groups for which aged accounting experience is available and is the method used to develop the original stub survivor curves in this study. The method (also known as the annual rate method) is illustrated through the use of an example in the following text and is also explained in several publications including "Statistical Analyses of Industrial Property Retirements,"[2] "Engineering Valuation and Depreciation,"[3] and "Depreciation Systems."[4]

The average rate of retirement used in the calculation of the percent surviving for the survivor curve (life table) requires two sets of data: first, the property retired during a period of observation, identified by the property's age at retirement; and second, the property exposed to retirement at the beginning of the age intervals during the same period. The period of observation is referred to as the experience band. The band of years which represent the installation dates of the property exposed to retirement during the experience band is referred to as the placement band. An example of the calculations used in the development of a life table follows. The example includes schedules of annual aged property transactions, a schedule of plant exposed to retirement, a life table and illustrations of smoothing the stub survivor curve.

---

[1]Marston, Anson, Robley Winfrey and Jean C. Hempstead. Engineering Valuation and Depreciation, 2nd Edition. New York, McGraw-Hill Book Company. 1953.

[2]Winfrey, Robley, Statistical Analyses of Industrial Property Retirements. Iowa State College, Engineering Experiment Station, Bulletin 125. 1935.

[3]Marston, Anson, Robley Winfrey, and Jean C. Hempstead, Supra Note 1.

[4]Wolf, Frank K. and W. Chester Fitch. Depreciation Systems. Iowa State University Press. 1994.

Schedules of Annual Transactions in Plant Records

The property group used to illustrate the retirement rate method is observed for the experience band 2013-2022 for which there were placements during the years 2008-2022. In order to illustrate the summation of the aged data by age interval, the data were compiled in the manner presented in Schedules 1 and 2 on pages II-11 and II-12. In Schedule 1, the year of installation (year placed) and the year of retirement are shown. The age interval during which a retirement occurred is determined from this information. In the example which follows, $10,000 of the dollars invested in 2008 were retired in 2013. The $10,000 retirement occurred during the age interval between 4½ and 5½ years on the basis that approximately one-half of the amount of property was installed prior to and subsequent to July 1 of each year. That is, on the average, property installed during a year is placed in service at the midpoint of the year for the purpose of the analysis. All retirements also are stated as occurring at the midpoint of a one-year age interval of time, except the first age interval which encompasses only one-half year.

The total retirements occurring in each age interval in a band are determined by summing the amounts for each transaction year-installation year combination for that age interval. For example, the total of $143,000 retired for age interval 4½-5½ is the sum of the retirements entered on Schedule 1 immediately above the stair step line drawn on the table beginning with the 2013 retirements of 2008 installations and ending with the 2022 retirements of the 2017 installations. Thus, the total amount of 143 for age interval 4½-5½ equals the sum of:

10 + 12 + 13 + 11 + 13 + 13 + 15 + 17 + 19 + 20.

SCHEDULE 1. RETIREMENTS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022

Placement Band 2008-2022

Year Placed	Retirements, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	10	11	12	13	14	16	23	24	25	26	26	13½-14½
2009	11	12	13	15	16	18	20	21	22	19	44	12½-13½
2010	11	12	13	14	16	17	19	21	22	18	64	11½-12½
2011	8	9	10	11	11	13	14	15	16	17	83	10½-11½
2012	9	10	11	12	13	14	16	17	19	20	93	9½-10½
2013	4	9	10	11	12	13	14	15	16	20	105	8½-9½
2014		5	11	12	13	14	15	16	18	20	113	7½-8½
2015			6	12	13	15	16	17	19	19	124	6½-7½
2016				6	13	15	16	17	19	19	131	5½-6½
2017					7	14	16	17	19	20	143	4½-5½
2018						8	18	20	22	23	146	3½-4½
2019							9	20	22	25	150	2½-3½
2020								11	23	25	151	1½-2½
2021									11	24	153	½-1½
2022										13	80	0-½
Total	53	68	86	106	128	157	196	231	273	308	1,606	

SCHEDULE 2. OTHER TRANSACTIONS FOR EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022 Placement Band 2008-2022

Year Placed	Acquisitions, Transfers and Sales, Thousands of Dollars During Year										Total During Age Interval	Age Interval
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	-	-	-	-	-	-	60[a]	-	-	-	-	13½-14½
2009	-	-	-	-	-	-	-	-	-	-	-	12½-13½
2010	-	-	-	-	-	-	-	-	-	-	-	11½-12½
2011	-	-	-	-	-	-	-	(5)[b]	-	-	60	10½-11½
2012	-	-	-	-	-	-	-	6[a]	-	-	-	9½-10½
2013	-	-	-	-	-	-	-	-	-	-	(5)	8½-9½
2014		-	-	-	-	-	-	-	-	-	6	7½-8½
2015			-	-	-	-	-	-	-	-	-	6½-7½
2016				-	-	-	-	(12)[b]	-	-	-	5½-6½
2017					-	-	-	-	22[a]	-	-	4½-5½
2018						-	-	(19)[b]	-	-	10	3½-4½
2019							-	-	-	-	-	2½-3½
2020								-	-	(102)[c]	(121)	1½-2½
2021									-	-	-	½-1½
2022											-	0-½
Total	-	-	-	-	-	-	60	(30)	22	(102)	(50)	

[a] Transfer Affecting Exposures at Beginning of Year

[b] Transfer Affecting Exposures at End of Year

[c] Sale with Continued Use

Parentheses Denote Credit Amount.

In Schedule 2, other transactions which affect the group are recorded in a similar manner. The entries illustrated include transfers and sales. The entries which are credits to the plant account are shown in parentheses. The items recorded on this schedule are not totaled with the retirements, but are used in developing the exposures at the beginning of each age interval.

Schedule of Plant Exposed to Retirement

The development of the amount of plant exposed to retirement at the beginning of each age interval is illustrated in Schedule 3 on page II-14. The surviving plant at the beginning of each year from 2013 through 2022 is recorded by year in the portion of the table headed "Annual Survivors at the Beginning of the Year." The last amount entered in each column is the amount of new plant added to the group during the year. The amounts entered in Schedule 3 for each successive year following the beginning balance or addition are obtained by adding or subtracting the net entries shown on Schedules 1 and 2. For the purpose of determining the plant exposed to retirement, transfers-in are considered as being exposed to retirement in this group at the beginning of the year in which they occurred, and the sales and transfers-out are considered to be removed from the plant exposed to retirement at the beginning of the following year. Thus, the amounts of plant shown at the beginning of each year are the amounts of plant from each placement year considered to be exposed to retirement at the beginning of each successive transaction year. For example, the exposures for the installation year 2018 are calculated in the following manner:

Exposures at age 0	= amount of addition	= $750,000
Exposures at age ½	= $750,000 - $ 8,000	= $742,000
Exposures at age 1½	= $742,000 - $18,000	= $724,000
Exposures at age 2½	= $724,000 - $20,000 - $19,000	= $685,000
Exposures at age 3½	= $685,000 - $22,000	= $663,000

SCHEDULE 3. PLANT EXPOSED TO RETIREMENT
JANUARY 1 OF EACH YEAR 2013-2022
SUMMARIZED BY AGE INTERVAL

Experience Band 2013-2022

Placement Band 2008-2022

Year Placed	Exposures, Thousands of Dollars Annual Survivors at the Beginning of the Year 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total at Beginning of Age Interval	Age Interval
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
2008	255	245	234	222	209	195	239	216	192	167	167	13½-14½
2009	279	268	256	243	228	212	194	174	153	131	323	12½-13½
2010	307	296	284	271	257	241	224	205	184	162	531	11½-12½
2011	338	330	321	311	300	289	276	262	242	226	823	10½-11½
2012	376	367	357	346	334	321	307	297	280	261	1,097	9½-10½
2013	420[a]	416	407	397	386	374	361	347	332	316	1,503	8½-9½
2014		460[a]	455	444	432	419	405	390	374	356	1,952	7½-8½
2015			510[a]	504	492	479	464	448	431	412	2,463	6½-7½
2016				580[a]	574	561	546	530	501	482	3,057	5½-6½
2017					660[a]	653	639	623	628	609	3,789	4½-5½
2018						750[a]	742	724	685	663	4,332	3½-4½
2019							850[a]	841	821	799	4,955	2½-3½
2020								960[a]	949	926	5,719	1½-2½
2021									1,080[a]	1,069	6,579	½-1½
2022										1,220[a]	7,490	0-½
Total	1,975	2,382	2,824	3,318	3,872	4,494	5,247	6,017	6,852	7,799	44,780	

[a]Additions during the year

For the entire experience band 2013-2022, the total exposures at the beginning of an age interval are obtained by summing diagonally in a manner similar to the summing of the retirements during an age interval (Schedule 1). For example, the figure of 3,789, shown as the total exposures at the beginning of age interval 4½-5½, is obtained by summing:

255 + 268 + 284 + 311 + 334 + 374 + 405 + 448 + 501 + 609.

Original Life Table

The original life table, illustrated in Schedule 4 on page II-16, is developed from the totals shown on the schedules of retirements and exposures, Schedules 1 and 3, respectively. The exposures at the beginning of the age interval are obtained from the corresponding age interval of the exposure schedule, and the retirements during the age interval are obtained from the corresponding age interval of the retirement schedule. The retirement ratio is the result of dividing the retirements during the age interval by the exposures at the beginning of the age interval. The percent surviving at the beginning of each age interval is derived from survivor ratios, each of which equals one minus the retirement ratio. The percent surviving is developed by starting with 100% at age zero and successively multiplying the percent surviving at the beginning of each interval by the survivor ratio, i.e., one minus the retirement ratio for that age interval. The calculations necessary to determine the percent surviving at age 5½ are as follows:

Percent surviving at age 4½	=	88.15				
Exposures at age 4½	=	3,789,000				
Retirements from age 4½ to 5½	=	143,000				
Retirement Ratio	=	143,000	÷	3,789,000	=	0.0377
Survivor Ratio	=	1.000	-	0.0377	=	0.9623
Percent surviving at age 5½	=	(88.15)	x	(0.9623)	=	84.83

The totals of the exposures and retirements (columns 2 and 3) are shown for the purpose of checking with the respective totals in Schedules 1 and 3. The ratio of the total retirements to the total exposures, other than for each age interval, is meaningless.

SCHEDULE 4. ORIGINAL LIFE TABLE
CALCULATED BY THE RETIREMENT RATE METHOD

Experience Band 2013-2022 Placement Band 2008-2022

(Exposure and Retirement Amounts are in Thousands of Dollars)

Age at Beginning of Interval	Exposures at Beginning of Age Interval	Retirements During Age Interval	Retirement Ratio	Survivor Ratio	Percent Surviving at Beginning of Age Interval
(1)	(2)	(3)	(4)	(5)	(6)
0.0	7,490	80	0.0107	0.9893	100.00
0.5	6,579	153	0.0233	0.9767	98.93
1.5	5,719	151	0.0264	0.9736	96.62
2.5	4,955	150	0.0303	0.9697	94.07
3.5	4,332	146	0.0337	0.9663	91.22
4.5	3,789	143	0.0377	0.9623	88.15
5.5	3,057	131	0.0429	0.9571	84.83
6.5	2,463	124	0.0503	0.9497	81.19
7.5	1,952	113	0.0579	0.9421	77.11
8.5	1,503	105	0.0699	0.9301	72.65
9.5	1,097	93	0.0848	0.9152	67.57
10.5	823	83	0.1009	0.8991	61.84
11.5	531	64	0.1205	0.8795	55.60
12.5	323	44	0.1362	0.8638	48.90
13.5	167	26	0.1557	0.8443	42.24
					35.66
Total	44,780	1,606			

Column 2 from Schedule 3, Column 12, Plant Exposed to Retirement.
Column 3 from Schedule 1, Column 12, Retirements for Each Year.
Column 4 = Column 3 Divided by Column 2.
Column 5 = 1.0000 Minus Column 4.
Column 6 = Column 5 Multiplied by Column 6 as of the Preceding Age Interval.

The original survivor curve is plotted from the original life table (column 6, Schedule 4). When the curve terminates at a percent surviving greater than zero, it is called a stub survivor curve. Survivor curves developed from retirement rate studies generally are stub curves.

Smoothing the Original Survivor Curve

The smoothing of the original survivor curve eliminates any irregularities and serves as the basis for the preliminary extrapolation to zero percent surviving of the original stub curve. Even if the original survivor curve is complete from 100% to zero percent, it is desirable to eliminate any irregularities, as there is still an extrapolation for the vintages which have not yet lived to the age at which the curve reaches zero percent. In this study, the smoothing of the original curve with established type curves was used to eliminate irregularities in the original curve.

The Iowa type curves are used in this study to smooth those original stub curves which are expressed as percents surviving at ages in years. Each original survivor curve was compared to the Iowa curves using visual and mathematical matching in order to determine the better fitting smooth curves. In Figures 6, 7, and 8, the original curve developed in Schedule 4 is compared with the L, S, and R Iowa type curves which most nearly fit the original survivor curve. In Figure 6, the L1 curve with an average life between 12 and 13 years appears to be the best fit. In Figure 7, the S0 type curve with a 12-year average life appears to be the best fit and appears to be better than the L1 fitting. In Figure 8, the R1 type curve with a 12-year average life appears to be the best fit and appears to be better than either the L1 or the S0.

In Figure 9, the three fittings, 12-L1, 12-S0 and 12-R1 are drawn for comparison purposes. It is probable that the 12-R1 Iowa curve would be selected as the most representative of the plotted survivor characteristics of the group.

FIGURE 6. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

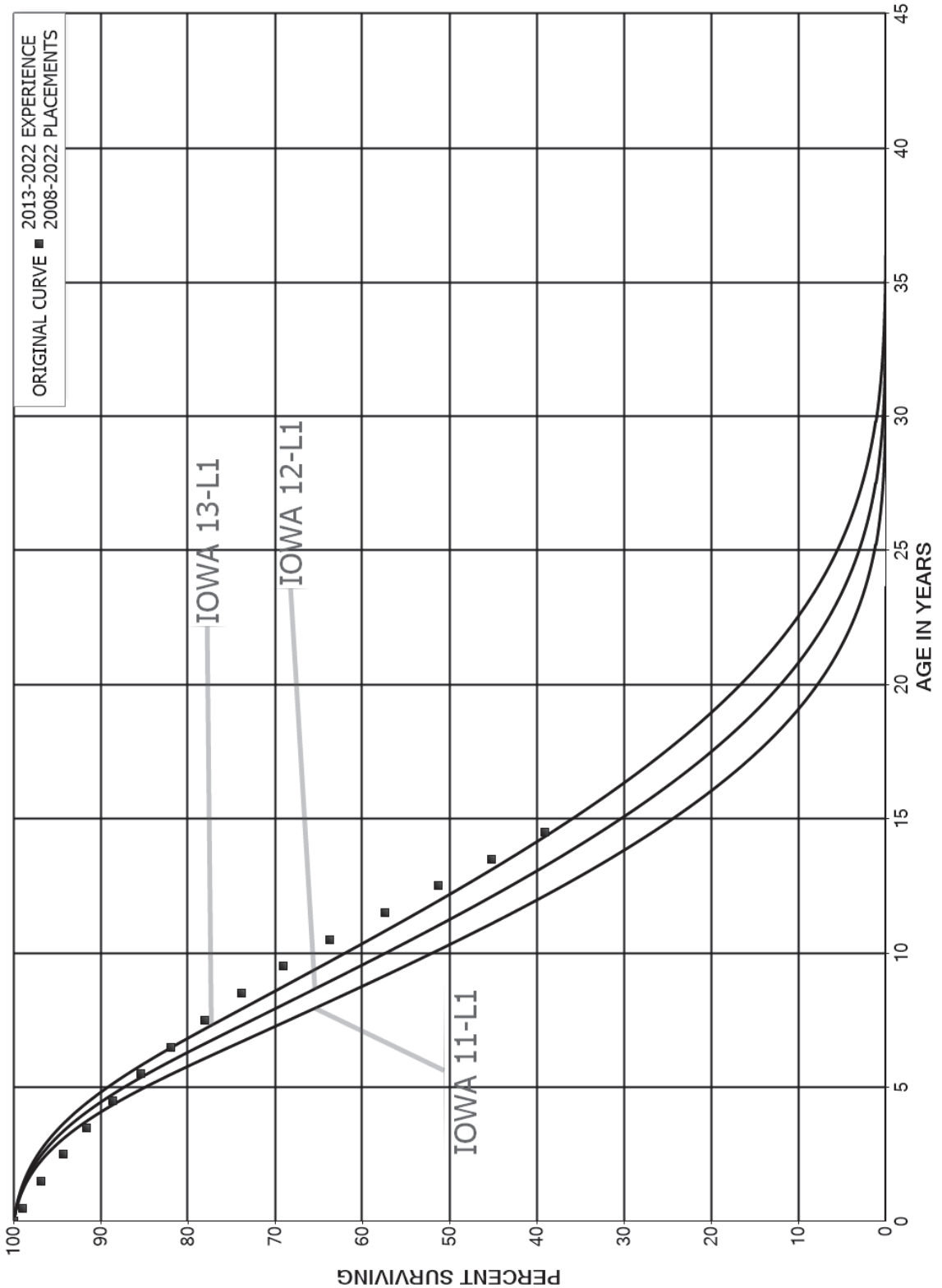


FIGURE 7. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN S0 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

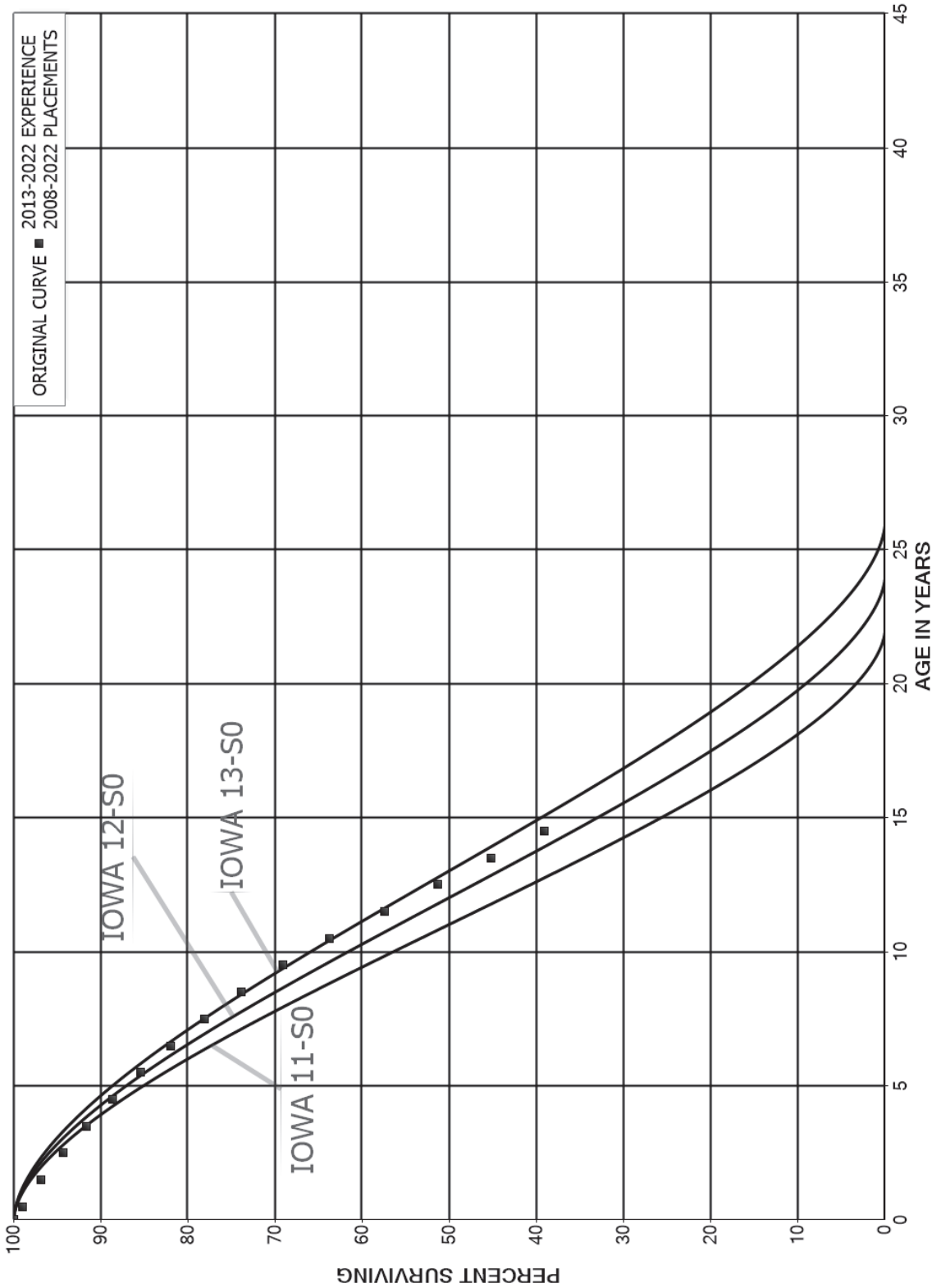


FIGURE 8. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES

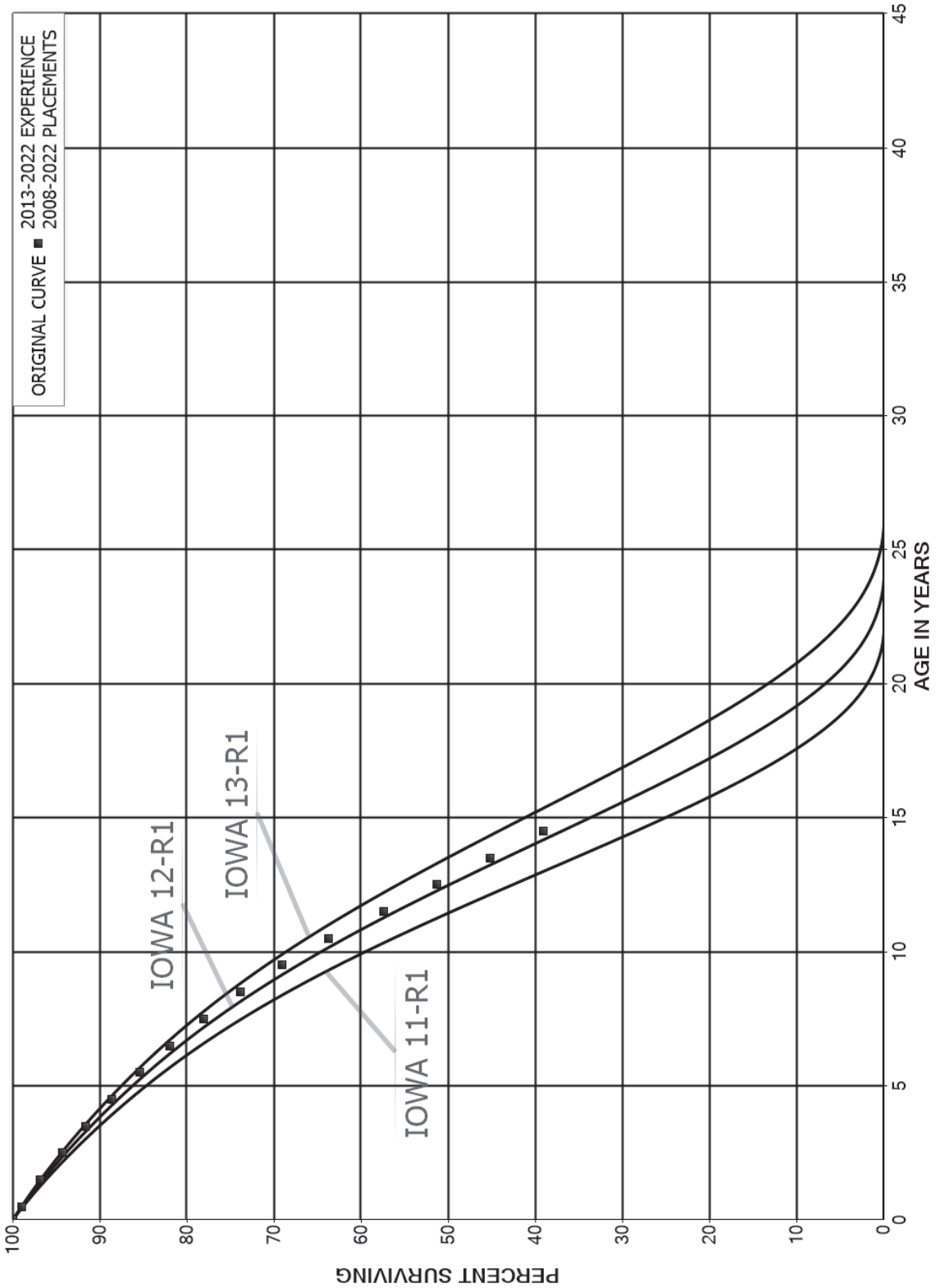
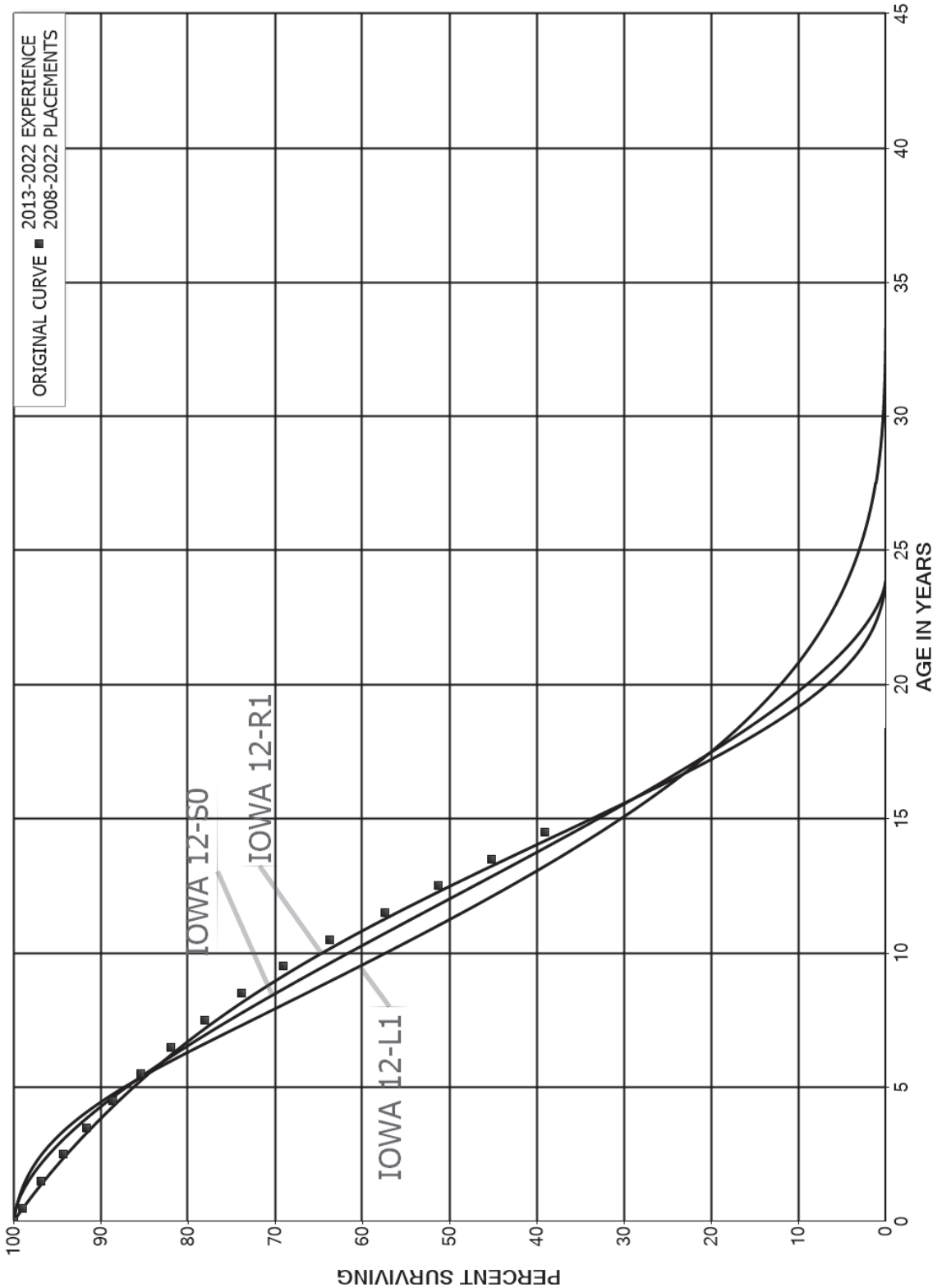


FIGURE 9. ILLUSTRATION OF THE MATCHING OF AN ORIGINAL SURVIVOR CURVE WITH AN L1, S0 AND R1 IOWA TYPE CURVE
ORIGINAL AND SMOOTH SURVIVOR CURVES



PART III. SERVICE LIFE CONSIDERATIONS

PART III. SERVICE LIFE CONSIDERATIONS

FIELD TRIPS

In order to be familiar with the operation of the Company and observe representative portions of the plant, field trips were conducted for the study. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirements are obtained during field trips. This knowledge and information were incorporated in the interpretation and extrapolation of the statistical analyses.

The following is a list of the locations visited during the most recent field trip.

November 20-21, 2023

Woolwich Water Treatment Plant
Well #14
Wellfield Treatment Plant
Gloucester Township Tank Site
Erial Underground Booster Station
Well #14, Whatley Road
Well #11
Green Avenue Plant, Well #4, 5 and 8
Well #9
Well #6
Exley Office
Phillipsburg Ultraviolet Treatment Facility
Liberty Road Booster Station
Low's Hollow Water Tank
Low's Hollow Booster Station
Califon 2

Service Life Analysis

The service life estimates were based on judgment which considered a number of factors. The primary factors were the statistical analyses of data; current company policies and outlook as determined during field reviews of the property and other

conversations with management; and the survivor curve estimates from previous studies of this company and other water companies.

For some of the mass plant accounts and subaccounts, the statistical analyses resulted in good to excellent indications of significant survivor patterns. These accounts represent 90 percent of depreciable plant. Generally, the information external to the statistics led to minimal or no significant departure from the indicated survivor curves for the accounts listed below. The statistical support for the service life estimates is presented in the section beginning on page VII-2.

Account No.	Account Description
304.30	Structures and Improvements – Purification
304.40	Structures and Improvements – Transmission and Distribution
304.51	Structures and Improvements – Office
307.00	Wells and Springs
309.00	Supply Mains
311.20	Pumping Equipment
311.40	Pumping Equipment – Transmission and Distribution
320.30	Water Treatment Equipment
330.40	Distribution Reservoirs and Standpipes
331.40	Transmission and Distribution Mains
333.40	Services
334.42	Meter Installations
334.44	Other Meters
335.40	Hydrants
341.50	Transportation Equipment

The Account 331.40, Transmission and Distribution Mains, is used to illustrate the manner in which the study was conducted for the accounts in the preceding list. Aged plant accounting data have been compiled for the years through 2022. These data have been coded according to account or property group, type of transaction, year in which the transaction took place, and year in which the utility plant was placed in service. The

retirements, other plant transactions and plant additions were analyzed by the retirement rate method.

The survivor curve estimate for this account is the 65-S2.5 and is based on the statistical indication for the period 2000-2022. The 65-S2.5 is an excellent fit of the significant portion of the original survivor curve as set forth on page VII-38, is consistent with management outlook for a continuation of the historical experience and is within the typical service life range of 60 to 100 years for water mains.

Generally, the estimates for the remaining accounts of the total depreciable plant in service were based on judgments which considered the nature of the plant and equipment, the previous estimate for this company and a general knowledge of service lives for similar equipment in other water companies.

The selected amortization periods for most General Plant accounts are described in the section “Calculation of Annual and Accrued Depreciation.”

PART IV. NET SALVAGE CONSIDERATIONS

PART IV. NET SALVAGE CONSIDERATIONS

NET SALVAGE ANALYSIS

The estimates of net salvage by account were based in part on historical data compiled for the years 2000 through 2022 for water plant. Cost of removal and gross salvage were expressed as percents of the original cost of plant retired, both on annual and three-year moving average bases. The most recent five-year average also was calculated for consideration. The net salvage estimates by account are expressed as a percent of the original cost of plant retired.

Net Salvage Considerations

The estimates of future net salvage are expressed as percentages of surviving plant in service, i.e., all future retirements. In cases in which removal costs are expected to exceed salvage receipts, a negative net salvage percentage is estimated. The net salvage estimates were based on judgment which incorporated analyses of historical cost of removal and gross salvage data, expectations with respect to future removal requirements and markets for retired equipment and materials.

The analyses of historical cost of removal and gross salvage data are presented in the section titled “Net Salvage Statistics” for the plant accounts for which the net salvage estimate relied partially on those analyses.

Statistical analyses of historical data for the period 2000 through 2022 for water plant contributed significantly toward the net salvage estimates for 14 plant accounts, representing 46 percent of depreciable plant, as follows:

DISTRIBUTION PLANT

304.22	Structures and Improvements – Power and Pumping
304.30	Structures and Improvements – Purification
304.40	Structures and Improvements – Transmission and Distribution
304.50	Structures and Improvements – Miscellaneous
304.51	Structures and Improvements – Office
307.00	Wells and Springs
311.20	Pumping Equipment – Pumping Equipment
311.40	Pumping Equipment – Transmission and Distribution
320.30	Water Treatment Equipment
333.40	Services
334.42	Meters and Meter Installations – Meter Installations
334.44	Meters and Meter Installations – Other Meters
335.40	Hydrants
341.50	Transportation Equipment

The analysis for Account 333.40, Services, is used to illustrate the manner in which the study was conducted for most plant accounts. Net salvage data for the period 2000 through 2022 were analyzed for this account. The data include cost of removal, gross salvage and net salvage amounts and each of these amounts is expressed as a percent of the original cost of regular retirements. Three-year moving averages for the 2000-2002 through 2020-2022 periods were computed to smooth the annual amounts.

Cost of removal has varied throughout the twenty-three year period but on average has been 24 percent of retirements. Cost of removal for the most recent five years averaged 10 percent. There has been no gross salvage throughout the period for the account.

The net salvage percent based on the overall period 2000 through 2022 is negative 24 percent and based on the most recent five-year period is negative 10 percent. Estimates for many other water utilities for this account are in the negative 20 to negative

50 percent range. The net salvage estimate for Aqua for this account is negative 20, which is conservative when compared to the overall net salvage percent in the historical data, is at the lower end of the range of other water company estimates and is consistent with future expectations for this account.

The net salvage percents for the remaining accounts were based on judgment incorporating estimates of other water utilities.

PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

PART V. CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

GROUP DEPRECIATION PROCEDURES

A group procedure for depreciation is appropriate when considering more than a single item of property. Normally the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group. In the average service life procedure, the rate of annual depreciation is based on the average life or average remaining life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

Single Unit of Property

The calculation of straight line depreciation for a single unit of property is straightforward. For example, if a $1,000 unit of property attains an age of four years and has a life expectancy of six years, the annual accrual over the total life is:

$$\frac{\$1{,}000}{(4 + 6)} = \$100 \text{ per year.}$$

The accrued depreciation is:

$$\$1{,}000\left(1 - \frac{6}{10}\right) = \$400.$$

Group Depreciation Procedures

When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

Remaining Life Annual Accruals

For the purpose of calculating remaining life accruals as of June 30, 2023, the depreciation reserve for each plant account is allocated among vintages in proportion to the calculated accrued depreciation for the account. Explanations of remaining life accruals and calculated accrued depreciation follow. The detailed calculations as of June 30, 2023, are set forth in the Results of Study section of the report.

Average Service Life Procedure

In the average service life procedure, the remaining life annual accrual for each vintage is determined by dividing future book accruals (original cost less book reserve) by the average remaining life of the vintage. The average remaining life is a directly weighted average derived from the estimated future survivor curve in accordance with the average service life procedure.

The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as the basis for such accruals. The accrued depreciation calculation consists of applying an appropriate ratio to the surviving original cost of each vintage of each

account, based upon the attained age and service life. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$\text{Ratio} = 1 - \frac{\text{Average Remaining Life}}{\text{Average Service Life}}.$$

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable utility plant in service. The accounts and their amortization periods are as follows:

Account		Amortization Period, Years
340.50	Office Furniture and Equipment	20
340.55	Computer Equipment	5
340.60	SAP Software	15
342.50	Stores Equipment	20
343.50	Tools, Shop and Garage Equipment	20
344.50	Laboratory Equipment	15
346.50	Communication Equipment	15
347.50	Miscellaneous Equipment	25
348.50	Other Tangible Plant	15

The calculated accrued amortization is equal to the original cost multiplied by the ratio of the vintage's age to its amortization period. The annual amortization amount is determined by dividing the original cost by the period of amortization for the account.

PART VI. RESULTS OF STUDY

PART VI. RESULTS OF STUDY

QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and net salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation, using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the water plant in service as of June 30, 2023. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to June 30, 2023, is reasonable for a period of three to five years.

DESCRIPTION OF DETAILED TABULATIONS

A summary of the results of the study, as applied to the original cost of water plant in service as of June 30, 2023, are presented on pages VI-5 and VI-6 of this report. The schedules set forth the original cost, the book depreciation reserve, future accruals, the calculated annual depreciation rate and amount, and the composite remaining life related to water plant. Table 1 sets forth the total annual depreciation accrual rates for water plant assets as of June 30, 2023.

The service life estimates were based on judgment that incorporated statistical analysis of retirement data, discussions with management and consideration of estimates made for other water utilities. The results of the statistical analysis of service life are presented in the section beginning on page VII-2, within the supporting documents of this report.

For each depreciable group analyzed by the retirement rate method, a chart depicting the original and estimated survivor curves is followed by a tabular presentation of the original life table(s) plotted on the chart. The survivor curves estimated for the depreciable groups are shown as dark smooth curves on the charts. Each smooth survivor curve is denoted by a numeral followed by the curve type designation. The numeral used is the average life derived from the entire curve from 100 percent to zero percent surviving. The titles of the chart indicate the group, the symbol used to plot the points of the original life table, and the experience and placement bands of the life tables which where plotted. The experience band indicates the range of years for which retirements were used to develop the stub survivor curve. The placements indicate, for the related experience band, the range of years of installations which appear in the experience.

The analyses of net salvage data are presented in the section titled, “Net Salvage Statistics.” The tabulations present annual cost of removal and gross salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

The tables of the calculated annual depreciation applicable to depreciable assets as of June 30, 2023 are presented in account sequence starting on page IX-2 of the

supporting documents. The tables indicate the estimated survivor curve and net salvage percent for the account and set forth, for each installation year, the original cost, the calculated accrued depreciation, the allocated book reserve, future accruals, the remaining life, and the calculated annual accrual amount.

AQUA NEW JERSEY, INC.
WATER PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
	WATER PLANT								
	DEPRECIABLE PLANT								
	SUPPLY AND PUMPING PLANT								
	STRUCTURES AND IMPROVEMENTS								
304.22	POWER AND PUMPING	60 - R4	(5)	1,889,873.68	933,279	1,051,088	36,279	1.92	29.0
304.30	PURIFICATION	50 - S3	(5)	16,887,784.97	4,972,527	12,759,648	364,545	2.16	35.0
304.40	TRANSMISSION AND DISTRIBUTION	50 - S2	(5)	936,246.19	315,275	667,784	16,945	1.81	39.4
304.50	MISCELLANEOUS	30 - S2.5	(5)	12,993,398.22	536,927	13,106,142	504,848	3.89	26.0
304.51	OFFICE	55 - R2.5	(5)	3,457,951.64	1,417,370	2,213,479	61,710	1.78	35.9
	TOTAL STRUCTURES AND IMPROVEMENTS			**36,165,254.70**	**8,175,377**	**29,798,141**	**984,327**	**2.72**	
307.00	WELLS AND SPRINGS	55 - R3	(10)	21,425,784.89	8,097,891	15,470,472	370,629	1.73	41.7
309.00	SUPPLY MAINS	50 - S1.5	(10)	579,417.23	312,826	324,533	12,205	2.11	26.6
310.20	POWER GENERATION EQUIPMENT	30 - R3	0	2,341,994.55	1,226,481	1,115,514	57,656	2.46	19.3
	PUMPING EQUIPMENT								
311.20	PUMPING EQUIPMENT	50 - R3	(5)	10,159,592.36	4,734,635	5,932,937	166,679	1.64	35.6
311.40	TRANSMISSION AND DISTRIBUTION	50 - R3	(5)	80,183.79	794	83,399	1,694	2.11	49.2
	TOTAL PUMPING EQUIPMENT			**10,239,776.15**	**4,735,429**	**6,016,336**	**168,373**	**1.64**	
	TOTAL SUPPLY AND PUMPING			**70,752,227.52**	**22,548,005**	**52,724,996**	**1,593,190**	**2.25**	
	DISTRIBUTION PLANT								
320.30	WATER TREATMENT EQUIPMENT	45 - S1.5	(10)	17,173,442.00	4,992,531	13,898,255	383,877	2.24	36.2
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	65 - R4	(10)	15,376,637.24	6,049,315	10,864,986	259,040	1.68	41.9
330.41	DISTRIBUTION RESERVOIRS AND STANDPIPES - TANK PAINTING	15 - SQ	0	6,273,605.00	0	6,273,605	491,909	7.84	12.8
331.40	TRANSMISSION AND DISTRIBUTION MAINS	65 - S2.5	(20)	178,290,113.00	40,322,353	173,625,783	3,546,391	1.99	49.0
333.40	SERVICES	35 - R2.5	(20)	71,764,084.40	12,790,086	73,326,816	2,789,589	3.89	26.3
	METERS AND METER INSTALLATIONS								
334.40	METERS AND METER INSTALLATIONS	17 - S2.5	0	324,803.20	179,698	145,105	12,265	3.78	11.8
334.42	METER INSTALLATIONS	21 - L2	0	3,026,445.27	1,501,085	1,525,360	104,657	3.46	14.6
334.43	ERT DEVICES	15 - S2.5	0	2,314,009.12	2,048,049	265,960	80,403	3.47	3.3
334.44	OTHER METERS	20 - L1.5	(3)	15,428,178.68	9,811,089	6,079,935	410,935	2.66	14.8
	TOTAL METERS AND METER INSTALLATIONS			**21,093,436.27**	**13,539,921**	**8,016,360**	**608,260**	**2.88**	
335.40	HYDRANTS	55 - R2.5	(25)	12,003,786.88	3,362,169	11,642,565	266,850	2.22	43.6
336.40	BACKFLOW PREVENTION DEVICES	40 - S2.5	0	266,513.67	122,129	144,385	7,694	2.89	18.8
	TOTAL DISTRIBUTION PLANT			**322,241,618.46**	**81,178,503**	**297,792,755**	**8,353,610**	**2.59**	
	GENERAL PLANT								
	OTHER PLANT AND MISCELLANEOUS EQUIPMENT								
339.20	SOURCE OF SUPPLY	40 - S3	0	416,851.24	180,902	235,949	12,036	2.89	19.6
339.40	TRANSMISSION AND DISTRIBUTION	40 - S2	0	69,985.13	67,414	2,571	118	0.17	21.8
	TOTAL OTHER PLANT AND MISCELLANEOUS EQUIPMENT			**486,836.37**	**248,316**	**238,520**	**12,154**	**2.50**	
	OFFICE FURNITURE AND EQUIPMENT								
340.50	OFFICE FURNITURE AND EQUIPMENT	20 - SQ	0	1,958,674.21	135,959	1,822,716	98,646	5.04	18.5
340.55	COMPUTER EQUIPMENT	5 - SQ	0	73,840.31	73,841	0	0	- *	-
340.60	SAP SOFTWARE	15 - SQ	0	3,089,706.25	366,446	2,723,260	207,802	6.73	13.1
	TOTAL OFFICE FURNITURE AND EQUIPMENT			**5,122,220.77**	**576,246**	**4,545,976**	**306,448**	**5.98**	

AQUA NEW JERSEY, INC.
WATER PLANT

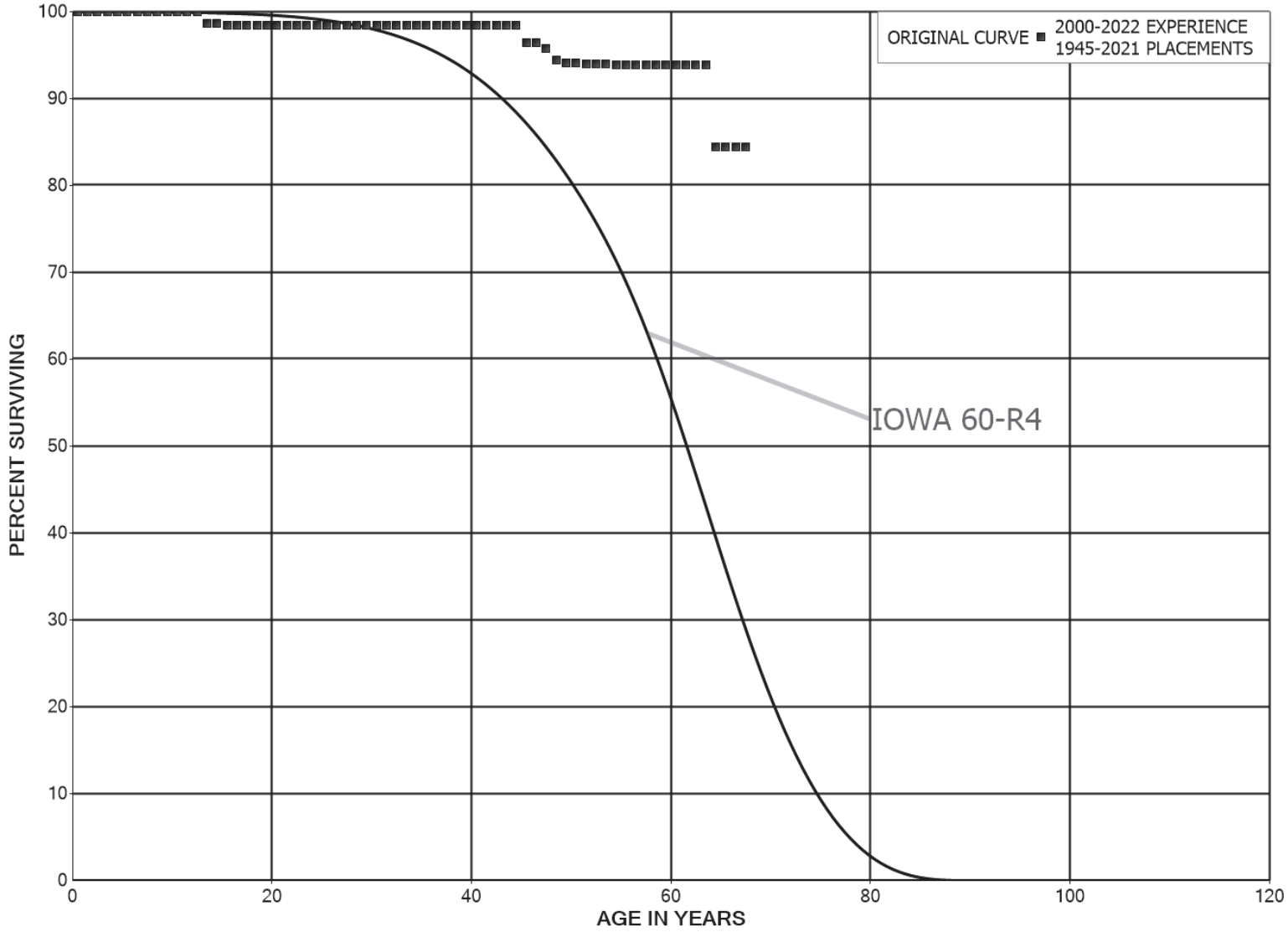
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF JUNE 30, 2023

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF JUNE 30, 2023	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
341.50	TRANSPORTATION EQUIPMENT	12 - S0	5	2,021,095.61	1,400,207	519,834	51,293	2.54	10.1
342.50	STORES EQUIPMENT	20 - SQ	0	20,592.85	1,448	19,145	1,276	6.20	15.0
343.50	TOOLS, SHOP AND GARAGE EQUIPMENT	20 - SQ	0	1,225,661.67	487,569	738,092	86,589	7.06	8.5
344.50	LABORATORY EQUIPMENT	15 - SQ	0	1,095.03	472	623	62	5.66	10.0
345.50	POWER OPERATED EQUIPMENT	20 - S3	0	368,833.19	163,954	204,879	36,094	9.79	5.7
346.50	COMMUNICATION EQUIPMENT	15 - SQ	0	1,816,986.49	320,024	1,496,962	122,908	6.76	12.2
347.50	MISCELLANEOUS EQUIPMENT	25 - SQ	0	177,887.67	0	177,888	7,883	4.43	22.6
348.50	OTHER TANGIBLE PLANT	15 - SQ	0	6,752,513.71	5,636,026	1,116,487	81,880	1.21	13.6
	TOTAL GENERAL PLANT			**17,993,723.36**	**8,834,263**	**9,058,406**	**706,587**	**3.93**	
	TOTAL DEPRECIABLE PLANT			**410,987,569.34**	**112,560,771**	**359,576,157**	**10,653,387**	**2.59**	
	NONDEPRECIABLE AND ACCOUNTS NOT STUDIED								
301.10	ORGANIZATION			1,063,477.63	0				
302.10	FRANCHISES			628,834.26	0				
303.21	LAND AND LAND RIGHTS - SOURCE OF SUPPLY			883,721.64	0				
303.22	LAND AND LAND RIGHTS - POWER AND PUMPING			78,759.39	0				
303.30	LAND AND LAND RIGHTS - PURIFICATION			361,846.78	0				
303.40	LAND AND LAND RIGHTS - TRANSMISSION AND DISTRIBUTION			489,030.73	0				
303.51	LAND AND LAND RIGHTS - OFFICE			25,883.41	0				
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**3,531,553.84**	**0**				
	TOTAL WATER PLANT			**414,519,123.18**	**112,560,771**	**359,576,157**	**10,653,387**		
	CONTRIBUTIONS IN AID OF CONSTRUCTION								
	DEPRECIABLE PLANT								
304.40	STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION	50 - S2	0	51,130.00	13,178	37,952	1,209	2.36	31.4
307.00	WELLS AND SPRINGS	55 - R3	0	1,288,355.15	408,568	879,787	21,721	1.69	40.5
311.20	PUMPING EQUIPMENT	50 - R3	0	33,065.00	3,652	29,413	929	2.81	31.7
311.40	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	50 - R3	0	500,613.37	183,583	317,031	8,456	1.69	37.5
320.30	WATER TREATMENT EQUIPMENT	45 - S1.5	0	15,931.00	4,247	11,684	425	2.67	27.5
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	65 - R4	0	726,196.63	197,902	528,295	11,170	1.54	47.3
331.40	TRANSMISSION AND DISTRIBUTION MAINS	65 - S2.5	0	58,791,426.22	12,249,493	46,541,933	842,330	1.43	55.3
333.40	SERVICES	35 - R2.5	0	1,109,227.19	1,013,396	95,831	3,975	0.36	24.1
334.44	OTHER METERS	20 - L1.5	0	132,436.56	143,242	(10,805)	0	-	-
335.40	HYDRANTS	55 - R2.5	0	38,239.64	20,552	17,688	345	0.90	51.3
346.50	COMMUNICATION EQUIPMENT	15 - SQ	0	1,993.00	1,993	0	0	-	-
	TOTAL DEPRECIABLE CONTRIBUTIONS IN AID OF CONSTRUCTION			**62,688,613.76**	**14,239,806**	**48,448,809**	**890,560**		
	NONDEPRECIABLE AND ACCOUNTS NOT STUDIED								
303.40	LAND AND LAND RIGHTS - TRANSMISSION AND DISTRIBUTION			10,826.00	0				
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**10,826.00**	**0**				
	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION			**62,699,439.76**	**14,239,806**	**48,448,809**	**890,560**	**1.42**	
	TOTAL UTILITY PLANT			**351,819,683.42**	**98,320,966**	**311,127,348**	**9,762,827**		

* NEW ADDITIONS AS OF JULY 1, 2023 WILL USE A DEPRECIATION RATE OF 20 PERCENT BASED ON THE AMORTIZATION PERIOD OF 5 YEARS AND A NET SALVAGE PERCENT OF 0.

PART VII. SERVICE LIFE STATISTICS

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

ORIGINAL LIFE TABLE

PLACEMENT BAND 1945-2021 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,201,873		0.0000	1.0000	100.00
0.5	825,141		0.0000	1.0000	100.00
1.5	814,433		0.0000	1.0000	100.00
2.5	817,268		0.0000	1.0000	100.00
3.5	826,285		0.0000	1.0000	100.00
4.5	835,345		0.0000	1.0000	100.00
5.5	866,898		0.0000	1.0000	100.00
6.5	866,893		0.0000	1.0000	100.00
7.5	853,426		0.0000	1.0000	100.00
8.5	865,414		0.0000	1.0000	100.00
9.5	865,414		0.0000	1.0000	100.00
10.5	885,074		0.0000	1.0000	100.00
11.5	938,132		0.0000	1.0000	100.00
12.5	938,132	12,954	0.0138	0.9862	100.00
13.5	1,163,458		0.0000	1.0000	98.62
14.5	1,283,420	3,128	0.0024	0.9976	98.62
15.5	1,233,158		0.0000	1.0000	98.38
16.5	1,232,590		0.0000	1.0000	98.38
17.5	1,231,068		0.0000	1.0000	98.38
18.5	1,263,197		0.0000	1.0000	98.38
19.5	1,004,333		0.0000	1.0000	98.38
20.5	872,642		0.0000	1.0000	98.38
21.5	660,912		0.0000	1.0000	98.38
22.5	683,925		0.0000	1.0000	98.38
23.5	710,245		0.0000	1.0000	98.38
24.5	852,212		0.0000	1.0000	98.38
25.5	866,909		0.0000	1.0000	98.38
26.5	904,945		0.0000	1.0000	98.38
27.5	853,223		0.0000	1.0000	98.38
28.5	852,144		0.0000	1.0000	98.38
29.5	854,021		0.0000	1.0000	98.38
30.5	853,137		0.0000	1.0000	98.38
31.5	850,637		0.0000	1.0000	98.38
32.5	850,637		0.0000	1.0000	98.38
33.5	805,139		0.0000	1.0000	98.38
34.5	757,591		0.0000	1.0000	98.38
35.5	752,397		0.0000	1.0000	98.38
36.5	503,342		0.0000	1.0000	98.38
37.5	285,147		0.0000	1.0000	98.38
38.5	270,461	89	0.0003	0.9997	98.38

AQUA NEW JERSEY, INC.
WATER PLANT

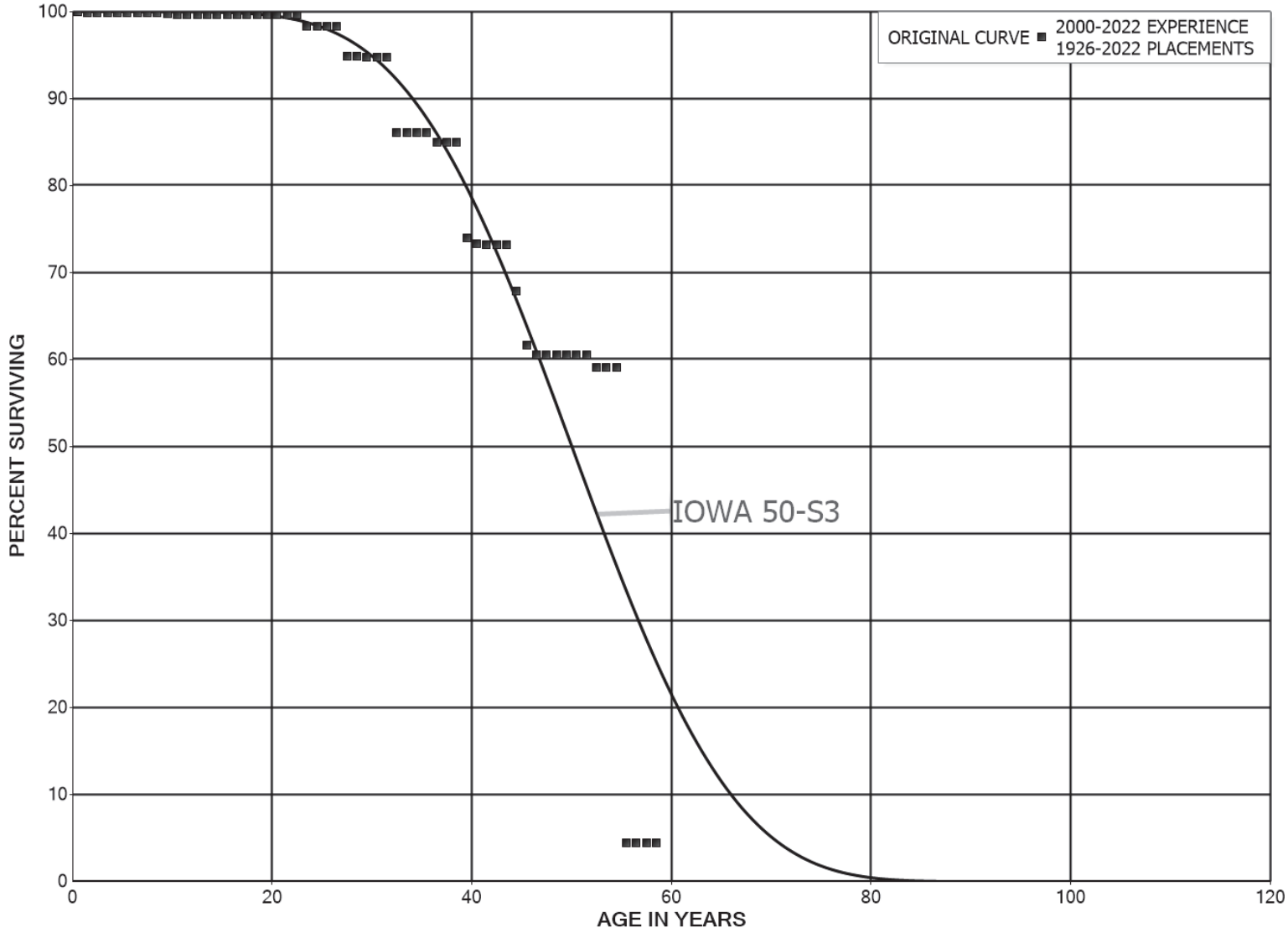
ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1945-2021 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	270,372		0.0000	1.0000	98.35
40.5	269,140		0.0000	1.0000	98.35
41.5	226,546		0.0000	1.0000	98.35
42.5	220,292		0.0000	1.0000	98.35
43.5	215,519		0.0000	1.0000	98.35
44.5	303,402	6,105	0.0201	0.9799	98.35
45.5	269,682		0.0000	1.0000	96.37
46.5	229,200	1,625	0.0071	0.9929	96.37
47.5	212,904	2,926	0.0137	0.9863	95.68
48.5	184,807	599	0.0032	0.9968	94.37
49.5	147,462		0.0000	1.0000	94.06
50.5	147,294	207	0.0014	0.9986	94.06
51.5	122,824		0.0000	1.0000	93.93
52.5	121,546		0.0000	1.0000	93.93
53.5	121,546	106	0.0009	0.9991	93.93
54.5	120,997		0.0000	1.0000	93.85
55.5	120,997		0.0000	1.0000	93.85
56.5	120,997		0.0000	1.0000	93.85
57.5	115,593		0.0000	1.0000	93.85
58.5	115,593		0.0000	1.0000	93.85
59.5	115,593		0.0000	1.0000	93.85
60.5	115,593		0.0000	1.0000	93.85
61.5	115,593		0.0000	1.0000	93.85
62.5	115,593		0.0000	1.0000	93.85
63.5	115,593	11,688	0.1011	0.8989	93.85
64.5	108,022		0.0000	1.0000	84.36
65.5	108,022		0.0000	1.0000	84.36
66.5	108,022		0.0000	1.0000	84.36
67.5	4,116		0.0000	1.0000	84.36
68.5	4,116		0.0000	1.0000	84.36
69.5	4,116		0.0000	1.0000	84.36
70.5	4,116		0.0000	1.0000	84.36
71.5	4,116		0.0000	1.0000	84.36
72.5	4,116		0.0000	1.0000	84.36
73.5	4,116		0.0000	1.0000	84.36
74.5	4,116		0.0000	1.0000	84.36
75.5	4,116		0.0000	1.0000	84.36
76.5	4,116		0.0000	1.0000	84.36
77.5					84.36

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	14,452,773		0.0000	1.0000	100.00
0.5	14,115,886	30,686	0.0022	0.9978	100.00
1.5	14,352,613	1	0.0000	1.0000	99.78
2.5	14,283,630	3	0.0000	1.0000	99.78
3.5	12,909,680	22	0.0000	1.0000	99.78
4.5	12,323,081	2	0.0000	1.0000	99.78
5.5	13,829,382	6	0.0000	1.0000	99.78
6.5	13,539,973	26	0.0000	1.0000	99.78
7.5	13,804,056	104	0.0000	1.0000	99.78
8.5	11,255,944	6,462	0.0006	0.9994	99.78
9.5	11,246,765	8,285	0.0007	0.9993	99.72
10.5	10,863,318	2,271	0.0002	0.9998	99.65
11.5	10,398,101		0.0000	1.0000	99.63
12.5	10,261,580		0.0000	1.0000	99.63
13.5	10,220,902		0.0000	1.0000	99.63
14.5	6,078,961		0.0000	1.0000	99.63
15.5	6,078,961	240	0.0000	1.0000	99.63
16.5	6,085,753		0.0000	1.0000	99.63
17.5	6,082,378		0.0000	1.0000	99.63
18.5	6,074,675		0.0000	1.0000	99.63
19.5	6,064,408	466	0.0001	0.9999	99.63
20.5	2,318,436		0.0000	1.0000	99.62
21.5	2,265,036		0.0000	1.0000	99.62
22.5	2,236,427	29,474	0.0132	0.9868	99.62
23.5	2,124,303	14	0.0000	1.0000	98.31
24.5	2,122,627	2	0.0000	1.0000	98.30
25.5	2,118,173		0.0000	1.0000	98.30
26.5	2,103,593	74,564	0.0354	0.9646	98.30
27.5	1,991,684	175	0.0001	0.9999	94.82
28.5	443,443	222	0.0005	0.9995	94.81
29.5	189,376	46	0.0002	0.9998	94.76
30.5	18,999		0.0000	1.0000	94.74
31.5	18,999	1,732	0.0911	0.9089	94.74
32.5	17,461		0.0000	1.0000	86.11
33.5	17,461		0.0000	1.0000	86.11
34.5	17,461		0.0000	1.0000	86.11
35.5	18,032	251	0.0139	0.9861	86.11
36.5	17,780		0.0000	1.0000	84.91
37.5	17,780		0.0000	1.0000	84.91
38.5	17,780	2,301	0.1294	0.8706	84.91

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	7,739	67	0.0087	0.9913	73.92
40.5	7,672	9	0.0012	0.9988	73.28
41.5	7,662		0.0000	1.0000	73.19
42.5	7,662		0.0000	1.0000	73.19
43.5	7,589	554	0.0730	0.9270	73.19
44.5	7,025	643	0.0916	0.9084	67.85
45.5	6,382	122	0.0191	0.9809	61.64
46.5	6,260		0.0000	1.0000	60.46
47.5	5,708		0.0000	1.0000	60.46
48.5	5,086		0.0000	1.0000	60.46
49.5	4,972		0.0000	1.0000	60.46
50.5	4,972		0.0000	1.0000	60.46
51.5	4,972	113	0.0227	0.9773	60.46
52.5	4,859		0.0000	1.0000	59.09
53.5	4,859		0.0000	1.0000	59.09
54.5	4,859	4,494	0.9249	0.0751	59.09
55.5	334		0.0000	1.0000	4.44
56.5	334		0.0000	1.0000	4.44
57.5	334		0.0000	1.0000	4.44
58.5					4.44
59.5					
60.5					
61.5					
62.5					
63.5					
64.5					
65.5					
66.5					
67.5					
68.5					
69.5					
70.5					
71.5					
72.5					
73.5					
74.5					
75.5					
76.5					
77.5					
78.5					

AQUA NEW JERSEY, INC.
WATER PLANT

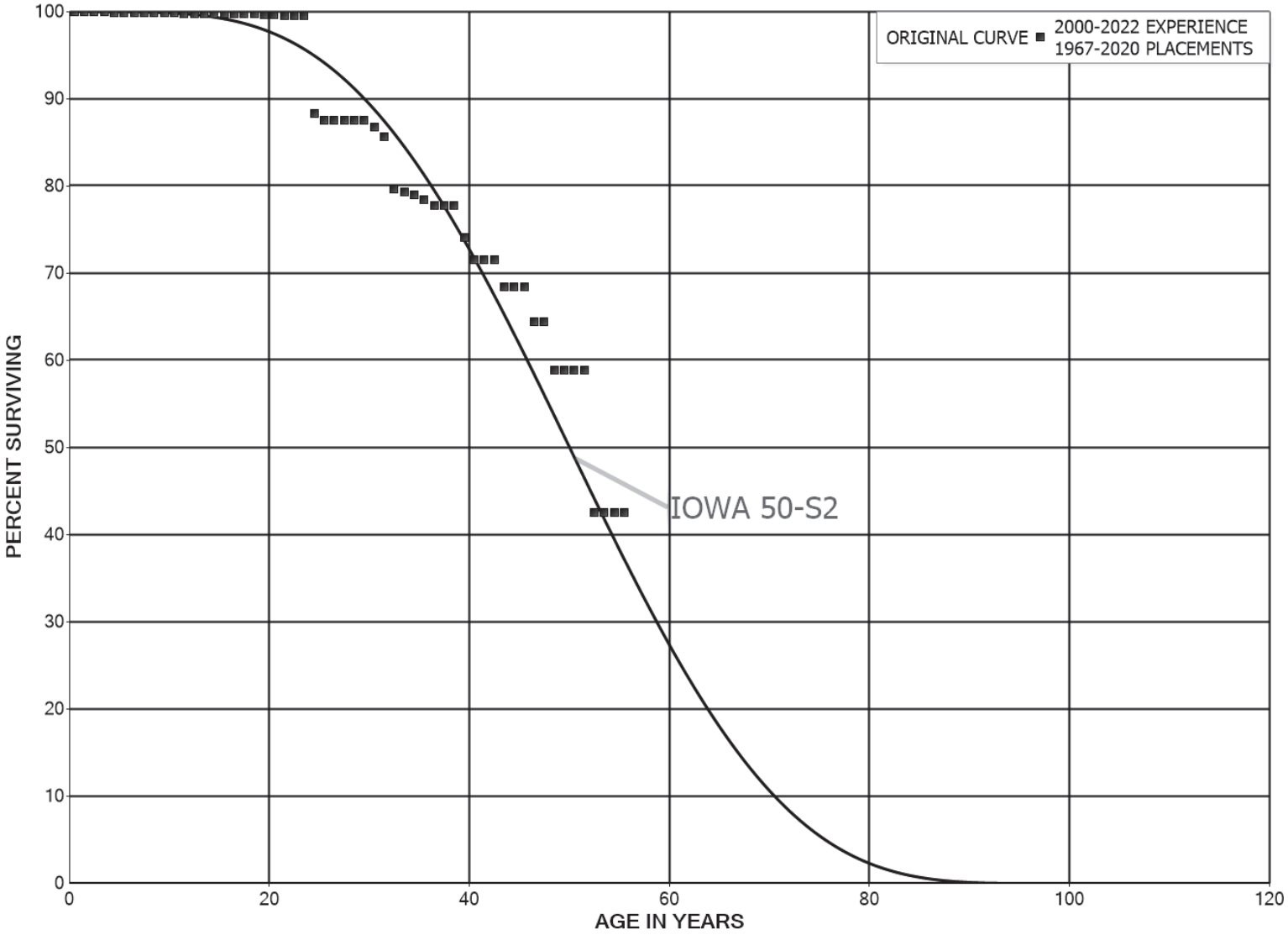
ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5					
80.5					
81.5					
82.5					
83.5	4,939		0.0000		
84.5	4,939		0.0000		
85.5	4,939		0.0000		
86.5	4,939		0.0000		
87.5	4,939		0.0000		
88.5	4,939		0.0000		
89.5	4,939		0.0000		
90.5	4,939		0.0000		
91.5	4,939		0.0000		
92.5	4,939	1,163	0.2355		
93.5	3,776		0.0000		
94.5	3,776		0.0000		
95.5	3,776		0.0000		
96.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 1967-2020 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	792,521		0.0000	1.0000	100.00
0.5	792,521	1	0.0000	1.0000	100.00
1.5	792,519	14	0.0000	1.0000	100.00
2.5	365,300	197	0.0005	0.9995	100.00
3.5	382,974	263	0.0007	0.9993	99.94
4.5	446,747	114	0.0003	0.9997	99.88
5.5	458,846	75	0.0002	0.9998	99.85
6.5	458,771		0.0000	1.0000	99.83
7.5	458,771		0.0000	1.0000	99.83
8.5	458,771	26	0.0001	0.9999	99.83
9.5	458,745	80	0.0002	0.9998	99.83
10.5	459,465	263	0.0006	0.9994	99.81
11.5	460,618	281	0.0006	0.9994	99.75
12.5	469,616	52	0.0001	0.9999	99.69
13.5	470,420		0.0000	1.0000	99.68
14.5	475,745		0.0000	1.0000	99.68
15.5	475,745		0.0000	1.0000	99.68
16.5	475,745	6	0.0000	1.0000	99.68
17.5	473,281	18	0.0000	1.0000	99.68
18.5	454,454	100	0.0002	0.9998	99.68
19.5	224,146	104	0.0005	0.9995	99.65
20.5	179,977	112	0.0006	0.9994	99.61
21.5	126,039	111	0.0009	0.9991	99.55
22.5	125,928		0.0000	1.0000	99.46
23.5	128,109	14,429	0.1126	0.8874	99.46
24.5	113,680	948	0.0083	0.9917	88.26
25.5	101,680	18	0.0002	0.9998	87.52
26.5	86,775	19	0.0002	0.9998	87.50
27.5	37,592		0.0000	1.0000	87.49
28.5	29,698		0.0000	1.0000	87.49
29.5	29,698	254	0.0085	0.9915	87.49
30.5	29,444	399	0.0136	0.9864	86.74
31.5	29,045	2,020	0.0696	0.9304	85.56
32.5	31,815	133	0.0042	0.9958	79.61
33.5	31,077	139	0.0045	0.9955	79.28
34.5	29,869	190	0.0064	0.9936	78.92
35.5	22,602	196	0.0087	0.9913	78.42
36.5	21,570		0.0000	1.0000	77.74
37.5	13,145		0.0000	1.0000	77.74
38.5	13,145	625	0.0476	0.9524	77.74

AQUA NEW JERSEY, INC.
WATER PLANT

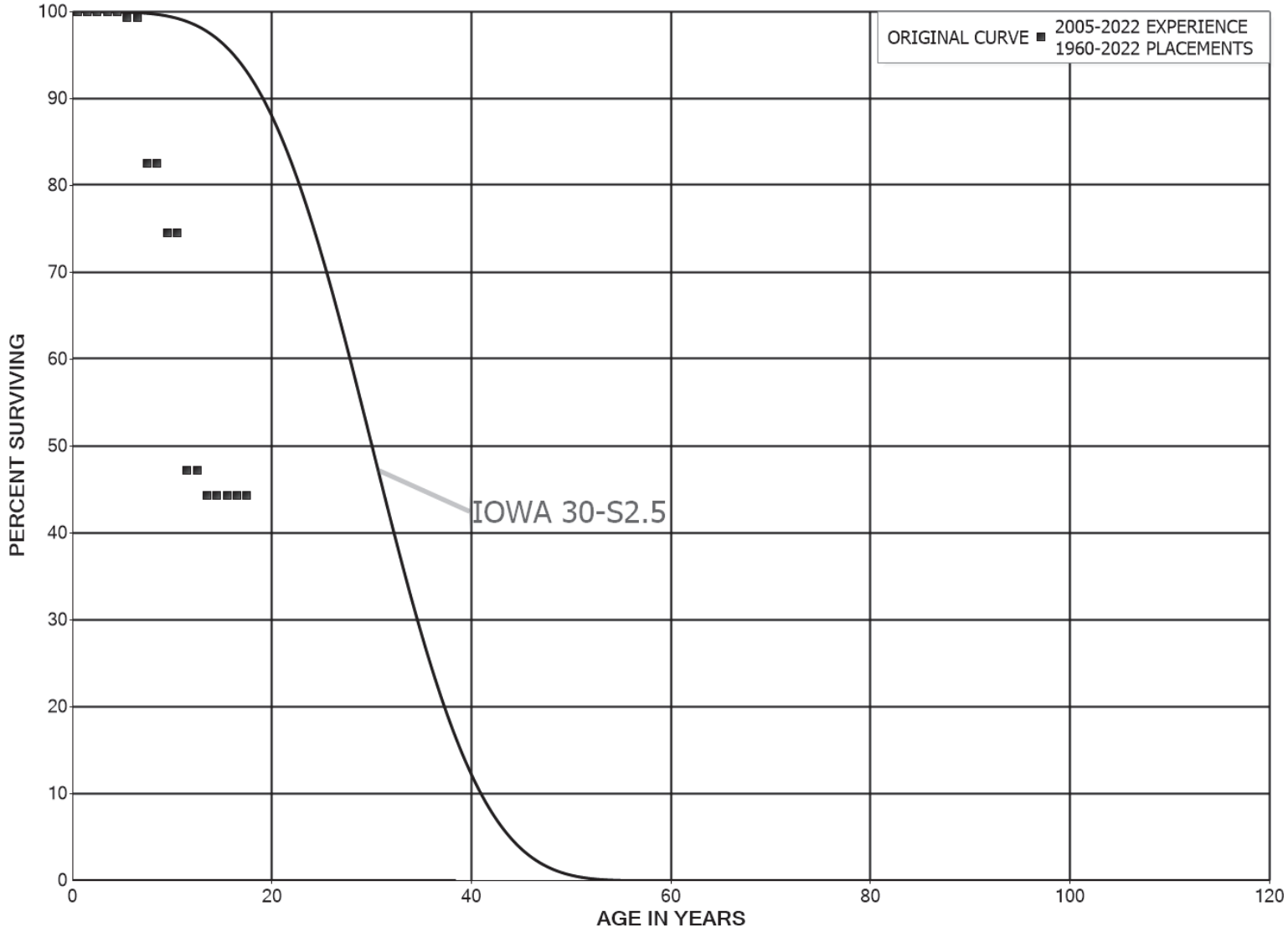
ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1967-2020 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	12,519	421	0.0336	0.9664	74.04
40.5	12,098		0.0000	1.0000	71.55
41.5	12,098		0.0000	1.0000	71.55
42.5	11,467	497	0.0434	0.9566	71.55
43.5	10,970		0.0000	1.0000	68.45
44.5	10,970		0.0000	1.0000	68.45
45.5	10,970	656	0.0598	0.9402	68.45
46.5	8,777		0.0000	1.0000	64.35
47.5	8,777	747	0.0851	0.9149	64.35
48.5	8,031		0.0000	1.0000	58.88
49.5	6,082		0.0000	1.0000	58.88
50.5	6,082		0.0000	1.0000	58.88
51.5	3,941	1,093	0.2773	0.7227	58.88
52.5	2,848		0.0000	1.0000	42.56
53.5	2,848		0.0000	1.0000	42.56
54.5	2,848		0.0000	1.0000	42.56
55.5					42.56

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 304.50 STRUCTURES AND IMPROVEMENTS - MISCELLANEOUS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.50 STRUCTURES AND IMPROVEMENTS - MISCELLANEOUS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1960-2022 EXPERIENCE BAND 2005-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,060,542		0.0000	1.0000	100.00
0.5	13,016,017		0.0000	1.0000	100.00
1.5	11,456,854		0.0000	1.0000	100.00
2.5	11,031,159		0.0000	1.0000	100.00
3.5	597,022		0.0000	1.0000	100.00
4.5	585,261	4,292	0.0073	0.9927	100.00
5.5	580,969		0.0000	1.0000	99.27
6.5	472,446	79,813	0.1689	0.8311	99.27
7.5	389,728		0.0000	1.0000	82.50
8.5	386,412	37,243	0.0964	0.9036	82.50
9.5	289,467		0.0000	1.0000	74.55
10.5	265,796	97,755	0.3678	0.6322	74.55
11.5	168,040		0.0000	1.0000	47.13
12.5	77,075	4,632	0.0601	0.9399	47.13
13.5	21,423		0.0000	1.0000	44.30
14.5	5,500		0.0000	1.0000	44.30
15.5	5,500		0.0000	1.0000	44.30
16.5	5,500		0.0000	1.0000	44.30
17.5					44.30
18.5					
19.5					
20.5					
21.5					
22.5					
23.5					
24.5					
25.5					
26.5					
27.5					
28.5					
29.5					
30.5					
31.5					
32.5					
33.5	14,890		0.0000		
34.5	14,890		0.0000		
35.5	14,890		0.0000		
36.5	14,890		0.0000		
37.5	14,890		0.0000		
38.5	14,890		0.0000		

AQUA NEW JERSEY, INC.
WATER PLANT

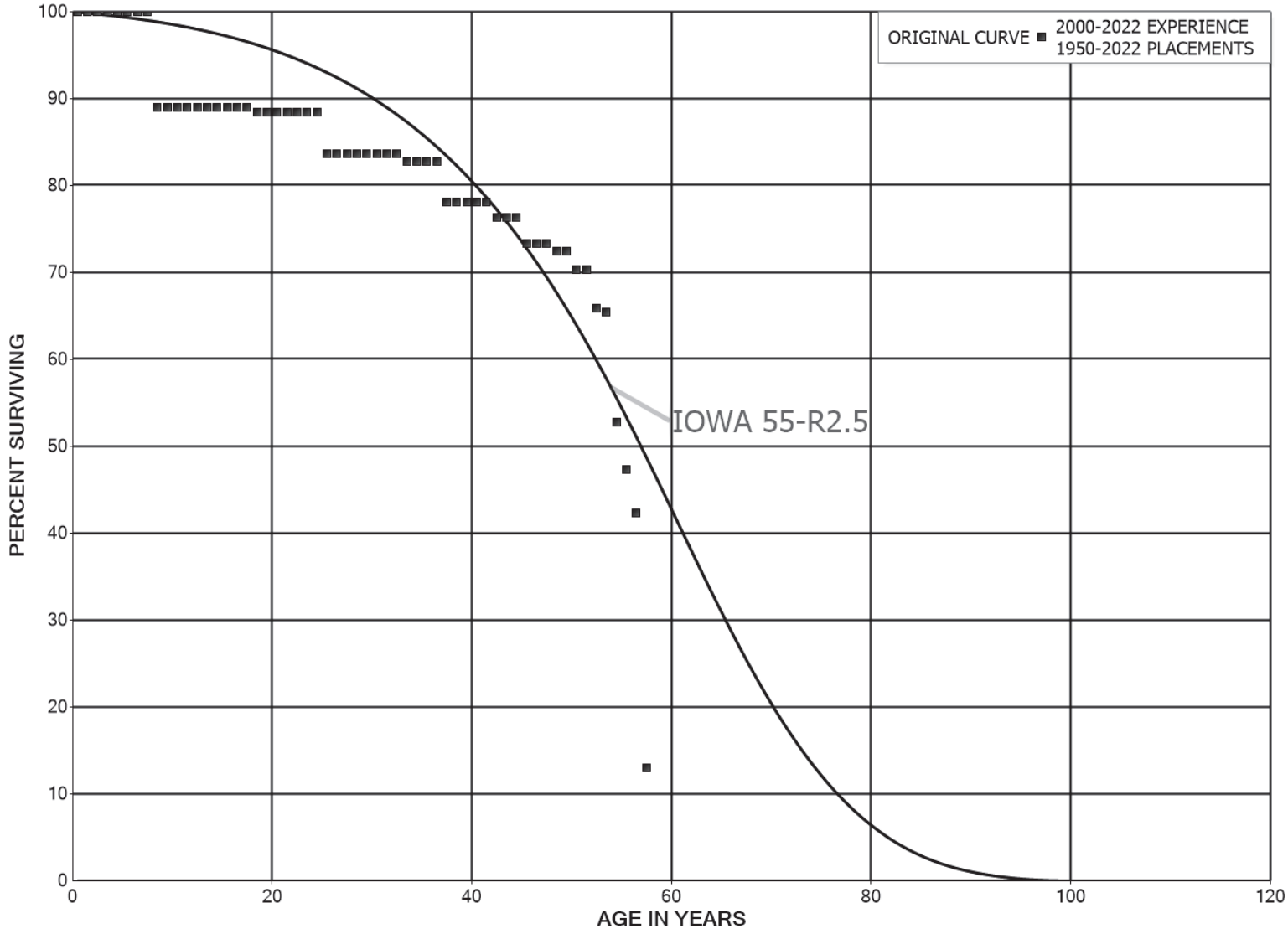
ACCOUNT 304.50 STRUCTURES AND IMPROVEMENTS - MISCELLANEOUS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1960-2022 EXPERIENCE BAND 2005-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	14,890		0.0000		
40.5	14,890		0.0000		
41.5	14,890		0.0000		
42.5	14,890		0.0000		
43.5	37,232		0.0000		
44.5	74,458		0.0000		
45.5	124,087		0.0000		
46.5	124,087	11,451	0.0923		
47.5	112,636		0.0000		
48.5	112,636		0.0000		
49.5	112,636		0.0000		
50.5	109,197		0.0000		
51.5	109,197		0.0000		
52.5	109,197	1,013	0.0093		
53.5	108,184		0.0000		
54.5	108,184		0.0000		
55.5	108,184		0.0000		
56.5	108,184	10,438	0.0965		
57.5	97,746	11,451	0.1172		
58.5	86,294		0.0000		
59.5	86,294		0.0000		
60.5	75,404		0.0000		
61.5	49,629		0.0000		
62.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,413,197		0.0000	1.0000	100.00
0.5	1,790,639		0.0000	1.0000	100.00
1.5	1,637,271		0.0000	1.0000	100.00
2.5	2,707,230		0.0000	1.0000	100.00
3.5	2,708,418		0.0000	1.0000	100.00
4.5	2,695,971		0.0000	1.0000	100.00
5.5	3,329,714		0.0000	1.0000	100.00
6.5	3,309,544		0.0000	1.0000	100.00
7.5	3,309,544	365,206	0.1103	0.8897	100.00
8.5	2,926,006		0.0000	1.0000	88.97
9.5	2,913,808		0.0000	1.0000	88.97
10.5	2,913,808		0.0000	1.0000	88.97
11.5	2,797,843		0.0000	1.0000	88.97
12.5	2,645,084		0.0000	1.0000	88.97
13.5	2,491,585		0.0000	1.0000	88.97
14.5	2,725,650	1,552	0.0006	0.9994	88.97
15.5	2,676,055		0.0000	1.0000	88.91
16.5	2,624,018		0.0000	1.0000	88.91
17.5	2,281,987	12,293	0.0054	0.9946	88.91
18.5	2,249,638		0.0000	1.0000	88.44
19.5	2,193,850		0.0000	1.0000	88.44
20.5	2,156,915	1,848	0.0009	0.9991	88.44
21.5	2,155,066		0.0000	1.0000	88.36
22.5	2,155,666		0.0000	1.0000	88.36
23.5	2,154,128		0.0000	1.0000	88.36
24.5	2,068,373	110,548	0.0534	0.9466	88.36
25.5	843,439		0.0000	1.0000	83.64
26.5	842,251		0.0000	1.0000	83.64
27.5	839,374		0.0000	1.0000	83.64
28.5	320,447		0.0000	1.0000	83.64
29.5	318,732		0.0000	1.0000	83.64
30.5	324,690		0.0000	1.0000	83.64
31.5	324,690		0.0000	1.0000	83.64
32.5	331,503	3,407	0.0103	0.9897	83.64
33.5	328,096		0.0000	1.0000	82.78
34.5	356,791		0.0000	1.0000	82.78
35.5	356,791		0.0000	1.0000	82.78
36.5	355,731	20,186	0.0567	0.9433	82.78
37.5	63,781		0.0000	1.0000	78.08
38.5	62,766		0.0000	1.0000	78.08

AQUA NEW JERSEY, INC.
WATER PLANT

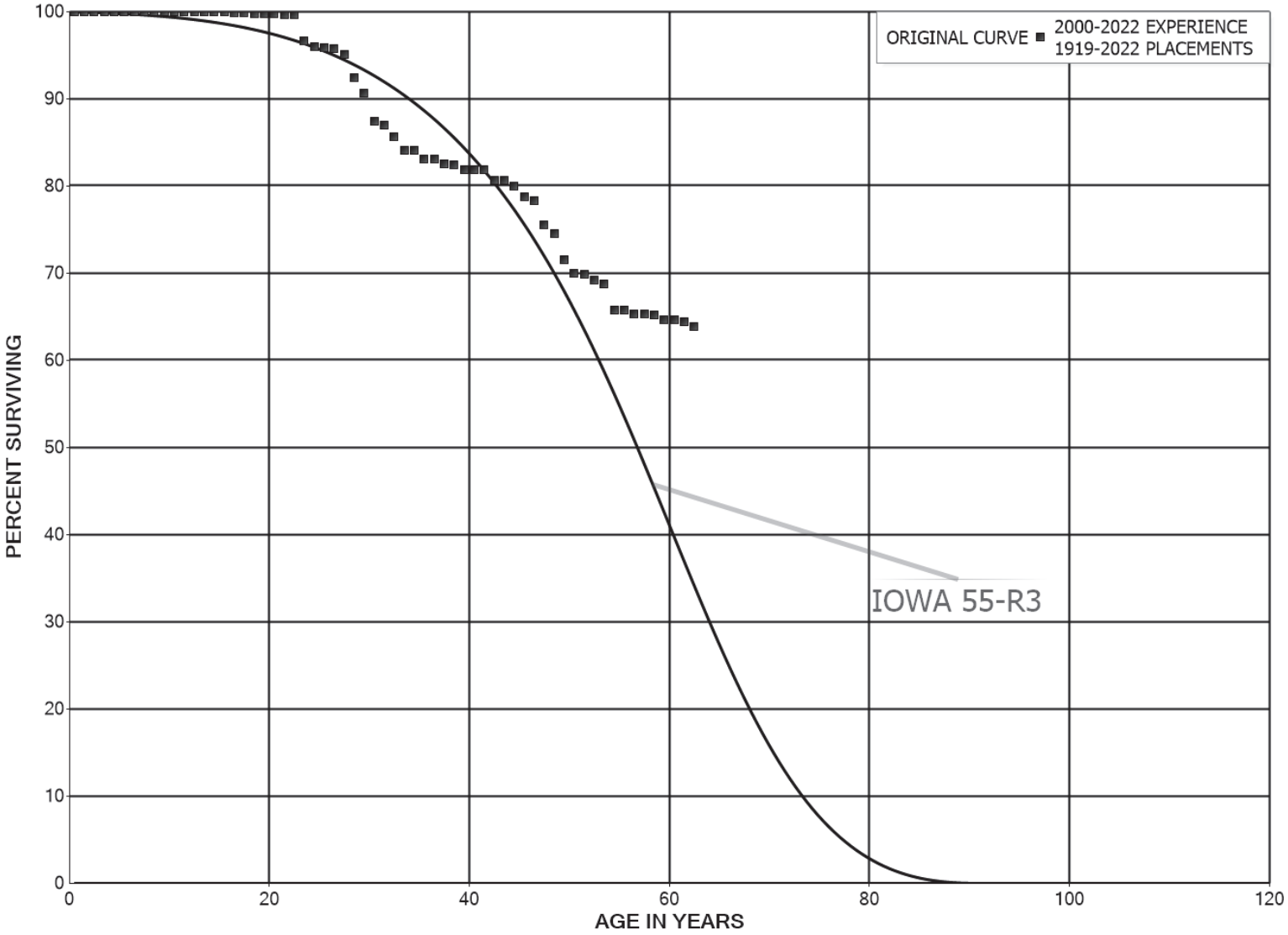
ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	58,341		0.0000	1.0000	78.08
40.5	55,291		0.0000	1.0000	78.08
41.5	55,291	1,258	0.0228	0.9772	78.08
42.5	54,032		0.0000	1.0000	76.30
43.5	53,223		0.0000	1.0000	76.30
44.5	53,223	2,074	0.0390	0.9610	76.30
45.5	45,392		0.0000	1.0000	73.33
46.5	45,392		0.0000	1.0000	73.33
47.5	45,392	552	0.0122	0.9878	73.33
48.5	44,840		0.0000	1.0000	72.44
49.5	44,840	1,359	0.0303	0.9697	72.44
50.5	43,481		0.0000	1.0000	70.24
51.5	41,614	2,592	0.0623	0.9377	70.24
52.5	39,022	271	0.0069	0.9931	65.87
53.5	35,461	6,890	0.1943	0.8057	65.41
54.5	28,571	2,915	0.1020	0.8980	52.70
55.5	23,313	2,499	0.1072	0.8928	47.33
56.5	20,814	14,411	0.6924	0.3076	42.25
57.5					13.00
58.5					
59.5	423		0.0000		
60.5	423		0.0000		
61.5	423		0.0000		
62.5	423		0.0000		
63.5	423		0.0000		
64.5	423		0.0000		
65.5	423		0.0000		
66.5	423		0.0000		
67.5	423		0.0000		
68.5	423		0.0000		
69.5	423		0.0000		
70.5	423		0.0000		
71.5	423		0.0000		
72.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 307.00 WELLS AND SPRINGS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	17,222,063		0.0000	1.0000	100.00
0.5	17,165,277	973	0.0001	0.9999	100.00
1.5	16,817,383	279	0.0000	1.0000	99.99
2.5	16,006,298	581	0.0000	1.0000	99.99
3.5	15,450,371	547	0.0000	1.0000	99.99
4.5	14,419,069	31	0.0000	1.0000	99.99
5.5	15,108,574	183	0.0000	1.0000	99.99
6.5	14,376,796	758	0.0001	0.9999	99.98
7.5	14,468,631	3,066	0.0002	0.9998	99.98
8.5	13,560,932	1,824	0.0001	0.9999	99.96
9.5	13,536,077	3,177	0.0002	0.9998	99.94
10.5	13,329,927	729	0.0001	0.9999	99.92
11.5	12,845,351	330	0.0000	1.0000	99.92
12.5	8,744,118	610	0.0001	0.9999	99.91
13.5	8,638,445	150	0.0000	1.0000	99.91
14.5	7,808,596	58	0.0000	1.0000	99.90
15.5	7,407,956	5,858	0.0008	0.9992	99.90
16.5	5,956,773	77	0.0000	1.0000	99.82
17.5	5,716,284	5,237	0.0009	0.9991	99.82
18.5	4,701,457	1,861	0.0004	0.9996	99.73
19.5	4,504,463	212	0.0000	1.0000	99.69
20.5	3,757,938	2,765	0.0007	0.9993	99.69
21.5	3,747,201	202	0.0001	0.9999	99.61
22.5	3,822,124	115,318	0.0302	0.9698	99.61
23.5	3,630,850	24,673	0.0068	0.9932	96.60
24.5	3,434,126	4,321	0.0013	0.9987	95.95
25.5	3,429,321	5,120	0.0015	0.9985	95.83
26.5	3,210,347	21,160	0.0066	0.9934	95.68
27.5	3,058,242	85,356	0.0279	0.9721	95.05
28.5	2,296,736	43,750	0.0190	0.9810	92.40
29.5	1,931,753	68,643	0.0355	0.9645	90.64
30.5	1,475,874	7,326	0.0050	0.9950	87.42
31.5	1,416,625	22,634	0.0160	0.9840	86.98
32.5	1,476,644	26,156	0.0177	0.9823	85.59
33.5	1,390,851	59	0.0000	1.0000	84.08
34.5	1,422,868	16,406	0.0115	0.9885	84.08
35.5	1,408,119	1,286	0.0009	0.9991	83.11
36.5	800,728	4,993	0.0062	0.9938	83.03
37.5	795,781	820	0.0010	0.9990	82.51
38.5	647,730	4,328	0.0067	0.9933	82.43

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	657,605	56	0.0001	0.9999	81.88
40.5	642,731	53	0.0001	0.9999	81.87
41.5	567,104	8,463	0.0149	0.9851	81.86
42.5	567,047	342	0.0006	0.9994	80.64
43.5	549,125	4,674	0.0085	0.9915	80.59
44.5	587,968	8,531	0.0145	0.9855	79.91
45.5	658,537	3,425	0.0052	0.9948	78.75
46.5	584,395	21,490	0.0368	0.9632	78.34
47.5	552,631	7,260	0.0131	0.9869	75.46
48.5	543,503	21,247	0.0391	0.9609	74.47
49.5	513,646	11,373	0.0221	0.9779	71.55
50.5	485,539	641	0.0013	0.9987	69.97
51.5	473,358	4,955	0.0105	0.9895	69.88
52.5	443,376	2,765	0.0062	0.9938	69.15
53.5	370,630	16,141	0.0436	0.9564	68.72
54.5	354,679	219	0.0006	0.9994	65.72
55.5	297,413	1,820	0.0061	0.9939	65.68
56.5	290,939	190	0.0007	0.9993	65.28
57.5	289,238	176	0.0006	0.9994	65.24
58.5	286,940	2,400	0.0084	0.9916	65.20
59.5	272,503	149	0.0005	0.9995	64.65
60.5	272,324	893	0.0033	0.9967	64.62
61.5	162,695	1,331	0.0082	0.9918	64.41
62.5	6,662	543	0.0815	0.9185	63.88
63.5	5,791		0.0000	1.0000	58.67
64.5	3,152		0.0000	1.0000	58.67
65.5	1,210		0.0000	1.0000	58.67
66.5	1,092		0.0000	1.0000	58.67
67.5	1,548		0.0000	1.0000	58.67
68.5	2,199		0.0000	1.0000	58.67
69.5	2,252		0.0000	1.0000	58.67
70.5	2,254	233	0.1034	0.8966	58.67
71.5	1,449	53	0.0369	0.9631	52.61
72.5	1,402	1	0.0010	0.9990	50.66
73.5	1,406	8	0.0060	0.9940	50.61
74.5	1,402	7	0.0048	0.9952	50.31
75.5	1,398	5	0.0038	0.9962	50.06
76.5	2,040	4	0.0019	0.9981	49.87
77.5	2,037	3	0.0014	0.9986	49.78
78.5	2,035	212	0.1041	0.8959	49.71

AQUA NEW JERSEY, INC.
WATER PLANT

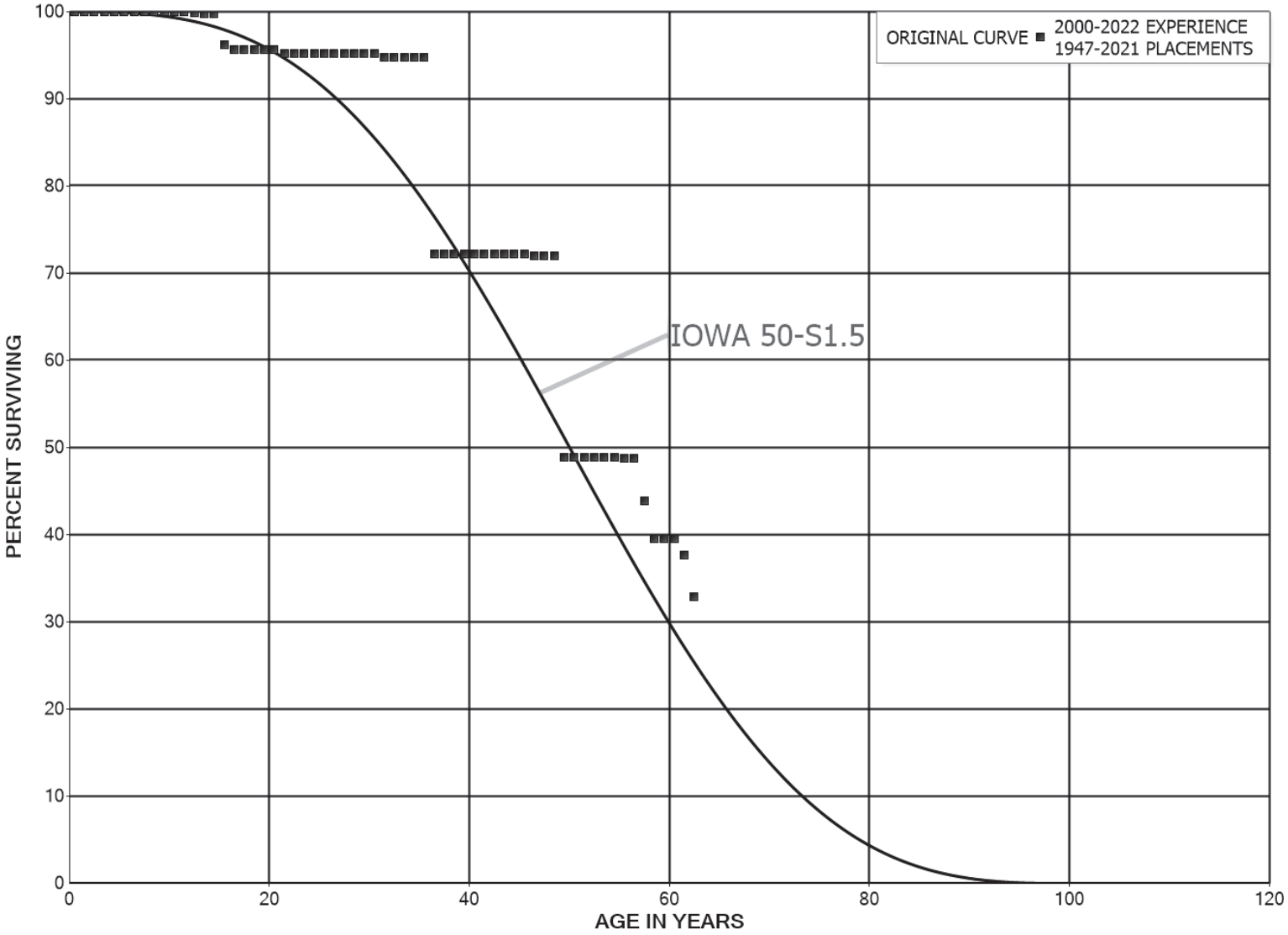
ACCOUNT 307.00 WELLS AND SPRINGS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	1,823	1	0.0007	0.9993	44.53
80.5	1,576	1	0.0005	0.9995	44.50
81.5	1,158	0	0.0003	0.9997	44.48
82.5	1,157	0	0.0003	0.9997	44.46
83.5	1,157		0.0000	1.0000	44.45
84.5	645		0.0000	1.0000	44.45
85.5	1,477		0.0000	1.0000	44.45
86.5	1,477		0.0000	1.0000	44.45
87.5	1,477		0.0000	1.0000	44.45
88.5	1,477		0.0000	1.0000	44.45
89.5	832		0.0000	1.0000	44.45
90.5	832		0.0000	1.0000	44.45
91.5	832		0.0000	1.0000	44.45
92.5	832		0.0000	1.0000	44.45
93.5	832		0.0000	1.0000	44.45
94.5	832		0.0000	1.0000	44.45
95.5	832		0.0000	1.0000	44.45
96.5	832		0.0000	1.0000	44.45
97.5	832		0.0000	1.0000	44.45
98.5					44.45

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 309.00 SUPPLY MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 309.00 SUPPLY MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1947-2021 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	40,692		0.0000	1.0000	100.00
0.5	40,692		0.0000	1.0000	100.00
1.5	500		0.0000	1.0000	100.00
2.5	500		0.0000	1.0000	100.00
3.5	25,423		0.0000	1.0000	100.00
4.5	25,423		0.0000	1.0000	100.00
5.5	427,716		0.0000	1.0000	100.00
6.5	486,067		0.0000	1.0000	100.00
7.5	486,067		0.0000	1.0000	100.00
8.5	486,067		0.0000	1.0000	100.00
9.5	490,655	38	0.0001	0.9999	100.00
10.5	490,617		0.0000	1.0000	99.99
11.5	514,208	690	0.0013	0.9987	99.99
12.5	513,518	888	0.0017	0.9983	99.86
13.5	512,630		0.0000	1.0000	99.69
14.5	512,630	17,855	0.0348	0.9652	99.69
15.5	536,420	3,082	0.0057	0.9943	96.21
16.5	533,338		0.0000	1.0000	95.66
17.5	533,338	58	0.0001	0.9999	95.66
18.5	533,280		0.0000	1.0000	95.65
19.5	535,512		0.0000	1.0000	95.65
20.5	535,512	2,948	0.0055	0.9945	95.65
21.5	532,845		0.0000	1.0000	95.12
22.5	532,845		0.0000	1.0000	95.12
23.5	532,845		0.0000	1.0000	95.12
24.5	532,845		0.0000	1.0000	95.12
25.5	532,845		0.0000	1.0000	95.12
26.5	504,989		0.0000	1.0000	95.12
27.5	504,989	1	0.0000	1.0000	95.12
28.5	79,095		0.0000	1.0000	95.12
29.5	23,933		0.0000	1.0000	95.12
30.5	23,933	109	0.0045	0.9955	95.12
31.5	23,824		0.0000	1.0000	94.69
32.5	23,824	5	0.0002	0.9998	94.69
33.5	23,819		0.0000	1.0000	94.67
34.5	3,234		0.0000	1.0000	94.67
35.5	3,234	768	0.2376	0.7624	94.67
36.5	233		0.0000	1.0000	72.18
37.5	233		0.0000	1.0000	72.18
38.5	233		0.0000	1.0000	72.18

AQUA NEW JERSEY, INC.
WATER PLANT

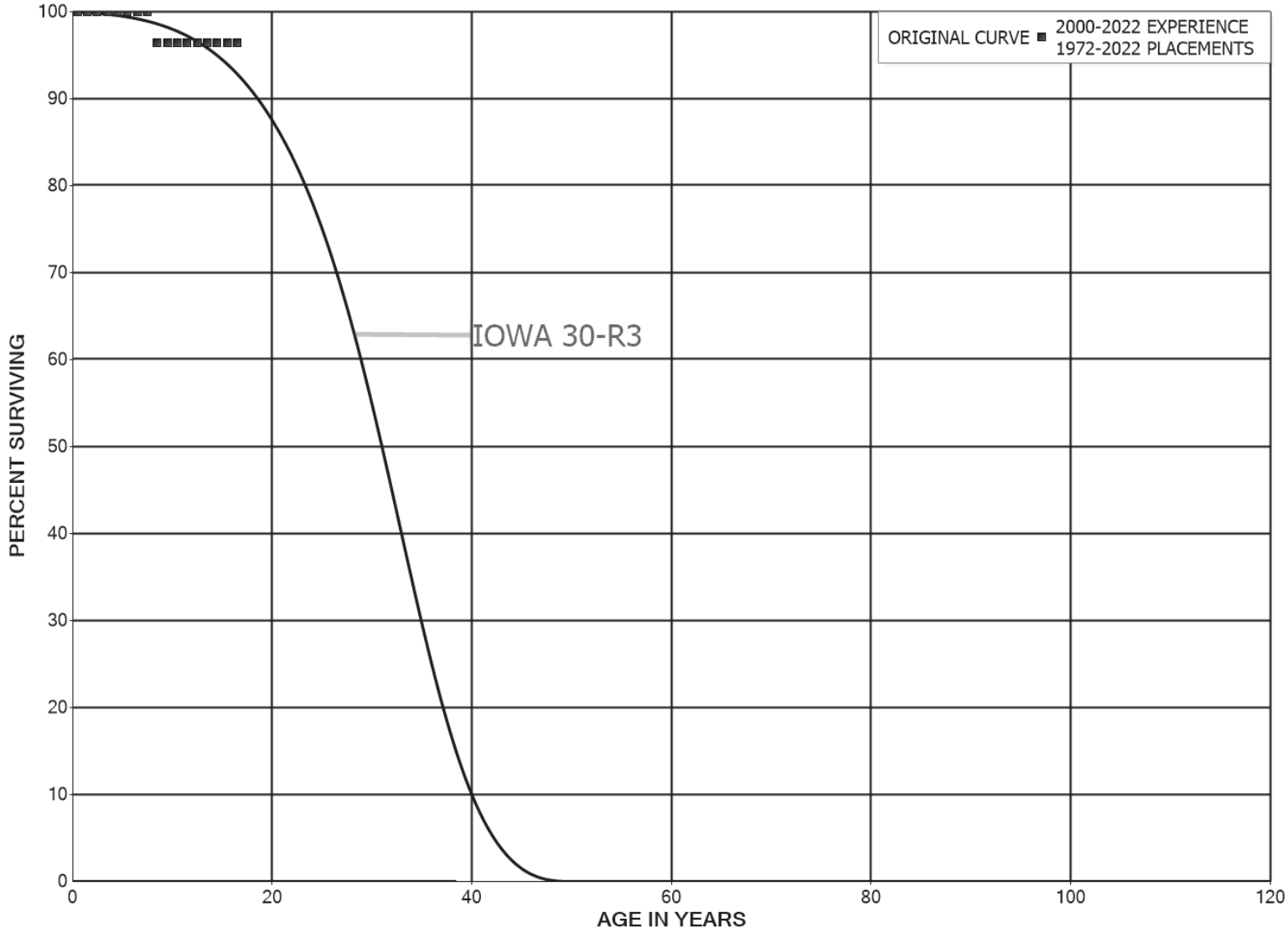
ACCOUNT 309.00 SUPPLY MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1947-2021 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	3,205		0.0000	1.0000	72.18
40.5	3,205		0.0000	1.0000	72.18
41.5	3,205		0.0000	1.0000	72.18
42.5	3,205		0.0000	1.0000	72.18
43.5	3,205		0.0000	1.0000	72.18
44.5	6,134		0.0000	1.0000	72.18
45.5	8,614	34	0.0039	0.9961	72.18
46.5	8,580		0.0000	1.0000	71.90
47.5	8,580		0.0000	1.0000	71.90
48.5	9,159	2,938	0.3207	0.6793	71.90
49.5	6,159		0.0000	1.0000	48.84
50.5	6,159		0.0000	1.0000	48.84
51.5	6,159		0.0000	1.0000	48.84
52.5	6,486		0.0000	1.0000	48.84
53.5	6,486		0.0000	1.0000	48.84
54.5	6,486	11	0.0016	0.9984	48.84
55.5	6,475		0.0000	1.0000	48.76
56.5	6,475	654	0.1010	0.8990	48.76
57.5	5,821	569	0.0977	0.9023	43.83
58.5	5,252	8	0.0015	0.9985	39.55
59.5	5,245		0.0000	1.0000	39.49
60.5	5,245	255	0.0487	0.9513	39.49
61.5	2,543	319	0.1253	0.8747	37.57
62.5					32.86

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 310.20 POWER GENERATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

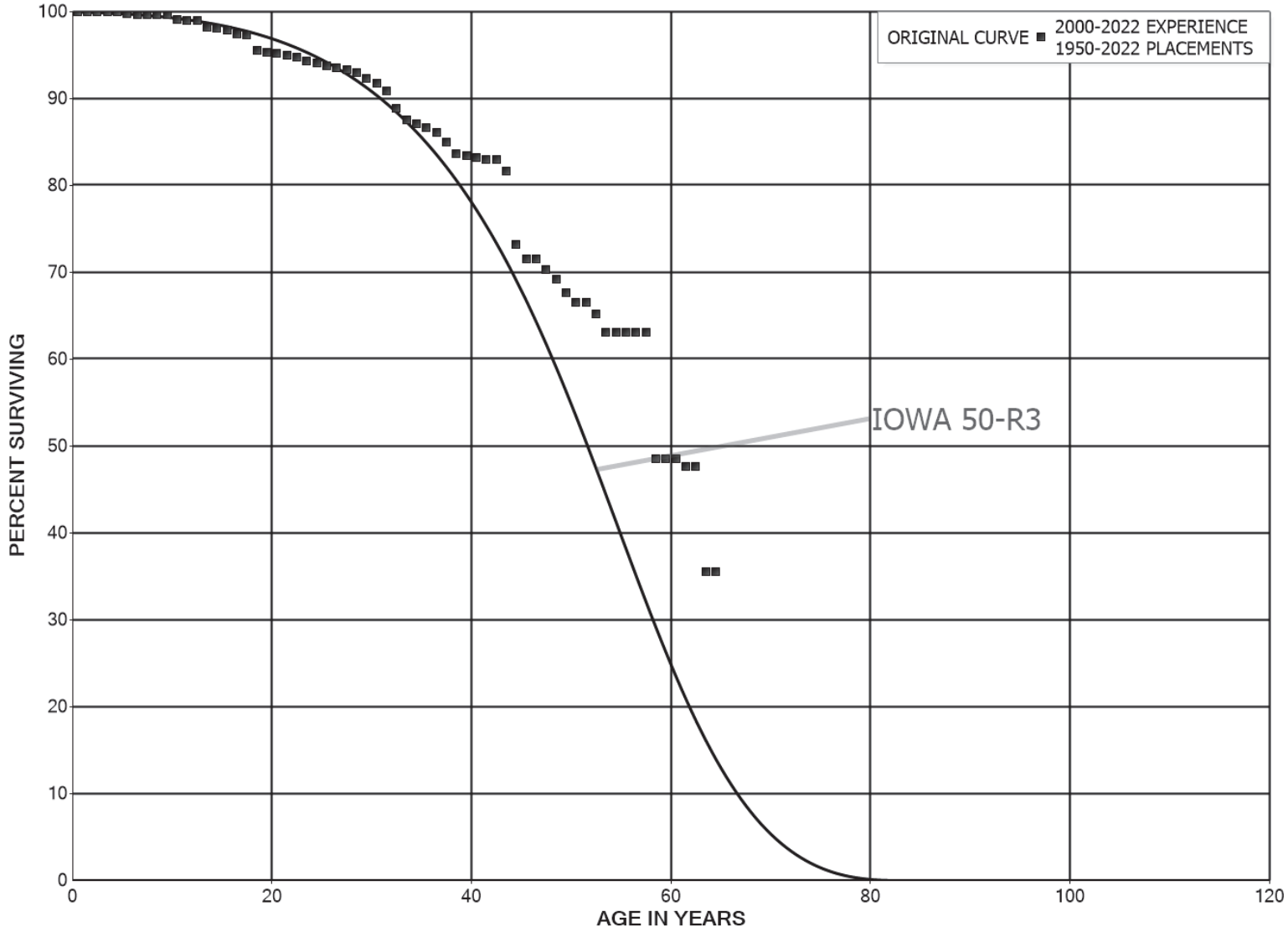
ACCOUNT 310.20 POWER GENERATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1972-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,812,245		0.0000	1.0000	100.00
0.5	2,792,605		0.0000	1.0000	100.00
1.5	2,766,084		0.0000	1.0000	100.00
2.5	2,766,084		0.0000	1.0000	100.00
3.5	2,676,428		0.0000	1.0000	100.00
4.5	2,677,467		0.0000	1.0000	100.00
5.5	2,636,215		0.0000	1.0000	100.00
6.5	2,505,312		0.0000	1.0000	100.00
7.5	2,405,875	85,935	0.0357	0.9643	100.00
8.5	2,309,224		0.0000	1.0000	96.43
9.5	2,309,224		0.0000	1.0000	96.43
10.5	2,216,580		0.0000	1.0000	96.43
11.5	1,039		0.0000	1.0000	96.43
12.5	1,039		0.0000	1.0000	96.43
13.5	1,039		0.0000	1.0000	96.43
14.5	1,039		0.0000	1.0000	96.43
15.5	1,039		0.0000	1.0000	96.43
16.5					96.43
17.5					
18.5	18,301		0.0000		
19.5	18,750		0.0000		
20.5	18,750		0.0000		
21.5	18,750		0.0000		
22.5	22,763		0.0000		
23.5	22,763		0.0000		
24.5	22,763		0.0000		
25.5	22,763		0.0000		
26.5	22,763		0.0000		
27.5	29,128		0.0000		
28.5	29,128		0.0000		
29.5	29,128		0.0000		
30.5	10,827		0.0000		
31.5	10,378		0.0000		
32.5	10,378		0.0000		
33.5	10,378		0.0000		
34.5	6,366		0.0000		
35.5	6,366		0.0000		
36.5	6,366		0.0000		
37.5	6,366		0.0000		
38.5	6,366		0.0000		
39.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNTS 311.20 AND 311.40 PUMPING EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNTS 311.20 AND 311.40 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	7,538,896		0.0000	1.0000	100.00
0.5	7,411,087	7	0.0000	1.0000	100.00
1.5	7,088,617	18	0.0000	1.0000	100.00
2.5	7,043,820	115	0.0000	1.0000	100.00
3.5	5,958,258	158	0.0000	1.0000	100.00
4.5	5,945,287	18,882	0.0032	0.9968	100.00
5.5	6,450,545	943	0.0001	0.9999	99.68
6.5	6,656,832	723	0.0001	0.9999	99.66
7.5	6,749,572	3,355	0.0005	0.9995	99.65
8.5	6,360,594	2,018	0.0003	0.9997	99.60
9.5	6,387,618	32,614	0.0051	0.9949	99.57
10.5	6,180,221	3,583	0.0006	0.9994	99.06
11.5	6,241,115	5,458	0.0009	0.9991	99.01
12.5	6,290,399	45,705	0.0073	0.9927	98.92
13.5	6,361,802	8,658	0.0014	0.9986	98.20
14.5	6,365,837	16,138	0.0025	0.9975	98.07
15.5	6,210,926	30,018	0.0048	0.9952	97.82
16.5	4,559,360	3,091	0.0007	0.9993	97.35
17.5	4,340,190	78,666	0.0181	0.9819	97.28
18.5	3,180,144	8,112	0.0026	0.9974	95.52
19.5	3,176,679	4,738	0.0015	0.9985	95.27
20.5	2,798,703	6,230	0.0022	0.9978	95.13
21.5	2,068,393	3,588	0.0017	0.9983	94.92
22.5	2,244,505	11,225	0.0050	0.9950	94.75
23.5	2,214,724	6,304	0.0028	0.9972	94.28
24.5	2,217,932	6,213	0.0028	0.9972	94.01
25.5	2,119,266	6,238	0.0029	0.9971	93.75
26.5	2,099,950	5,192	0.0025	0.9975	93.47
27.5	2,066,839	7,320	0.0035	0.9965	93.24
28.5	1,542,856	9,724	0.0063	0.9937	92.91
29.5	1,369,471	8,844	0.0065	0.9935	92.33
30.5	1,187,902	10,969	0.0092	0.9908	91.73
31.5	1,095,263	24,581	0.0224	0.9776	90.88
32.5	1,043,440	15,803	0.0151	0.9849	88.84
33.5	953,841	4,625	0.0048	0.9952	87.50
34.5	951,516	4,527	0.0048	0.9952	87.07
35.5	667,390	4,400	0.0066	0.9934	86.66
36.5	523,442	6,653	0.0127	0.9873	86.09
37.5	480,041	7,905	0.0165	0.9835	84.99
38.5	428,219	820	0.0019	0.9981	83.59

AQUA NEW JERSEY, INC.
WATER PLANT

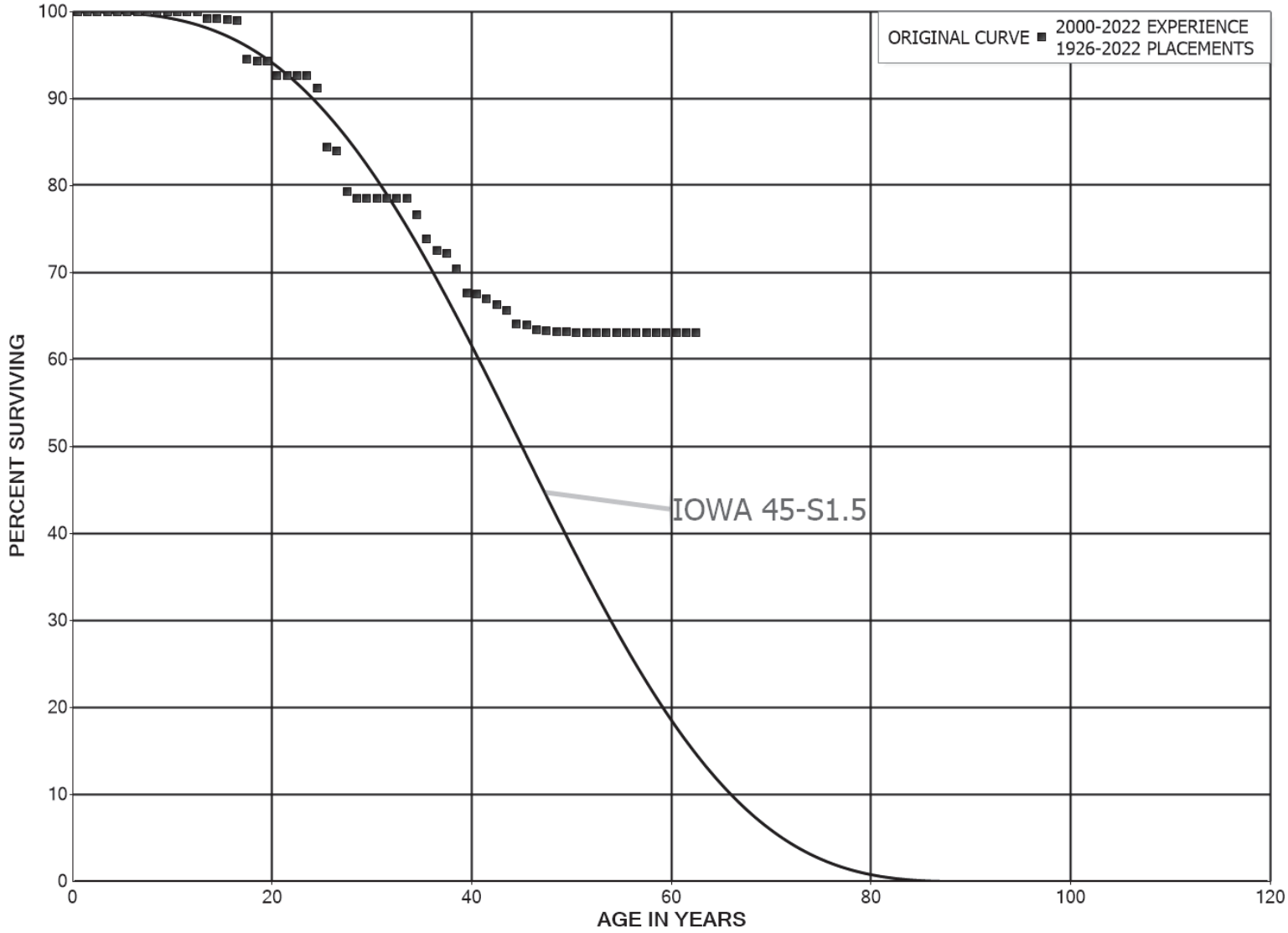
ACCOUNTS 311.20 AND 311.40 PUMPING EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	416,414	1,319	0.0032	0.9968	83.43
40.5	411,078	1,160	0.0028	0.9972	83.17
41.5	352,094	149	0.0004	0.9996	82.93
42.5	330,746	4,917	0.0149	0.9851	82.90
43.5	311,606	32,472	0.1042	0.8958	81.67
44.5	269,277	6,135	0.0228	0.9772	73.16
45.5	230,118	23	0.0001	0.9999	71.49
46.5	205,183	3,345	0.0163	0.9837	71.48
47.5	182,904	2,856	0.0156	0.9844	70.32
48.5	153,567	3,530	0.0230	0.9770	69.22
49.5	124,024	1,989	0.0160	0.9840	67.63
50.5	93,261	115	0.0012	0.9988	66.54
51.5	89,656	1,810	0.0202	0.9798	66.46
52.5	77,790	2,405	0.0309	0.9691	65.12
53.5	29,673		0.0000	1.0000	63.11
54.5	29,577		0.0000	1.0000	63.11
55.5	28,423		0.0000	1.0000	63.11
56.5	25,904		0.0000	1.0000	63.11
57.5	25,703	5,968	0.2322	0.7678	63.11
58.5	14,430		0.0000	1.0000	48.45
59.5	14,384		0.0000	1.0000	48.45
60.5	9,923	178	0.0180	0.9820	48.45
61.5	8,826		0.0000	1.0000	47.58
62.5	193	49	0.2535	0.7465	47.58
63.5	135		0.0000	1.0000	35.52
64.5					35.52

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 320.30 WATER TREATMENT EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	16,169,542		0.0000	1.0000	100.00
0.5	16,157,751	1,674	0.0001	0.9999	100.00
1.5	15,594,525	902	0.0001	0.9999	99.99
2.5	15,351,765	299	0.0000	1.0000	99.98
3.5	9,885,393	126	0.0000	1.0000	99.98
4.5	8,811,996	193	0.0000	1.0000	99.98
5.5	9,192,445	621	0.0001	0.9999	99.98
6.5	6,288,877	3,049	0.0005	0.9995	99.97
7.5	6,237,011	257	0.0000	1.0000	99.92
8.5	6,270,141	437	0.0001	0.9999	99.92
9.5	6,325,831	411	0.0001	0.9999	99.91
10.5	6,327,017	199	0.0000	1.0000	99.91
11.5	6,199,469	275	0.0000	1.0000	99.90
12.5	6,153,294	44,971	0.0073	0.9927	99.90
13.5	6,143,566	2,353	0.0004	0.9996	99.17
14.5	6,206,736	5,384	0.0009	0.9991	99.13
15.5	5,391,471	6,326	0.0012	0.9988	99.04
16.5	2,604,638	116,183	0.0446	0.9554	98.93
17.5	2,221,246	5,348	0.0024	0.9976	94.52
18.5	1,468,345	95	0.0001	0.9999	94.29
19.5	1,415,015	24,936	0.0176	0.9824	94.28
20.5	1,260,030	141	0.0001	0.9999	92.62
21.5	1,232,183	38	0.0000	1.0000	92.61
22.5	1,022,172	145	0.0001	0.9999	92.61
23.5	904,431	13,922	0.0154	0.9846	92.59
24.5	878,655	65,754	0.0748	0.9252	91.17
25.5	807,473	4,173	0.0052	0.9948	84.35
26.5	730,141	39,864	0.0546	0.9454	83.91
27.5	649,053	6,328	0.0097	0.9903	79.33
28.5	353,781	143	0.0004	0.9996	78.56
29.5	333,260	34	0.0001	0.9999	78.52
30.5	296,293	2	0.0000	1.0000	78.52
31.5	169,630	84	0.0005	0.9995	78.51
32.5	155,342	1	0.0000	1.0000	78.48
33.5	184,391	4,274	0.0232	0.9768	78.48
34.5	177,133	6,514	0.0368	0.9632	76.66
35.5	155,619	2,767	0.0178	0.9822	73.84
36.5	94,867	469	0.0049	0.9951	72.52
37.5	93,243	2,281	0.0245	0.9755	72.17
38.5	86,158	3,420	0.0397	0.9603	70.40

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	81,257	172	0.0021	0.9979	67.61
40.5	79,137	668	0.0084	0.9916	67.46
41.5	73,692	705	0.0096	0.9904	66.89
42.5	69,895	644	0.0092	0.9908	66.25
43.5	85,457	1,992	0.0233	0.9767	65.64
44.5	123,546	375	0.0030	0.9970	64.11
45.5	170,971	1,287	0.0075	0.9925	63.92
46.5	169,070	321	0.0019	0.9981	63.44
47.5	168,505	412	0.0024	0.9976	63.32
48.5	167,751	2	0.0000	1.0000	63.16
49.5	167,642	144	0.0009	0.9991	63.16
50.5	112,083		0.0000	1.0000	63.11
51.5	110,496		0.0000	1.0000	63.11
52.5	110,487		0.0000	1.0000	63.11
53.5	110,255	22	0.0002	0.9998	63.11
54.5	110,232	2	0.0000	1.0000	63.09
55.5	110,230		0.0000	1.0000	63.09
56.5	110,230	0	0.0000	1.0000	63.09
57.5	109,424		0.0000	1.0000	63.09
58.5	108,635		0.0000	1.0000	63.09
59.5	108,635		0.0000	1.0000	63.09
60.5	91,658		0.0000	1.0000	63.09
61.5	50,913		0.0000	1.0000	63.09
62.5					63.09
63.5					
64.5					
65.5					
66.5					
67.5					
68.5					
69.5					
70.5					
71.5					
72.5					
73.5					
74.5					
75.5					
76.5					
77.5					
78.5					

AQUA NEW JERSEY, INC.
WATER PLANT

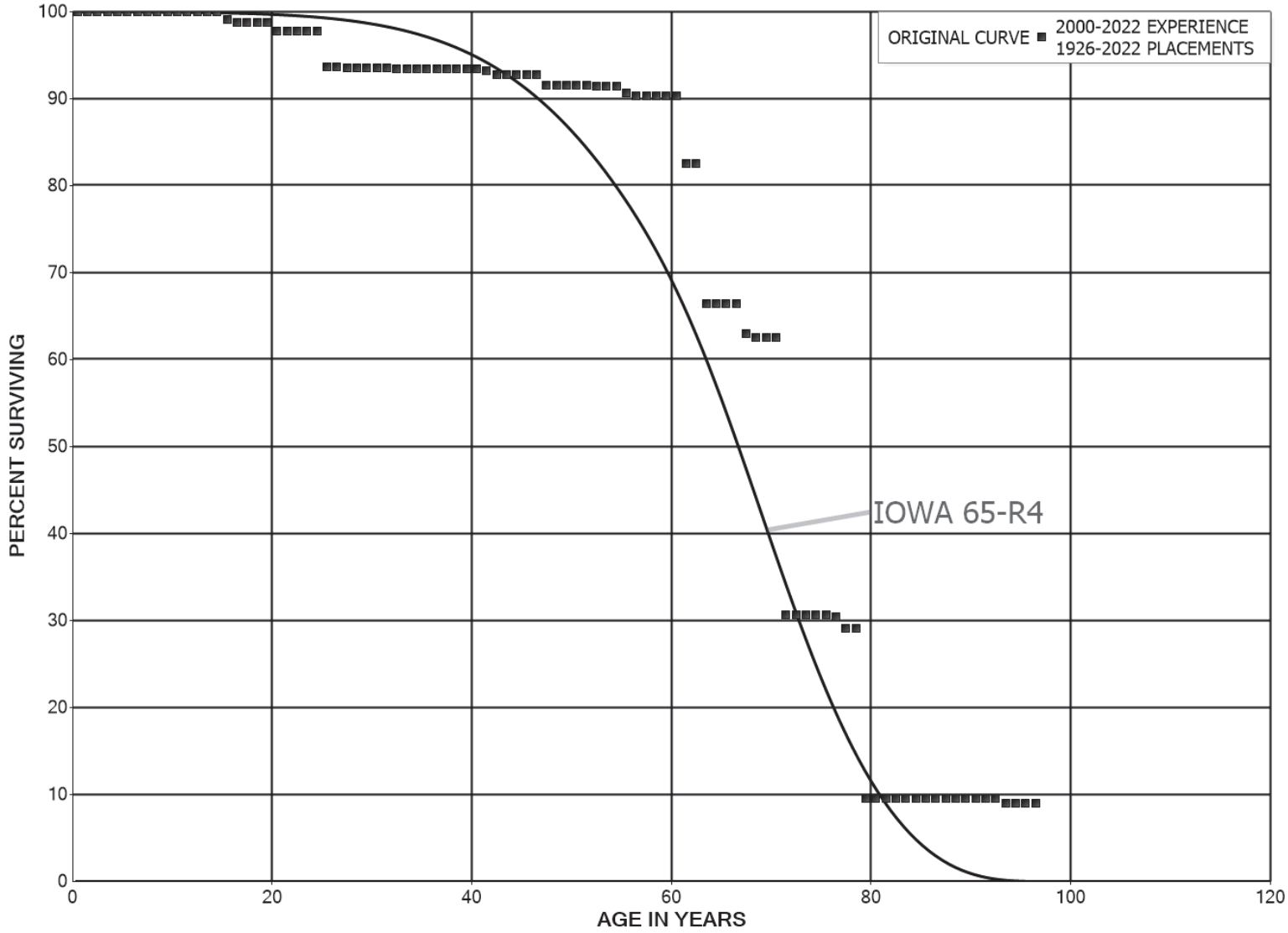
ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5					
80.5					
81.5					
82.5					
83.5	4,606		0.0000		
84.5	4,606		0.0000		
85.5	4,606		0.0000		
86.5	4,606		0.0000		
87.5	4,606		0.0000		
88.5	4,606		0.0000		
89.5	4,606		0.0000		
90.5	4,606		0.0000		
91.5	4,606		0.0000		
92.5	4,606		0.0000		
93.5	4,606		0.0000		
94.5	4,606		0.0000		
95.5	4,606		0.0000		
96.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	9,848,903		0.0000	1.0000	100.00
0.5	7,440,394	0	0.0000	1.0000	100.00
1.5	4,845,994	41	0.0000	1.0000	100.00
2.5	5,929,160	2	0.0000	1.0000	100.00
3.5	5,595,603	46	0.0000	1.0000	100.00
4.5	8,489,973	1	0.0000	1.0000	100.00
5.5	8,489,972	41	0.0000	1.0000	100.00
6.5	8,441,633	49	0.0000	1.0000	100.00
7.5	8,523,996	197	0.0000	1.0000	100.00
8.5	9,043,841	40	0.0000	1.0000	99.99
9.5	9,043,801	888	0.0001	0.9999	99.99
10.5	8,758,051	27	0.0000	1.0000	99.98
11.5	8,085,254	2	0.0000	1.0000	99.98
12.5	8,126,383	137	0.0000	1.0000	99.98
13.5	8,125,237	534	0.0001	0.9999	99.98
14.5	9,242,224	81,909	0.0089	0.9911	99.98
15.5	9,165,769	31,196	0.0034	0.9966	99.09
16.5	9,134,573	3	0.0000	1.0000	98.75
17.5	9,121,580	97	0.0000	1.0000	98.75
18.5	9,081,234	165	0.0000	1.0000	98.75
19.5	7,764,705	82,318	0.0106	0.9894	98.75
20.5	7,627,320	91	0.0000	1.0000	97.70
21.5	7,011,104	1	0.0000	1.0000	97.70
22.5	8,032,013	20	0.0000	1.0000	97.70
23.5	7,743,042	15	0.0000	1.0000	97.70
24.5	7,722,368	323,501	0.0419	0.9581	97.70
25.5	6,890,026	1,637	0.0002	0.9998	93.61
26.5	6,884,863	2,227	0.0003	0.9997	93.59
27.5	3,911,905	2,509	0.0006	0.9994	93.56
28.5	3,918,713	160	0.0000	1.0000	93.50
29.5	3,959,565	83	0.0000	1.0000	93.49
30.5	4,148,878	1,693	0.0004	0.9996	93.49
31.5	2,689,389	332	0.0001	0.9999	93.45
32.5	2,689,056	364	0.0001	0.9999	93.44
33.5	2,436,483	79	0.0000	1.0000	93.43
34.5	2,386,746	11	0.0000	1.0000	93.42
35.5	1,688,719	221	0.0001	0.9999	93.42
36.5	1,803,836	18	0.0000	1.0000	93.41
37.5	1,386,985		0.0000	1.0000	93.41
38.5	1,260,250	7	0.0000	1.0000	93.41

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	1,260,243		0.0000	1.0000	93.41
40.5	1,260,243	3,845	0.0031	0.9969	93.41
41.5	1,336,632	5,596	0.0042	0.9958	93.13
42.5	1,330,484		0.0000	1.0000	92.74
43.5	1,066,434		0.0000	1.0000	92.74
44.5	959,564		0.0000	1.0000	92.74
45.5	671,745	381	0.0006	0.9994	92.74
46.5	655,672	8,403	0.0128	0.9872	92.68
47.5	640,138		0.0000	1.0000	91.50
48.5	512,553		0.0000	1.0000	91.50
49.5	517,032		0.0000	1.0000	91.50
50.5	517,032		0.0000	1.0000	91.50
51.5	507,780	526	0.0010	0.9990	91.50
52.5	466,243		0.0000	1.0000	91.40
53.5	466,243		0.0000	1.0000	91.40
54.5	465,553	3,835	0.0082	0.9918	91.40
55.5	461,718	1,652	0.0036	0.9964	90.65
56.5	460,066		0.0000	1.0000	90.32
57.5	503,169		0.0000	1.0000	90.32
58.5	421,454		0.0000	1.0000	90.32
59.5	312,228		0.0000	1.0000	90.32
60.5	312,228	27,178	0.0870	0.9130	90.32
61.5	101,991		0.0000	1.0000	82.46
62.5	97,512	18,994	0.1948	0.8052	82.46
63.5	78,517		0.0000	1.0000	66.40
64.5	30,724		0.0000	1.0000	66.40
65.5	69,484		0.0000	1.0000	66.40
66.5	69,484	3,642	0.0524	0.9476	66.40
67.5	65,842	484	0.0073	0.9927	62.92
68.5	65,358		0.0000	1.0000	62.46
69.5	65,358		0.0000	1.0000	62.46
70.5	65,358	33,360	0.5104	0.4896	62.46
71.5	31,998	17	0.0005	0.9995	30.58
72.5	31,981		0.0000	1.0000	30.56
73.5	31,981		0.0000	1.0000	30.56
74.5	31,981		0.0000	1.0000	30.56
75.5	31,981	200	0.0063	0.9937	30.56
76.5	31,781	1,367	0.0430	0.9570	30.37
77.5	30,413		0.0000	1.0000	29.06
78.5	30,413	20,503	0.6741	0.3259	29.06

AQUA NEW JERSEY, INC.
WATER PLANT

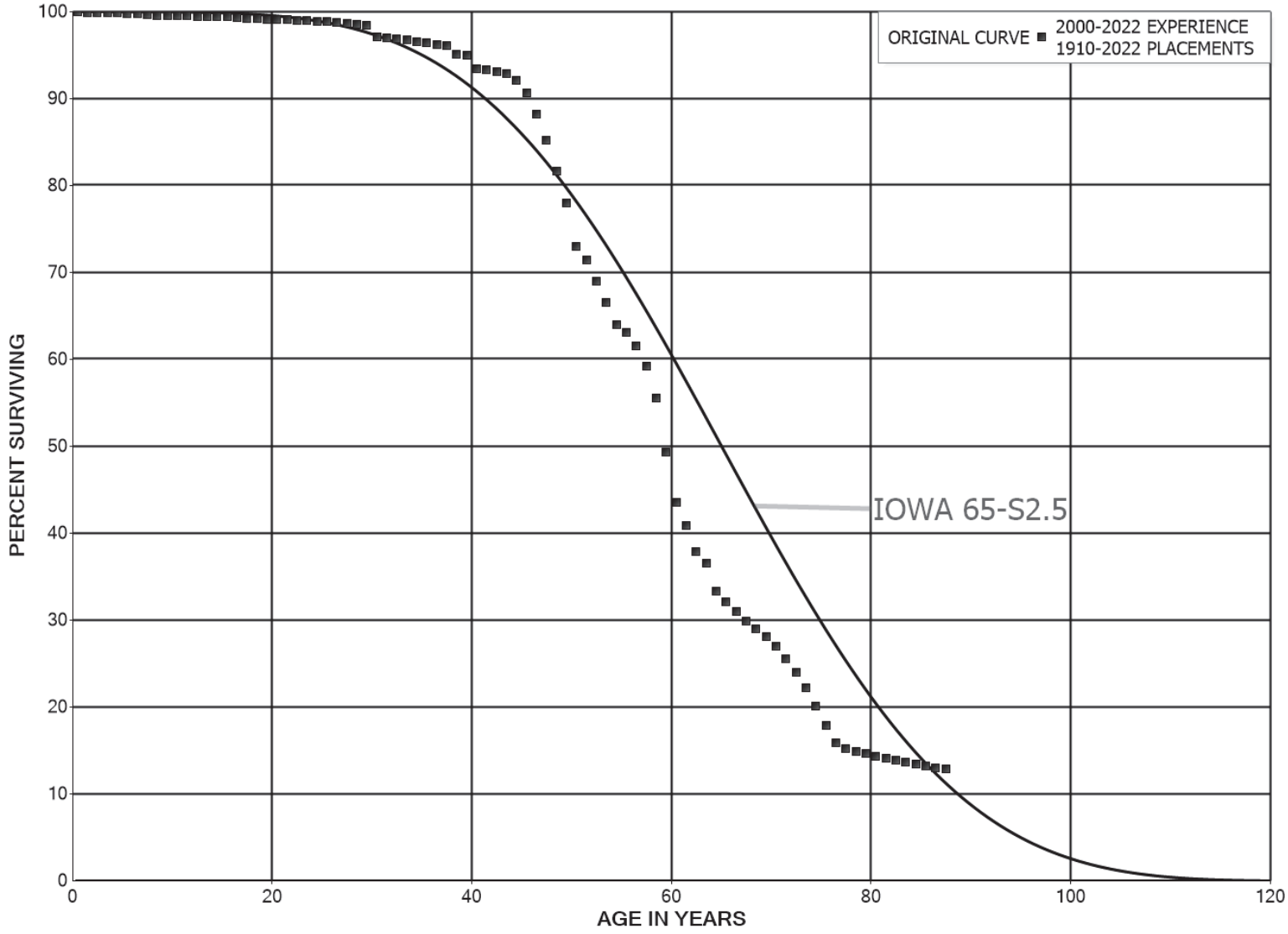
ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1926-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	9,910		0.0000	1.0000	9.47
80.5	6,259		0.0000	1.0000	9.47
81.5	6,259		0.0000	1.0000	9.47
82.5	6,259		0.0000	1.0000	9.47
83.5	27,773		0.0000	1.0000	9.47
84.5	26,915		0.0000	1.0000	9.47
85.5	26,915		0.0000	1.0000	9.47
86.5	26,915		0.0000	1.0000	9.47
87.5	26,915		0.0000	1.0000	9.47
88.5	21,515		0.0000	1.0000	9.47
89.5	21,515		0.0000	1.0000	9.47
90.5	21,515		0.0000	1.0000	9.47
91.5	21,515		0.0000	1.0000	9.47
92.5	21,515	1,159	0.0538	0.9462	9.47
93.5	20,356		0.0000	1.0000	8.96
94.5	20,356		0.0000	1.0000	8.96
95.5	20,356		0.0000	1.0000	8.96
96.5					8.96

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	136,043,729		0.0000	1.0000	100.00
0.5	122,984,558	155,443	0.0013	0.9987	100.00
1.5	119,634,623	9,021	0.0001	0.9999	99.87
2.5	119,477,700	10,333	0.0001	0.9999	99.87
3.5	111,469,325	25,026	0.0002	0.9998	99.86
4.5	109,382,615	113,538	0.0010	0.9990	99.84
5.5	100,194,840	38,458	0.0004	0.9996	99.73
6.5	94,780,138	50,207	0.0005	0.9995	99.69
7.5	84,592,970	108,508	0.0013	0.9987	99.64
8.5	80,469,946	15,267	0.0002	0.9998	99.51
9.5	68,646,139	13,044	0.0002	0.9998	99.49
10.5	65,550,919	14,742	0.0002	0.9998	99.47
11.5	63,981,365	12,193	0.0002	0.9998	99.45
12.5	62,157,723	10,992	0.0002	0.9998	99.43
13.5	59,646,086	17,056	0.0003	0.9997	99.42
14.5	57,400,053	23,634	0.0004	0.9996	99.39
15.5	55,127,851	44,713	0.0008	0.9992	99.35
16.5	49,171,239	23,786	0.0005	0.9995	99.27
17.5	46,076,515	19,216	0.0004	0.9996	99.22
18.5	43,511,945	33,115	0.0008	0.9992	99.18
19.5	39,377,612	17,608	0.0004	0.9996	99.10
20.5	37,017,839	15,754	0.0004	0.9996	99.06
21.5	35,194,790	15,016	0.0004	0.9996	99.01
22.5	33,297,836	14,748	0.0004	0.9996	98.97
23.5	31,559,568	14,579	0.0005	0.9995	98.93
24.5	29,925,915	14,042	0.0005	0.9995	98.88
25.5	28,627,938	43,717	0.0015	0.9985	98.84
26.5	27,458,029	31,226	0.0011	0.9989	98.69
27.5	25,367,737	23,061	0.0009	0.9991	98.57
28.5	24,376,218	18,492	0.0008	0.9992	98.48
29.5	22,201,306	299,384	0.0135	0.9865	98.41
30.5	22,609,830	25,360	0.0011	0.9989	97.08
31.5	22,273,541	22,294	0.0010	0.9990	96.97
32.5	19,668,330	41,772	0.0021	0.9979	96.88
33.5	18,411,762	22,603	0.0012	0.9988	96.67
34.5	17,201,301	26,246	0.0015	0.9985	96.55
35.5	16,288,792	29,698	0.0018	0.9982	96.40
36.5	15,306,749	33,147	0.0022	0.9978	96.23
37.5	13,802,863	143,486	0.0104	0.9896	96.02
38.5	12,768,465	15,030	0.0012	0.9988	95.02

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	11,983,057	184,457	0.0154	0.9846	94.91
40.5	12,181,379	16,037	0.0013	0.9987	93.45
41.5	10,334,819	26,857	0.0026	0.9974	93.33
42.5	9,634,382	30,206	0.0031	0.9969	93.08
43.5	8,855,720	68,257	0.0077	0.9923	92.79
44.5	8,072,850	125,617	0.0156	0.9844	92.08
45.5	7,405,541	203,352	0.0275	0.9725	90.64
46.5	6,563,950	221,550	0.0338	0.9662	88.15
47.5	5,122,975	217,263	0.0424	0.9576	85.18
48.5	4,352,601	192,912	0.0443	0.9557	81.57
49.5	3,558,102	230,966	0.0649	0.9351	77.95
50.5	3,050,224	64,667	0.0212	0.9788	72.89
51.5	2,680,133	91,434	0.0341	0.9659	71.35
52.5	2,497,288	87,606	0.0351	0.9649	68.91
53.5	2,396,924	90,009	0.0376	0.9624	66.49
54.5	2,316,344	32,658	0.0141	0.9859	64.00
55.5	2,290,935	57,504	0.0251	0.9749	63.10
56.5	2,223,033	86,264	0.0388	0.9612	61.51
57.5	944,433	58,159	0.0616	0.9384	59.12
58.5	815,399	91,734	0.1125	0.8875	55.48
59.5	704,240	82,359	0.1169	0.8831	49.24
60.5	604,557	37,377	0.0618	0.9382	43.48
61.5	560,127	40,711	0.0727	0.9273	40.79
62.5	483,905	16,800	0.0347	0.9653	37.83
63.5	477,679	42,896	0.0898	0.9102	36.52
64.5	425,292	15,526	0.0365	0.9635	33.24
65.5	394,688	12,849	0.0326	0.9674	32.02
66.5	343,293	12,595	0.0367	0.9633	30.98
67.5	326,648	9,984	0.0306	0.9694	29.84
68.5	316,578	9,247	0.0292	0.9708	28.93
69.5	276,224	10,663	0.0386	0.9614	28.09
70.5	237,669	13,139	0.0553	0.9447	27.00
71.5	194,368	12,110	0.0623	0.9377	25.51
72.5	179,057	13,009	0.0727	0.9273	23.92
73.5	161,866	15,369	0.0949	0.9051	22.18
74.5	151,049	16,556	0.1096	0.8904	20.08
75.5	128,955	15,010	0.1164	0.8836	17.88
76.5	110,456	4,580	0.0415	0.9585	15.80
77.5	97,577	1,842	0.0189	0.9811	15.14
78.5	94,361	1,714	0.0182	0.9818	14.85

AQUA NEW JERSEY, INC.
WATER PLANT

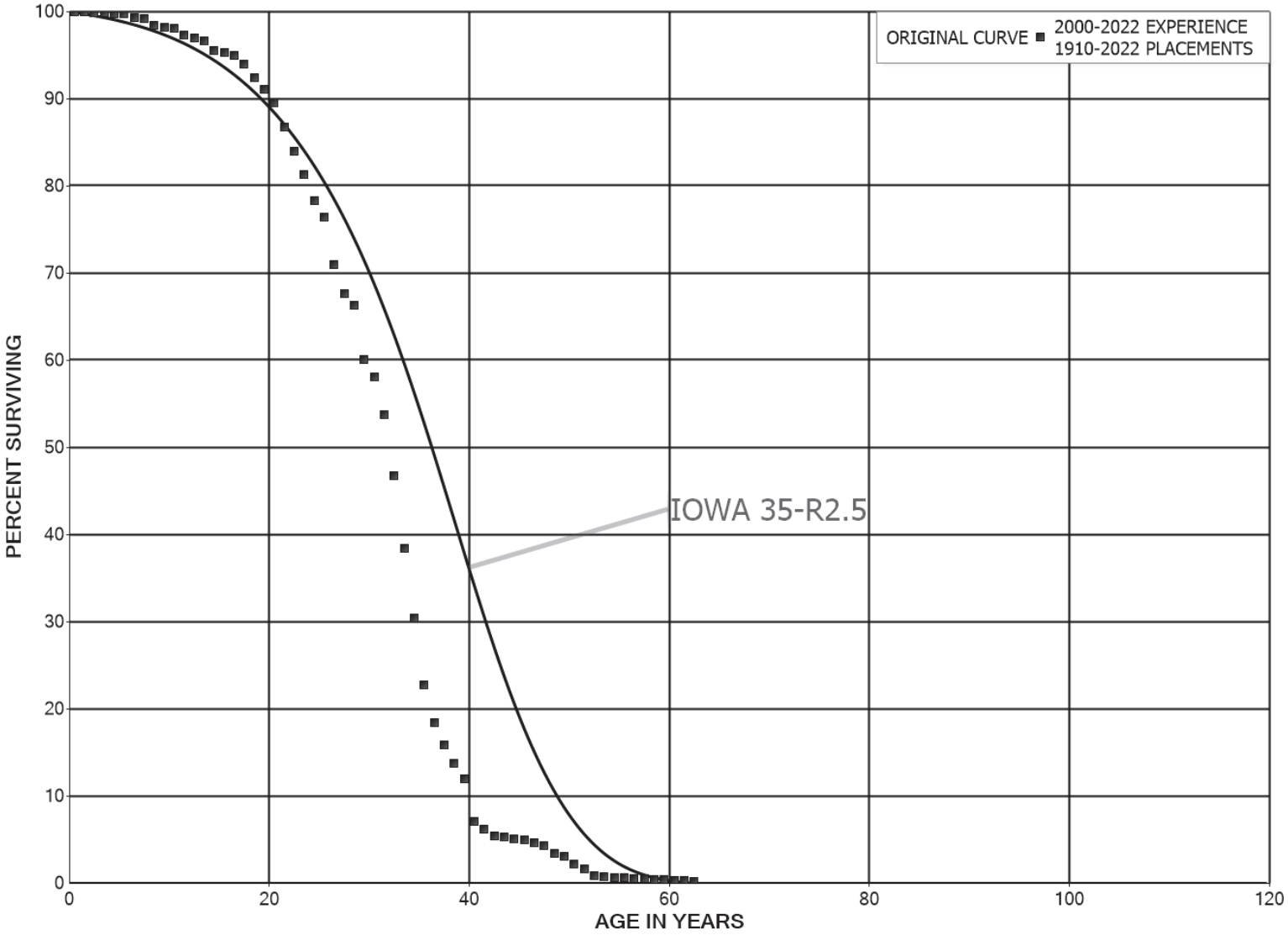
ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	93,493	1,670	0.0179	0.9821	14.58
80.5	88,933	1,641	0.0184	0.9816	14.32
81.5	95,845	1,452	0.0151	0.9849	14.06
82.5	93,235	1,343	0.0144	0.9856	13.85
83.5	80,688	1,296	0.0161	0.9839	13.65
84.5	76,843	1,232	0.0160	0.9840	13.43
85.5	64,836	1,114	0.0172	0.9828	13.21
86.5	62,118	835	0.0134	0.9866	12.99
87.5	45,427		0.0000	1.0000	12.81
88.5	39,017		0.0000	1.0000	12.81
89.5	35,546		0.0000	1.0000	12.81
90.5	32,436		0.0000	1.0000	12.81
91.5	31,561		0.0000	1.0000	12.81
92.5	28,866		0.0000	1.0000	12.81
93.5	28,866		0.0000	1.0000	12.81
94.5	16,444		0.0000	1.0000	12.81
95.5	16,444		0.0000	1.0000	12.81
96.5	16,444		0.0000	1.0000	12.81
97.5	8,527		0.0000	1.0000	12.81
98.5	8,527		0.0000	1.0000	12.81
99.5	3,241		0.0000	1.0000	12.81
100.5	3,241		0.0000	1.0000	12.81
101.5	3,241		0.0000	1.0000	12.81
102.5	1,872		0.0000	1.0000	12.81
103.5	1,872		0.0000	1.0000	12.81
104.5	1,872		0.0000	1.0000	12.81
105.5	1,872		0.0000	1.0000	12.81
106.5	1,872		0.0000	1.0000	12.81
107.5	1,872		0.0000	1.0000	12.81
108.5	1,872		0.0000	1.0000	12.81
109.5	1,872		0.0000	1.0000	12.81
110.5	1,872		0.0000	1.0000	12.81
111.5	1,872		0.0000	1.0000	12.81
112.5					12.81

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 333.40 SERVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	61,239,736		0.0000	1.0000	100.00
0.5	51,307,425	5,737	0.0001	0.9999	100.00
1.5	50,728,408	87,701	0.0017	0.9983	99.99
2.5	50,386,191	13,492	0.0003	0.9997	99.82
3.5	49,177,312	27,442	0.0006	0.9994	99.79
4.5	46,188,692	17,141	0.0004	0.9996	99.73
5.5	46,009,795	199,279	0.0043	0.9957	99.70
6.5	45,259,597	26,246	0.0006	0.9994	99.26
7.5	44,679,659	372,541	0.0083	0.9917	99.21
8.5	44,144,930	104,161	0.0024	0.9976	98.38
9.5	43,423,199	60,378	0.0014	0.9986	98.15
10.5	19,889,031	151,218	0.0076	0.9924	98.01
11.5	18,471,459	71,279	0.0039	0.9961	97.27
12.5	18,276,964	58,266	0.0032	0.9968	96.89
13.5	17,749,148	194,959	0.0110	0.9890	96.58
14.5	16,801,987	35,257	0.0021	0.9979	95.52
15.5	16,284,975	61,308	0.0038	0.9962	95.32
16.5	15,399,383	163,725	0.0106	0.9894	94.96
17.5	14,085,782	226,294	0.0161	0.9839	93.95
18.5	12,863,227	189,441	0.0147	0.9853	92.44
19.5	11,831,539	202,136	0.0171	0.9829	91.08
20.5	11,253,314	350,065	0.0311	0.9689	89.53
21.5	10,418,735	341,855	0.0328	0.9672	86.74
22.5	9,496,295	293,554	0.0309	0.9691	83.89
23.5	8,795,411	325,182	0.0370	0.9630	81.30
24.5	8,136,111	192,331	0.0236	0.9764	78.30
25.5	7,680,890	554,065	0.0721	0.9279	76.44
26.5	6,813,232	320,860	0.0471	0.9529	70.93
27.5	6,126,411	122,345	0.0200	0.9800	67.59
28.5	5,829,016	540,525	0.0927	0.9073	66.24
29.5	4,900,489	166,007	0.0339	0.9661	60.10
30.5	4,979,145	371,453	0.0746	0.9254	58.06
31.5	4,596,280	594,850	0.1294	0.8706	53.73
32.5	3,915,658	700,409	0.1789	0.8211	46.78
33.5	3,199,412	664,143	0.2076	0.7924	38.41
34.5	2,503,984	637,960	0.2548	0.7452	30.44
35.5	1,824,297	343,715	0.1884	0.8116	22.68
36.5	1,437,387	200,559	0.1395	0.8605	18.41
37.5	1,223,093	165,926	0.1357	0.8643	15.84
38.5	1,061,450	130,870	0.1233	0.8767	13.69

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	940,588	386,450	0.4109	0.5891	12.00
40.5	894,880	110,147	0.1231	0.8769	7.07
41.5	799,819	107,690	0.1346	0.8654	6.20
42.5	707,009	11,845	0.0168	0.9832	5.37
43.5	710,293	23,125	0.0326	0.9674	5.28
44.5	709,411	14,477	0.0204	0.9796	5.10
45.5	693,257	50,812	0.0733	0.9267	5.00
46.5	649,475	53,691	0.0827	0.9173	4.63
47.5	599,041	125,879	0.2101	0.7899	4.25
48.5	474,784	44,699	0.0941	0.9059	3.36
49.5	432,698	127,693	0.2951	0.7049	3.04
50.5	304,075	78,987	0.2598	0.7402	2.14
51.5	224,789	111,853	0.4976	0.5024	1.59
52.5	113,694	12,244	0.1077	0.8923	0.80
53.5	102,077	10,500	0.1029	0.8971	0.71
54.5	94,027	5,640	0.0600	0.9400	0.64
55.5	88,969	7,500	0.0843	0.9157	0.60
56.5	81,912	11,998	0.1465	0.8535	0.55
57.5	69,220	10,747	0.1553	0.8447	0.47
58.5	58,279	8,000	0.1373	0.8627	0.40
59.5	49,725	2,200	0.0442	0.9558	0.34
60.5	47,845	4,400	0.0920	0.9080	0.33
61.5	45,370	11,973	0.2639	0.7361	0.30
62.5	33,703	4,998	0.1483	0.8517	0.22
63.5	30,593	1,400	0.0458	0.9542	0.19
64.5	31,232	1,400	0.0448	0.9552	0.18
65.5	29,852	1,700	0.0569	0.9431	0.17
66.5	28,897	1,950	0.0675	0.9325	0.16
67.5	26,882	1,300	0.0484	0.9516	0.15
68.5	27,586	3,246	0.1177	0.8823	0.14
69.5	26,112	2,569	0.0984	0.9016	0.13
70.5	23,303	2,585	0.1109	0.8891	0.11
71.5	20,551	1,527	0.0743	0.9257	0.10
72.5	19,082	733	0.0384	0.9616	0.09
73.5	18,400	148	0.0080	0.9920	0.09
74.5	18,366	2,634	0.1434	0.8566	0.09
75.5	15,769	2,141	0.1358	0.8642	0.08
76.5	13,689	2,701	0.1973	0.8027	0.07
77.5	11,140	2,470	0.2217	0.7783	0.05
78.5	8,860	2,521	0.2846	0.7154	0.04

AQUA NEW JERSEY, INC.
WATER PLANT

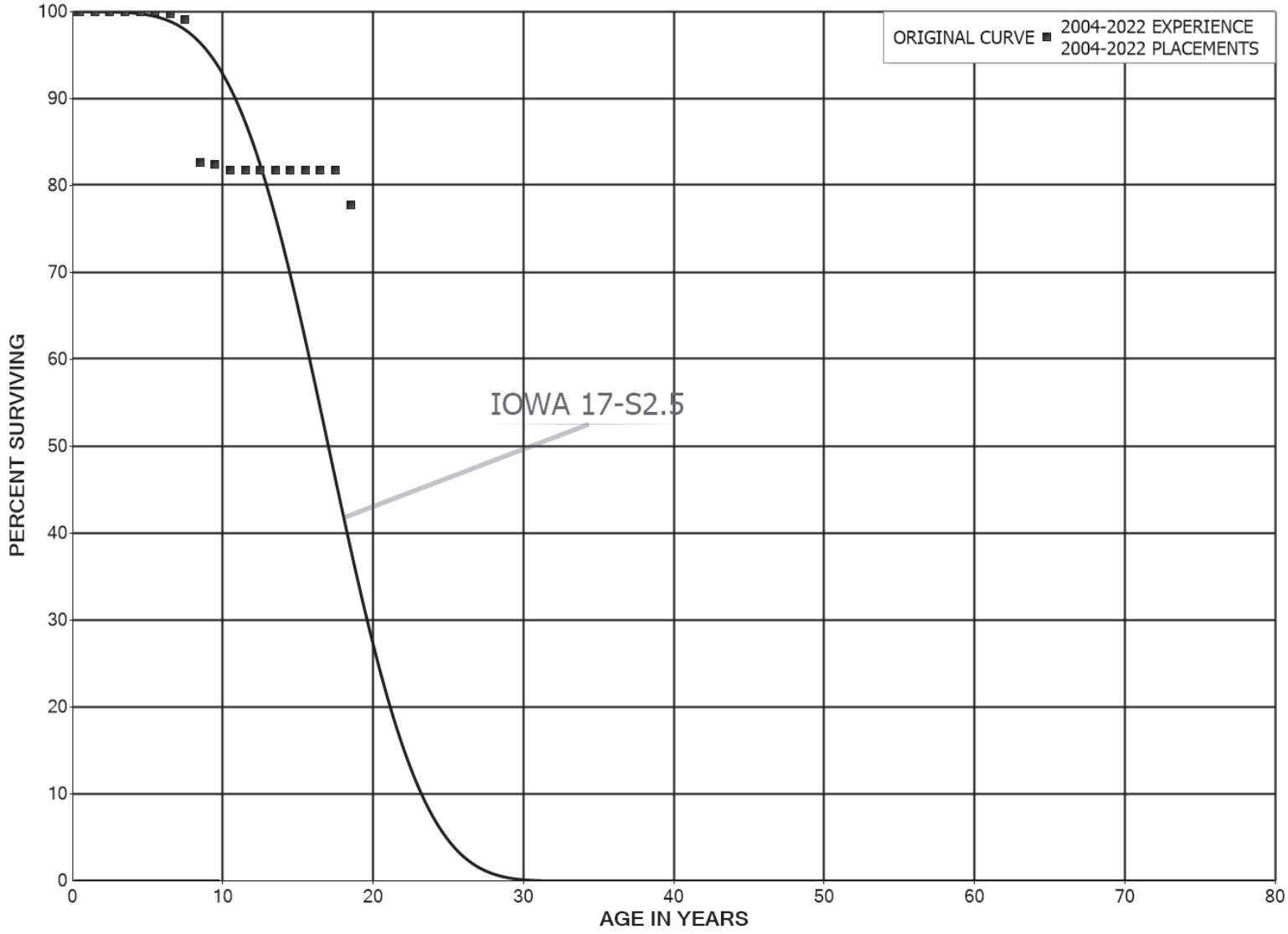
ACCOUNT 333.40 SERVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1910-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	7,264	2,360	0.3249	0.6751	0.03
80.5	5,312	902	0.1697	0.8303	0.02
81.5	4,764	2,287	0.4801	0.5199	0.02
82.5	3,058	651	0.2128	0.7872	0.01
83.5	7,535	1,065	0.1413	0.8587	0.01
84.5	6,723	408	0.0607	0.9393	0.01
85.5	7,048	354	0.0502	0.9498	0.01
86.5	8,186	581	0.0710	0.9290	0.01
87.5	7,605	3,739	0.4916	0.5084	0.00
88.5	3,867	253	0.0653	0.9347	0.00
89.5	4,034	1,928	0.4779	0.5221	0.00
90.5	2,106	1,233	0.5856	0.4144	0.00
91.5	873	453	0.5190	0.4810	0.00
92.5	420		0.0000	1.0000	0.00
93.5	420	332	0.7908	0.2092	0.00
94.5	88	88	1.0000		0.00
95.5					
96.5					
97.5					
98.5					
99.5	478		0.0000		
100.5	478		0.0000		
101.5	478		0.0000		
102.5	478		0.0000		
103.5	478	467	0.9763		
104.5	11		0.0000		
105.5	11		0.0000		
106.5	11	11	1.0000		
107.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 334.40 METERS AND METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

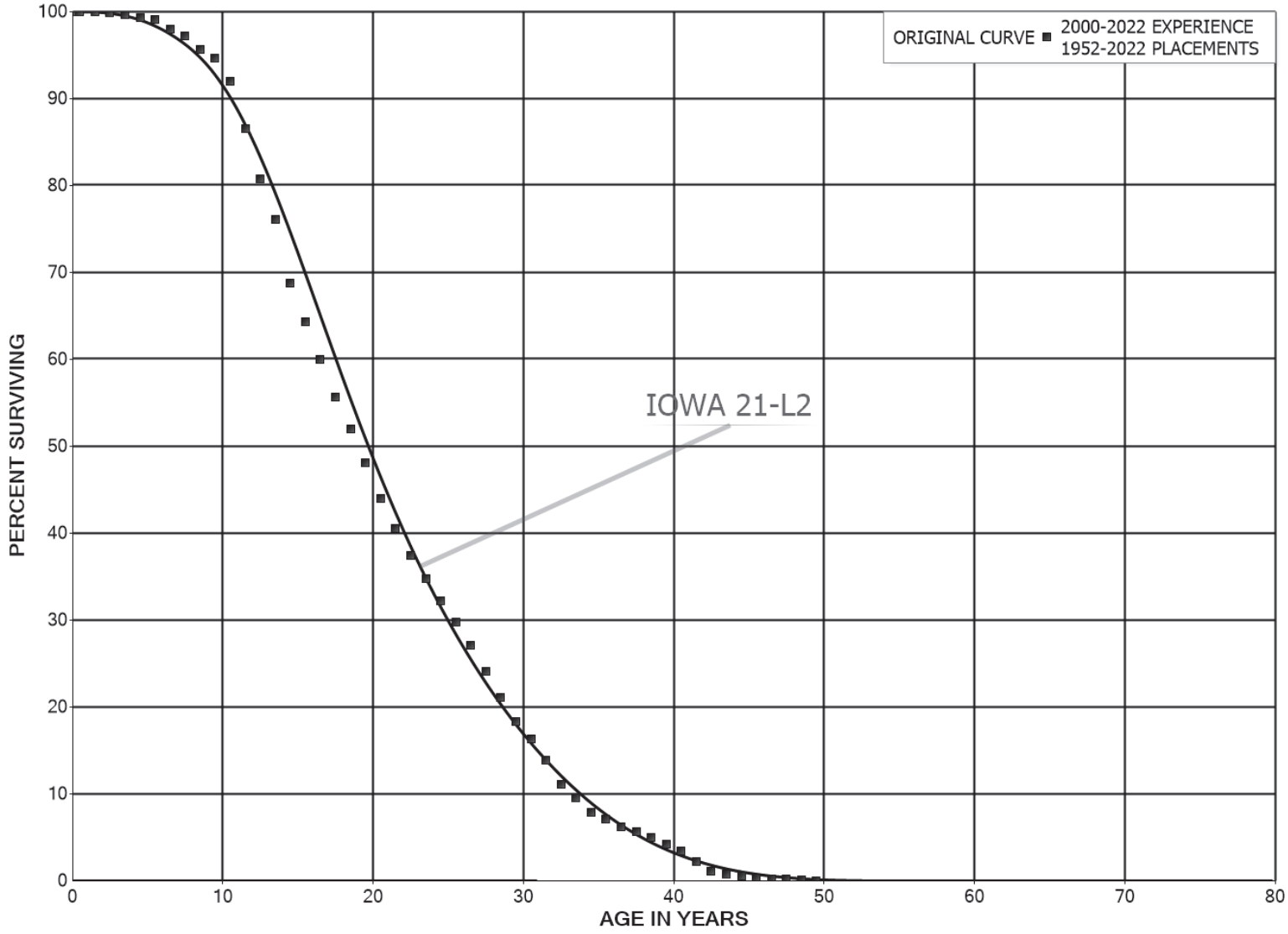
ACCOUNT 334.40 METERS AND METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 2004-2022 EXPERIENCE BAND 2004-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,294,812		0.0000	1.0000	100.00
0.5	2,255,339	576	0.0003	0.9997	100.00
1.5	2,254,763	210	0.0001	0.9999	99.97
2.5	2,254,554	478	0.0002	0.9998	99.97
3.5	346,585	66	0.0002	0.9998	99.94
4.5	337,896	95	0.0003	0.9997	99.93
5.5	337,769	728	0.0022	0.9978	99.90
6.5	216,894	1,363	0.0063	0.9937	99.68
7.5	138,395	23,044	0.1665	0.8335	99.06
8.5	115,351	212	0.0018	0.9982	82.56
9.5	114,904	885	0.0077	0.9923	82.41
10.5	110,460		0.0000	1.0000	81.78
11.5	55,128		0.0000	1.0000	81.78
12.5	55,128		0.0000	1.0000	81.78
13.5	55,128		0.0000	1.0000	81.78
14.5	55,128		0.0000	1.0000	81.78
15.5	55,128		0.0000	1.0000	81.78
16.5	55,096		0.0000	1.0000	81.78
17.5	55,096	2,700	0.0490	0.9510	81.78
18.5					77.77

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 334.42 METER INSTALLATIONS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.42 METER INSTALLATIONS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1952-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,893,696	411	0.0001	0.9999	100.00
0.5	2,832,409	2,524	0.0009	0.9991	99.99
1.5	2,822,999	1,797	0.0006	0.9994	99.90
2.5	2,597,937	4,418	0.0017	0.9983	99.83
3.5	2,314,386	8,107	0.0035	0.9965	99.66
4.5	1,997,287	4,383	0.0022	0.9978	99.31
5.5	2,057,802	23,468	0.0114	0.9886	99.10
6.5	2,076,881	17,818	0.0086	0.9914	97.97
7.5	2,116,037	31,787	0.0150	0.9850	97.13
8.5	2,134,353	23,583	0.0110	0.9890	95.67
9.5	2,161,530	60,626	0.0280	0.9720	94.61
10.5	2,118,571	125,218	0.0591	0.9409	91.96
11.5	1,304,887	87,386	0.0670	0.9330	86.52
12.5	1,160,865	67,574	0.0582	0.9418	80.73
13.5	886,695	85,669	0.0966	0.9034	76.03
14.5	812,754	52,294	0.0643	0.9357	68.68
15.5	806,451	54,451	0.0675	0.9325	64.26
16.5	794,590	56,911	0.0716	0.9284	59.92
17.5	792,904	52,425	0.0661	0.9339	55.63
18.5	801,614	60,605	0.0756	0.9244	51.95
19.5	799,909	68,636	0.0858	0.9142	48.03
20.5	768,456	59,745	0.0777	0.9223	43.91
21.5	729,895	54,876	0.0752	0.9248	40.49
22.5	710,533	52,523	0.0739	0.9261	37.45
23.5	705,041	51,345	0.0728	0.9272	34.68
24.5	610,698	46,725	0.0765	0.9235	32.15
25.5	524,671	47,258	0.0901	0.9099	29.69
26.5	442,454	48,502	0.1096	0.8904	27.02
27.5	359,688	45,106	0.1254	0.8746	24.06
28.5	279,507	35,891	0.1284	0.8716	21.04
29.5	223,774	25,431	0.1136	0.8864	18.34
30.5	178,655	26,569	0.1487	0.8513	16.25
31.5	136,537	27,419	0.2008	0.7992	13.84
32.5	89,547	12,250	0.1368	0.8632	11.06
33.5	63,847	11,574	0.1813	0.8187	9.55
34.5	38,799	3,588	0.0925	0.9075	7.82
35.5	25,191	3,129	0.1242	0.8758	7.09
36.5	15,484	1,545	0.0998	0.9002	6.21
37.5	9,446	1,102	0.1167	0.8833	5.59
38.5	6,291	1,027	0.1633	0.8367	4.94

AQUA NEW JERSEY, INC.
WATER PLANT

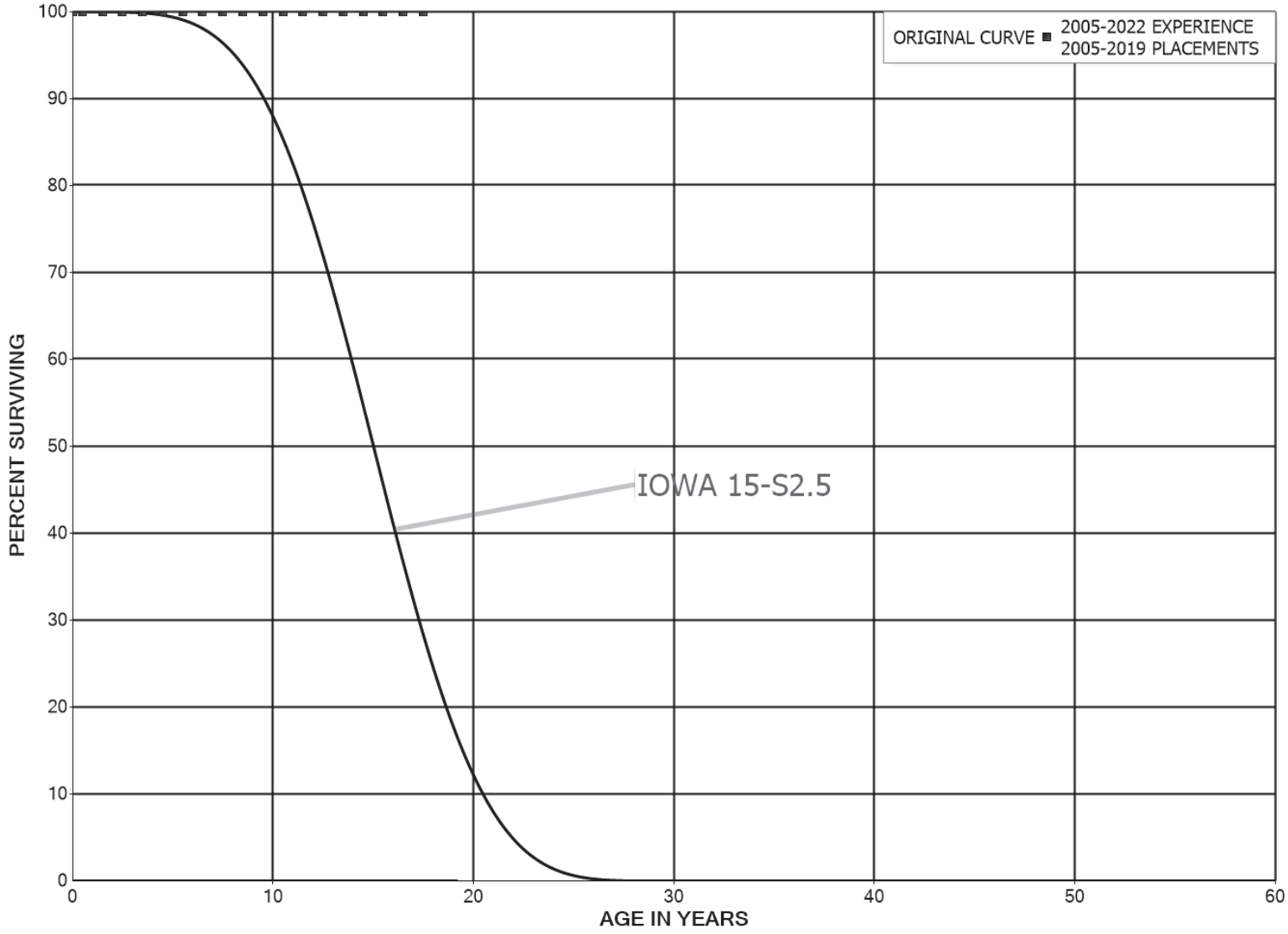
ACCOUNT 334.42 METER INSTALLATIONS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1952-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	4,685	836	0.1783	0.8217	4.13
40.5	4,189	1,452	0.3465	0.6535	3.40
41.5	3,299	1,682	0.5098	0.4902	2.22
42.5	1,652	580	0.3513	0.6487	1.09
43.5	1,093	372	0.3399	0.6601	0.71
44.5	737	335	0.4547	0.5453	0.47
45.5	406	140	0.3444	0.6556	0.25
46.5	267	70	0.2615	0.7385	0.17
47.5	198	117	0.5942	0.4058	0.12
48.5	80	80	1.0000		0.05
49.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 334.43 ERT DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

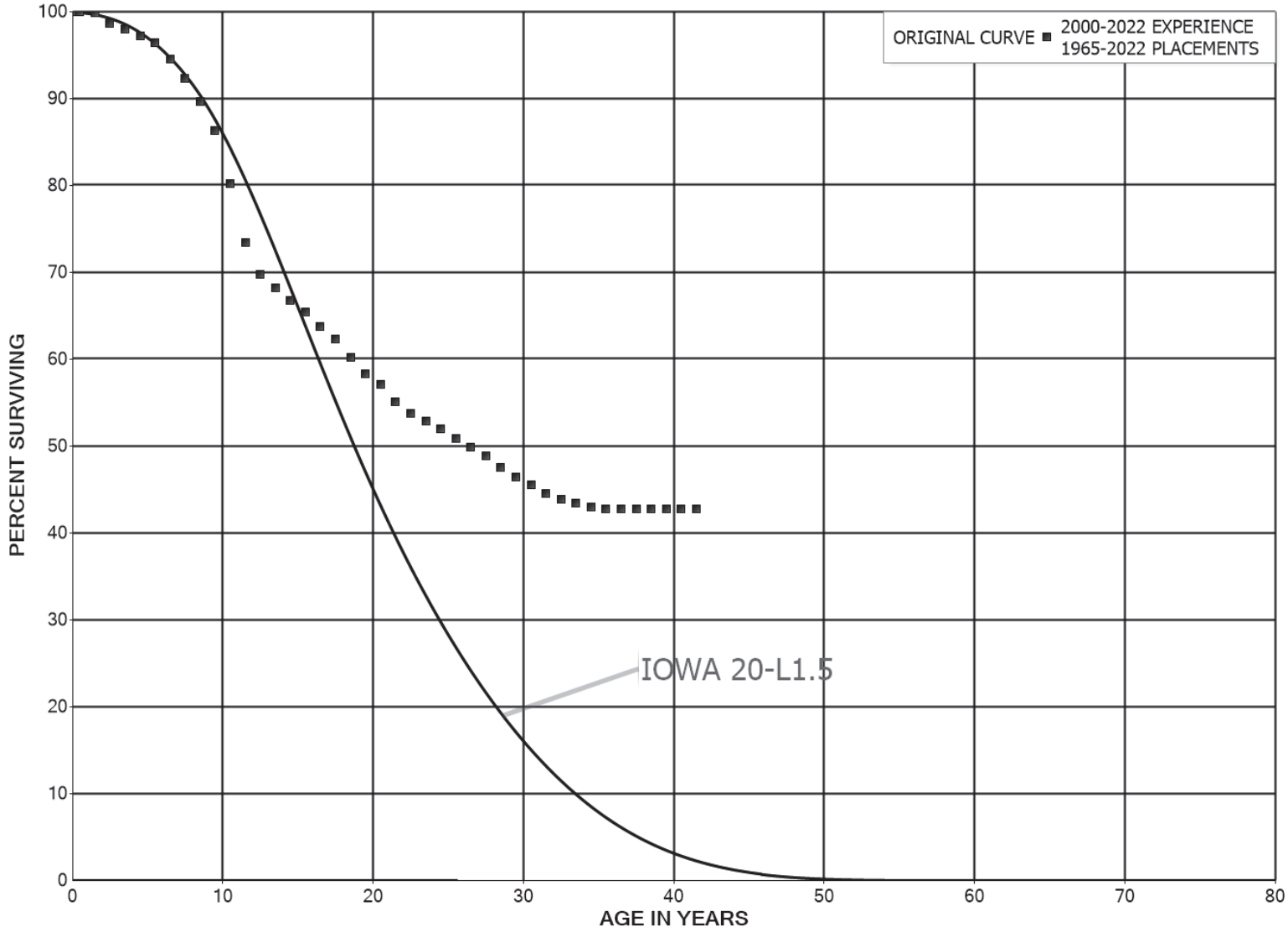
ACCOUNT 334.43 ERT DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 2005-2019 EXPERIENCE BAND 2005-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	3,660,428		0.0000	1.0000	100.00
0.5	3,584,679		0.0000	1.0000	100.00
1.5	3,560,784		0.0000	1.0000	100.00
2.5	3,468,001		0.0000	1.0000	100.00
3.5	2,391,482		0.0000	1.0000	100.00
4.5	2,389,787		0.0000	1.0000	100.00
5.5	2,290,851		0.0000	1.0000	100.00
6.5	2,290,851		0.0000	1.0000	100.00
7.5	2,290,851		0.0000	1.0000	100.00
8.5	2,290,851		0.0000	1.0000	100.00
9.5	2,290,851		0.0000	1.0000	100.00
10.5	2,290,851		0.0000	1.0000	100.00
11.5	2,290,851		0.0000	1.0000	100.00
12.5	2,290,851		0.0000	1.0000	100.00
13.5	2,283,067		0.0000	1.0000	100.00
14.5	738,111		0.0000	1.0000	100.00
15.5	738,111		0.0000	1.0000	100.00
16.5	51,251		0.0000	1.0000	100.00
17.5					100.00

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 334.44 OTHER METERS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1965-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	13,909,294	1,385	0.0001	0.9999	100.00
0.5	13,524,010	25,334	0.0019	0.9981	99.99
1.5	13,064,817	154,582	0.0118	0.9882	99.80
2.5	12,501,143	79,777	0.0064	0.9936	98.62
3.5	12,584,997	100,858	0.0080	0.9920	97.99
4.5	12,207,047	104,290	0.0085	0.9915	97.21
5.5	11,586,669	231,604	0.0200	0.9800	96.38
6.5	10,892,407	244,642	0.0225	0.9775	94.45
7.5	10,232,139	299,347	0.0293	0.9707	92.33
8.5	9,302,722	341,730	0.0367	0.9633	89.63
9.5	10,167,478	719,735	0.0708	0.9292	86.34
10.5	9,077,380	776,248	0.0855	0.9145	80.22
11.5	8,016,345	392,277	0.0489	0.9511	73.36
12.5	7,409,101	167,178	0.0226	0.9774	69.77
13.5	6,890,309	151,049	0.0219	0.9781	68.20
14.5	5,626,667	111,851	0.0199	0.9801	66.70
15.5	5,246,578	129,311	0.0246	0.9754	65.38
16.5	4,308,716	100,032	0.0232	0.9768	63.77
17.5	3,615,394	125,253	0.0346	0.9654	62.29
18.5	3,440,867	105,296	0.0306	0.9694	60.13
19.5	3,119,876	66,834	0.0214	0.9786	58.29
20.5	1,632,822	56,269	0.0345	0.9655	57.04
21.5	1,489,805	36,344	0.0244	0.9756	55.07
22.5	1,226,658	19,628	0.0160	0.9840	53.73
23.5	1,011,505	17,810	0.0176	0.9824	52.87
24.5	774,304	15,957	0.0206	0.9794	51.94
25.5	739,454	15,621	0.0211	0.9789	50.87
26.5	694,258	13,693	0.0197	0.9803	49.79
27.5	641,360	16,514	0.0257	0.9743	48.81
28.5	593,092	14,856	0.0250	0.9750	47.56
29.5	421,225	8,150	0.0193	0.9807	46.36
30.5	389,479	8,185	0.0210	0.9790	45.47
31.5	357,331	5,463	0.0153	0.9847	44.51
32.5	259,924	2,658	0.0102	0.9898	43.83
33.5	225,188	2,366	0.0105	0.9895	43.38
34.5	197,920	907	0.0046	0.9954	42.93
35.5	180,265	51	0.0003	0.9997	42.73
36.5	168,471		0.0000	1.0000	42.72
37.5	79,331		0.0000	1.0000	42.72
38.5	63,286		0.0000	1.0000	42.72

AQUA NEW JERSEY, INC.
WATER PLANT

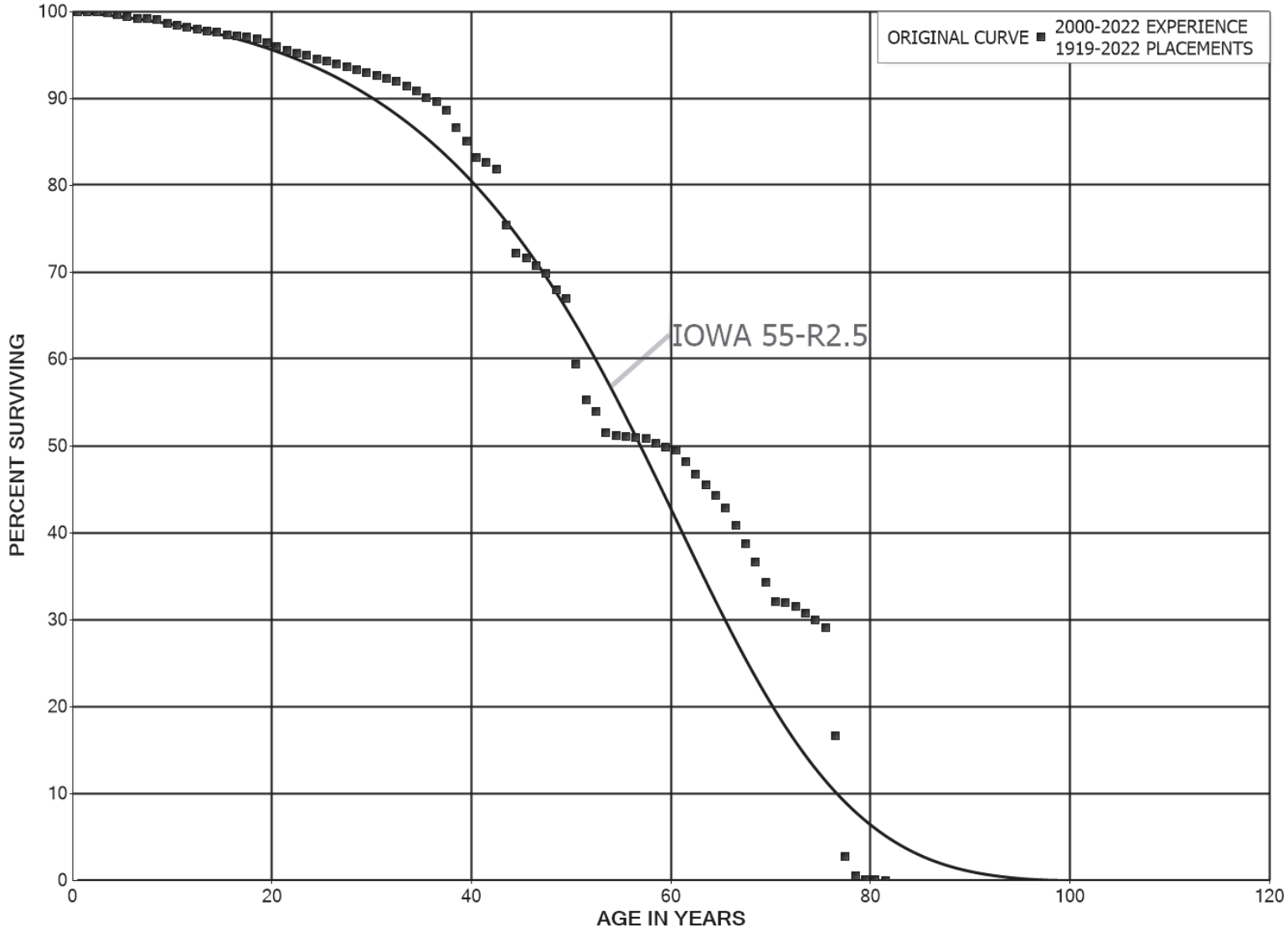
ACCOUNT 334.44 OTHER METERS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1965-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	62,228		0.0000	1.0000	42.72
40.5	55,086		0.0000	1.0000	42.72
41.5					42.72

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 335.40 HYDRANTS
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

ORIGINAL LIFE TABLE

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	8,770,774		0.0000	1.0000	100.00
0.5	6,515,771	719	0.0001	0.9999	100.00
1.5	5,846,407	2,462	0.0004	0.9996	99.99
2.5	5,015,254	6,588	0.0013	0.9987	99.95
3.5	4,700,716	8,684	0.0018	0.9982	99.82
4.5	4,556,685	8,692	0.0019	0.9981	99.63
5.5	4,461,736	11,843	0.0027	0.9973	99.44
6.5	4,342,677	2,261	0.0005	0.9995	99.18
7.5	4,139,915	1,752	0.0004	0.9996	99.13
8.5	3,923,887	19,537	0.0050	0.9950	99.08
9.5	3,751,872	8,311	0.0022	0.9978	98.59
10.5	3,633,899	8,447	0.0023	0.9977	98.37
11.5	3,641,894	6,664	0.0018	0.9982	98.14
12.5	3,707,662	7,780	0.0021	0.9979	97.96
13.5	3,721,473	5,130	0.0014	0.9986	97.76
14.5	3,716,344	12,493	0.0034	0.9966	97.62
15.5	3,729,108	3,016	0.0008	0.9992	97.30
16.5	3,651,336	4,265	0.0012	0.9988	97.22
17.5	3,424,067	9,625	0.0028	0.9972	97.10
18.5	3,166,320	13,264	0.0042	0.9958	96.83
19.5	2,868,514	13,064	0.0046	0.9954	96.42
20.5	2,825,590	13,318	0.0047	0.9953	95.99
21.5	2,674,028	9,069	0.0034	0.9966	95.53
22.5	2,482,273	5,724	0.0023	0.9977	95.21
23.5	2,370,483	11,534	0.0049	0.9951	94.99
24.5	2,237,768	5,378	0.0024	0.9976	94.53
25.5	2,103,050	8,690	0.0041	0.9959	94.30
26.5	2,019,166	7,240	0.0036	0.9964	93.91
27.5	1,933,882	5,737	0.0030	0.9970	93.57
28.5	1,775,633	7,433	0.0042	0.9958	93.30
29.5	1,621,357	4,646	0.0029	0.9971	92.91
30.5	1,595,349	6,785	0.0043	0.9957	92.64
31.5	1,564,627	5,889	0.0038	0.9962	92.25
32.5	1,472,067	7,335	0.0050	0.9950	91.90
33.5	1,348,977	8,300	0.0062	0.9938	91.44
34.5	1,199,072	11,114	0.0093	0.9907	90.88
35.5	1,095,491	5,558	0.0051	0.9949	90.04
36.5	1,001,455	11,266	0.0112	0.9888	89.58
37.5	889,251	19,227	0.0216	0.9784	88.57
38.5	790,109	14,477	0.0183	0.9817	86.66

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	733,923	16,768	0.0228	0.9772	85.07
40.5	727,480	4,256	0.0059	0.9941	83.12
41.5	630,027	6,248	0.0099	0.9901	82.64
42.5	574,195	45,435	0.0791	0.9209	81.82
43.5	478,574	19,859	0.0415	0.9585	75.34
44.5	407,869	3,344	0.0082	0.9918	72.22
45.5	360,403	4,507	0.0125	0.9875	71.63
46.5	336,611	4,355	0.0129	0.9871	70.73
47.5	265,236	7,151	0.0270	0.9730	69.81
48.5	240,166	3,425	0.0143	0.9857	67.93
49.5	187,369	21,024	0.1122	0.8878	66.96
50.5	139,056	9,832	0.0707	0.9293	59.45
51.5	125,608	2,993	0.0238	0.9762	55.25
52.5	116,609	5,195	0.0445	0.9555	53.93
53.5	109,657	703	0.0064	0.9936	51.53
54.5	100,846	294	0.0029	0.9971	51.20
55.5	95,797	178	0.0019	0.9981	51.05
56.5	84,800	128	0.0015	0.9985	50.95
57.5	22,826	275	0.0120	0.9880	50.88
58.5	20,813	164	0.0079	0.9921	50.26
59.5	20,512	140	0.0068	0.9932	49.87
60.5	17,329	477	0.0275	0.9725	49.53
61.5	16,234	468	0.0289	0.9711	48.16
62.5	16,454	427	0.0260	0.9740	46.77
63.5	14,199	394	0.0278	0.9722	45.56
64.5	11,107	376	0.0338	0.9662	44.29
65.5	8,219	369	0.0449	0.9551	42.80
66.5	6,606	347	0.0525	0.9475	40.88
67.5	6,050	333	0.0551	0.9449	38.73
68.5	4,988	314	0.0629	0.9371	36.60
69.5	4,544	299	0.0658	0.9342	34.30
70.5	3,843	17	0.0043	0.9957	32.04
71.5	3,722	50	0.0134	0.9866	31.90
72.5	1,958	47	0.0241	0.9759	31.47
73.5	1,689	45	0.0264	0.9736	30.72
74.5	1,584	42	0.0265	0.9735	29.91
75.5	92	39	0.4294	0.5706	29.12
76.5	44	37	0.8364	0.1636	16.61
77.5	42	34	0.8268	0.1732	2.72
78.5	39	32	0.8164	0.1836	0.47

AQUA NEW JERSEY, INC.
WATER PLANT

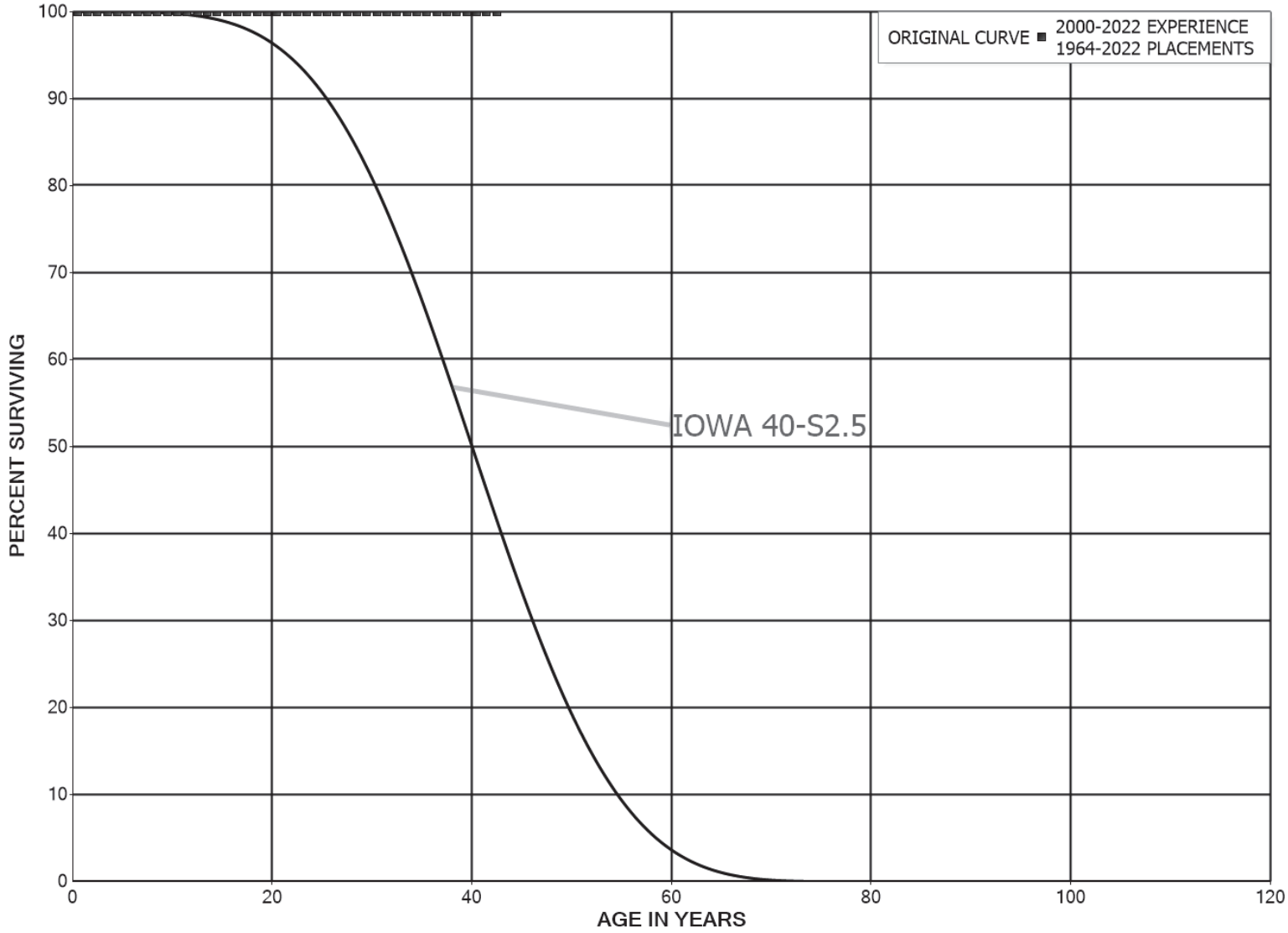
ACCOUNT 335.40 HYDRANTS

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1919-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
79.5	37	30	0.8050	0.1950	0.09
80.5	28	28	1.0000		0.02
81.5					

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 336.40 BACKFLOW PREVENTION DEVICES
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 336.40 BACKFLOW PREVENTION DEVICES

ORIGINAL LIFE TABLE

PLACEMENT BAND 1964-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	192,830		0.0000	1.0000	100.00
0.5	204,429		0.0000	1.0000	100.00
1.5	194,607		0.0000	1.0000	100.00
2.5	201,349		0.0000	1.0000	100.00
3.5	208,075		0.0000	1.0000	100.00
4.5	213,436		0.0000	1.0000	100.00
5.5	222,468		0.0000	1.0000	100.00
6.5	227,689		0.0000	1.0000	100.00
7.5	233,783		0.0000	1.0000	100.00
8.5	236,030		0.0000	1.0000	100.00
9.5	246,758		0.0000	1.0000	100.00
10.5	257,490		0.0000	1.0000	100.00
11.5	257,490		0.0000	1.0000	100.00
12.5	261,331		0.0000	1.0000	100.00
13.5	261,331		0.0000	1.0000	100.00
14.5	261,331		0.0000	1.0000	100.00
15.5	246,133		0.0000	1.0000	100.00
16.5	227,082		0.0000	1.0000	100.00
17.5	192,510		0.0000	1.0000	100.00
18.5	174,409		0.0000	1.0000	100.00
19.5	146,609		0.0000	1.0000	100.00
20.5	142,668		0.0000	1.0000	100.00
21.5	128,172		0.0000	1.0000	100.00
22.5	98,327		0.0000	1.0000	100.00
23.5	87,739		0.0000	1.0000	100.00
24.5	68,483		0.0000	1.0000	100.00
25.5	61,741		0.0000	1.0000	100.00
26.5	55,414		0.0000	1.0000	100.00
27.5	50,053		0.0000	1.0000	100.00
28.5	41,021		0.0000	1.0000	100.00
29.5	35,800		0.0000	1.0000	100.00
30.5	29,706		0.0000	1.0000	100.00
31.5	27,458		0.0000	1.0000	100.00
32.5	16,730		0.0000	1.0000	100.00
33.5	5,998		0.0000	1.0000	100.00
34.5	5,998		0.0000	1.0000	100.00
35.5	2,182		0.0000	1.0000	100.00
36.5	2,182		0.0000	1.0000	100.00
37.5	2,182		0.0000	1.0000	100.00
38.5	2,182		0.0000	1.0000	100.00

AQUA NEW JERSEY, INC.
WATER PLANT

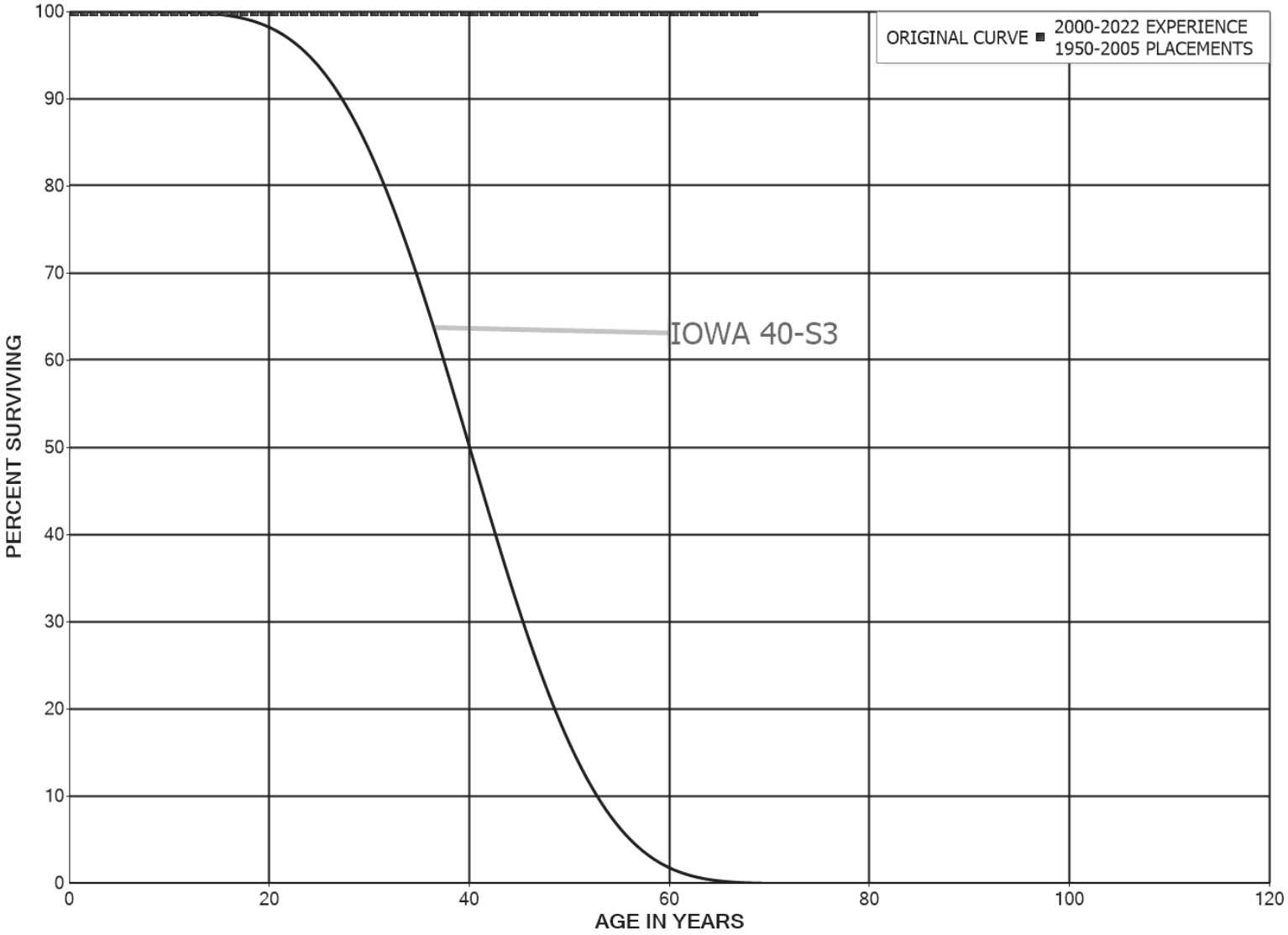
ACCOUNT 336.40 BACKFLOW PREVENTION DEVICES

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1964-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	2,182		0.0000	1.0000	100.00
40.5	2,182		0.0000	1.0000	100.00
41.5	2,182		0.0000	1.0000	100.00
42.5	583		0.0000	1.0000	100.00
43.5	583		0.0000	1.0000	100.00
44.5	583		0.0000	1.0000	100.00
45.5	583		0.0000	1.0000	100.00
46.5	424		0.0000	1.0000	100.00
47.5	424		0.0000	1.0000	100.00
48.5	424		0.0000	1.0000	100.00
49.5	25		0.0000	1.0000	100.00
50.5	25		0.0000	1.0000	100.00
51.5	25		0.0000	1.0000	100.00
52.5	25		0.0000	1.0000	100.00
53.5	25		0.0000	1.0000	100.00
54.5	25		0.0000	1.0000	100.00
55.5	25		0.0000	1.0000	100.00
56.5	25		0.0000	1.0000	100.00
57.5	25		0.0000	1.0000	100.00
58.5					100.00

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 339.20 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - SOURCE OF SUPPLY
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.20 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - SOURCE OF SUPPLY

ORIGINAL LIFE TABLE

PLACEMENT BAND 1950-2005 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	365,305		0.0000	1.0000	100.00
0.5	365,305		0.0000	1.0000	100.00
1.5	365,569		0.0000	1.0000	100.00
2.5	365,569		0.0000	1.0000	100.00
3.5	365,569		0.0000	1.0000	100.00
4.5	365,569		0.0000	1.0000	100.00
5.5	365,569		0.0000	1.0000	100.00
6.5	404,064		0.0000	1.0000	100.00
7.5	405,622		0.0000	1.0000	100.00
8.5	405,622		0.0000	1.0000	100.00
9.5	405,622		0.0000	1.0000	100.00
10.5	405,622		0.0000	1.0000	100.00
11.5	407,032		0.0000	1.0000	100.00
12.5	407,032		0.0000	1.0000	100.00
13.5	407,032		0.0000	1.0000	100.00
14.5	407,032		0.0000	1.0000	100.00
15.5	407,032		0.0000	1.0000	100.00
16.5	407,032		0.0000	1.0000	100.00
17.5	367,358		0.0000	1.0000	100.00
18.5	365,536		0.0000	1.0000	100.00
19.5	7,196		0.0000	1.0000	100.00
20.5	7,196		0.0000	1.0000	100.00
21.5	7,563		0.0000	1.0000	100.00
22.5	7,212		0.0000	1.0000	100.00
23.5	7,212		0.0000	1.0000	100.00
24.5	6,970		0.0000	1.0000	100.00
25.5	6,970		0.0000	1.0000	100.00
26.5	6,970		0.0000	1.0000	100.00
27.5	6,970		0.0000	1.0000	100.00
28.5	6,970		0.0000	1.0000	100.00
29.5	6,970		0.0000	1.0000	100.00
30.5	6,970		0.0000	1.0000	100.00
31.5	6,970		0.0000	1.0000	100.00
32.5	6,970		0.0000	1.0000	100.00
33.5	6,970		0.0000	1.0000	100.00
34.5	6,350		0.0000	1.0000	100.00
35.5	6,350		0.0000	1.0000	100.00
36.5	6,350		0.0000	1.0000	100.00
37.5	6,350		0.0000	1.0000	100.00
38.5	6,350		0.0000	1.0000	100.00

AQUA NEW JERSEY, INC.
WATER PLANT

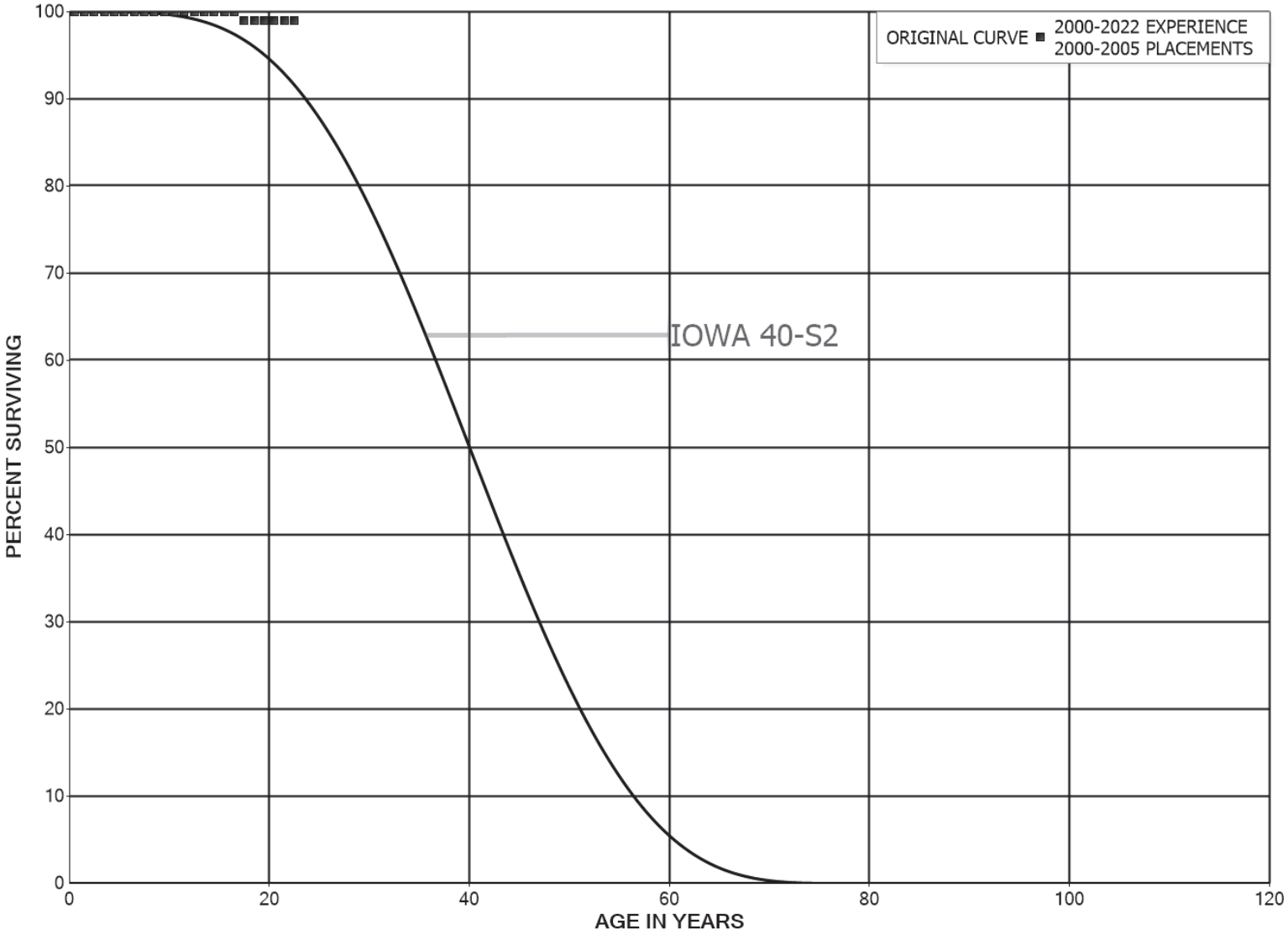
ACCOUNT 339.20 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - SOURCE OF SUPPLY

ORIGINAL LIFE TABLE, CONT.

PLACEMENT BAND 1950-2005 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
39.5	6,375		0.0000	1.0000	100.00
40.5	6,400		0.0000	1.0000	100.00
41.5	6,459		0.0000	1.0000	100.00
42.5	2,362		0.0000	1.0000	100.00
43.5	3,057		0.0000	1.0000	100.00
44.5	2,725		0.0000	1.0000	100.00
45.5	3,371		0.0000	1.0000	100.00
46.5	3,509		0.0000	1.0000	100.00
47.5	3,768		0.0000	1.0000	100.00
48.5	4,259		0.0000	1.0000	100.00
49.5	4,259		0.0000	1.0000	100.00
50.5	4,259		0.0000	1.0000	100.00
51.5	4,259		0.0000	1.0000	100.00
52.5	4,259		0.0000	1.0000	100.00
53.5	4,259		0.0000	1.0000	100.00
54.5	4,259		0.0000	1.0000	100.00
55.5	4,259		0.0000	1.0000	100.00
56.5	4,259		0.0000	1.0000	100.00
57.5	3,469		0.0000	1.0000	100.00
58.5	3,469		0.0000	1.0000	100.00
59.5	3,469		0.0000	1.0000	100.00
60.5	3,469		0.0000	1.0000	100.00
61.5	3,469		0.0000	1.0000	100.00
62.5	3,444		0.0000	1.0000	100.00
63.5	3,419		0.0000	1.0000	100.00
64.5	3,360		0.0000	1.0000	100.00
65.5	2,413		0.0000	1.0000	100.00
66.5	1,718		0.0000	1.0000	100.00
67.5	1,683		0.0000	1.0000	100.00
68.5	910		0.0000	1.0000	100.00
69.5	772		0.0000	1.0000	100.00
70.5	491		0.0000	1.0000	100.00
71.5	0		0.0000	1.0000	100.00
72.5					100.00

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 339.40 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TRANSMISSION AND DISTRIBUTION
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

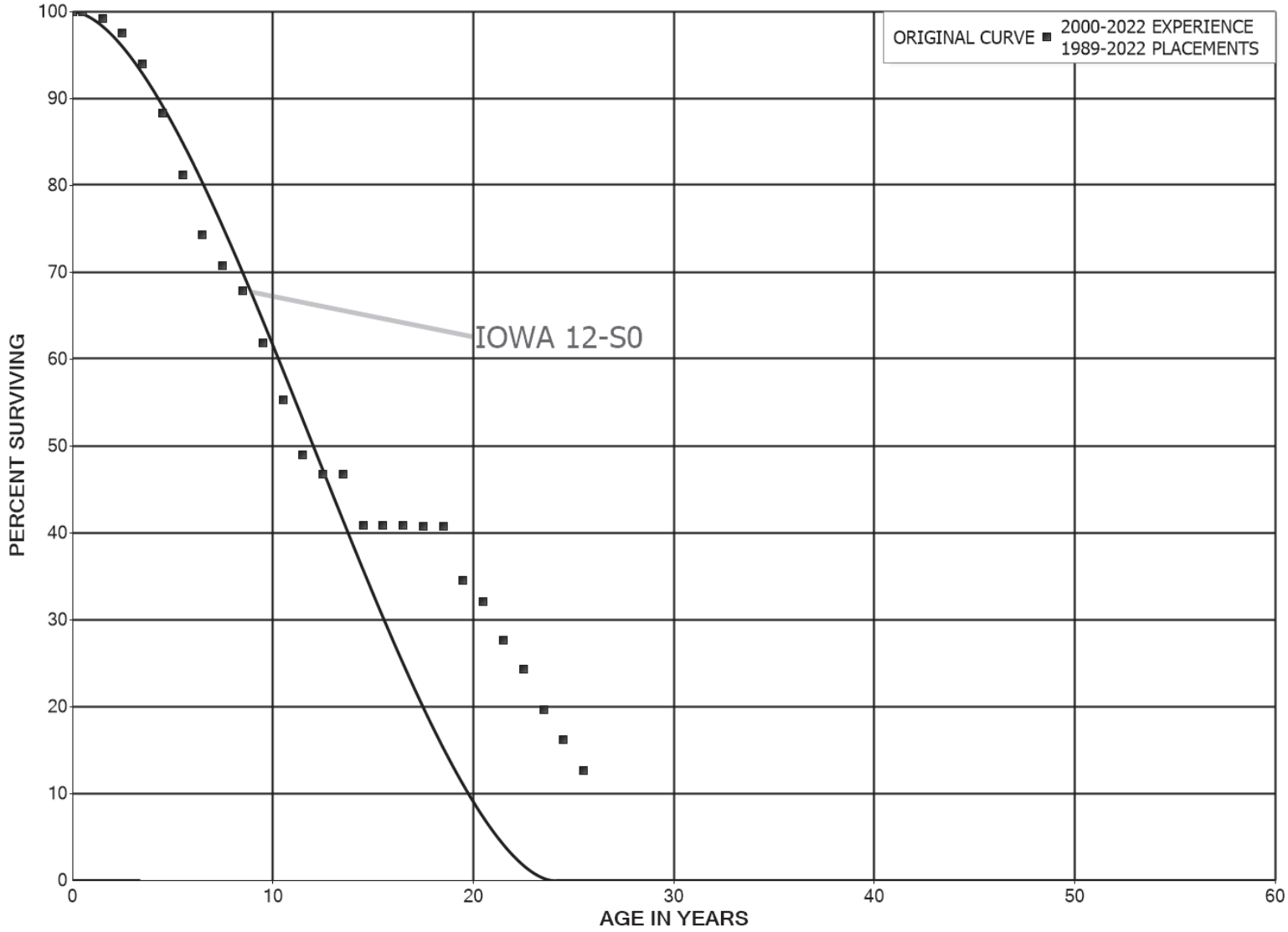
ACCOUNT 339.40 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TRANSMISSION AND DISTRIBUTION

ORIGINAL LIFE TABLE

PLACEMENT BAND 2000-2005 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	110,803		0.0000	1.0000	100.00
0.5	110,803		0.0000	1.0000	100.00
1.5	110,803		0.0000	1.0000	100.00
2.5	110,803		0.0000	1.0000	100.00
3.5	110,803		0.0000	1.0000	100.00
4.5	110,803		0.0000	1.0000	100.00
5.5	110,803		0.0000	1.0000	100.00
6.5	72,307		0.0000	1.0000	100.00
7.5	70,749		0.0000	1.0000	100.00
8.5	70,749		0.0000	1.0000	100.00
9.5	70,749		0.0000	1.0000	100.00
10.5	70,749		0.0000	1.0000	100.00
11.5	70,749		0.0000	1.0000	100.00
12.5	70,749		0.0000	1.0000	100.00
13.5	70,749		0.0000	1.0000	100.00
14.5	70,749		0.0000	1.0000	100.00
15.5	70,749		0.0000	1.0000	100.00
16.5	70,749	764	0.0108	0.9892	100.00
17.5	69,293		0.0000	1.0000	98.92
18.5	45,881		0.0000	1.0000	98.92
19.5	7,789		0.0000	1.0000	98.92
20.5	7,789		0.0000	1.0000	98.92
21.5	7,789		0.0000	1.0000	98.92
22.5					98.92

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 341.50 TRANSPORTATION EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

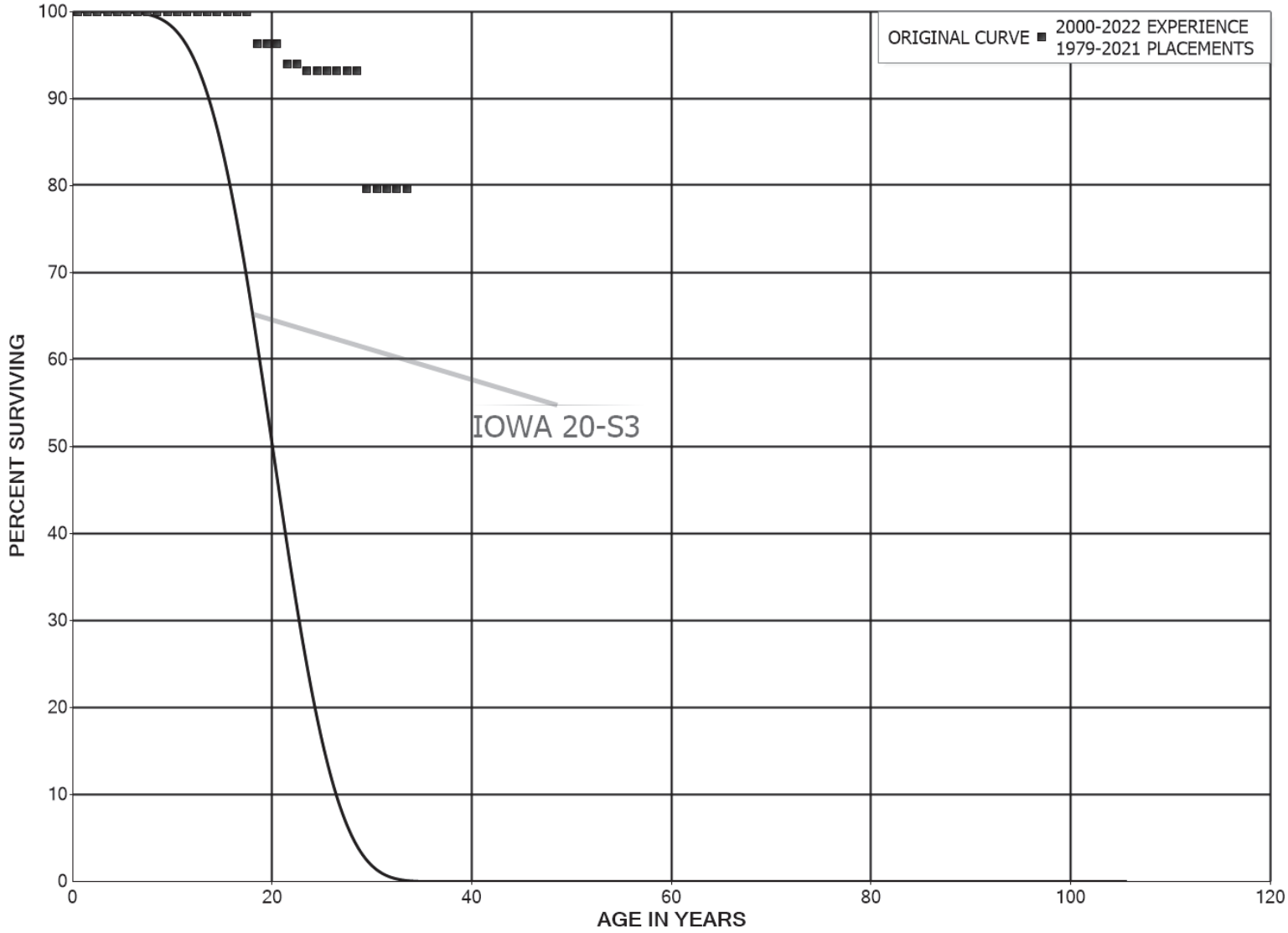
ACCOUNT 341.50 TRANSPORTATION EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1989-2022 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	2,853,655		0.0000	1.0000	100.00
0.5	2,737,606	23,472	0.0086	0.9914	100.00
1.5	2,626,761	42,039	0.0160	0.9840	99.14
2.5	2,329,531	86,373	0.0371	0.9629	97.56
3.5	2,246,293	135,384	0.0603	0.9397	93.94
4.5	1,849,906	149,119	0.0806	0.9194	88.28
5.5	1,786,533	150,919	0.0845	0.9155	81.16
6.5	1,353,540	64,524	0.0477	0.9523	74.31
7.5	1,330,387	54,215	0.0408	0.9592	70.76
8.5	1,136,344	100,494	0.0884	0.9116	67.88
9.5	1,040,361	110,849	0.1065	0.8935	61.88
10.5	824,711	95,116	0.1153	0.8847	55.28
11.5	686,985	30,417	0.0443	0.9557	48.91
12.5	638,870		0.0000	1.0000	46.74
13.5	642,181	80,921	0.1260	0.8740	46.74
14.5	561,260		0.0000	1.0000	40.85
15.5	560,039		0.0000	1.0000	40.85
16.5	558,707	2,019	0.0036	0.9964	40.85
17.5	556,688		0.0000	1.0000	40.70
18.5	534,336	80,938	0.1515	0.8485	40.70
19.5	453,397	33,065	0.0729	0.9271	34.54
20.5	410,436	55,854	0.1361	0.8639	32.02
21.5	293,194	35,937	0.1226	0.8774	27.66
22.5	232,422	44,689	0.1923	0.8077	24.27
23.5	181,349	31,297	0.1726	0.8274	19.60
24.5	130,665	28,973	0.2217	0.7783	16.22
25.5	38,826		0.0000	1.0000	12.62
26.5	23,556	9,517	0.4040	0.5960	12.62
27.5	14,039		0.0000	1.0000	7.52
28.5	2,901		0.0000	1.0000	7.52
29.5	2,901		0.0000	1.0000	7.52
30.5					7.52

AQUA NEW JERSEY, INC.
WATER PLANT
ACCOUNT 345.50 POWER OPERATED EQUIPMENT
ORIGINAL AND SMOOTH SURVIVOR CURVES



AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 345.50 POWER OPERATED EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1979-2021 EXPERIENCE BAND 2000-2022

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	330,064		0.0000	1.0000	100.00
0.5	330,064		0.0000	1.0000	100.00
1.5	302,783		0.0000	1.0000	100.00
2.5	305,857		0.0000	1.0000	100.00
3.5	309,812		0.0000	1.0000	100.00
4.5	310,756		0.0000	1.0000	100.00
5.5	313,293		0.0000	1.0000	100.00
6.5	313,293		0.0000	1.0000	100.00
7.5	291,414		0.0000	1.0000	100.00
8.5	306,418		0.0000	1.0000	100.00
9.5	307,736		0.0000	1.0000	100.00
10.5	316,756		0.0000	1.0000	100.00
11.5	134,629		0.0000	1.0000	100.00
12.5	134,629		0.0000	1.0000	100.00
13.5	137,202		0.0000	1.0000	100.00
14.5	137,202		0.0000	1.0000	100.00
15.5	137,550		0.0000	1.0000	100.00
16.5	137,550		0.0000	1.0000	100.00
17.5	137,550	5,136	0.0373	0.9627	100.00
18.5	124,353		0.0000	1.0000	96.27
19.5	124,356		0.0000	1.0000	96.27
20.5	115,138	2,818	0.0245	0.9755	96.27
21.5	110,488		0.0000	1.0000	93.91
22.5	42,706	348	0.0081	0.9919	93.91
23.5	42,358		0.0000	1.0000	93.15
24.5	35,311		0.0000	1.0000	93.15
25.5	32,237		0.0000	1.0000	93.15
26.5	28,282	3	0.0001	0.9999	93.15
27.5	27,335	0	0.0000	1.0000	93.14
28.5	24,798	3,586	0.1446	0.8554	93.13
29.5	21,212		0.0000	1.0000	79.67
30.5	16,620		0.0000	1.0000	79.67
31.5	5,202		0.0000	1.0000	79.67
32.5	3,883		0.0000	1.0000	79.67
33.5					79.67

PART VIII. NET SALVAGE STATISTICS

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNTS 304.22 THROUGH 304.51 STRUCTURES AND IMPROVEMENTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2006	1,684		0		0		0
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015	32,336	7,251	22		0	7,251-	22-
2016	30,676	36,160	118		0	36,160-	118-
2017	13,142	120	1		0	120-	1-
2018	11,137		0		0		0
2019	826,222		0		0		0
2020	4,292		0		0		0
2021	59,154		0		0		0
2022	42,093		0		0		0
TOTAL	1,020,735	43,531	4		0	43,531-	4-
THREE-YEAR MOVING AVERAGES							
06-08	561		0		0		0
07-09							
08-10							
09-11							
10-12							
11-13							
12-14							
13-15	10,779	2,417	22		0	2,417-	22-
14-16	21,004	14,470	69		0	14,470-	69-
15-17	25,385	14,510	57		0	14,510-	57-
16-18	18,318	12,093	66		0	12,093-	66-
17-19	283,500	40	0		0	40-	0
18-20	280,550		0		0		0
19-21	296,556		0		0		0
20-22	35,180		0		0		0
FIVE-YEAR AVERAGE							
18-22	188,580		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2014	1,774		0		0		0
2015	1,588	556	35		0	556-	35-
2016	54,973	7,858	14		0	7,858-	14-
2017		18,618				18,618-	
2018							
2019	25,700		0		0		0
2020	543		0		0		0
2021	16,834		0		0		0
2022	365,000		0		0		0
TOTAL	466,413	27,031	6		0	27,031-	6-
THREE-YEAR MOVING AVERAGES							
14-16	19,445	2,804	14		0	2,804-	14-
15-17	18,854	9,010	48		0	9,010-	48-
16-18	18,324	8,825	48		0	8,825-	48-
17-19	8,567	6,206	72		0	6,206-	72-
18-20	8,748		0		0		0
19-21	14,359		0		0		0
20-22	127,459		0		0		0
FIVE-YEAR AVERAGE							
18-22	81,615		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 309.00 SUPPLY MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2018	654		0		0		0
2019							
2020							
2021	255		0		0		0
2022							
TOTAL	909		0		0		0
THREE-YEAR MOVING AVERAGES							
18-20	218		0		0		0
19-21	85		0		0		0
20-22	85		0		0		0
FIVE-YEAR AVERAGE							
18-22	182		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 310.20 POWER GENERATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
2019	85,935		0		0		0
2020							
2021							
2022							
TOTAL	85,935		0		0		0
THREE-YEAR MOVING AVERAGES							
19-21	28,645		0		0		0
20-22							

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2005	18,335		0		0		0
2006	37,149		0		0		0
2007							
2008							
2009							
2010							
2011							
2012	1,550	315	20		0	315-	20-
2013							
2014							
2015	1,838	4,000	218		0	4,000-	218-
2016	27,429	1,562	6		0	1,562-	6-
2017	43,207	9,558	22		0	9,558-	22-
2018							
2019	159,210		0		0		0
2020	40,659		0		0		0
2021	17,801		0		0		0
2022	22,413		0		0		0
TOTAL	369,590	15,436	4		0	15,436-	4-
THREE-YEAR MOVING AVERAGES							
05-07	18,495		0		0		0
06-08	12,383		0		0		0
07-09							
08-10							
09-11							
10-12	517	105	20		0	105-	20-
11-13	517	105	20		0	105-	20-
12-14	517	105	20		0	105-	20-
13-15	613	1,333	218		0	1,333-	218-
14-16	9,756	1,854	19		0	1,854-	19-
15-17	24,158	5,040	21		0	5,040-	21-
16-18	23,545	3,707	16		0	3,707-	16-
17-19	67,472	3,186	5		0	3,186-	5-
18-20	66,623		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
19-21	72,557		0		0		0
20-22	26,957		0		0		0
FIVE-YEAR AVERAGE							
18-22	48,016		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2006	700		0		0		0
2007							
2008	515		0		0		0
2009							
2010							
2011							
2012	25,000	5,571	22		0	5,571-	22-
2013							
2014							
2015							
2016							
2017		38,600				38,600-	
2018							
2019	273,877		0		0		0
2020	12,537		0		0		0
2021	41,651		0		0		0
2022	6,260		0		0		0
TOTAL	360,541	44,171	12		0	44,171-	12-
THREE-YEAR MOVING AVERAGES							
06-08	405		0		0		0
07-09	172		0		0		0
08-10	172		0		0		0
09-11							
10-12	8,333	1,857	22		0	1,857-	22-
11-13	8,333	1,857	22		0	1,857-	22-
12-14	8,333	1,857	22		0	1,857-	22-
13-15							
14-16							
15-17		12,867				12,867-	
16-18		12,867				12,867-	
17-19	91,292	12,867	14		0	12,867-	14-
18-20	95,471		0		0		0
19-21	109,355		0		0		0
20-22	20,149		0		0		0
FIVE-YEAR AVERAGE							
18-22	66,865		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2005	83,381		0		0		0
2006							
2007							
2008							
2009							
2010	3,994		0		0		0
2011							
2012							
2013							
2014	200		0		0		0
2015							
2016							
2017							
2018							
2019	227,280		0		0		0
2020	1,652		0		0		0
2021	20,503		0		0		0
2022	324,795		0		0		0
TOTAL	661,805		0		0		0
THREE-YEAR MOVING AVERAGES							
05-07	27,794		0		0		0
06-08							
07-09							
08-10	1,331		0		0		0
09-11	1,331		0		0		0
10-12	1,331		0		0		0
11-13							
12-14	67		0		0		0
13-15	67		0		0		0
14-16	67		0		0		0
15-17							
16-18							
17-19	75,760		0		0		0
18-20	76,311		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
19-21	83,145		0		0		0
20-22	115,650		0		0		0
FIVE-YEAR AVERAGE							
18-22	114,846		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	29,954	63,060	211		0	63,060-	211-
2001							
2002							
2003	91,591	47,023	51		0	47,023-	51-
2004	62,247	22,880	37		0	22,880-	37-
2005	101,790	0			0	0	
2006	403,430	0			0	0	
2007							
2008	6,426	0			0	0	
2009	13,612	36,642	269		0	36,642-	269-
2010	23,916	11,873	50	1,335	6	10,538-	44-
2011	161,133	59,650	37		0	59,650-	37-
2012	36,030	98,041	272	335	1	97,706-	271-
2013	585,390	1,049,997	179	1,867	0	1,048,129-	179-
2014	350,832	156,089-	44-		0	156,089	44
2015	794,587	463,759	58		0	463,759-	58-
2016	175,164	701,259	400		0	701,259-	400-
2017	50,641	307,882	608		0	307,882-	608-
2018	122,800	135,976	111		0	135,976-	111-
2019	82,744	78,787	95		0	78,787-	95-
2020	50,839	17,818	35	143	0	17,675-	35-
2021	53,463	175,767	329		0	175,767-	329-
2022	806,524	116,031	14		0	116,031-	14-
TOTAL	4,003,113	3,230,356	81	3,681	0	3,226,675-	81-
THREE-YEAR MOVING AVERAGES							
00-02	9,985	21,020	211		0	21,020-	211-
01-03	30,530	15,674	51		0	15,674-	51-
02-04	51,279	23,301	45		0	23,301-	45-
03-05	85,209	23,301	27		0	23,301-	27-
04-06	189,156	7,627	4		0	7,627-	4-
05-07	168,407	0			0	0	
06-08	136,619	0			0	0	
07-09	6,679	12,214	183		0	12,214-	183-
08-10	14,651	16,172	110	445	3	15,727-	107-
09-11	66,220	36,055	54	445	1	35,610-	54-
10-12	73,693	56,521	77	557	1	55,964-	76-
11-13	260,851	402,562	154	734	0	401,828-	154-
12-14	324,084	330,650	102	734	0	329,915-	102-
13-15	576,936	452,556	78	622	0	451,933-	78-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
14-16	440,194	336,310	76		0	336,310-	76-
15-17	340,131	490,967	144		0	490,967-	144-
16-18	116,202	381,706	328		0	381,706-	328-
17-19	85,395	174,215	204		0	174,215-	204-
18-20	85,461	77,527	91	48	0	77,479-	91-
19-21	62,349	90,791	146	48	0	90,743-	146-
20-22	303,609	103,205	34	48	0	103,158-	34-
FIVE-YEAR AVERAGE							
18-22	223,274	104,876	47	29	0	104,847-	47-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	136,593	104,992	77		0	104,992-	77-
2001							
2002							
2003	131,950	130,972	99		0	130,972-	99-
2004	67,264	68,681	102		0	68,681-	102-
2005	51,486		0		0		0
2006	100,047		0		0		0
2007							
2008	84,984		0		0		0
2009	128,190	52,280	41		0	52,280-	41-
2010	94,218	34,164	36		0	34,164-	36-
2011	113,529		0		0		0
2012	320,456	179,801	56		0	179,801-	56-
2013	725,733	315,161	43		0	315,161-	43-
2014	614,763	191,397	31		0	191,397-	31-
2015	984,969	395,272	40		0	395,272-	40-
2016	509,470	258,378	51		0	258,378-	51-
2017	670,004	258,641	39		0	258,641-	39-
2018	1,755,490	237,754	14		0	237,754-	14-
2019	386,616	102,769	27		0	102,769-	27-
2020	424,164	73,530	17		0	73,530-	17-
2021	325,428	58,550	18		0	58,550-	18-
2022	2,745,946	63,237	2		0	63,237-	2-
TOTAL	10,371,300	2,525,580	24		0	2,525,580-	24-
THREE-YEAR MOVING AVERAGES							
00-02	45,531	34,997	77		0	34,997-	77-
01-03	43,983	43,658	99		0	43,658-	99-
02-04	66,405	66,551	100		0	66,551-	100-
03-05	83,567	66,551	80		0	66,551-	80-
04-06	72,932	22,894	31		0	22,894-	31-
05-07	50,511		0		0		0
06-08	61,677		0		0		0
07-09	71,058	17,427	25		0	17,427-	25-
08-10	102,464	28,815	28		0	28,815-	28-
09-11	111,979	28,815	26		0	28,815-	26-
10-12	176,068	71,322	41		0	71,322-	41-
11-13	386,573	164,987	43		0	164,987-	43-
12-14	553,651	228,786	41		0	228,786-	41-
13-15	775,155	300,610	39		0	300,610-	39-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
14-16	703,067	281,682	40		0	281,682-	40-
15-17	721,481	304,097	42		0	304,097-	42-
16-18	978,321	251,591	26		0	251,591-	26-
17-19	937,370	199,721	21		0	199,721-	21-
18-20	855,423	138,018	16		0	138,018-	16-
19-21	378,736	78,283	21		0	78,283-	21-
20-22	1,165,179	65,106	6		0	65,106-	6-
FIVE-YEAR AVERAGE							
18-22	1,127,529	107,168	10		0	107,168-	10-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.40 METERS AND METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2012	22,040		0	142	1	142	1
2013							
2014							
2015							
2016				1,183-		1,183-	
2017				4,630		4,630	
2018	665	423	64		0	423-	64-
2019	1,978		0		0		0
2020	1,437		0		0		0
2021	380		0		0		0
2022	3,857		0		0		0
TOTAL	30,356	423	1	3,589	12	3,166	10
THREE-YEAR MOVING AVERAGES							
12-14	7,347		0	47	1	47	1
13-15							
14-16				394-		394-	
15-17				1,149		1,149	
16-18	222	141	64	1,149	519	1,008	455
17-19	881	141	16	1,543	175	1,402	159
18-20	1,360	141	10		0	141-	10-
19-21	1,265		0		0		0
20-22	1,891		0		0		0
FIVE-YEAR AVERAGE							
18-22	1,663	85	5		0	85-	5-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.42 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	78,689		0		0		0
2001							
2002							
2003	25,924		0		0		0
2004	38,683		0		0		0
2005	43,215		0		0		0
2006	45,265		0		0		0
2007	112,187		0		0		0
2008	71,060		0		0		0
2009	302,911		0		0		0
2010	67,551		0		0		0
2011							
2012	21,417	152	1		0	152-	1-
2013							
2014							
2015		963				963-	
2016							
2017		125				125-	
2018	40,425	2,522	6		0	2,522-	6-
2019	94,954		0		0		0
2020	43,711		0		0		0
2021	22,423		0		0		0
2022	40,781		0		0		0
TOTAL	1,049,196	3,762	0		0	3,762-	0
THREE-YEAR MOVING AVERAGES							
00-02	26,230		0		0		0
01-03	8,641		0		0		0
02-04	21,536		0		0		0
03-05	35,941		0		0		0
04-06	42,388		0		0		0
05-07	66,889		0		0		0
06-08	76,171		0		0		0
07-09	162,053		0		0		0
08-10	147,174		0		0		0
09-11	123,487		0		0		0
10-12	29,656	51	0		0	51-	0
11-13	7,139	51	1		0	51-	1-
12-14	7,139	51	1		0	51-	1-
13-15		321				321-	

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.42 METER INSTALLATIONS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
14-16		321				321-	
15-17		363				363-	
16-18	13,475	882	7		0	882-	7-
17-19	45,126	882	2		0	882-	2-
18-20	59,697	841	1		0	841-	1-
19-21	53,696		0		0		0
20-22	35,638		0		0		0
FIVE-YEAR AVERAGE							
18-22	48,459	504	1		0	504-	1-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.43 ERT DEVICES

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2018		257				257-	
2019		78				78-	
2020							
2021							
2022							
TOTAL		336				336-	
THREE-YEAR MOVING AVERAGES							
18-20		112				112-	
19-21		26				26-	
20-22							
FIVE-YEAR AVERAGE							
18-22		67				67-	

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	94,716	21,425	23	5,196	5	16,229-	17-
2001							
2002							
2003	45,940	22,905	50	7,610	17	15,295-	33-
2004	90,943	20,909	23	2,270	2	18,638-	20-
2005	104,827		0		0		0
2006	112,914		0		0		0
2007	240,271		0		0		0
2008	129,018		0		0		0
2009	586,570		0	180-	0	180-	0
2010	141,169		0	17,820	13	17,820	13
2011	434,591		0		0		0
2012	256,371		0		0		0
2013	217,135		0		0		0
2014	157,117		0		0		0
2015	98,997	16,768	17		0	16,768-	17-
2016	78,135	12,356	16	2,025-	3-	14,381-	18-
2017	158,302	16,544	10	11,309	7	5,235-	3-
2018	231,935	9,166	4		0	9,166-	4-
2019	209,012	15,102	7		0	15,102-	7-
2020	86,667	10,155	12		0	10,155-	12-
2021	112,221	12,582	11		0	12,582-	11-
2022	138,528		0		0		0
TOTAL	3,725,378	157,910	4	41,999	1	115,911-	3-
THREE-YEAR MOVING AVERAGES							
00-02	31,572	7,142	23	1,732	5	5,410-	17-
01-03	15,313	7,635	50	2,536	17	5,098-	33-
02-04	45,628	14,604	32	3,293	7	11,311-	25-
03-05	80,570	14,604	18	3,293	4	11,311-	14-
04-06	102,895	6,970	7	757	1	6,213-	6-
05-07	152,671		0		0		0
06-08	160,734		0		0		0
07-09	318,620		0	60-	0	60-	0
08-10	285,586		0	5,880	2	5,880	2
09-11	387,443		0	5,880	2	5,880	2
10-12	277,377		0	5,940	2	5,940	2
11-13	302,699		0		0		0
12-14	210,208		0		0		0
13-15	157,750	5,589	4		0	5,589-	4-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
14-16	111,416	9,708	9	675-	1-	10,383-	9-
15-17	111,811	15,223	14	3,095	3	12,128-	11-
16-18	156,124	12,689	8	3,095	2	9,594-	6-
17-19	199,750	13,604	7	3,770	2	9,834-	5-
18-20	175,871	11,474	7		0	11,474-	7-
19-21	135,966	12,613	9		0	12,613-	9-
20-22	112,472	7,579	7		0	7,579-	7-
FIVE-YEAR AVERAGE							
18-22	155,673	9,401	6		0	9,401-	6-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	7,520	19,066	254		0	19,066-	254-
2001							
2002							
2003	19,633	19,593	100		0	19,593-	100-
2004	17,738	13,078	74		0	13,078-	74-
2005	5,237		0		0		0
2006	8,034		0		0		0
2007							
2008	13,522		0		0		0
2009	11,041	2,919	26		0	2,919-	26-
2010	13,171	3,284	25		0	3,284-	25-
2011	16,923		0		0		0
2012	12,254	27,120	221		0	27,120-	221-
2013	36,204	10,581	29		0	10,581-	29-
2014	32,946	13,212	40		0	13,212-	40-
2015	15,438	9,043	59		0	9,043-	59-
2016	8,615	3,568	41		0	3,568-	41-
2017	5,359	5,872	110		0	5,872-	110-
2018	36,080	10,243	28		0	10,243-	28-
2019	43,290	5,233	12		0	5,233-	12-
2020	40,603	4,375	11		0	4,375-	11-
2021	28,686	4,123	14		0	4,123-	14-
2022	64,990	7,216	11		0	7,216-	11-
TOTAL	437,283	158,524	36		0	158,524-	36-
THREE-YEAR MOVING AVERAGES							
00-02	2,507	6,355	254		0	6,355-	254-
01-03	6,544	6,531	100		0	6,531-	100-
02-04	12,457	10,890	87		0	10,890-	87-
03-05	14,203	10,890	77		0	10,890-	77-
04-06	10,336	4,359	42		0	4,359-	42-
05-07	4,424		0		0		0
06-08	7,185		0		0		0
07-09	8,188	973	12		0	973-	12-
08-10	12,578	2,068	16		0	2,068-	16-
09-11	13,712	2,068	15		0	2,068-	15-
10-12	14,116	10,135	72		0	10,135-	72-
11-13	21,793	12,567	58		0	12,567-	58-
12-14	27,134	16,971	63		0	16,971-	63-
13-15	28,196	10,945	39		0	10,945-	39-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
THREE-YEAR MOVING AVERAGES							
14-16	19,000	8,608	45		0	8,608-	45-
15-17	9,804	6,161	63		0	6,161-	63-
16-18	16,685	6,561	39		0	6,561-	39-
17-19	28,243	7,116	25		0	7,116-	25-
18-20	39,991	6,617	17		0	6,617-	17-
19-21	37,526	4,577	12		0	4,577-	12-
20-22	44,760	5,238	12		0	5,238-	12-
FIVE-YEAR AVERAGE							
18-22	42,730	6,238	15		0	6,238-	15-

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.40 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TRANSMISSION AND DISTRIBUTION

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
2021	764		0		0		0
2022							
TOTAL	764		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 341.50 TRANSPORTATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2000	14,877		0	5,451	37	5,451	37
2001							
2002							
2003							
2004				6,040		6,040	
2005							
2006							
2007	1,210		0		0		0
2008	64,985		0		0		0
2009				3,677		3,677	
2010	43,833		0	9,875	23	9,875	23
2011	121,797		0	3,906	3	3,906	3
2012				7,800		7,800	
2013	9,669		0	5,500	57	5,500	57
2014	86,442		0	10,122	12	10,122	12
2015							
2016	169,501		0	29,695	18	29,695	18
2017	37,678		0	6,026	16	6,026	16
2018	43,805		0		0		0
2019	260,279		0		0		0
2020	137,523		0		0		0
2021	261,134		0		0		0
2022	68,025		0		0		0
TOTAL	1,320,757		0	88,092	7	88,092	7
THREE-YEAR MOVING AVERAGES							
00-02	4,959		0	1,817	37	1,817	37
01-03							
02-04				2,013		2,013	
03-05				2,013		2,013	
04-06				2,013		2,013	
05-07	403		0		0		0
06-08	22,065		0		0		0
07-09	22,065		0	1,226	6	1,226	6
08-10	36,272		0	4,517	12	4,517	12
09-11	55,210		0	5,819	11	5,819	11
10-12	55,210		0	7,194	13	7,194	13
11-13	43,822		0	5,735	13	5,735	13
12-14	32,037		0	7,807	24	7,807	24
13-15	32,037		0	5,207	16	5,207	16

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 341.50 TRANSPORTATION EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
14-16	85,314		0	13,272	16	13,272	16
15-17	69,060		0	11,907	17	11,907	17
16-18	83,661		0	11,907	14	11,907	14
17-19	113,920		0	2,009	2	2,009	2
18-20	147,202		0		0		0
19-21	219,645		0		0		0
20-22	155,561		0		0		0
FIVE-YEAR AVERAGE							
18-22	154,153		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 345.50 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	PCT	GROSS SALVAGE AMOUNT	PCT	NET SALVAGE AMOUNT	PCT
2004	6,000		0		0		0
2005							
2006							
2007	8,061		0		0		0
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							
2019	245		0		0		0
2020	3,586		0		0		0
2021							
2022							
TOTAL	17,891		0		0		0
THREE-YEAR MOVING AVERAGES							
04-06	2,000		0		0		0
05-07	2,687		0		0		0
06-08	2,687		0		0		0
07-09	2,687		0		0		0
08-10							
09-11							
10-12							
11-13							
12-14							
13-15							
14-16							
15-17							
16-18							
17-19	82		0		0		0
18-20	1,277		0		0		0

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 345.50 POWER OPERATED EQUIPMENT

SUMMARY OF BOOK SALVAGE

YEAR	REGULAR RETIREMENTS	COST OF REMOVAL AMOUNT	COST OF REMOVAL PCT	GROSS SALVAGE AMOUNT	GROSS SALVAGE PCT	NET SALVAGE AMOUNT	NET SALVAGE PCT
THREE-YEAR MOVING AVERAGES							
19-21	1,277		0		0		0
20-22	1,195		0		0		0
FIVE-YEAR AVERAGE							
18-22	766		0		0		0

PART IX. DETAILED DEPRECIATION CALCULATIONS

UTILITY PLANT IN SERVICE

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R4						
NET SALVAGE PERCENT.. -5						
1945	4,116.36	4,105	3,861	461	3.01	153
1955	103,905.27	98,627	92,770	16,331	5.76	2,835
1965	5,403.65	4,750	4,468	1,206	9.77	123
1968	442.80	376	354	111	11.45	10
1970	1,278.61	1,059	996	347	12.69	27
1971	24,262.40	19,812	18,635	6,841	13.34	513
1972	167.72	135	127	49	14.00	4
1973	36,745.84	29,143	27,412	11,171	14.68	761
1974	25,170.83	19,659	18,492	7,937	15.37	516
1975	14,670.97	11,279	10,609	4,796	16.07	298
1976	40,481.83	30,618	28,800	13,706	16.78	817
1977	27,614.78	20,538	19,318	9,678	17.50	553
1978	27,710.77	20,251	19,048	10,048	18.24	551
1979	4,773.13	3,426	3,223	1,789	18.99	94
1980	6,253.17	4,405	4,143	2,423	19.75	123
1981	42,594.62	29,429	27,681	17,043	20.52	831
1982	1,231.97	834	784	510	21.31	24
1984	14,686.03	9,530	8,964	6,456	22.92	282
1985	218,195.20	138,455	130,233	98,872	23.74	4,165
1986	249,055.14	154,376	145,209	116,299	24.58	4,731
1987	5,194.02	3,143	2,956	2,498	25.42	98
1988	53,057.69	31,309	29,450	26,261	26.28	999
1989	57,660.00	33,147	31,179	29,364	27.15	1,082
1991	3,150.37	1,713	1,611	1,697	28.92	59
1992	883.91	467	439	489	29.81	16
1994	31,553.51	15,660	14,730	18,401	31.64	582
1995	51,889.82	24,917	23,437	31,047	32.56	954
1996	4,814.13	2,233	2,100	2,955	33.49	88
1997	10,474.23	4,687	4,409	6,589	34.43	191
1999	2,000.00	829	780	1,320	36.32	36
2000	4,601.50	1,830	1,721	3,111	37.28	83
2001	247,830.91	94,375	88,771	171,451	38.24	4,484
2002	141,658.62	51,539	48,479	100,263	39.21	2,557
2003	265,117.36	91,955	86,495	191,878	40.18	4,775
2004	8,805.62	2,905	2,733	6,513	41.15	158
2005	2,753.80	861	810	2,081	42.13	49
2006	568.00	168	158	438	43.11	10
2007	61,819.49	17,212	16,190	48,720	44.09	1,105
2008	500.00	131	123	402	45.07	9
2009	2,473.00	603	567	2,030	46.06	44
2012	38,000.00	7,295	6,862	33,038	49.03	674

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R4						
NET SALVAGE PERCENT.. -5						
2015	14,351.40	2,004	1,885	13,184	52.02	253
2016	13,272.00	1,623	1,527	12,409	53.01	234
2020	7,638.90	401	377	7,644	57.00	134
2021	11,043.59	386	363	11,233	58.00	194
2023	0.72		0	1	59.75	
	1,889,873.68	992,200	933,279	1,051,088		36,279

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.0 1.92

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S3						
NET SALVAGE PERCENT.. -5						
1926	3,775.75	3,965	3,965			
1964	128.03	116	109	25	6.95	4
1967	30.93	27	25	7	7.82	1
1973	114.18	96	91	29	9.88	3
1974	622.08	519	490	163	10.27	16
1975	551.48	455	429	150	10.68	14
1978	10.04	8	8	3	11.99	
1979	73.65	58	55	22	12.47	2
1983	7,740.67	5,761	5,436	2,692	14.56	185
1987	6,558.90	4,548	4,292	2,595	16.98	153
1992	170,330.87	105,413	99,469	79,378	20.53	3,866
1993	253,845.42	152,939	144,316	122,222	21.31	5,735
1994	1,548,066.38	906,687	855,563	769,907	22.11	34,822
1995	37,344.95	21,229	20,032	19,180	22.93	836
1996	14,861.64	8,183	7,722	7,883	23.78	331
1997	5,938.76	3,163	2,985	3,251	24.64	132
1998	2,942.33	1,513	1,428	1,661	25.52	65
1999	82,649.32	40,944	38,635	48,147	26.41	1,823
2000	28,608.70	13,620	12,852	17,187	27.33	629
2001	53,422.47	24,401	23,025	33,069	28.25	1,171
2002	3,745,660.37	1,636,891	1,544,595	2,388,348	29.19	81,821
2003	10,267.75	4,280	4,039	6,742	30.15	224
2004	7,703.00	3,056	2,884	5,204	31.11	167
2005	3,374.20	1,270	1,198	2,345	32.08	73
2006	1,376.20	490	462	983	33.05	30
2008	4,141,940.32	1,302,972	1,229,504	3,119,533	35.02	89,079
2009	40,678.33	11,942	11,269	31,443	36.02	873
2010	145,052.01	39,569	37,338	114,967	37.01	3,106
2011	462,946.62	116,565	109,992	376,102	38.01	9,895
2012	375,161.75	86,662	81,776	312,144	39.00	8,004
2013	2,716.50	570	538	2,314	40.00	58
2014	2,566,748.61	485,115	457,761	2,237,325	41.00	54,569
2015	12,530.84	2,105	1,986	11,171	42.00	266
2016	544,765.44	80,081	75,566	496,438	43.00	11,545
2017	48,226.20	6,077	5,734	44,904	44.00	1,021
2018	624,026.21	65,523	61,829	593,399	45.00	13,187
2019	1,388,835.12	116,662	110,084	1,348,193	46.00	29,309

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S3						
NET SALVAGE PERCENT.. -5						
2020	74,927.54	4,720	4,454	74,220	47.00	1,579
2021	61,245.94	2,572	2,427	61,881	48.00	1,289
2022	411,985.47	8,652	8,164	424,421	49.00	8,662
	16,887,784.97	5,269,419	4,972,527	12,759,648		364,545
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.0						2.16

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S2						
NET SALVAGE PERCENT.. -5						
1967	2,848.47	2,365	2,991			
1971	2,141.07	1,713	2,248			
1973	1,948.50	1,527	2,019	27	12.67	2
1976	1,535.89	1,164	1,539	74	13.91	5
1980	631.28	455	602	61	15.71	4
1985	8,424.75	5,617	7,428	1,418	18.25	78
1986	837.10	548	725	154	18.81	8
1987	7,077.39	4,552	6,020	1,411	19.37	73
1988	1,068.29	674	891	231	19.96	12
1989	605.14	374	495	140	20.56	7
1994	11,166.97	6,142	8,122	3,603	23.81	151
1995	49,163.61	26,317	34,803	16,819	24.51	686
1996	17,764.41	9,241	12,221	6,432	25.23	255
1997	11,050.93	5,574	7,371	4,232	25.98	163
2001	53,825.45	23,601	31,211	25,306	29.12	869
2002	44,064.79	18,553	24,535	21,733	29.95	726
2003	231,074.11	93,169	123,211	119,417	30.80	3,877
2004	18,808.80	7,244	9,580	10,169	31.66	321
2005	2,458.83	902	1,193	1,389	32.54	43
2008	3,313.00	1,025	1,356	2,123	35.27	60
2020	438,312.92	27,614	36,518	423,711	47.00	9,015
2023	28,124.49	148	196	29,335	49.75	590
	936,246.19	238,519	315,275	667,784		16,945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.4 1.81

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.50 STRUCTURES AND IMPROVEMENTS - MISCELLANEOUS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 30-S2.5						
NET SALVAGE PERCENT.. -5						
1960	49,629.00	52,110	52,110			
1961	25,774.67	27,063	27,063			
1962	10,890.67	11,435	11,435			
1972	3,438.66	3,411	867	2,744	1.66	1,653
2005	5,500.00	3,213	817	4,958	13.31	373
2008	15,922.95	7,986	2,030	14,689	15.67	937
2009	51,019.38	24,089	6,124	47,446	16.51	2,874
2010	90,965.70	40,147	10,206	85,308	17.39	4,906
2012	23,671.08	8,948	2,275	22,580	19.20	1,176
2013	59,702.36	20,603	5,238	57,449	20.14	2,852
2014	3,316.67	1,034	263	3,220	21.09	153
2015	2,905.22	808	205	2,845	22.05	129
2016	108,522.82	26,474	6,730	107,219	23.03	4,656
2018	11,760.60	2,054	522	11,827	25.01	473
2019	10,434,137.59	1,460,743	371,340	10,584,504	26.00	407,096
2020	425,695.31	44,698	11,363	435,617	27.00	16,134
2021	1,559,162.45	109,147	27,746	1,609,375	28.00	57,478
2022	51,648.97	1,808	460	53,771	29.00	1,854
2023	59,734.12	522	133	62,588	29.75	2,104
	12,993,398.22	1,846,293	536,927	13,106,142		504,848

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.0 3.89

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R2.5						
NET SALVAGE PERCENT.. -5						
1950	422.92	387	427	17	7.12	2
1965	6,403.09	5,276	5,824	899	11.84	76
1967	1,737.64	1,404	1,550	275	12.69	22
1969	3,290.18	2,600	2,870	585	13.61	43
1971	1,866.82	1,440	1,589	371	14.59	25
1977	5,757.89	4,078	4,501	1,545	17.90	86
1979	809.00	554	612	237	19.11	12
1982	3,050.00	1,978	2,183	1,020	21.03	49
1983	4,425.00	2,814	3,106	1,540	21.69	71
1984	1,015.62	633	699	367	22.37	16
1985	271,763.66	165,764	182,973	102,379	23.05	4,442
1986	1,060.08	632	698	415	23.75	17
1988	1,507.00	858	947	635	25.17	25
1993	1,715.00	855	944	857	28.89	30
1994	521,346.10	252,210	278,393	269,020	29.66	9,070
1995	2,876.94	1,349	1,489	1,532	30.44	50
1996	1,188.00	539	595	652	31.22	21
1997	1,114,385.14	488,893	539,648	630,456	32.02	19,689
1998	85,754.92	36,295	40,063	49,980	32.83	1,522
1999	1,538.50	627	692	923	33.64	27
2000	8,490.00	3,329	3,675	5,240	34.46	152
2002	37,744.09	13,604	15,016	24,615	36.12	681
2003	55,788.39	19,214	21,209	37,369	36.96	1,011
2004	20,056.09	6,582	7,265	13,794	37.81	365
2005	345,080.73	107,646	118,821	243,514	38.66	6,299
2006	56,461.98	16,675	18,406	40,879	39.53	1,034
2007	49,059.31	13,684	15,105	36,407	40.39	901
2008	61,290.80	16,066	17,734	46,621	41.27	1,130
2009	154,559.09	37,917	41,853	120,434	42.15	2,857
2010	152,759.38	34,878	38,499	121,898	43.04	2,832
2011	117,472.33	24,826	27,403	95,943	43.93	2,184
2013	12,197.22	2,159	2,383	10,424	45.73	228
2014	18,332.52	2,926	3,230	16,019	46.64	343
2016	21,884.79	2,728	3,011	19,968	48.47	412
2018	15,323.40	1,372	1,515	14,575	50.31	290

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R2.5						
NET SALVAGE PERCENT.. -5						
2020	44,426.57	2,392	2,640	44,008	52.18	843
2021	237,277.23	8,560	9,449	239,692	53.11	4,513
2022	17,834.22	320	353	18,373	54.06	340
	3,457,951.64	1,284,064	1,417,370	2,213,479		61,710
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					35.9	1.78

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R3						
NET SALVAGE PERCENT.. -10						
1924	832.00	915	915			
1933	645.00	700	710			
1938	512.00	544	563			
1941	417.71	437	459			
1942	246.20	257	271			
1951	1,092.00	1,087	1,201			
1956	118.49	115	130			
1957	1,941.22	1,867	2,135			
1958	2,639.63	2,522	2,904			
1959	327.21	311	360			
1960	154,702.18	145,822	170,172			
1961	108,736.00	101,734	119,610			
1962	30.91	29	34			
1963	12,036.50	11,083	13,240			
1964	3,214.13	2,935	3,536			
1965	1,659.31	1,501	1,825			
1966	4,815.98	4,316	5,298			
1967	57,222.30	50,768	62,945			
1969	70,185.83	60,964	77,204			
1970	25,247.07	21,677	27,472	300	12.07	25
1971	12,882.30	10,929	13,851	320	12.58	25
1972	18,844.29	15,788	20,009	720	13.11	55
1973	9,023.81	7,461	9,456	470	13.66	34
1974	2,145.57	1,750	2,218	142	14.22	10
1975	10,274.00	8,258	10,466	835	14.81	56
1976	73,916.00	58,541	74,192	7,116	15.40	462
1977	73,127.78	57,025	72,270	8,171	16.01	510
1978	66,159.22	50,757	64,327	8,448	16.64	508
1979	21,480.22	16,205	20,537	3,091	17.28	179
1980	3,921.98	2,908	3,685	629	17.93	35
1981	83,793.20	61,002	77,311	14,862	18.60	799
1982	15,450.06	11,034	13,984	3,011	19.29	156
1983	6,241.84	4,372	5,541	1,325	19.98	66
1984	147,231.14	101,030	128,040	33,914	20.69	1,639
1986	620,864.02	408,158	517,277	165,673	22.13	7,486
1987	2,254.50	1,448	1,835	645	22.88	28
1989	66,165.22	40,507	51,336	21,446	24.39	879
1991	51,922.78	30,167	38,232	18,883	25.95	728
1992	506,957.21	286,533	363,136	194,517	26.74	7,274
1993	350,281.15	192,373	243,803	141,506	27.54	5,138
1994	689,932.43	367,737	466,050	292,876	28.35	10,331

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R3						
NET SALVAGE PERCENT.. -10						
1995	195,770.70	101,136	128,174	87,174	29.17	2,988
1996	236,345.87	118,174	149,767	110,213	30.00	3,674
1997	2,643.07	1,277	1,618	1,289	30.84	42
1998	172,050.73	80,210	101,654	87,602	31.69	2,764
1999	140,567.98	63,143	80,024	74,601	32.54	2,293
2000	2,418.26	1,044	1,323	1,337	33.41	40
2001	80,000.00	33,152	42,015	45,985	34.28	1,341
2002	768,702.98	305,024	386,571	459,002	35.16	13,055
2003	431,175.82	163,418	207,107	267,186	36.05	7,412
2004	1,096,152.66	395,926	501,775	703,993	36.94	19,058
2005	254,476.09	87,286	110,621	169,303	37.85	4,473
2006	1,447,078.24	470,293	596,024	995,762	38.75	25,697
2007	570,249.11	174,840	221,583	405,691	39.67	10,227
2008	829,698.03	239,119	303,046	609,622	40.59	15,019
2009	498,880.99	134,498	170,455	378,314	41.52	9,112
2010	4,096,116.22	1,027,306	1,301,951	3,203,777	42.46	75,454
2011	483,847.31	112,253	142,263	389,969	43.40	8,985
2012	243,451.89	51,904	65,780	202,017	44.34	4,556
2013	262,249.63	50,930	64,546	223,929	45.29	4,944
2014	963,431.78	168,600	213,674	846,101	46.25	18,294
2015	468,908.46	73,151	92,708	423,091	47.20	8,964
2016	1,144,316.55	156,311	198,100	1,060,648	48.17	22,019
2017	101,912.73	11,965	15,164	96,940	49.13	1,973
2018	1,231,372.02	120,673	152,934	1,201,575	50.10	23,984
2019	635,837.10	49,848	63,175	636,246	51.08	12,456
2020	813,455.94	47,997	60,829	833,973	52.05	16,023
2021	540,094.94	21,281	26,970	567,134	53.03	10,695
2022	364,328.16	7,142	9,052	391,709	54.02	7,251
2023	70,761.24	354	448	77,389	54.75	1,413
	21,425,784.89	6,411,822	8,097,891	15,470,472		370,629

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.7 1.73

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 309.00 SUPPLY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S1.5						
NET SALVAGE PERCENT.. -10						
1960	2,224.56	1,966	2,053	394	9.83	40
1961	2,446.10	2,145	2,240	451	10.14	44
1973	62.36	49	51	18	14.36	1
1978	170.99	126	132	56	16.46	3
1986	2,232.00	1,455	1,519	936	20.37	46
1988	20,585.37	12,921	13,491	9,153	21.47	426
1993	55,162.07	30,982	32,348	28,330	24.47	1,158
1994	425,893.17	233,211	243,493	224,989	25.11	8,960
1996	28,691.41	14,871	15,527	16,034	26.44	606
2017	499.92	65	68	482	44.06	11
2021	41,449.28	1,824	1,904	43,690	48.00	910
	579,417.23	299,615	312,826	324,533		12,205

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.6 2.11

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 310.20 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 30-R3						
NET SALVAGE PERCENT.. 0						
2011	2,114,650.90	796,526	1,159,804	954,847	18.70	51,061
2012	92,643.55	32,178	46,854	45,790	19.58	2,339
2019	89,012.00	11,572	16,850	72,162	26.10	2,765
2021	26,173.88	1,710	2,490	23,684	28.04	845
2022	6,936.48	227	330	6,606	29.02	228
2023	12,577.74	105	153	12,425	29.75	418
	2,341,994.55	842,318	1,226,481	1,115,514		57,656

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.3 2.46

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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.. -5						
1958	134.97	128	142			
1959	8.83	8	9			
1960	8,633.23	8,084	9,065			
1961	918.35	855	964			
1962	4,461.59	4,124	4,685			
1963	45.92	42	48			
1964	5,305.53	4,837	5,571			
1965	200.84	182	211			
1966	2,518.42	2,261	2,644			
1967	1,153.97	1,027	1,212			
1968	96.09	85	101			
1969	45,711.62	39,972	47,997			
1970	10,057.22	8,710	10,560			
1971	3,489.46	2,991	3,664			
1972	28,774.39	24,394	30,213			
1973	26,012.88	21,802	27,314			
1974	23,305.83	19,298	24,471			
1975	18,936.05	15,481	19,883			
1976	24,915.00	20,102	26,161			
1977	41,655.81	33,136	43,739			
1978	16,759.33	13,138	17,495	102	12.67	8
1979	18,548.09	14,314	19,061	414	13.25	31
1980	21,371.02	16,228	21,610	830	13.84	60
1981	58,849.25	43,946	58,520	3,272	14.44	227
1982	4,039.48	2,963	3,946	295	15.07	20
1983	17,413.07	12,539	16,697	1,587	15.71	101
1984	43,917.29	31,025	41,314	4,799	16.36	293
1985	37,077.46	25,671	34,185	4,746	17.03	279
1986	139,639.21	94,659	126,052	20,569	17.72	1,161
1987	284,963.94	188,982	251,657	47,555	18.42	2,582
1988	13,625.55	8,833	11,762	2,545	19.13	133
1989	88,356.30	55,924	74,471	18,303	19.86	922
1990	31,660.97	19,554	26,039	7,205	20.59	350
1991	82,459.40	49,629	66,088	20,494	21.34	960
1992	262,256.58	153,656	204,615	70,754	22.10	3,202
1993	174,121.42	99,202	132,102	50,725	22.87	2,218
1994	524,457.02	290,098	386,307	164,373	23.66	6,947
1995	59,713.58	32,039	42,665	20,034	24.45	819
1996	57,925.68	30,095	40,076	20,746	25.26	821
1997	133,385.75	67,030	89,260	50,795	26.07	1,948
1998	31,876.30	15,463	20,591	12,879	26.90	479

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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.. -5						
1999	59,335.08	27,749	36,952	25,350	27.73	914
2000	117,184.90	52,712	70,194	52,850	28.58	1,849
2001	786,537.84	339,761	452,441	373,424	29.43	12,689
2002	402,017.18	166,399	221,584	200,534	30.29	6,620
2003	46,251.74	18,299	24,368	24,196	31.16	777
2004	1,129,150.15	425,870	567,107	618,501	32.04	19,304
2005	220,761.23	79,136	105,381	126,418	32.93	3,839
2006	1,628,392.77	552,953	736,337	973,475	33.83	28,775
2007	208,376.19	66,820	88,980	129,815	34.73	3,738
2008	33,401.32	10,065	13,403	21,668	35.65	608
2009	12,828.23	3,618	4,818	8,652	36.57	237
2011	42,137.01	10,238	13,633	30,611	38.43	797
2012	265,678.00	59,363	79,051	199,911	39.36	5,079
2013	4,191.32	853	1,136	3,265	40.31	81
2014	446,331.30	81,920	109,088	359,560	41.26	8,714
2015	275,356.71	44,988	59,908	229,217	42.22	5,429
2016	102,168.18	14,633	19,486	87,791	43.18	2,033
2017	65,118.45	8,013	10,670	57,704	44.14	1,307
2018	72,408.90	7,436	9,902	66,127	45.11	1,466
2019	1,150,724.55	94,728	126,145	1,082,116	46.08	23,483
2020	174,386.02	10,767	14,338	168,767	47.06	3,586
2021	414,367.70	17,142	22,827	412,259	48.03	8,583
2022	129,520.80	2,666	3,550	132,447	49.02	2,702
2023	24,214.10	127	169	25,256	49.75	508
	10,159,592.36	3,568,763	4,734,635	5,932,937		166,679

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 35.6 1.64

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.40 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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.. -5						
2022	57,843.23	1,190	723	60,012	49.02	1,224
2023	22,340.56	117	71	23,386	49.75	470
	80,183.79	1,307	794	83,399		1,694

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 49.2 2.11

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 45-S1.5						
NET SALVAGE PERCENT.. -10						
1926	4,606.00	5,067	5,067			
1960	50,913.00	47,292	56,004			
1961	40,745.00	37,569	44,820			
1962	16,976.98	15,533	18,675			
1964	788.87	711	868			
1965	806.25	720	887			
1969	232.00	200	249	6	9.70	1
1970	9.41	8	10			
1971	1,586.93	1,344	1,674	72	10.36	7
1972	55,414.70	46,462	57,868	3,088	10.70	289
1973	107.23	89	111	7	11.05	1
1974	341.56	280	349	27	11.41	2
1975	243.04	197	245	22	11.78	2
1976	614.52	493	614	62	12.15	5
1977	3,113.38	2,471	3,078	347	12.53	28
1978	664.15	521	649	82	12.93	6
1979	770.88	597	744	104	13.33	8
1980	3,092.40	2,363	2,943	459	13.74	33
1981	4,777.21	3,601	4,485	770	14.16	54
1982	1,948.19	1,448	1,803	340	14.60	23
1983	1,480.92	1,085	1,351	278	15.04	18
1984	4,804.71	3,465	4,316	969	15.50	63
1985	1,154.61	820	1,021	249	15.96	16
1986	52,656.26	36,761	45,785	12,137	16.44	738
1987	15,803.64	10,840	13,501	3,883	16.94	229
1988	3,814.00	2,569	3,200	995	17.44	57
1989	25,315.67	16,733	20,841	7,006	17.96	390
1990	14,288.65	9,256	11,528	4,190	18.50	226
1991	126,669.22	80,351	100,076	39,260	19.05	2,061
1992	37,782.15	23,449	29,205	12,355	19.61	630
1993	20,391.14	12,366	15,402	7,028	20.19	348
1994	290,629.53	172,065	214,305	105,387	20.78	5,072
1995	43,120.65	24,887	30,996	16,437	21.39	768
1996	73,298.89	41,175	51,283	29,346	22.02	1,333
1997	5,872.13	3,207	3,994	2,465	22.66	109
1998	12,403.23	6,573	8,187	5,457	23.32	234
1999	120,153.38	61,679	76,820	55,349	24.00	2,306
2000	213,937.90	106,160	132,221	103,111	24.70	4,175
2001	31,205.43	14,943	18,611	15,715	25.41	618
2002	146,020.46	67,318	83,844	76,779	26.14	2,937
2003	84,278.14	37,309	46,468	46,238	26.89	1,720

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 45-S1.5						
NET SALVAGE PERCENT.. -10						
2004	756,488.11	320,839	399,601	432,536	27.65	15,643
2005	270,478.93	109,555	136,449	161,078	28.43	5,666
2006	2,782,024.83	1,071,753	1,334,854	1,725,373	29.24	59,007
2007	817,627.02	298,795	372,145	527,245	30.05	17,546
2008	30,721.54	10,596	13,197	20,597	30.89	667
2009	3,778.00	1,225	1,526	2,630	31.74	83
2010	65,315.97	19,782	24,638	47,210	32.61	1,448
2011	131,221.23	36,920	45,983	98,360	33.49	2,937
2012	8,861.51	2,298	2,862	6,886	34.39	200
2013	12,684.91	3,008	3,746	10,207	35.30	289
2014	4,954.89	1,062	1,323	4,127	36.23	114
2015	94,459.76	18,102	22,546	81,360	37.16	2,189
2016	2,927,702.46	493,087	614,133	2,606,340	38.11	68,390
2017	11,223.19	1,624	2,023	10,323	39.08	264
2018	1,155,736.87	139,844	174,174	1,097,137	40.05	27,394
2019	5,485,154.33	533,618	664,614	5,369,056	41.02	130,889
2020	247,765.99	18,108	22,553	249,990	42.01	5,951
2021	596,734.13	29,171	36,332	620,076	43.00	14,420
2022	165,237.71	4,039	5,030	176,731	44.00	4,017
2023	92,438.21	565	704	100,978	44.75	2,256
	17,173,442.00	4,013,968	4,992,531	13,898,255		383,877

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.2 2.24

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-R4						
NET SALVAGE PERCENT.. -10						
1926	20,356.15	22,227	22,325	67	0.48	67
1934	5,399.80	5,742	5,767	173	2.16	80
1938	858.89	899	903	42	3.13	13
1942	3,651.78	3,759	3,776	241	4.17	58
1958	47,793.82	44,881	45,079	7,494	9.51	788
1960	4,478.82	4,132	4,150	777	10.49	74
1961	187,778.00	171,536	172,294	34,262	11.02	3,109
1963	109,225.72	97,690	98,122	22,026	12.15	1,813
1964	81,714.56	72,255	72,574	17,312	12.75	1,358
1965	1,897.18	1,658	1,665	422	13.37	32
1968	689.58	580	583	176	15.34	11
1970	41,012.00	33,515	33,663	11,450	16.71	685
1971	9,252.07	7,451	7,484	2,693	17.41	155
1974	127,584.95	98,089	98,523	41,820	19.57	2,137
1975	7,131.14	5,392	5,416	2,428	20.32	119
1976	15,692.05	11,666	11,718	5,543	21.07	263
1977	287,818.45	210,223	211,152	105,448	21.84	4,828
1978	294,648.20	211,322	212,256	111,857	22.62	4,945
1979	264,050.30	185,848	186,670	103,785	23.41	4,433
1980	552.30	381	383	225	24.22	9
1981	3,146.74	2,128	2,137	1,324	25.03	53
1984	126,735.11	80,343	80,698	58,711	27.54	2,132
1985	416,832.31	258,181	259,322	199,194	28.40	7,014
1987	789,444.06	465,725	467,784	400,604	30.14	13,291
1988	51,554.88	29,638	29,769	26,941	31.03	868
1989	252,208.93	141,190	141,814	135,616	31.92	4,249
1991	1,458,506.16	771,567	774,977	829,380	33.74	24,582
1992	54,812.21	28,143	28,267	32,026	34.66	924
1995	2,970,730.26	1,384,536	1,390,656	1,877,147	37.46	50,111
1996	3,527.17	1,588	1,595	2,285	38.40	60
1997	759,618.28	329,737	331,195	504,385	39.35	12,818
1998	27,882.83	11,650	11,701	18,970	40.31	471
1999	304,823.59	122,413	122,954	212,352	41.27	5,145
2000	7,788.92	3,001	3,014	5,554	42.23	132
2001	913,332.36	336,945	338,435	666,231	43.20	15,422
2002	75,058.66	26,459	26,576	55,989	44.17	1,268
2003	1,316,919.80	442,377	444,333	1,004,279	45.15	22,243
2004	43,413.64	13,864	13,925	33,830	46.13	733
2005	12,989.67	3,933	3,950	10,339	47.11	219
2008	41,315.56	10,446	10,492	34,955	50.06	698
2009	1,009.04	238	239	871	51.05	17

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-R4						
NET SALVAGE PERCENT.. -10						
2010	10,411.99	2,284	2,294	9,159	52.04	176
2011	724,329.35	146,604	147,252	649,510	53.04	12,246
2012	537,432.16	99,773	100,214	490,961	54.03	9,087
2014	199,500.00	30,317	30,451	188,999	56.02	3,374
2015	3,744.88	506	508	3,611	57.02	63
2016	147,437.58	17,441	17,518	144,663	58.01	2,494
2018	75,582.35	6,383	6,411	76,730	60.01	1,279
2019	482,109.71	32,636	32,781	497,540	61.00	8,156
2021	119,739.26	4,053	4,071	127,642	63.00	2,026
2022	1,668,560.59	28,229	28,354	1,807,063	64.00	28,235
2023	264,553.43	1,120	1,125	289,883	64.75	4,477
	15,376,637.24	6,022,694	6,049,315	10,864,986		259,040

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 41.9 1.68

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.41 DISTRIBUTION RESERVOIRS AND STANDPIPES - TANK PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2019	2,317,788.32	618,085		2,317,788	11.00	210,708
2020	103,105.00	20,621		103,105	12.00	8,592
2021	974,050.00	129,870		974,050	13.00	74,927
2022	693,409.54	46,230		693,410	14.00	49,529
2023	2,185,252.14	36,428		2,185,252	14.75	148,153
	6,273,605.00	851,234		6,273,605		491,909

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.8 7.84

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
1910	1,872.30	2,139	1,739	508	3.13	162
1920	1,368.74	1,516	1,232	410	5.00	82
1923	7,158.37	7,854	6,385	2,205	5.57	396
1925	7,917.37	8,630	7,016	2,485	5.96	417
1928	12,421.25	13,403	10,896	4,010	6.55	612
1930	2,694.93	2,888	2,348	886	6.96	127
1931	875.46	935	760	291	7.16	41
1932	3,110.27	3,309	2,690	1,042	7.38	141
1933	4,838.99	5,129	4,170	1,637	7.59	216
1934	6,410.73	6,769	5,503	2,190	7.81	280
1935	15,855.24	16,679	13,560	5,466	8.02	682
1936	8,762.44	9,180	7,463	3,052	8.25	370
1937	10,775.01	11,243	9,140	3,790	8.48	447
1938	10,467.13	10,877	8,843	3,718	8.71	427
1939	11,204.04	11,596	9,427	4,018	8.94	449
1940	1,158.08	1,193	970	420	9.19	46
1941	3,346.71	3,433	2,791	1,225	9.43	130
1942	4,250.54	4,341	3,529	1,572	9.68	162
1943	3,232.96	3,286	2,671	1,209	9.94	122
1944	2,856.86	2,890	2,350	1,078	10.21	106
1945	9,813.76	9,878	8,031	3,746	10.48	357
1946	5,036.61	5,044	4,101	1,943	10.75	181
1947	7,116.40	7,091	5,765	2,775	11.03	252
1948	6,673.45	6,614	5,377	2,631	11.32	232
1949	5,818.79	5,734	4,662	2,321	11.62	200
1950	5,979.35	5,859	4,763	2,412	11.92	202
1951	32,377.07	31,542	25,643	13,209	12.23	1,080
1952	32,518.11	31,487	25,598	13,424	12.55	1,070
1953	48,754.69	46,913	38,139	20,367	12.88	1,581
1954	17,899.73	17,111	13,911	7,569	13.22	573
1955	22,222.73	21,104	17,157	9,510	13.56	701
1956	56,844.17	53,605	43,580	24,633	13.92	1,770
1957	33,576.75	31,440	25,560	14,732	14.28	1,032
1958	33,560.15	31,189	25,356	14,916	14.66	1,017
1959	8,337.85	7,690	6,252	3,753	15.04	250
1960	54,618.87	49,974	40,628	24,915	15.44	1,614
1961	26,349.01	23,914	19,442	12,177	15.84	769
1962	36,800.30	33,114	26,921	17,239	16.26	1,060
1963	21,343.55	19,036	15,476	10,136	16.69	607
1964	76,196.22	67,339	54,745	36,690	17.13	2,142
1965	1,198,874.83	1,049,553	853,264	585,386	17.58	33,298

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
1966	16,789.73	14,553	11,831	8,317	18.05	461
1967	11,477.06	9,846	8,005	5,767	18.53	311
1968	5,645.97	4,793	3,897	2,878	19.02	151
1969	35,812.21	30,069	24,445	18,530	19.52	949
1970	108,150.87	89,768	72,979	56,802	20.04	2,834
1971	320,590.12	262,963	213,783	170,925	20.57	8,309
1972	289,500.88	234,524	190,663	156,738	21.12	7,421
1973	624,181.42	499,190	405,831	343,187	21.68	15,830
1974	594,065.72	468,853	381,168	331,711	22.25	14,908
1975	1,259,936.53	980,664	797,259	714,665	22.84	31,290
1976	729,988.48	559,957	455,233	420,753	23.45	17,943
1977	563,297.40	425,643	346,039	329,918	24.07	13,707
1978	853,389.40	634,768	516,053	508,014	24.71	20,559
1979	849,917.26	621,986	505,662	514,239	25.36	20,278
1980	809,396.75	582,319	473,413	497,863	26.03	19,127
1981	1,962,578.96	1,387,339	1,127,877	1,227,218	26.71	45,946
1982	854,319.90	592,874	481,994	543,190	27.41	19,817
1983	867,240.21	590,466	480,036	560,652	28.12	19,938
1984	936,394.50	624,931	508,056	615,617	28.85	21,339
1985	1,553,548.69	1,015,592	825,655	1,038,603	29.59	35,100
1986	1,018,766.78	651,701	529,819	692,701	30.35	22,824
1987	1,052,671.06	658,231	535,128	728,077	31.13	23,388
1988	1,478,724.01	903,063	734,171	1,040,298	31.92	32,591
1989	1,667,002.37	993,440	807,646	1,192,757	32.72	36,453
1990	2,759,624.53	1,602,790	1,303,035	2,008,514	33.54	59,884
1991	585,301.32	330,974	269,075	433,287	34.37	12,607
1992	616,047.32	338,809	275,445	463,812	35.21	13,173
1993	2,491,656.84	1,330,784	1,081,899	1,908,089	36.07	52,900
1994	1,674,915.39	867,653	705,384	1,304,514	36.94	35,314
1995	3,002,814.66	1,507,329	1,225,427	2,377,951	37.81	62,892
1996	2,268,045.75	1,100,801	894,928	1,826,727	38.71	47,190
1997	2,120,459.94	993,953	808,063	1,736,489	39.61	43,840
1998	3,630,227.35	1,640,659	1,333,821	3,022,452	40.52	74,592
1999	2,474,295.01	1,076,200	874,928	2,094,226	41.44	50,536
2000	2,518,866.57	1,052,332	855,524	2,167,116	42.37	51,147
2001	2,788,612.34	1,116,638	907,803	2,438,532	43.31	56,304
2002	3,784,931.10	1,449,235	1,178,197	3,363,720	44.26	75,999
2003	5,081,028.57	1,856,364	1,509,185	4,588,049	45.21	101,483
2004	3,031,856.08	1,053,958	856,846	2,781,381	46.17	60,242
2005	3,552,808.39	1,171,446	952,361	3,311,009	47.14	70,238
2006	6,720,284.22	2,095,519	1,703,613	6,360,728	48.11	132,212

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
2007	3,063,756.37	900,450	732,047	2,944,461	49.08	59,993
2008	3,375,905.40	931,142	756,999	3,294,087	50.06	65,803
2009	3,413,205.52	879,051	714,650	3,381,197	51.05	66,233
2010	4,263,278.82	1,020,834	829,916	4,286,019	52.03	82,376
2011	3,112,736.14	688,450	559,695	3,175,588	53.02	59,894
2012	4,844,511.06	982,002	798,347	5,015,066	54.02	92,837
2013	14,328,718.33	2,642,617	2,148,392	15,046,070	55.01	273,515
2014	4,574,327.92	759,210	617,222	4,871,972	56.01	86,984
2015	11,499,273.97	1,698,397	1,380,761	12,418,368	57.00	217,866
2016	6,360,288.63	821,927	668,209	6,964,137	58.00	120,071
2017	10,694,481.75	1,184,649	963,095	11,870,283	59.00	201,191
2018	4,894,346.60	451,768	367,278	5,505,938	60.00	91,766
2019	13,046,080.98	963,427	783,245	14,872,052	61.00	243,804
2020	2,264,193.23	125,391	101,940	2,615,092	62.00	42,179
2021	5,305,842.96	195,913	159,273	6,207,739	63.00	98,536
2022	13,276,137.58	245,024	199,200	15,732,165	64.00	245,815
2023	546,576.27	2,525	2,053	653,839	64.75	10,098
	178,290,113.00	49,598,275	40,322,353	173,625,783		3,546,391

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 49.0 1.99

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
1945	100.00	120	120			
1946	152.76	183	183			
1947	79.91	96	96			
1948	139.03	167	167			
1949	126.50	152	152			
1950	160.03	192	192			
1951	466.02	559	559			
1952	512.42	615	615			
1953	448.76	539	539			
1954	243.88	293	293			
1955	2,268.62	2,722	2,722			
1956	1,474.17	1,769	1,769			
1957	2,222.35	2,667	2,667			
1958	1,683.51	2,017	1,335	685	0.05	685
1959	405.69	483	320	167	0.27	167
1960	2,010.71	2,377	1,574	839	0.52	839
1961	415.19	487	322	176	0.77	176
1962	2,041.41	2,377	1,574	876	1.04	842
1963	787.05	909	602	342	1.31	261
1964	839.25	962	637	370	1.58	234
1965	1,486.96	1,690	1,119	665	1.85	359
1966	462.10	521	345	210	2.12	99
1967	288.21	323	214	132	2.36	56
1968	224.48	249	165	104	2.59	40
1969	825.90	912	604	387	2.81	138
1970	1,272.02	1,394	923	603	3.03	199
1971	2,138.35	2,328	1,541	1,025	3.25	315
1972	2,456.84	2,656	1,758	1,190	3.47	343
1973	1,372.08	1,473	975	671	3.69	182
1974	3,343.23	3,563	2,359	1,653	3.92	422
1975	1,655.96	1,751	1,159	828	4.16	199
1976	4,095.50	4,297	2,845	2,070	4.40	470
1977	4,121.09	4,290	2,840	2,105	4.64	454
1978	3,704.68	3,823	2,531	1,915	4.90	391
1979	1,422.87	1,456	964	743	5.16	144
1980	1,589.46	1,611	1,066	841	5.44	155
1981	1,718.14	1,724	1,141	921	5.73	161
1982	2,638.74	2,620	1,734	1,432	6.04	237
1983	1,737.66	1,706	1,129	956	6.37	150
1984	1,232.59	1,195	791	688	6.72	102
1985	23,776.53	22,744	15,057	13,475	7.10	1,898

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
1986	51,248.85	48,320	31,988	29,511	7.50	3,935
1987	62,399.25	57,935	38,353	36,526	7.92	4,612
1988	66,727.49	60,947	40,347	39,726	8.36	4,752
1989	98,869.77	88,711	58,727	59,917	8.83	6,786
1990	115,154.08	101,349	67,093	71,092	9.33	7,620
1991	57,867.12	49,898	33,033	36,408	9.85	3,696
1992	104,149.69	87,843	58,152	66,828	10.40	6,426
1993	457,495.38	377,082	249,630	299,364	10.96	27,314
1994	325,131.22	261,406	173,052	217,105	11.55	18,797
1995	579,157.58	453,529	300,238	394,751	12.16	32,463
1996	568,632.28	433,004	286,650	395,709	12.79	30,939
1997	447,353.33	330,684	218,914	317,910	13.44	23,654
1998	786,021.12	562,973	372,690	570,535	14.11	40,435
1999	593,906.34	411,527	272,432	440,256	14.79	29,767
2000	796,163.13	532,289	352,377	603,019	15.50	38,904
2001	590,551.98	380,452	251,861	456,801	16.21	28,180
2002	496,674.23	307,541	203,593	392,416	16.94	23,165
2003	791,750.71	469,891	311,070	639,031	17.69	36,124
2004	696,458.42	395,193	261,619	574,131	18.45	31,118
2005	1,167,000.10	630,978	417,710	982,690	19.23	51,102
2006	823,724.95	423,352	280,261	708,209	20.01	35,393
2007	704,249.79	342,384	226,659	618,441	20.82	29,704
2008	722,536.24	331,211	219,263	647,780	21.63	29,948
2009	723,828.60	311,452	206,182	662,412	22.45	29,506
2010	484,713.10	194,605	128,829	452,827	23.29	19,443
2011	1,722,769.18	641,470	424,656	1,642,667	24.14	68,048
2012	23,514,670.67	8,062,052	5,337,109	22,880,496	25.00	915,220
2013	933,092.37	292,401	193,571	926,140	25.86	35,814
2014	503,176.08	142,499	94,335	509,476	26.74	19,053
2015	1,180,733.11	298,352	197,510	1,219,370	27.63	44,132
2016	1,102,870.72	244,652	161,960	1,161,485	28.53	40,711
2017	822,420.56	157,056	103,972	882,933	29.43	30,001
2018	3,753,412.05	599,675	396,987	4,107,107	30.34	135,369
2019	2,048,751.77	262,716	173,919	2,284,583	31.26	73,083
2020	1,566,127.22	150,893	99,892	1,779,461	32.19	55,280

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
2021	1,625,668.56	104,778	69,363	1,881,439	33.12	56,807
2022	19,267,638.43	621,035	411,127	22,710,039	34.06	666,766
2023	1,332,848.28	10,972	7,264	1,592,154	34.76	45,804
	71,764,084.40	19,315,119	12,790,086	73,326,816		2,789,589

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.3 3.89

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.40 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 17-S2.5						
NET SALVAGE PERCENT.. 0						
2004	52,395.51	42,687	52,396			
2006	32.27	25	32			
2011	55,332.39	34,762	46,289	9,043	6.32	1,431
2012	3,558.45	2,099	2,795	763	6.97	109
2013	235.40	129	172	63	7.69	8
2016	120,147.39	48,201	64,185	55,962	10.18	5,497
2018	8,623.84	2,511	3,344	5,280	12.05	438
2019	22,287.90	5,218	6,948	15,340	13.02	1,178
2022	39,473.10	2,322	3,092	36,381	16.00	2,274
2023	22,716.95	334	445	22,272	16.75	1,330
	324,803.20	138,288	179,698	145,105		12,265

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.8 3.78

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.42 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 21-L2						
NET SALVAGE PERCENT.. 0						
1983	665.08	549	665			
1984	2,259.49	1,843	2,259			
1985	4,905.09	3,952	4,905			
1986	7,352.26	5,847	7,352			
1987	10,610.71	8,327	10,611			
1988	14,356.17	11,109	14,356			
1989	17,892.26	13,649	17,892			
1990	21,547.34	16,191	21,547			
1991	16,088.49	11,905	16,041	47	5.46	9
1992	20,882.44	15,214	20,500	382	5.70	67
1993	20,732.73	14,859	20,021	712	5.95	120
1994	37,107.14	26,152	35,238	1,869	6.20	301
1995	39,546.14	27,400	36,919	2,627	6.45	407
1996	39,399.10	26,829	36,150	3,249	6.70	485
1997	62,066.35	41,496	55,913	6,153	6.96	884
1998	62,126.54	40,826	55,010	7,117	7.20	988
1999	1,155.23	745	1,004	151	7.45	20
2000	4,743.12	3,006	4,050	693	7.69	90
2001	4,894.63	3,046	4,104	791	7.93	100
2002	6,861.35	4,192	5,648	1,213	8.17	148
2003	4.76	3	4	1	8.41	
2008	42,782.06	22,756	30,662	12,120	9.83	1,233
2009	266,267.84	136,939	184,515	81,753	10.20	8,015
2010	115,092.83	56,834	76,579	38,514	10.63	3,623
2011	760,798.74	358,298	482,779	278,020	11.11	25,024
2012	57,342.41	25,504	34,365	22,977	11.66	1,971
2013	26,304.99	10,923	14,718	11,587	12.28	944
2015	534.55	186	251	284	13.71	21
2016	8,584.27	2,649	3,569	5,015	14.52	345
2017	19,322.36	5,189	6,992	12,330	15.36	803
2018	391,789.65	89,179	120,162	271,628	16.22	16,746
2019	356,196.29	65,643	88,449	267,747	17.13	15,630
2020	338,749.53	47,425	63,901	274,849	18.06	15,219
2021	152,375.38	14,367	19,358	133,017	19.02	6,994
2022	63,828.01	3,039	4,095	59,733	20.00	2,987
2023	31,279.94	372	501	30,779	20.75	1,483
	3,026,445.27	1,116,443	1,501,085	1,525,360		104,657

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.6 3.46

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.43 ERT DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S2.5						
NET SALVAGE PERCENT.. 0						
2005	51,251.13	42,983	48,429	2,822	2.42	1,166
2006	686,859.42	563,225	634,588	52,271	2.70	19,360
2008	1,544,956.12	1,196,831	1,348,476	196,480	3.38	58,130
2009	7,783.99	5,817	6,554	1,230	3.79	325
2017	20,947.52	8,184	9,221	11,727	9.14	1,283
2018	1,695.29	557	628	1,067	10.07	106
2019	515.65	136	153	363	11.03	33
	2,314,009.12	1,817,733	2,048,049	265,960		80,403

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.3 3.47

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-L1.5						
NET SALVAGE PERCENT.. -3						
1981	55,086.20	46,668	56,739			
1982	7,141.54	5,984	7,356			
1983	1,058.42	877	1,090			
1984	16,044.60	13,138	16,526			
1985	89,140.04	72,120	91,814			
1986	11,743.55	9,380	12,096			
1987	16,747.79	13,205	17,250			
1988	24,905.60	19,368	25,653			
1989	32,152.42	24,656	33,117			
1990	91,980.22	69,492	94,740			
1991	24,196.58	17,994	24,922			
1992	23,979.45	17,549	24,699			
1993	157,493.62	113,391	162,218			
1994	37,036.55	26,207	38,148			
1995	49,084.41	34,101	50,557			
1996	35,599.50	24,274	36,667			
1997	48,661.86	32,529	50,122			
1998	270,306.75	177,212	278,416			
1999	226,604.81	145,527	233,403			
2000	256,869.92	161,524	264,576			
2001	110,333.27	67,845	111,237	2,406	8.06	299
2002	1,515,668.73	911,705	1,494,804	66,335	8.32	7,973
2003	254,815.17	149,733	245,498	16,962	8.59	1,975
2004	108,897.16	62,475	102,432	9,732	8.86	1,098
2005	601,332.27	336,319	551,419	67,953	9.14	7,435
2006	809,362.37	440,997	723,045	110,598	9.42	11,741
2007	270,220.33	143,060	234,557	43,770	9.72	4,503
2008	1,085,412.62	556,193	911,917	206,058	10.05	20,503
2009	367,157.71	181,712	297,930	80,242	10.39	7,723
2010	440,566.15	209,421	343,360	110,423	10.77	10,253
2011	414,987.04	188,286	308,708	118,729	11.19	10,610
2012	504,384.41	217,158	356,046	163,470	11.64	14,044
2013	648,027.83	261,981	429,536	237,933	12.15	19,583
2014	732,239.25	274,531	450,113	304,093	12.72	23,907
2015	563,890.57	193,409	317,108	263,699	13.34	19,768
2016	538,226.73	165,758	271,772	282,602	14.02	20,157
2017	697,158.04	188,494	309,049	409,024	14.75	27,730
2018	400,356.59	92,370	151,447	260,920	15.52	16,812
2019	993,587.68	187,281	307,060	716,335	16.34	43,839
2020	664,470.60	95,817	157,099	527,306	17.20	30,657

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-L1.5						
NET SALVAGE PERCENT.. -3						
2021	883,192.59	86,420	141,692	767,996	18.10	42,431
2022	786,788.46	38,899	63,778	746,614	19.04	39,213
2023	561,269.28	6,937	11,373	566,734	19.76	28,681
	15,428,178.68	6,081,997	9,811,089	6,079,935		410,935
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.8	2.66

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R2.5						
NET SALVAGE PERCENT.. -25						
1942	7.22	8	8	1	5.26	
1946	45.12	50	53	3	6.16	
1947	1,489.71	1,645	1,731	131	6.40	20
1948	102.22	112	118	10	6.63	2
1949	266.44	291	306	27	6.87	4
1950	1,761.91	1,917	2,017	185	7.12	26
1951	153.41	166	175	17	7.37	2
1952	419.16	451	474	50	7.62	7
1953	429.52	460	484	53	7.88	7
1954	1,042.04	1,110	1,168	135	8.15	17
1955	537.75	569	599	73	8.43	9
1956	1,586.79	1,669	1,756	227	8.71	26
1957	2,870.60	3,000	3,156	432	9.01	48
1958	3,069.62	3,187	3,353	484	9.32	52
1959	2,214.35	2,283	2,402	366	9.64	38
1960	1,126.46	1,153	1,213	195	9.97	20
1961	1,033.03	1,049	1,104	187	10.31	18
1962	3,472.40	3,498	3,680	660	10.67	62
1963	1,898.23	1,896	1,995	378	11.04	34
1964	1,828.11	1,810	1,904	381	11.43	33
1965	62,161.22	60,975	64,146	13,556	11.84	1,145
1966	10,819.20	10,509	11,055	2,469	12.26	201
1967	5,371.63	5,165	5,434	1,281	12.69	101
1968	8,107.43	7,713	8,114	2,020	13.14	154
1969	1,960.62	1,844	1,940	511	13.61	38
1970	6,543.34	6,084	6,400	1,779	14.09	126
1971	3,981.06	3,656	3,846	1,130	14.59	77
1972	28,154.45	25,531	26,859	8,334	15.10	552
1973	49,755.70	44,520	46,835	15,360	15.63	983
1974	18,339.57	16,181	17,022	5,902	16.18	365
1975	68,086.60	59,205	62,284	22,824	16.74	1,363
1976	20,305.07	17,393	18,297	7,084	17.31	409
1977	45,300.85	38,197	40,183	16,443	17.90	919
1978	52,203.15	43,305	45,557	19,697	18.50	1,065
1979	54,295.64	44,288	46,591	21,279	19.11	1,114
1980	54,487.38	43,664	45,935	22,174	19.74	1,123
1981	99,165.37	78,025	82,082	41,875	20.38	2,055
1982	47,627.07	36,770	38,682	20,852	21.03	992
1983	43,166.35	32,679	34,378	19,580	21.69	903
1984	81,506.30	60,444	63,587	38,296	22.37	1,712
1985	108,030.96	78,445	82,524	52,515	23.05	2,278

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R2.5						
NET SALVAGE PERCENT.. -25						
1986	93,222.35	66,209	69,652	46,876	23.75	1,974
1987	98,361.79	68,294	71,845	51,107	24.45	2,090
1988	152,727.11	103,541	108,925	81,984	25.17	3,257
1989	130,520.73	86,351	90,841	72,310	25.89	2,793
1990	100,969.28	65,102	68,487	57,725	26.63	2,168
1991	48,184.09	30,257	31,830	28,400	27.37	1,038
1992	88,834.88	54,270	57,092	53,952	28.12	1,919
1993	154,497.12	91,681	96,449	96,672	28.89	3,346
1994	191,380.39	110,218	115,949	123,276	29.66	4,156
1995	154,908.24	86,468	90,964	102,671	30.44	3,373
1996	151,786.24	82,033	86,299	103,434	31.22	3,313
1997	182,174.26	95,145	100,093	127,625	32.02	3,986
1998	221,071.85	111,390	117,182	159,158	32.83	4,848
1999	156,734.13	76,087	80,044	115,874	33.64	3,445
2000	265,516.99	123,947	130,392	201,504	34.46	5,847
2001	236,449.72	105,974	111,485	184,077	35.28	5,218
2002	142,034.29	60,945	64,114	113,429	36.12	3,140
2003	357,917.52	146,746	154,377	293,020	36.96	7,928
2004	294,132.47	114,914	120,890	246,776	37.81	6,527
2005	273,577.70	101,596	106,879	235,093	38.66	6,081
2006	101,528.94	35,696	37,552	89,359	39.53	2,261
2007	58,784.84	19,520	20,535	52,946	40.39	1,311
2008	80,511.23	25,124	26,431	74,208	41.27	1,798
2009	78,784.68	23,009	24,206	74,275	42.15	1,762
2010	95,876.81	26,061	27,416	92,430	43.04	2,148
2011	135,009.27	33,967	35,733	133,029	43.93	3,028
2012	234,474.62	54,196	57,014	236,079	44.83	5,266
2013	255,443.64	53,819	56,618	262,687	45.73	5,744
2014	265,655.41	50,475	53,100	278,969	46.64	5,981
2015	312,184.39	52,857	55,606	334,624	47.55	7,037
2016	218,275.06	32,395	34,080	238,764	48.47	4,926
2017	270,435.34	34,481	36,274	301,770	49.39	6,110
2018	300,119.11	31,989	33,652	341,497	50.31	6,788
2019	453,159.49	38,722	40,736	525,713	51.24	10,260
2020	1,081,816.72	69,331	72,936	1,279,335	52.18	24,518

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R2.5						
NET SALVAGE PERCENT.. -25						
2021	870,591.77	37,392	39,336	1,048,904	53.11	19,750
2022	2,487,819.73	53,146	55,910	3,053,865	54.06	56,490
2023	313,591.63	1,709	1,798	390,192	54.76	7,125
	12,003,786.88	3,195,974	3,362,169	11,642,565		266,850
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					43.6	2.22

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 336.40 BACKFLOW PREVENTION DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
1964	24.60	22	19	6	3.92	2
1973	399.00	340	297	102	5.92	17
1976	159.39	133	116	43	6.72	6
1980	1,599.00	1,281	1,120	479	7.95	60
1987	3,841.00	2,815	2,461	1,380	10.68	129
1989	10,732.00	7,612	6,656	4,076	11.63	350
1990	10,728.00	7,475	6,536	4,192	12.13	346
1991	2,247.35	1,536	1,343	904	12.66	71
1992	6,093.86	4,081	3,568	2,526	13.21	191
1993	5,221.25	3,423	2,993	2,228	13.78	162
1994	9,031.88	5,785	5,058	3,974	14.38	276
1995	5,361.31	3,349	2,928	2,433	15.01	162
1996	6,725.51	4,092	3,578	3,148	15.66	201
1997	6,741.98	3,990	3,489	3,253	16.33	199
1998	19,256.80	11,058	9,669	9,588	17.03	563
1999	10,747.23	5,978	5,227	5,520	17.75	311
2000	29,845.10	16,042	14,028	15,817	18.50	855
2001	14,496.12	7,509	6,566	7,930	19.28	411
2002	3,940.15	1,963	1,716	2,224	20.07	111
2003	29,399.78	14,046	12,282	17,118	20.89	819
2004	18,100.18	8,267	7,229	10,871	21.73	500
2005	34,572.75	15,048	13,159	21,414	22.59	948
2006	19,051.00	7,868	6,880	12,171	23.48	518
2007	15,198.08	5,939	5,193	10,005	24.37	411
2022	65.04	2	2	63	39.00	2
2023	2,935.31	18	16	2,920	39.75	73
	266,513.67	139,672	122,129	144,385		7,694

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.8 2.89

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.20 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S3						
NET SALVAGE PERCENT.. 0						
1950	0.01					
1951	491.31	479	419	72	0.97	72
1952	280.64	273	239	42	1.09	39
1953	138.20	134	117	21	1.24	17
1954	772.46	746	653	119	1.36	88
1955	35.41	34	30	5	1.51	3
1956	694.95	666	583	112	1.65	68
1957	947.11	904	792	155	1.80	86
1958	58.51	56	49	10	1.94	5
1959	25.15	24	21	4	2.10	2
1960	25.15	24	21	4	2.25	2
1965	789.90	728	637	153	3.12	49
1969	0.28					
1975	21.63	19	17	5	5.34	1
1977	127.20	108	95	32	5.90	5
1978	366.98	310	271	96	6.19	16
1980	5,044.00	4,183	3,663	1,381	6.83	202
1988	1,410.12	1,055	924	486	10.07	48
1998	263.58	156	137	127	16.28	8
2000	478.31	265	232	246	17.85	14
2003	363,384.46	177,968	155,825	207,559	20.41	10,169
2004	1,822.00	851	745	1,077	21.31	51
2005	39,673.88	17,625	15,432	24,242	22.23	1,091
	416,851.24	206,608	180,902	235,949		12,036

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 19.6 2.89

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.40 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
NET SALVAGE PERCENT.. 0						
2000	7,789.00	4,052	7,789			
2003	38,092.40	17,722	37,138	954	21.39	45
2004	23,411.94	10,436	21,869	1,543	22.17	70
2005	691.79	295	618	74	22.97	3
	69,985.13	32,505	67,414	2,571		118

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.8 0.17

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.50 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
1986	5,187.03	5,187	5,187			
1987	15,575.00	15,575	15,575			
1988	9,828.00	9,828	9,828			
1989	4,816.00	4,816	4,816			
1990	9,830.00	9,830	9,830			
1991	10,832.32	10,832	10,832			
1992	6,056.79	6,057	6,057			
1993	6.68	7	7			
1994	129.11	129	129			
1995	590.81	591	591			
1996	14,584.42	14,584	14,584			
1997	1,417.46	1,417	1,417			
1999	621.01	621	621			
2002	2,346.69	2,347	2,347			
2003	850.57	851	851			
2004	371.00	352	152	219	1.00	219
2008	10,410.28	7,808	3,380	7,030	5.00	1,406
2010	262.13	170	74	188	7.00	27
2011	730.03	438	190	540	8.00	68
2012	1,262.12	694	300	962	9.00	107
2013	8,376.48	4,188	1,813	6,563	10.00	656
2014	8,014.51	3,607	1,561	6,454	11.00	587
2016	2,096.64	734	318	1,779	13.00	137
2017	1,022.58	307	133	890	14.00	64
2018	716.96	179	77	640	15.00	43
2019	43,129.60	8,626	3,734	39,396	16.00	2,462
2020	12,197.94	1,830	792	11,406	17.00	671
2021	108,490.16	10,849	4,696	103,794	18.00	5,766
2022	1,662,217.11	83,111	35,976	1,626,241	19.00	85,592
2023	16,704.78	209	91	16,614	19.75	841
	1,958,674.21	205,774	135,959	1,822,716		98,646

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.5 5.04

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.55 COMPUTER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
1999	4,243.00	4,243	4,243			
2000	29,132.00	29,132	29,132			
2002	647.00	647	647			
2003	595.00	595	595			
2004	982.00	982	982			
2005	7,721.87	7,722	7,722			
2006	8,911.42	8,911	8,911			
2007	8,254.32	8,254	8,254			
2010	4,980.77	4,981	4,981			
2011	1,622.05	1,622	1,622			
2013	5,688.68	5,689	5,689			
2017	888.90	889	889			
2019	173.30	139	174			
	73,840.31	73,806	73,841			

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

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.60 SAP SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2021	2,763,772.90	368,494	346,040	2,417,733	13.00	185,979
2022	325,933.35	21,730	20,406	305,527	14.00	21,823
	3,089,706.25	390,224	366,446	2,723,260		207,802
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					13.1	6.73

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 341.50 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 12-S0						
NET SALVAGE PERCENT.. +5						
1992	2,901.26	2,756	2,756			
1994	11,138.13	10,581	10,581			
1996	15,270.26	14,507	14,507			
1997	62,866.28	59,723	59,723			
1998	19,387.05	18,418	18,418			
1999	6,383.73	6,065	6,065			
2000	24,835.00	22,866	23,593			
2001	61,388.51	54,723	58,319			
2002	9,895.84	8,531	9,401			
2004	22,352.00	17,925	21,234			
2006	1,332.37	985	1,266			
2007	1,220.93	863	1,160			
2009	9,107.03	5,840	8,652			
2010	17,699.35	10,747	16,814			
2011	42,608.95	24,388	40,479			
2012	119,848.78	64,329	113,856			
2014	145,003.46	66,810	137,753			
2016	305,192.80	115,973	289,933			
2018	343,465.77	100,064	268,594	57,698	8.32	6,935
2019	32,049.07	7,764	20,840	9,607	8.94	1,075
2020	353,994.18	67,259	180,538	155,756	9.60	16,225
2021	161,767.03	21,643	58,095	95,584	10.31	9,271
2022	176,894.05	12,604	33,831	134,218	11.10	12,092
2023	74,493.78	1,415	3,799	66,970	11.76	5,695
	2,021,095.61	716,779	1,400,207	519,834		51,293

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.1 2.54

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 342.50 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
1985	199.98	200	200			
1997	0.02					
2018	20,392.85	5,098	1,248	19,145	15.00	1,276
	20,592.85	5,298	1,448	19,145		1,276

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.0 6.20

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 343.50 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
1980	28.72	29	29			
1981	6.10	6	6			
1982	27.58	28	28			
1983	24.33	24	24			
1984	33.85	34	34			
1985	312.38	312	312			
1986	87.94	88	88			
1987	210.58	211	211			
1988	54.10	54	54			
1989	20,708.00	20,708	20,708			
1990	12,211.00	12,211	12,211			
1991	14,396.38	14,396	14,396			
1992	28,215.55	28,216	28,216			
1993	9,996.44	9,996	9,996			
1994	24,607.29	24,607	24,607			
1995	2,468.70	2,469	2,469			
1996	9,447.14	9,447	9,447			
1997	13,582.58	13,583	13,583			
1998	11,216.23	11,216	11,216			
1999	3,041.16	3,041	3,041			
2000	7,398.17	7,398	7,398			
2001	10,377.58	10,378	10,378			
2002	15,009.89	15,010	15,010			
2003	11,731.38	11,731	11,731			
2004	37,346.96	35,480	22,397	14,950	1.00	14,950
2005	29,511.40	26,560	16,767	12,744	2.00	6,372
2006	380.00	323	204	176	3.00	59
2007	27,542.16	22,034	13,909	13,633	4.00	3,408
2009	40,065.05	28,046	17,705	22,360	6.00	3,727
2010	6,987.31	4,542	2,867	4,120	7.00	589
2011	9,956.98	5,974	3,771	6,186	8.00	773
2012	477,824.28	262,803	165,900	311,924	9.00	34,658
2013	21,812.68	10,906	6,885	14,928	10.00	1,493
2017	91,265.29	27,380	17,284	73,981	14.00	5,284
2018	38,892.69	9,723	6,138	32,755	15.00	2,184
2019	91,513.57	18,303	11,554	79,960	16.00	4,998
2020	23,894.42	3,584	2,262	21,632	17.00	1,272

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 343.50 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2021	25,573.44	2,557	1,614	23,959	18.00	1,331
2022	95,806.12	4,790	3,024	92,782	19.00	4,883
2023	12,096.25	151	95	12,001	19.75	608
	1,225,661.67	658,349	487,569	738,092		86,589

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 8.5 7.06

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 344.50 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2018	1,095.03	365	472	623	10.00	62
	1,095.03	365	472	623		62

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.0 5.66

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 345.50 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S3						
NET SALVAGE PERCENT.. 0						
1989	3,883.32	3,736	2,693	1,190	0.76	1,190
1990	1,318.90	1,260	908	411	0.90	411
1991	11,417.37	10,818	7,798	3,619	1.05	3,447
1992	4,592.71	4,315	3,111	1,482	1.21	1,225
1994	2,536.89	2,339	1,686	851	1.56	546
1995	943.40	861	621	322	1.75	184
1996	3,955.00	3,567	2,571	1,384	1.96	706
1997	3,074.00	2,739	1,974	1,100	2.18	505
1998	7,047.25	6,198	4,468	2,579	2.41	1,070
2000	67,781.70	57,784	41,655	26,127	2.95	8,857
2001	1,833.04	1,535	1,107	726	3.25	223
2002	9,218.00	7,563	5,452	3,766	3.59	1,049
2004	8,060.67	6,307	4,547	3,514	4.35	808
2011	182,127.05	104,450	75,295	106,832	8.53	12,524
2015	26,471.03	10,509	7,576	18,895	12.06	1,567
2021	34,572.86	3,457	2,492	32,081	18.00	1,782
	368,833.19	227,438	163,954	204,879		36,094

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.7 9.79

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 346.50 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2018	200,355.55	66,785	62,729	137,627	10.00	13,763
2019	280,175.62	74,714	70,177	209,999	11.00	19,091
2020	335,849.69	67,170	63,091	272,759	12.00	22,730
2021	982,554.96	131,004	123,048	859,507	13.00	66,116
2022	14,830.96	989	929	13,902	14.00	993
2023	3,219.71	54	50	3,169	14.75	215
	1,816,986.49	340,716	320,024	1,496,962		122,908

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.2 6.76

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 347.50 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2020	75,817.48	9,098		75,817	22.00	3,446
2021	101,608.76	8,129		101,609	23.00	4,418
2022	461.43	18		461	24.00	19
	177,887.67	17,245		177,888		7,883

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.6 4.43

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 348.50 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2000	63,497.45	63,497	63,497			
2002	82.54	83	83			
2003	543.88	544	544			
2005	9,248.36	9,248	9,248			
2008	716.24	716	716			
2009	3,855.76	3,599	3,856			
2011	28,423.96	22,739	28,424			
2012	1,899.04	1,393	1,899			
2014	94,544.35	56,727	94,544			
2017	574,823.77	229,930	574,824			
2018	1,811,776.35	603,919	1,811,776			
2019	586,647.43	156,441	586,647			
2020	1,800,547.19	360,109	1,688,948	111,599	12.00	9,300
2021	947,105.71	126,278	592,257	354,849	13.00	27,296
2022	485,970.18	32,400	151,959	334,011	14.00	23,858
2023	342,831.50	5,715	26,804	316,027	14.75	21,426
	6,752,513.71	1,673,338	5,636,026	1,116,487		81,880

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.6 1.21

CONTRIBUTIONS IN AID OF CONSTRUCTION

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-S2						
NET SALVAGE PERCENT.. 0						
2002	32,456.44	13,015	9,047	23,409	29.95	782
2003	1,938.54	744	517	1,422	30.80	46
2004	2,271.36	833	579	1,692	31.66	53
2005	3,223.56	1,126	783	2,441	32.54	75
2006	1,510.93	500	348	1,163	33.44	35
2007	1,515.10	474	329	1,186	34.35	35
2009	8,214.07	2,265	1,575	6,639	36.21	183
	51,130.00	18,957	13,178	37,952		1,209

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.4 2.36

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-R3						
NET SALVAGE PERCENT.. 0						
2002	307,716.78	111,003	132,657	175,060	35.16	4,979
2003	8,228.26	2,835	3,388	4,840	36.05	134
2004	80,396.21	26,399	31,549	48,847	36.94	1,322
2005	15,922.18	4,965	5,934	9,988	37.85	264
2006	8,220.68	2,429	2,903	5,318	38.75	137
2007	13,982.31	3,897	4,657	9,325	39.67	235
2009	27,257.73	6,681	7,984	19,274	41.52	464
2010	801,631.00	182,772	218,425	583,206	42.46	13,735
2021	25,000.00	896	1,071	23,929	53.03	451
	1,288,355.15	341,877	408,568	879,787		21,721

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.5 1.69

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2002	20,989.09	8,274	2,512	18,477	30.29	610
2003	1,253.62	472	143	1,111	31.16	36
2004	1,468.85	528	160	1,309	32.04	41
2005	2,084.63	712	216	1,869	32.93	57
2006	977.09	316	96	881	33.83	26
2007	979.79	299	91	889	34.73	26
2009	5,311.93	1,427	434	4,878	36.57	133
	33,065.00	12,028	3,652	29,413		929

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.7 2.81

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 311.40 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2010	500,613.37	125,253	183,583	317,031	37.49	8,456
	500,613.37	125,253	183,583	317,031		8,456

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 37.5 1.69

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 45-S1.5						
NET SALVAGE PERCENT.. 0						
2002	10,112.72	4,238	2,903	7,210	26.14	276
2003	604.01	243	166	438	26.89	16
2004	707.71	273	187	521	27.65	19
2005	1,004.39	370	254	750	28.43	26
2006	470.77	165	113	358	29.24	12
2007	472.07	157	108	364	30.05	12
2009	2,559.33	754	516	2,043	31.74	64
	15,931.00	6,200	4,247	11,684		425

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 27.5 2.67

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-R4						
NET SALVAGE PERCENT.. 0						
2002	350,961.73	112,469	112,540	238,422	44.17	5,398
2003	27,583.38	8,423	8,428	19,155	45.15	424
2004	11,492.96	3,337	3,339	8,154	46.13	177
2005	32,804.19	9,029	9,035	23,769	47.11	505
2006	27,125.37	7,057	7,061	20,064	48.09	417
2007	19,264.80	4,718	4,721	14,544	49.08	296
2008	6,086.46	1,399	1,400	4,686	50.06	94
2009	86,896.11	18,650	18,662	68,234	51.05	1,337
2010	163,981.63	32,695	32,716	131,266	52.04	2,522
	726,196.63	197,777	197,902	528,295		11,170

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 47.3 1.54

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 65-S2.5						
NET SALVAGE PERCENT.. 0						
2002	10,319,994.74	3,292,904	4,401,975	5,918,020	44.26	133,710
2003	650,964.59	198,193	264,946	386,019	45.21	8,538
2004	1,620,870.07	469,550	627,697	993,173	46.17	21,511
2005	800,821.31	220,042	294,154	506,667	47.14	10,748
2006	2,021,115.67	525,187	702,073	1,319,043	48.11	27,417
2007	545,215.71	133,534	178,509	366,707	49.08	7,472
2008	143,745.07	33,040	44,168	99,577	50.06	1,989
2009	1,958,937.35	420,427	562,030	1,396,907	51.05	27,364
2010	2,676,452.22	534,059	713,934	1,962,518	52.03	37,719
2011	797,775.20	147,038	196,561	601,214	53.02	11,339
2012	4,973,945.12	840,199	1,123,184	3,850,761	54.02	71,284
2013	291,037.00	44,729	59,794	231,243	55.01	4,204
2014	5,749,139.08	795,163	1,062,979	4,686,160	56.01	83,666
2015	310,303.66	38,192	51,055	259,249	57.00	4,548
2016	270,277.00	29,106	38,909	231,368	58.00	3,989
2017	316,438.00	29,210	39,048	277,390	59.00	4,702
2019	21,359,143.46	1,314,442	1,757,155	19,601,988	61.00	321,344
2020	995,243.24	45,930	61,399	933,844	62.00	15,062
2021	489,828.76	15,072	20,148	469,681	63.00	7,455
2022	2,394,483.27	36,827	49,231	2,345,252	64.00	36,645
2023	105,695.70	407	544	105,151	64.75	1,624
	58,791,426.22	9,163,251	12,249,493	46,541,933		842,330

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 55.3 1.43

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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 35-R2.5						
NET SALVAGE PERCENT.. 0						
2002	1,039.58	536	1,040			
2003	93.45	46	93			
2004	10.88	5	11			
2005	93.54	42	94			
2006	303,826.44	130,126	303,826			
2007	62.18	25	62			
2008	28.82	11	29			
2009	253.99	91	243	11	22.45	
2010	793,818.31	265,588	707,814	86,004	23.29	3,693
2023	10,000.00	69	184	9,816	34.76	282
	1,109,227.19	396,539	1,013,396	95,831		3,975

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.1 0.36

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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-L1.5						
NET SALVAGE PERCENT.. 0						
2002	39,346.95	22,979	39,347			
2003	1,239.44	707	1,239			
2004	9,774.96	5,445	9,775			
2005	2,039.86	1,108	2,040			
2006	922.66	488	923			
2007	1,855.35	954	1,855			
2008	139.65	69	140			
2009	3,617.69	1,738	3,618			
2010	73,500.00	33,920	84,305	10,805-		
	132,436.56	67,408	143,242	10,805-		

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

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
2002	3,658.89	1,256	3,659			
2003	218.54	72	219			
2004	256.06	80	256			
2005	363.40	108	363			
2006	170.33	48	170			
2007	170.79	45	171			
2009	925.99	216	926			
2019	32,475.64	2,220	14,788	17,688	51.24	345
	38,239.64	4,045	20,552	17,688		345

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 51.3 0.90

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 346.50 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF JUNE 30, 2023

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						
2002	1,265.12	1,265	1,265			
2003	75.56	76	76			
2004	88.54	89	89			
2005	125.65	126	126			
2006	58.89	59	59			
2007	59.05	59	59			
2009	320.19	299	319			
	1,993.00	1,973	1,993			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

EXHIBIT JJS-3

AQUA NEW JERSEY, INC.
WATER PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF ARPIL 30, 2024

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF APRIL 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE		COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)		(9)=(6)/(7)
	WATER PLANT									
	DEPRECIABLE PLANT									
	SUPPLY AND PUMPING PLANT									
	STRUCTURES AND IMPROVEMENTS									
304.22	POWER AND PUMPING	60 - R4	(5)	2,105,458.33	965,242	1,245,490	39,764	1.89		31.3
304.30	PURIFICATION	50 - S3	(5)	16,893,846.50	5,276,562	12,461,977	364,113	2.16		34.2
304.40	TRANSMISSION AND DISTRIBUTION	50 - S2	(5)	911,335.97	304,298	652,604	16,836	1.85		38.8
304.50	MISCELLANEOUS	30 - S2.5	(5)	13,981,041.82	974,137	13,705,956	539,205	3.86		25.4
304.51	OFFICE	55 - R2.5	(5)	3,461,173.06	1,468,687	2,165,545	61,489	1.78		35.2
	TOTAL STRUCTURES AND IMPROVEMENTS			**37,352,855.68**	**8,988,926**	**30,231,572**	**1,021,407**	**2.73**		
307.00	WELLS AND SPRINGS	55 - R3	(10)	27,196,087.66	8,448,374	21,467,323	486,103	1.79		44.2
309.00	SUPPLY MAINS	50 - S1.5	(10)	2,022,933.13	335,705	1,889,521	44,398	2.19		42.6
310.20	POWER GENERATION EQUIPMENT	30 - R3	0	2,358,083.34	1,274,657	1,083,427	57,909	2.46		18.7
	PUMPING EQUIPMENT									
311.20	PUMPING EQUIPMENT	50 - R3	(5)	11,073,151.58	4,879,726	6,747,083	185,737	1.68		36.3
311.40	TRANSMISSION AND DISTRIBUTION	50 - R3	(5)	116,234.20	2,521	119,525	2,455	2.11		48.7
	TOTAL PUMPING EQUIPMENT			**11,189,385.78**	**4,882,247**	**6,866,608**	**188,192**	**1.68**		
	TOTAL SUPPLY AND PUMPING			**80,119,345.59**	**23,929,909**	**61,538,451**	**1,798,009**	**2.24**		
	DISTRIBUTION PLANT									
320.30	WATER TREATMENT EQUIPMENT	45 - S1.5	(10)	19,961,927.13	5,339,128	16,618,992	451,191	2.26		36.8
320.40	WATER TREATMENT EQUIPMENT - PFAS	15 - L3	0	6,360,790.00	176,777	6,184,013	422,906	6.65	*	14.6
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	65 - R4	(10)	22,535,018.52	6,314,697	18,473,823	378,880	1.68		48.8
330.41	DISTRIBUTION RESERVOIRS AND STANDPIPES - TANK PAINTING	15 - SQ	0	7,994,500.00	466,092	7,528,408	601,408	7.52		12.5
331.40	TRANSMISSION AND DISTRIBUTION MAINS	65 - S2.5	(20)	189,970,475.20	43,376,031	184,588,539	3,754,127	1.98		49.2
333.40	SERVICES	35 - R2.5	(20)	76,776,921.55	15,197,688	76,934,618	2,937,380	3.83		26.2
	METERS AND METER INSTALLATIONS									
334.40	METERS AND METER INSTALLATIONS	17 - S2.5	0	1,716,720.96	211,501	1,505,220	97,046	5.65		15.5
334.42	METER INSTALLATIONS	21 - L2	0	3,042,565.31	1,588,580	1,453,985	103,636	3.41		14.0
334.43	ERT DEVICES	15 - S2.5	0	2,314,009.12	2,114,962	199,047	65,183	2.82		3.1
334.44	OTHER METERS	20 - L1.5	(3)	15,601,625.67	10,155,003	5,914,672	414,169	2.65		14.3
	TOTAL METERS AND METER INSTALLATIONS			**22,674,921.06**	**14,070,046**	**9,072,924**	**680,034**	**3.00**		
335.40	HYDRANTS	55 - R2.5	(25)	12,772,928.47	3,591,354	12,374,807	283,495	2.22		43.7
336.40	BACKFLOW PREVENTION DEVICES	40 - S2.5	0	269,958.74	128,589	141,370	7,677	2.84		18.4
	TOTAL DISTRIBUTION PLANT			**359,317,440.67**	**88,660,401**	**331,917,494**	**9,517,098**	**2.65**		
	GENERAL PLANT									
	OTHER PLANT AND MISCELLANEOUS EQUIPMENT									
339.20	SOURCE OF SUPPLY	40 - S3	0	416,851.24	190,942	225,910	11,925	2.86		18.9
339.40	TRANSMISSION AND DISTRIBUTION	40 - S2	0	69,985.13	67,513	2,472	116	0.17		21.3
	TOTAL OTHER PLANT AND MISCELLANEOUS EQUIPMENT			**486,836.37**	**258,455**	**228,382**	**12,041**	**2.47**		
	OFFICE FURNITURE AND EQUIPMENT									
340.50	OFFICE FURNITURE AND EQUIPMENT	20 - SQ	0	3,274,824.07	245,862	3,028,962	164,090	5.01		18.5
340.55	COMPUTER EQUIPMENT	5 - SQ	0	73,840.31	73,841	0	0	-	**	-
340.60	SAP SOFTWARE	15 - SQ	0	3,089,706.25	539,727	2,549,979	207,735	6.72		12.3
	TOTAL OFFICE FURNITURE AND EQUIPMENT			**6,438,370.63**	**859,430**	**5,578,941**	**371,825**	**5.78**		

AQUA NEW JERSEY, INC.
WATER PLANT

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF ARPIL 30, 2024

	ACCOUNT	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF APRIL 30, 2024	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(4)	(9)=(6)/(7)
341.50	TRANSPORTATION EQUIPMENT	12 - S0	5	2,138,564.05	1,411,549	620,087	62,919	2.94	9.9
342.50	STORES EQUIPMENT	20 - SQ	0	20,592.85	2,512	18,081	1,276	6.20	14.2
343.50	TOOLS, SHOP AND GARAGE EQUIPMENT	20 - SQ	0	1,236,775.00	560,006	676,769	83,255	6.73	8.1
344.50	LABORATORY EQUIPMENT	15 - SQ	0	1,095.03	524	571	62	5.66	9.2
345.50	POWER OPERATED EQUIPMENT	20 - S3	0	368,833.19	194,045	174,788	30,990	8.40	5.6
346.50	COMMUNICATION EQUIPMENT	15 - SQ	0	2,699,070.53	447,227	2,251,844	181,810	6.74	12.4
347.50	MISCELLANEOUS EQUIPMENT	25 - SQ	0	228,779.39	7,507	221,273	9,945	4.35	22.2
348.50	OTHER TANGIBLE PLANT	15 - SQ	0	6,857,585.93	5,668,324	1,189,261	92,457	1.35	12.9
	TOTAL GENERAL PLANT			**20,476,502.97**	**9,409,578**	**10,959,997**	**846,580**	**4.13**	
	TOTAL DEPRECIABLE PLANT			**459,913,289.23**	**121,999,888**	**404,415,942**	**12,161,687**	**2.64**	
	NONDEPRECIABLE AND ACCOUNTS NOT STUDIED								
301.10	ORGANIZATION			1,063,477.63	0				
302.10	FRANCHISES			628,834.26	0				
303.21	LAND AND LAND RIGHTS - SOURCE OF SUPPLY			1,195,449.84	0				
303.22	LAND AND LAND RIGHTS - POWER AND PUMPING			78,759.39	0				
303.30	LAND AND LAND RIGHTS - PURIFICATION			361,846.78	0				
303.40	LAND AND LAND RIGHTS - TRANSMISSION AND DISTRIBUTION			489,030.73	0				
303.51	LAND AND LAND RIGHTS - OFFICE			25,883.41	0				
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**3,843,282.04**	**0**				
	TOTAL WATER PLANT			**463,756,571.27**	**121,999,888**	**404,415,942**	**12,161,687**		
	CONTRIBUTIONS IN AID OF CONSTRUCTION								
	DEPRECIABLE PLANT								
304.40	STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION	50 - S2	0	51,130.00	13,919	37,211	1,213	2.37	30.7
307.00	WELLS AND SPRINGS	55 - R3	0	1,288,355.15	437,019	851,336	21,416	1.66	39.8
311.20	PUMPING EQUIPMENT	50 - R3	0	33,065.00	3,812	29,253	945	2.86	31.0
311.40	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	50 - R3	0	500,613.37	186,003	314,610	8,568	1.71	36.7
320.30	WATER TREATMENT EQUIPMENT	45 - S1.5	0	15,931.00	4,445	11,486	429	2.69	26.8
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	65 - R4	0	726,196.63	207,040	519,157	11,169	1.54	46.5
331.40	TRANSMISSION AND DISTRIBUTION MAINS	65 - S2.5	0	58,862,368.45	13,342,679	45,519,689	835,627	1.42	54.5
333.40	SERVICES	35 - R2.5	0	1,109,227.19	1,055,454	53,773	2,239	0.20	24.0
334.44	OTHER METERS	20 - L1.5	0	132,436.56	143,242	(10,805)	0	-	-
335.40	HYDRANTS	55 - R2.5	0	38,239.64	21,508	16,732	332	0.87	50.4
346.50	COMMUNICATION EQUIPMENT	15 - SQ	0	1,993.00	1,993	0	0	-	-
	TOTAL DEPRECIABLE CONTRIBUTIONS IN AID OF CONSTRUCTION			**62,759,555.99**	**15,417,114**	**47,342,442**	**881,938**	**1.41**	
	NONDEPRECIABLE AND ACCOUNTS NOT STUDIED								
303.40	LAND AND LAND RIGHTS - TRANSMISSION AND DISTRIBUTION			10,826.00	0				
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**10,826.00**	**0**				
	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION			**62,770,381.99**	**15,417,114**				
	TOTAL UTILITY PLANT			**400,986,189.28**	**106,582,774**	**357,073,500**	**11,279,749**		

* NEW ADDITIONS IN ACCOUNT 320.50, WATER TREATMENT EQUIPMENT - FILTER MEDIA WILL USE A DEPRECIATION RATE OF 20 PERCENT BASED ON A 5 YEAR LIFE.
** NEW ADDITIONS AS OF JULY 1, 2023 WILL USE A DEPRECIATION RATE OF 20 PERCENT BASED ON THE AMORTIZATION PERIOD OF 5 YEARS AND A NET SALVAGE PERCENT OF 0.

PART I. DETAILED DEPRECIATION CALCULATIONS

UTILITY PLANT IN SERVICE

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R4						
NET SALVAGE PERCENT.. -5						
1945	4,116.36	4,120	3,909	413	2.80	148
1955	103,905.27	99,082	93,999	15,102	5.51	2,741
1965	5,403.65	4,791	4,545	1,129	9.34	121
1968	442.80	380	361	104	10.96	9
1970	1,278.61	1,070	1,015	328	12.16	27
1971	24,262.40	20,045	19,017	6,459	12.79	505
1972	167.72	137	130	46	13.45	3
1973	36,745.84	29,510	27,996	10,587	14.11	750
1974	25,170.83	19,915	18,893	7,536	14.79	510
1975	14,670.97	11,430	10,844	4,561	15.48	295
1976	40,481.83	31,037	29,445	13,061	16.19	807
1977	27,614.78	20,828	19,760	9,236	16.90	547
1978	27,710.77	20,552	19,498	9,598	17.62	545
1979	4,773.13	3,478	3,300	1,712	18.36	93
1980	6,253.17	4,475	4,245	2,321	19.11	121
1981	42,594.62	29,906	28,372	16,352	19.88	823
1982	1,231.97	848	805	489	20.65	24
1984	14,686.03	9,704	9,206	6,214	22.24	279
1985	218,195.20	141,090	133,852	95,253	23.05	4,132
1986	249,055.14	157,428	149,352	112,156	23.88	4,697
1987	5,194.02	3,207	3,042	2,412	24.72	98
1988	53,057.69	31,978	30,338	25,373	25.56	993
1989	57,660.00	33,884	32,146	28,397	26.42	1,075
1991	3,150.37	1,755	1,665	1,643	28.17	58
1992	883.91	479	454	474	29.06	16
1994	31,553.51	16,085	15,260	17,871	30.87	579
1995	51,889.82	25,617	24,303	30,181	31.79	949
1996	4,814.13	2,298	2,180	2,875	32.72	88
1997	10,474.23	4,830	4,582	6,416	33.65	191
1999	2,000.00	856	812	1,288	35.53	36
2000	4,601.50	1,894	1,797	3,035	36.48	83
2001	247,830.91	97,844	92,825	167,397	37.44	4,471
2002	141,658.62	53,547	50,800	97,942	38.40	2,551
2003	265,117.36	95,713	90,804	187,569	39.37	4,764
2004	8,805.62	3,030	2,875	6,371	40.34	158
2005	2,753.80	901	855	2,036	41.31	49
2006	568.00	176	167	429	42.29	10
2007	61,819.49	18,099	17,170	47,740	43.27	1,103
2008	500.00	138	131	394	44.25	9
2009	2,473.00	639	606	1,991	45.24	44
2012	38,000.00	7,840	7,438	32,462	48.21	673

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.22 STRUCTURES AND IMPROVEMENTS - POWER AND PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R4						
NET SALVAGE PERCENT.. -5						
2015	14,351.40	2,213	2,100	12,969	51.19	253
2016	13,272.00	1,816	1,723	12,213	52.18	234
2020	7,638.90	512	486	7,535	56.17	134
2021	11,043.59	547	519	11,077	57.17	194
2023	92,394.14	1,342	1,273	95,741	59.17	1,618
2024	123,191.23	366	347	129,004	59.83	2,156
	2,105,458.33	1,017,432	965,242	1,245,490		39,764

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.3 1.89

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S3						
NET SALVAGE PERCENT.. -5						
1926	3,775.75	3,965	3,965			
1964	128.03	116	110	24	6.72	4
1967	30.93	28	27	5	7.57	1
1973	114.18	97	92	28	9.57	3
1974	622.08	523	497	156	9.94	16
1975	551.48	459	436	143	10.34	14
1978	10.04	8	8	3	11.61	
1979	73.65	59	56	21	12.07	2
1983	7,740.67	5,837	5,548	2,580	14.09	183
1987	6,558.90	4,621	4,392	2,495	16.45	152
1992	170,330.87	107,666	102,335	76,512	19.90	3,845
1993	253,845.42	156,404	148,660	117,878	20.66	5,706
1994	1,548,066.38	928,143	882,185	743,285	21.45	34,652
1995	37,344.95	21,763	20,685	18,527	22.25	833
1996	14,861.64	8,405	7,989	7,616	23.07	330
1997	5,938.76	3,253	3,092	3,144	23.92	131
1998	2,942.33	1,558	1,481	1,608	24.78	65
1999	82,649.32	42,228	40,137	46,645	25.67	1,817
2000	28,608.70	14,076	13,379	16,660	26.57	627
2001	53,422.47	25,265	24,014	32,080	27.48	1,167
2002	3,745,660.37	1,698,245	1,614,155	2,318,788	28.41	81,619
2003	10,267.75	4,453	4,233	6,548	29.35	223
2004	7,703.00	3,185	3,027	5,061	30.31	167
2005	3,374.20	1,327	1,261	2,282	31.27	73
2006	1,376.20	513	488	957	32.24	30
2008	4,141,940.32	1,374,296	1,306,246	3,042,791	34.20	88,970
2009	40,678.33	12,651	12,025	30,687	35.19	872
2010	145,052.01	42,097	40,013	112,292	36.18	3,104
2011	462,946.62	124,634	118,463	367,631	37.18	9,888
2012	375,161.75	93,201	88,586	305,334	38.17	7,999
2013	2,716.50	618	587	2,265	39.17	58
2014	2,566,748.61	529,854	503,617	2,191,469	40.17	54,555
2015	12,530.84	2,324	2,209	10,948	41.17	266
2016	544,765.44	89,576	85,141	486,863	42.17	11,545
2017	48,226.20	6,917	6,574	44,064	43.17	1,021
2018	624,026.21	76,400	72,617	582,611	44.17	13,190
2019	1,388,835.12	140,870	133,895	1,324,382	45.17	29,320
2020	74,927.54	6,026	5,728	72,946	46.17	1,580

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.30 STRUCTURES AND IMPROVEMENTS - PURIFICATION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S3						
NET SALVAGE PERCENT.. -5						
2021	61,245.94	3,640	3,460	60,848	47.17	1,290
2022	411,985.47	15,833	15,048	417,537	48.17	8,668
2023	6,061.53	106	101	6,264	49.17	127
	16,893,846.50	5,551,240	5,276,562	12,461,977		364,113
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					34.2	2.16

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S2						
NET SALVAGE PERCENT.. -5						
1967	2,848.47	2,382	2,991			
1971	2,141.07	1,727	2,195	53	11.59	5
1973	1,948.50	1,541	1,959	87	12.35	7
1976	1,535.89	1,176	1,495	118	13.55	9
1980	631.28	460	585	78	15.32	5
1985	8,424.75	5,695	7,239	1,607	17.81	90
1986	837.10	556	707	172	18.35	9
1987	7,077.39	4,622	5,875	1,556	18.90	82
1988	1,068.29	685	871	251	19.47	13
1989	605.14	380	483	152	20.06	8
1994	11,166.97	6,275	7,976	3,749	23.24	161
1995	24,253.39	13,278	16,878	8,588	23.93	359
1996	17,764.41	9,464	12,030	6,623	24.63	269
1997	11,050.93	5,718	7,268	4,335	25.36	171
2001	53,825.45	24,370	30,977	25,540	28.44	898
2002	44,064.79	19,192	24,395	21,873	29.26	748
2003	231,074.11	96,614	122,807	119,821	30.09	3,982
2004	18,808.80	7,528	9,569	10,180	30.94	329
2005	2,458.83	939	1,194	1,388	31.81	44
2008	3,313.00	1,078	1,370	2,109	34.50	61
2020	438,312.92	35,254	44,812	415,417	46.17	8,998
2023	28,124.49	490	622	28,908	49.17	588
	911,335.97	239,424	304,298	652,604		16,836

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 38.8 1.85

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.50 STRUCTURES AND IMPROVEMENTS - MISCELLANEOUS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 30-S2.5						
NET SALVAGE PERCENT.. -5						
1960	49,629.00	52,110	52,110			
1961	25,774.67	27,063	27,063			
1962	10,890.67	11,435	11,435			
1972	3,438.66	3,430	1,404	2,207	1.50	1,471
2005	5,500.00	3,328	1,363	4,412	12.71	347
2008	15,922.95	8,365	3,425	13,294	14.99	887
2009	51,019.38	25,339	10,375	43,195	15.81	2,732
2010	90,965.70	42,472	17,390	78,124	16.66	4,689
2012	23,671.08	9,586	3,925	20,930	18.43	1,136
2013	59,702.36	22,254	9,112	53,575	19.35	2,769
2014	3,316.67	1,127	461	3,022	20.29	149
2015	2,905.22	890	364	2,686	21.25	126
2016	108,522.82	29,550	12,099	101,850	22.22	4,584
2018	11,760.60	2,396	981	11,368	24.18	470
2019	10,434,137.59	1,763,891	722,220	10,233,624	25.17	406,580
2020	425,695.31	57,066	23,366	423,614	26.17	16,187
2021	1,559,162.45	154,430	63,231	1,573,890	27.17	57,927
2022	51,648.97	3,308	1,354	52,877	28.17	1,877
2023	1,047,377.72	30,430	12,459	1,087,287	29.17	37,274
	13,981,041.82	2,248,470	974,137	13,705,956		539,205

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 25.4 3.86

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R2.5						
NET SALVAGE PERCENT.. -5						
1950	422.92	388	429	15	6.91	2
1965	6,403.09	5,317	5,875	848	11.50	74
1967	1,737.64	1,416	1,565	260	12.33	21
1969	3,290.18	2,624	2,899	556	13.22	42
1971	1,866.82	1,455	1,608	352	14.17	25
1977	5,757.89	4,132	4,566	1,480	17.41	85
1979	809.00	562	621	228	18.60	12
1982	3,050.00	2,009	2,220	982	20.49	48
1983	4,425.00	2,860	3,160	1,486	21.14	70
1984	1,015.62	644	712	354	21.80	16
1985	271,763.66	168,720	186,433	98,919	22.48	4,400
1986	1,060.08	644	712	401	23.17	17
1988	1,507.00	875	967	615	24.57	25
1993	1,715.00	876	968	833	28.25	29
1994	521,346.10	258,680	285,836	261,577	29.01	9,017
1995	2,876.94	1,385	1,530	1,491	29.79	50
1996	1,188.00	554	612	635	30.57	21
1997	1,114,385.14	502,934	555,733	614,371	31.36	19,591
1998	85,754.92	37,408	41,335	48,708	32.15	1,515
1999	1,538.50	647	715	900	32.96	27
2000	8,490.00	3,441	3,802	5,112	33.77	151
2002	37,744.09	14,109	15,590	24,041	35.42	679
2003	55,788.39	19,959	22,054	36,524	36.26	1,007
2004	20,056.09	6,854	7,574	13,485	37.10	363
2005	345,080.73	112,324	124,116	238,219	37.95	6,277
2006	56,461.98	17,451	19,283	40,002	38.81	1,031
2007	49,059.31	14,358	15,865	35,647	39.67	899
2008	61,290.80	16,920	18,696	45,659	40.54	1,126
2009	154,559.09	40,100	44,310	117,977	41.41	2,849
2010	152,759.38	37,037	40,926	119,471	42.30	2,824
2011	117,472.33	26,508	29,291	94,055	43.18	2,178
2013	12,197.22	2,333	2,578	10,229	44.98	227
2014	18,332.52	3,192	3,527	15,722	45.88	343
2016	21,884.79	3,050	3,370	19,609	47.70	411
2018	15,323.40	1,597	1,765	14,325	49.54	289
2020	44,426.57	3,053	3,373	43,275	51.40	842

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 304.51 STRUCTURES AND IMPROVEMENTS - OFFICE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R2.5						
NET SALVAGE PERCENT.. -5						
2021	237,277.23	12,096	13,366	235,775	52.33	4,506
2022	17,834.22	589	651	18,075	53.27	339
2023	3,221.42	49	54	3,328	54.21	61
	3,461,173.06	1,329,150	1,468,687	2,165,545		61,489
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					35.2	1.78

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R3						
NET SALVAGE PERCENT.. -10						
1924	832.00	915	915			
1933	645.00	702	710			
1938	512.00	546	563			
1941	417.71	439	459			
1942	246.20	258	271			
1951	1,092.00	1,092	1,201			
1956	118.49	115	130			
1957	1,941.22	1,877	2,135			
1958	2,639.63	2,536	2,904			
1959	327.21	312	360			
1960	154,702.18	146,689	170,172			
1961	108,736.00	102,364	119,610			
1962	30.91	29	34			
1963	12,036.50	11,160	13,240			
1964	3,214.13	2,955	3,536			
1965	1,659.31	1,513	1,825			
1966	4,815.98	4,351	5,298			
1967	57,222.30	51,202	62,945			
1969	70,185.83	61,511	76,826	378	11.18	34
1970	25,247.07	21,884	27,333	439	11.66	38
1971	12,882.30	11,040	13,789	382	12.15	31
1972	18,844.29	15,954	19,926	803	12.67	63
1973	9,023.81	7,544	9,422	504	13.20	38
1974	2,145.57	1,770	2,211	149	13.75	11
1975	10,274.00	8,359	10,440	861	14.32	60
1976	73,916.00	59,281	74,040	7,268	14.90	488
1977	73,127.78	57,771	72,154	8,287	15.50	535
1978	66,159.22	51,445	64,253	8,522	16.12	529
1979	21,480.22	16,437	20,529	3,099	16.74	185
1980	3,921.98	2,950	3,684	630	17.39	36
1981	83,793.20	61,923	77,340	14,833	18.05	822
1982	15,450.06	11,211	14,002	2,993	18.72	160
1983	6,241.84	4,444	5,550	1,316	19.40	68
1984	147,231.14	102,768	128,354	33,600	20.10	1,672
1986	620,864.02	415,609	519,084	163,866	21.53	7,611
1987	2,254.50	1,476	1,843	637	22.26	29
1989	66,165.22	41,353	51,649	21,133	23.75	890
1991	51,922.78	30,852	38,533	18,582	25.29	735
1992	506,957.21	293,225	366,230	191,423	26.08	7,340
1993	350,281.15	197,066	246,130	139,179	26.87	5,180
1994	689,932.43	377,118	471,010	287,916	27.67	10,405

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R3						
NET SALVAGE PERCENT.. -10						
1995	195,770.70	103,798	129,641	85,707	28.49	3,008
1996	236,345.87	121,434	151,668	108,312	29.31	3,695
1997	2,643.07	1,314	1,641	1,266	30.14	42
1998	172,050.73	82,654	103,233	86,023	30.98	2,777
1999	140,567.98	65,139	81,357	73,268	31.83	2,302
2000	2,418.26	1,079	1,348	1,312	32.69	40
2001	80,000.00	34,320	42,865	45,135	33.55	1,345
2002	768,702.98	316,244	394,980	450,593	34.43	13,087
2003	431,175.82	169,797	212,072	262,221	35.31	7,426
2004	1,096,152.66	412,156	514,772	690,996	36.20	19,088
2005	254,476.09	91,154	113,849	166,075	37.09	4,478
2006	1,447,078.24	492,005	614,501	977,285	38.00	25,718
2007	570,249.11	183,509	229,198	398,076	38.91	10,231
2008	829,698.03	251,896	314,611	598,057	39.82	15,019
2009	498,880.99	142,181	177,580	371,189	40.75	9,109
2010	4,096,116.22	1,091,197	1,362,876	3,142,852	41.68	75,404
2011	483,847.31	119,896	149,747	382,485	42.61	8,976
2012	243,451.89	55,750	69,630	198,167	43.55	4,550
2013	262,249.63	55,073	68,785	219,690	44.50	4,937
2014	963,431.78	184,019	229,835	829,940	45.45	18,261
2015	468,908.46	80,650	100,730	415,069	46.40	8,945
2016	1,144,316.55	174,853	218,387	1,040,361	47.36	21,967
2017	101,912.73	13,595	16,980	95,124	48.33	1,968
2018	1,231,372.02	140,381	175,332	1,179,177	49.30	23,918
2019	635,837.10	60,150	75,126	624,295	50.27	12,419
2020	813,455.94	61,169	76,398	818,404	51.24	15,972
2021	540,094.94	30,032	37,509	556,595	52.22	10,659
2022	364,328.16	13,117	16,383	384,378	53.20	7,225
2023	2,629,300.57	43,123	53,859	2,838,372	54.18	52,388
2024	3,211,763.44	10,281	12,841	3,520,099	54.84	64,189
	27,196,087.66	6,784,012	8,448,374	21,467,323		486,103

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 44.2 1.79

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 309.00 SUPPLY MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S1.5						
NET SALVAGE PERCENT.. -10						
1960	2,224.56	1,979	1,995	452	9.57	47
1961	2,446.10	2,159	2,176	515	9.88	52
1973	62.36	49	49	20	14.03	1
1978	170.99	128	129	59	16.10	4
1986	2,232.00	1,477	1,489	966	19.93	48
1988	20,585.37	13,129	13,233	9,411	21.01	448
1993	55,162.07	31,626	31,878	28,800	23.94	1,203
1994	425,893.17	238,270	240,165	228,317	24.57	9,293
1996	28,691.41	15,225	15,346	16,215	25.88	627
2017	499.92	74	75	475	43.26	11
2021	41,449.28	2,581	2,602	42,992	47.17	911
2023	1,443,515.90	26,359	26,568	1,561,299	49.17	31,753
	2,022,933.13	333,056	335,705	1,889,521		44,398

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 42.6 2.19

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 310.20 POWER GENERATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 30-R3						
NET SALVAGE PERCENT.. 0						
2011	2,114,650.90	847,975	1,201,059	913,592	17.97	50,840
2012	92,643.55	34,463	48,813	43,831	18.84	2,326
2019	89,012.00	13,946	19,752	69,260	25.30	2,738
2021	26,173.88	2,417	3,424	22,750	27.23	835
2022	6,936.48	416	589	6,347	28.20	225
2023	25,800.32	705	999	24,801	29.18	850
2024	2,866.21	15	21	2,845	29.84	95
	2,358,083.34	899,937	1,274,657	1,083,427		57,909

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.7 2.46

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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.. -5						
1958	134.97	129	142			
1959	8.83	8	9			
1960	8,633.23	8,126	9,065			
1961	918.35	859	964			
1962	4,461.59	4,147	4,685			
1963	45.92	42	48			
1964	5,305.53	4,866	5,571			
1965	200.84	183	211			
1966	2,518.42	2,276	2,644			
1967	1,153.97	1,035	1,212			
1968	96.09	85	101			
1969	45,711.62	40,279	47,997			
1970	10,057.22	8,780	10,560			
1971	3,489.46	3,017	3,664			
1972	28,774.39	24,618	30,213			
1973	26,012.88	22,015	27,314			
1974	23,305.83	19,494	24,471			
1975	18,936.05	15,648	19,883			
1976	24,915.00	20,327	26,161			
1977	41,655.81	33,530	43,739			
1978	16,759.33	13,300	17,445	152	12.21	12
1979	18,548.09	14,501	19,021	454	12.77	36
1980	21,371.02	16,453	21,581	859	13.34	64
1981	58,849.25	44,564	58,454	3,338	13.94	239
1982	4,039.48	3,007	3,944	297	14.55	20
1983	17,413.07	12,736	16,706	1,578	15.17	104
1984	43,917.29	31,523	41,348	4,765	15.82	301
1985	37,077.46	26,100	34,235	4,696	16.48	285
1986	139,639.21	96,330	126,355	20,266	17.15	1,182
1987	284,963.94	192,453	252,438	46,774	17.84	2,622
1988	13,625.55	9,002	11,808	2,499	18.54	135
1989	88,356.30	57,056	74,840	17,934	19.25	932
1990	31,660.97	19,960	26,181	7,063	19.98	354
1991	82,459.40	50,703	66,507	20,075	20.72	969
1992	262,256.58	157,126	206,100	69,269	21.47	3,226
1993	174,121.42	101,542	133,191	49,636	22.23	2,233
1994	524,457.02	297,367	390,053	160,627	23.00	6,984
1995	59,713.58	32,867	43,111	19,588	23.79	823
1996	57,925.68	30,910	40,544	20,278	24.59	825
1997	133,385.75	68,935	90,421	49,634	25.39	1,955
1998	31,876.30	15,925	20,889	12,581	26.21	480

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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.. -5						
1999	59,335.08	28,621	37,542	24,760	27.03	916
2000	117,184.90	54,459	71,433	51,611	27.87	1,852
2001	786,537.84	351,488	461,043	364,822	28.72	12,703
2002	402,017.18	172,477	226,236	195,882	29.57	6,624
2003	46,251.74	18,998	24,919	23,645	30.44	777
2004	1,129,150.15	443,180	581,314	604,294	31.31	19,300
2005	220,761.23	82,567	108,302	123,497	32.19	3,837
2006	1,628,392.77	578,601	758,944	950,868	33.08	28,744
2007	208,376.19	70,102	91,952	126,843	33.98	3,733
2008	33,401.32	10,599	13,903	21,168	34.89	607
2009	12,828.23	3,825	5,017	8,453	35.80	236
2011	42,137.01	10,928	14,334	29,910	37.65	794
2012	265,678.00	63,715	83,574	195,388	38.58	5,064
2013	4,191.32	922	1,209	3,192	39.52	81
2014	446,331.30	89,324	117,165	351,483	40.47	8,685
2015	275,356.71	49,614	65,078	224,047	41.42	5,409
2016	102,168.18	16,370	21,472	85,805	42.37	2,025
2017	65,118.45	9,107	11,946	56,428	43.34	1,302
2018	72,408.90	8,667	11,368	64,661	44.30	1,460
2019	1,150,724.55	114,301	149,928	1,058,333	45.27	23,378
2020	174,386.02	13,770	18,062	165,043	46.24	3,569
2021	414,367.70	24,191	31,731	403,355	47.22	8,542
2022	129,520.80	4,896	6,422	129,575	48.20	2,688
2023	488,032.69	8,404	11,024	501,410	49.18	10,195
2024	449,740.63	1,511	1,982	470,246	49.84	9,435
	11,073,151.58	3,732,461	4,879,726	6,747,083		185,737

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.3 1.68

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 311.40 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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.. -5						
2022	57,843.23	2,186	1,727	59,008	48.20	1,224
2023	58,390.97	1,005	794	60,517	49.18	1,231
	116,234.20	3,191	2,521	119,525		2,455

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 48.7 2.11

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 45-S1.5						
NET SALVAGE PERCENT.. -10						
1926	4,606.00	5,067	5,067			
1960	50,913.00	47,579	56,004			
1961	40,745.00	37,798	44,820			
1962	16,976.98	15,633	18,675			
1964	788.87	715	868			
1965	806.25	725	887			
1969	232.00	202	249	6	9.43	1
1970	9.41	8	10			
1971	1,586.93	1,355	1,667	79	10.08	8
1972	55,414.70	46,841	57,628	3,328	10.42	319
1973	107.23	90	111	7	10.76	1
1974	341.56	283	348	28	11.11	3
1975	243.04	199	245	22	11.47	2
1976	614.52	498	613	63	11.84	5
1977	3,113.38	2,495	3,070	355	12.21	29
1978	664.15	526	647	84	12.60	7
1979	770.88	603	742	106	12.99	8
1980	3,092.40	2,389	2,939	463	13.40	35
1981	4,777.21	3,642	4,481	774	13.81	56
1982	1,948.19	1,465	1,802	341	14.23	24
1983	1,480.92	1,098	1,351	278	14.67	19
1984	4,804.71	3,511	4,320	965	15.11	64
1985	1,154.61	831	1,022	248	15.57	16
1986	52,656.26	37,276	45,860	12,062	16.04	752
1987	15,803.64	11,002	13,536	3,848	16.52	233
1988	3,814.00	2,609	3,210	985	17.02	58
1989	25,315.67	16,999	20,914	6,933	17.53	395
1990	14,288.65	9,413	11,581	4,137	18.05	229
1991	126,669.22	81,775	100,606	38,730	18.59	2,083
1992	37,782.15	23,883	29,383	12,177	19.14	636
1993	20,391.14	12,611	15,515	6,915	19.70	351
1994	290,629.53	175,546	215,971	103,721	20.29	5,112
1995	43,120.65	25,424	31,279	16,154	20.88	774
1996	73,298.89	42,106	51,802	28,827	21.50	1,341
1997	5,872.13	3,283	4,039	2,420	22.13	109
1998	12,403.23	6,740	8,292	5,352	22.77	235
1999	120,153.38	63,352	77,941	54,228	23.43	2,314
2000	213,937.90	109,246	134,403	100,929	24.11	4,186
2001	31,205.43	15,401	18,948	15,378	24.81	620
2002	146,020.46	69,497	85,501	75,122	25.53	2,942
2003	84,278.14	38,606	47,496	45,210	26.26	1,722

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 45-S1.5						
NET SALVAGE PERCENT.. -10						
2004	756,488.11	332,672	409,280	422,857	27.01	15,656
2005	270,478.93	113,855	140,074	157,453	27.78	5,668
2006	2,782,024.83	1,117,320	1,374,619	1,685,608	28.57	58,999
2007	817,627.02	312,385	384,322	515,068	29.37	17,537
2008	30,721.54	11,122	13,683	20,111	30.19	666
2009	3,778.00	1,290	1,587	2,569	31.03	83
2010	65,315.97	20,948	25,772	46,076	31.88	1,445
2011	131,221.23	39,293	48,341	96,002	32.75	2,931
2012	8,861.51	2,461	3,028	6,720	33.64	200
2013	12,684.91	3,243	3,990	9,963	34.54	288
2014	4,954.89	1,157	1,423	4,027	35.45	114
2015	94,459.76	19,904	24,488	79,418	36.38	2,183
2016	2,927,702.46	549,638	676,210	2,544,263	37.32	68,174
2017	11,223.19	1,846	2,271	10,075	38.27	263
2018	1,155,736.87	162,728	200,201	1,071,110	39.24	27,296
2019	5,485,154.33	642,224	790,117	5,243,553	40.21	130,404
2020	247,765.99	23,076	28,390	244,153	41.19	5,927
2021	596,734.13	41,137	50,610	605,798	42.18	14,362
2022	165,237.71	7,392	9,094	172,667	43.17	4,000
2023	657,672.06	13,340	16,412	707,027	44.17	16,007
2024	2,223,251.28	9,244	11,373	2,434,204	44.83	54,299
	19,961,927.13	4,344,597	5,339,128	16,618,992		451,191

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.8 2.26

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 320.40 WATER TREATMENT EQUIPMENT - PFAS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2023	2,004,777.86	110,924	122,342	1,882,436	14.17	132,847
2024	4,356,012.14	49,354	54,435	4,301,577	14.83	290,059
	6,360,790.00	160,278	176,777	6,184,013		422,906
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.6	6.65

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-R4						
NET SALVAGE PERCENT.. -10						
1926	20,356.15	22,285	22,392			
1934	5,399.80	5,760	5,817	123	1.97	62
1938	858.89	902	911	34	2.93	12
1942	3,651.78	3,773	3,810	207	3.95	52
1958	47,793.82	45,189	45,636	6,937	9.13	760
1960	4,478.82	4,163	4,204	723	10.07	72
1961	187,778.00	172,935	174,647	31,909	10.58	3,016
1963	109,225.72	98,577	99,553	20,595	11.67	1,765
1964	81,714.56	72,946	73,668	16,218	12.25	1,324
1965	1,897.18	1,674	1,691	396	12.86	31
1968	689.58	586	592	167	14.78	11
1970	41,012.00	33,918	34,254	10,859	16.13	673
1971	9,252.07	7,544	7,619	2,558	16.82	152
1974	127,584.95	99,407	100,391	39,952	18.96	2,107
1975	7,131.14	5,467	5,521	2,323	19.70	118
1976	15,692.05	11,833	11,950	5,311	20.44	260
1977	287,818.45	213,341	215,453	101,147	21.20	4,771
1978	294,648.20	214,563	216,687	107,426	21.97	4,890
1979	264,050.30	188,796	190,665	99,790	22.75	4,386
1980	552.30	387	391	217	23.55	9
1981	3,146.74	2,165	2,186	1,275	24.35	52
1984	126,735.11	81,865	82,675	56,734	26.83	2,115
1985	416,832.31	263,257	265,863	192,653	27.68	6,960
1987	789,444.06	475,477	480,183	388,205	29.41	13,200
1988	51,554.88	30,283	30,583	26,127	30.29	863
1989	252,208.93	144,350	145,779	131,651	31.18	4,222
1991	1,458,506.16	790,338	798,161	806,196	32.98	24,445
1992	54,812.21	28,858	29,144	31,149	33.89	919
1995	2,970,730.26	1,424,272	1,438,369	1,829,434	36.67	49,889
1996	3,527.17	1,635	1,651	2,229	37.61	59
1997	759,618.28	339,889	343,253	492,327	38.56	12,768
1998	27,882.83	12,028	12,147	18,524	39.51	469
1999	304,823.59	126,538	127,790	207,516	40.47	5,128
2000	7,788.92	3,107	3,138	5,430	41.43	131
2001	913,332.36	349,473	352,932	651,734	42.39	15,375
2002	75,058.66	27,487	27,759	54,806	43.36	1,264
2003	1,316,919.80	460,441	464,999	983,613	44.34	22,183
2004	43,413.64	14,466	14,609	33,146	45.31	732
2005	12,989.67	4,113	4,154	10,135	46.29	219
2008	41,315.56	11,019	11,128	34,319	49.24	697
2009	1,009.04	252	254	856	50.23	17

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-R4						
NET SALVAGE PERCENT.. -10						
2010	10,411.99	2,428	2,452	9,001	51.22	176
2011	724,329.35	156,779	158,331	638,431	52.21	12,228
2012	537,432.16	107,322	108,384	482,791	53.20	9,075
2014	199,500.00	33,119	33,447	186,003	55.19	3,370
2015	3,744.88	558	564	3,555	56.19	63
2016	147,437.58	19,512	19,705	142,476	57.18	2,492
2018	75,582.35	7,444	7,518	75,623	59.18	1,278
2019	482,109.71	39,408	39,798	490,523	60.17	8,152
2021	119,739.26	5,735	5,792	125,921	62.17	2,025
2022	1,668,560.59	51,667	52,178	1,783,239	63.17	28,229
2023	1,092,184.46	15,342	15,494	1,185,909	64.17	18,481
2024	6,330,750.25	18,245	18,425	6,945,400	64.83	107,133
	22,535,018.52	6,252,918	6,314,697	18,473,823		378,880

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 48.8 1.68

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 330.41 DISTRIBUTION RESERVOIRS AND STANDPIPES - TANK PAINTING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2019	2,317,788.32	746,328	283,507	2,034,281	10.17	200,028
2020	103,105.00	26,326	10,000	93,105	11.17	8,335
2021	974,050.00	183,774	69,810	904,240	12.17	74,301
2022	693,409.54	84,596	32,136	661,274	13.17	50,211
2023	3,220,433.07	178,187	67,687	3,152,746	14.17	222,494
2024	685,714.07	7,769	2,952	682,762	14.83	46,039
	7,994,500.00	1,226,980	466,092	7,528,408		601,408

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.5 7.52

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
1910	1,872.30	2,144	1,778	469	2.97	158
1920	1,368.74	1,520	1,260	382	4.84	79
1923	7,158.37	7,874	6,529	2,061	5.42	380
1925	7,917.37	8,653	7,175	2,326	5.80	401
1928	12,421.25	13,440	11,145	3,760	6.39	588
1930	2,694.93	2,896	2,401	833	6.79	123
1931	875.46	938	778	273	6.99	39
1932	3,110.27	3,319	2,752	980	7.20	136
1933	4,838.99	5,145	4,266	1,541	7.41	208
1934	6,410.73	6,791	5,631	2,062	7.62	271
1935	15,855.24	16,731	13,873	5,153	7.84	657
1936	8,762.44	9,211	7,638	2,877	8.06	357
1937	10,775.01	11,283	9,356	3,574	8.28	432
1938	10,467.13	10,914	9,050	3,511	8.52	412
1939	11,204.04	11,635	9,648	3,797	8.75	434
1940	1,158.08	1,197	993	397	8.99	44
1941	3,346.71	3,446	2,857	1,159	9.23	126
1942	4,250.54	4,358	3,614	1,487	9.47	157
1943	3,232.96	3,299	2,736	1,144	9.73	118
1944	2,856.86	2,901	2,406	1,022	9.99	102
1945	9,813.76	9,919	8,225	3,552	10.25	347
1946	5,036.61	5,066	4,201	1,843	10.52	175
1947	7,116.40	7,121	5,905	2,635	10.80	244
1948	6,673.45	6,643	5,508	2,500	11.08	226
1949	5,818.79	5,761	4,777	2,206	11.37	194
1950	5,979.35	5,887	4,882	2,293	11.67	196
1951	32,377.07	31,698	26,284	12,568	11.97	1,050
1952	32,518.11	31,644	26,239	12,783	12.29	1,040
1953	48,754.69	47,156	39,102	19,404	12.61	1,539
1954	17,899.73	17,204	14,266	7,214	12.94	557
1955	22,222.73	21,219	17,595	9,072	13.28	683
1956	56,844.17	53,920	44,711	23,502	13.62	1,726
1957	33,576.75	31,626	26,225	14,067	13.98	1,006
1958	33,560.15	31,381	26,021	14,251	14.35	993
1959	8,337.85	7,740	6,418	3,587	14.72	244
1960	54,618.87	50,307	41,715	23,828	15.11	1,577
1961	26,349.01	24,074	19,962	11,657	15.51	752
1962	36,800.30	33,351	27,655	16,505	15.91	1,037
1963	21,343.55	19,178	15,903	9,709	16.33	595
1964	76,196.22	67,859	56,269	35,166	16.76	2,098
1965	1,198,874.83	1,057,738	877,085	561,565	17.21	32,630

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
1966	16,789.73	14,674	12,168	7,980	17.66	452
1967	11,477.06	9,931	8,235	5,537	18.13	305
1968	5,645.97	4,835	4,009	2,766	18.61	149
1969	35,812.21	30,347	25,164	17,811	19.10	933
1970	108,150.87	90,627	75,149	54,632	19.61	2,786
1971	320,590.12	265,568	220,211	164,497	20.13	8,172
1972	289,500.88	236,980	196,506	150,895	20.66	7,304
1973	624,181.42	504,606	418,423	330,595	21.21	15,587
1974	594,065.72	474,121	393,145	319,734	21.77	14,687
1975	1,259,936.53	992,049	822,615	689,309	22.35	30,842
1976	729,988.48	566,693	469,906	406,080	22.95	17,694
1977	563,297.40	431,051	357,431	318,526	23.55	13,526
1978	853,389.40	643,114	533,275	490,792	24.18	20,297
1979	849,917.26	630,615	522,911	496,990	24.81	20,032
1980	809,396.75	590,682	489,798	481,478	25.47	18,904
1981	1,962,578.96	1,407,993	1,167,519	1,187,576	26.14	45,431
1982	854,319.90	602,173	499,327	525,857	26.82	19,607
1983	867,240.21	600,082	497,593	543,095	27.52	19,735
1984	936,394.50	635,482	526,947	596,726	28.24	21,131
1985	1,553,548.69	1,033,377	856,884	1,007,374	28.97	34,773
1986	1,018,766.78	663,547	550,218	672,302	29.72	22,621
1987	1,052,671.06	670,863	556,285	706,920	30.48	23,193
1988	1,478,724.01	921,091	763,776	1,010,693	31.26	32,332
1989	1,667,002.37	1,014,044	840,853	1,159,550	32.05	36,179
1990	2,759,624.53	1,637,959	1,358,209	1,953,340	32.85	59,462
1991	585,301.32	338,538	280,718	421,644	33.67	12,523
1992	616,047.32	346,771	287,545	451,712	34.51	13,089
1993	2,491,656.84	1,363,883	1,130,943	1,859,045	35.35	52,590
1994	1,674,915.39	890,224	738,181	1,271,717	36.21	35,121
1995	3,002,814.66	1,547,795	1,283,444	2,319,934	37.08	62,566
1996	2,268,045.75	1,132,208	938,836	1,782,819	37.96	46,966
1997	2,120,459.94	1,023,292	848,522	1,696,030	38.86	43,645
1998	3,630,227.35	1,691,584	1,402,675	2,953,598	39.76	74,286
1999	2,474,295.01	1,111,384	921,569	2,047,585	40.67	50,346
2000	2,518,866.57	1,088,150	902,303	2,120,337	41.60	50,970
2001	2,788,612.34	1,156,794	959,223	2,387,112	42.53	56,128
2002	3,784,931.10	1,504,419	1,247,476	3,294,441	43.47	75,787
2003	5,081,028.57	1,930,506	1,600,791	4,496,443	44.42	101,226
2004	3,031,856.08	1,098,745	911,088	2,727,139	45.37	60,109
2005	3,552,808.39	1,224,568	1,015,422	3,247,948	46.33	70,105
2006	6,720,284.22	2,196,001	1,820,941	6,243,400	47.30	131,996

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-S2.5						
NET SALVAGE PERCENT.. -20						
2007	3,063,756.37	946,260	784,646	2,891,862	48.27	59,910
2008	3,375,905.40	981,619	813,966	3,237,120	49.25	65,728
2009	3,413,205.52	930,699	771,743	3,324,104	50.23	66,178
2010	4,263,278.82	1,085,346	899,978	4,215,957	51.21	82,327
2011	3,112,736.14	735,552	609,926	3,125,357	52.20	59,873
2012	4,844,511.06	1,056,239	875,842	4,937,571	53.19	92,829
2013	14,328,718.33	2,862,190	2,373,351	14,821,111	54.18	273,553
2014	4,574,327.92	829,307	687,668	4,801,526	55.18	87,016
2015	11,499,273.97	1,874,612	1,554,443	12,244,686	56.17	217,993
2016	6,360,288.63	919,392	762,367	6,869,979	57.17	120,168
2017	10,694,481.75	1,348,531	1,118,213	11,715,165	58.17	201,395
2018	4,894,346.60	526,769	436,801	5,436,415	59.17	91,878
2019	13,046,080.98	1,163,345	964,655	14,690,642	60.17	244,152
2020	2,264,193.23	160,088	132,746	2,584,286	61.17	42,248
2021	5,305,842.96	277,220	229,873	6,137,139	62.17	98,715
2022	13,276,137.58	448,468	371,873	15,559,492	63.17	246,311
2023	9,405,752.12	144,134	119,517	11,167,386	64.17	174,028
2024	2,821,186.35	8,870	7,355	3,378,069	64.83	52,107
	189,970,475.20	52,310,194	43,376,031	184,588,539		3,754,127

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 49.2 1.98

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
1945	100.00	120	120			
1946	152.76	183	183			
1947	79.91	96	96			
1948	139.03	167	167			
1949	126.50	152	152			
1950	160.03	192	192			
1951	466.02	559	559			
1952	512.42	615	615			
1953	448.76	539	539			
1954	243.88	293	293			
1955	2,268.62	2,722	2,722			
1956	1,474.17	1,769	1,769			
1957	2,222.35	2,667	2,667			
1958	1,683.51	2,020	2,020			
1959	405.69	485	348	139	0.13	139
1960	2,010.71	2,392	1,716	697	0.30	697
1961	415.19	490	351	147	0.55	147
1962	2,041.41	2,392	1,716	734	0.82	734
1963	787.05	915	656	288	1.08	267
1964	839.25	968	694	313	1.35	232
1965	1,486.96	1,701	1,220	564	1.63	346
1966	462.10	524	376	179	1.90	94
1967	288.21	325	233	113	2.16	52
1968	224.48	251	180	89	2.40	37
1969	825.90	917	658	333	2.63	127
1970	1,272.02	1,402	1,005	521	2.85	183
1971	2,138.35	2,342	1,680	886	3.06	290
1972	2,456.84	2,672	1,916	1,032	3.28	315
1973	1,372.08	1,482	1,063	583	3.50	167
1974	3,343.23	3,584	2,570	1,442	3.73	387
1975	1,655.96	1,762	1,264	723	3.96	183
1976	4,095.50	4,326	3,103	1,812	4.19	432
1977	4,121.09	4,318	3,097	1,848	4.44	416
1978	3,704.68	3,851	2,762	1,684	4.68	360
1979	1,422.87	1,466	1,051	656	4.94	133
1980	1,589.46	1,623	1,164	743	5.21	143
1981	1,718.14	1,738	1,246	816	5.49	149
1982	2,638.74	2,644	1,896	1,270	5.78	220
1983	1,737.66	1,722	1,235	850	6.10	139
1984	1,232.59	1,207	866	613	6.43	95
1985	23,776.53	22,997	16,493	12,039	6.79	1,773

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
1986	51,248.85	48,918	35,083	26,416	7.16	3,689
1987	62,399.25	58,705	42,102	32,777	7.56	4,336
1988	66,727.49	61,793	44,317	35,756	7.99	4,475
1989	98,869.77	90,034	64,571	54,073	8.44	6,407
1990	115,154.08	102,967	73,847	64,338	8.92	7,213
1991	57,867.12	50,751	36,398	33,043	9.42	3,508
1992	104,149.69	89,485	64,177	60,803	9.94	6,117
1993	457,495.38	384,455	275,726	273,268	10.49	26,050
1994	325,131.22	266,868	191,394	198,763	11.06	17,971
1995	579,157.58	463,655	332,527	362,462	11.65	31,113
1996	568,632.28	443,144	317,817	364,542	12.27	29,710
1997	447,353.33	338,967	243,103	293,721	12.90	22,769
1998	786,021.12	578,065	414,580	528,645	13.55	39,014
1999	593,906.34	423,130	303,463	409,225	14.22	28,778
2000	796,163.13	548,397	393,303	562,093	14.91	37,699
2001	590,551.98	392,599	281,567	427,095	15.61	27,360
2002	496,674.23	317,929	228,014	367,995	16.33	22,535
2003	791,750.71	486,727	349,074	601,027	17.07	35,210
2004	696,458.42	410,236	294,216	541,534	17.82	30,389
2005	1,167,000.10	656,984	471,180	929,220	18.58	50,012
2006	823,724.95	441,708	316,787	671,683	19.36	34,694
2007	704,249.79	358,567	257,159	587,941	20.15	29,178
2008	722,536.24	348,057	249,622	617,421	20.95	29,471
2009	723,828.60	328,581	235,654	632,940	21.76	29,087
2010	484,713.10	206,238	147,911	433,745	22.59	19,201
2011	1,722,769.18	683,395	490,122	1,577,201	23.43	67,315
2012	23,514,670.67	8,642,770	6,198,478	22,019,127	24.28	906,883
2013	933,092.37	315,434	226,225	893,486	25.14	35,540
2014	503,176.08	155,095	111,232	492,579	26.01	18,938
2015	1,180,733.11	328,305	235,456	1,181,424	26.89	43,935
2016	1,102,870.72	273,013	195,801	1,127,644	27.78	40,592
2017	822,420.56	178,205	127,806	859,099	28.68	29,955
2018	3,753,412.05	697,504	500,241	4,003,853	29.58	135,357
2019	2,048,751.77	316,803	227,207	2,231,295	30.49	73,181
2020	1,566,127.22	192,765	138,248	1,741,105	31.41	55,432
2021	1,625,668.56	148,261	106,331	1,844,471	32.34	57,034

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 35-R2.5						
NET SALVAGE PERCENT.. -20						
2022	19,267,638.43	1,142,879	819,658	22,301,508	33.27	670,319
2023	4,498,097.68	121,826	87,372	5,310,345	34.21	155,228
2024	1,847,587.75	10,132	7,266	2,209,839	34.84	63,428
	76,776,921.55	21,185,937	15,197,688	76,934,618		2,937,380
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					26.2	3.83

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.40 METERS AND METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 17-S2.5						
NET SALVAGE PERCENT.. 0						
2004	52,395.51	43,457	49,032	3,364	2.90	1,160
2006	32.27	26	29	3	3.53	1
2011	55,332.39	36,422	41,095	14,237	5.81	2,450
2012	3,558.45	2,215	2,499	1,059	6.42	165
2013	235.40	137	155	80	7.09	11
2016	120,147.39	53,431	60,285	59,862	9.44	6,341
2018	8,623.84	2,917	3,291	5,333	11.25	474
2019	22,287.90	6,280	7,086	15,202	12.21	1,245
2022	39,473.10	4,249	4,794	34,679	15.17	2,286
2023	622,671.23	30,399	34,299	588,372	16.17	36,387
2024	791,963.48	7,920	8,936	783,027	16.83	46,526
	1,716,720.96	187,453	211,501	1,505,220		97,046

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.5 5.65

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.42 METER INSTALLATIONS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 21-L2						
NET SALVAGE PERCENT.. 0						
1983	665.08	555	665			
1984	2,259.49	1,861	2,259			
1985	4,905.09	3,992	4,905			
1986	7,352.26	5,910	7,352			
1987	10,610.71	8,418	10,611			
1988	14,356.17	11,239	14,356			
1989	17,892.26	13,811	17,892			
1990	21,547.34	16,396	21,547			
1991	16,088.49	12,059	16,088			
1992	20,882.44	15,413	20,565	317	5.50	58
1993	20,732.73	15,066	20,102	631	5.74	110
1994	37,107.14	26,523	35,389	1,718	5.99	287
1995	39,546.14	27,795	37,086	2,460	6.24	394
1996	39,399.10	27,223	36,323	3,076	6.49	474
1997	62,066.35	42,116	56,194	5,872	6.75	870
1998	62,126.54	41,418	55,262	6,865	7.00	981
1999	1,155.23	756	1,009	146	7.25	20
2000	4,743.12	3,051	4,071	672	7.49	90
2001	4,894.63	3,093	4,127	768	7.73	99
2002	6,861.35	4,257	5,680	1,181	7.97	148
2003	4.76	3	4	1	8.21	
2008	42,782.06	23,326	31,123	11,659	9.55	1,221
2009	266,267.84	140,869	187,956	78,312	9.89	7,918
2010	115,092.83	58,807	78,464	36,629	10.27	3,567
2011	760,798.74	373,157	497,887	262,912	10.70	24,571
2012	57,342.41	26,760	35,705	21,637	11.20	1,932
2013	26,304.99	11,574	15,443	10,862	11.76	924
2015	534.55	202	270	265	13.08	20
2016	8,584.27	2,923	3,900	4,684	13.85	338
2017	19,322.36	5,843	7,796	11,526	14.65	787
2018	391,789.65	102,610	136,908	254,882	15.50	16,444
2019	356,196.29	78,534	104,784	251,412	16.37	15,358
2020	338,749.53	60,006	80,064	258,686	17.28	14,970
2021	152,375.38	20,171	26,913	125,462	18.22	6,886
2022	63,828.01	5,532	7,381	56,447	19.18	2,943
2023	47,399.98	1,873	2,499	44,901	20.17	2,226
	3,042,565.31	1,193,142	1,588,580	1,453,985		103,636

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.0 3.41

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.43 ERT DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S2.5						
NET SALVAGE PERCENT.. 0						
2005	51,251.13	43,734	49,684	1,567	2.20	712
2006	686,859.42	574,214	652,330	34,529	2.46	14,036
2008	1,544,956.12	1,227,730	1,394,749	150,207	3.08	48,769
2009	7,783.99	5,994	6,809	975	3.45	283
2017	20,947.52	9,217	10,471	10,477	8.40	1,247
2018	1,695.29	645	733	962	9.29	104
2019	515.65	164	186	329	10.23	32
	2,314,009.12	1,861,698	2,114,962	199,047		65,183

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 3.1 2.82

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-L1.5						
NET SALVAGE PERCENT.. -3						
1981	55,086.20	47,093	56,739			
1982	7,141.54	6,039	7,356			
1983	1,058.42	885	1,090			
1984	16,044.60	13,270	16,526			
1985	89,140.04	72,855	91,814			
1986	11,743.55	9,483	12,096			
1987	16,747.79	13,352	17,250			
1988	24,905.60	19,599	25,653			
1989	32,152.42	24,954	33,117			
1990	91,980.22	70,344	94,740			
1991	24,196.58	18,231	24,922			
1992	23,979.45	17,796	24,699			
1993	157,493.62	115,013	162,218			
1994	37,036.55	26,589	38,148			
1995	49,084.41	34,632	50,557			
1996	35,599.50	24,659	36,667			
1997	48,661.86	33,080	50,122			
1998	270,306.75	180,135	278,416			
1999	226,604.81	147,977	233,403			
2000	256,869.92	164,302	263,081	1,495	7.58	197
2001	110,333.27	69,095	110,635	3,008	7.84	384
2002	1,515,668.73	928,878	1,487,321	73,818	8.10	9,113
2003	254,815.17	152,752	244,587	17,873	8.36	2,138
2004	108,897.16	63,765	102,101	10,063	8.63	1,166
2005	601,332.27	343,752	550,416	68,956	8.90	7,748
2006	809,362.37	451,001	722,144	111,499	9.18	12,146
2007	270,220.33	146,539	234,639	43,688	9.47	4,613
2008	1,085,412.62	571,285	914,743	203,232	9.78	20,780
2009	367,157.71	187,195	299,737	78,435	10.10	7,766
2010	440,566.15	216,681	346,950	106,833	10.45	10,223
2011	414,987.04	195,766	313,461	113,976	10.84	10,514
2012	504,384.41	227,028	363,518	155,998	11.26	13,854
2013	648,027.83	276,332	442,463	225,006	11.72	19,198
2014	732,239.25	292,632	468,563	285,643	12.24	23,337
2015	563,890.57	208,510	333,866	246,941	12.82	19,262
2016	538,226.73	181,557	290,709	263,665	13.45	19,603
2017	697,158.04	210,395	336,885	381,188	14.14	26,958
2018	400,356.59	105,772	169,362	243,005	14.87	16,342
2019	993,587.68	222,588	356,408	666,987	15.65	42,619
2020	664,470.60	120,455	192,873	491,532	16.48	29,826

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-L1.5						
NET SALVAGE PERCENT.. -3						
2021	883,192.59	120,534	192,999	716,689	17.35	41,308
2022	786,788.46	70,909	113,540	696,852	18.25	38,184
2023	734,716.27	30,270	48,469	708,289	19.20	36,890
	15,601,625.67	6,433,979	10,155,003	5,914,672		414,169
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					14.3	2.65

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R2.5						
NET SALVAGE PERCENT.. -25						
1942	7.22	8	8	1	5.07	
1946	45.12	50	53	3	5.97	1
1947	1,489.71	1,652	1,744	118	6.20	19
1948	102.22	113	119	9	6.44	1
1949	266.44	293	309	24	6.67	4
1950	1,761.91	1,926	2,033	169	6.91	24
1951	153.41	167	176	16	7.16	2
1952	419.16	453	478	46	7.41	6
1953	429.52	462	488	49	7.66	6
1954	1,042.04	1,115	1,177	126	7.93	16
1955	537.75	572	604	68	8.20	8
1956	1,586.79	1,678	1,771	212	8.47	25
1957	2,870.60	3,017	3,184	404	8.76	46
1958	3,069.62	3,205	3,383	454	9.06	50
1959	2,214.35	2,296	2,423	345	9.37	37
1960	1,126.46	1,160	1,224	184	9.69	19
1961	1,033.03	1,056	1,115	176	10.02	18
1962	3,472.40	3,522	3,717	624	10.37	60
1963	1,898.23	1,910	2,016	357	10.73	33
1964	1,828.11	1,824	1,925	360	11.11	32
1965	62,161.22	61,455	64,866	12,836	11.50	1,116
1966	10,819.20	10,595	11,183	2,341	11.91	197
1967	5,371.63	5,209	5,498	1,217	12.33	99
1968	8,107.43	7,781	8,213	1,921	12.77	150
1969	1,960.62	1,862	1,965	486	13.22	37
1970	6,543.34	6,143	6,484	1,695	13.69	124
1971	3,981.06	3,694	3,899	1,077	14.17	76
1972	28,154.45	25,800	27,232	7,961	14.68	542
1973	49,755.70	45,018	47,516	14,679	15.19	966
1974	18,339.57	16,372	17,281	5,643	15.72	359
1975	68,086.60	59,932	63,258	21,850	16.27	1,343
1976	20,305.07	17,615	18,593	6,788	16.83	403
1977	45,300.85	38,701	40,849	15,777	17.41	906
1978	52,203.15	43,898	46,334	18,920	18.00	1,051
1979	54,295.64	44,917	47,410	20,460	18.60	1,100
1980	54,487.38	44,308	46,767	21,342	19.22	1,110
1981	99,165.37	79,219	83,616	40,341	19.85	2,032
1982	47,627.07	37,355	39,428	20,106	20.49	981
1983	43,166.35	33,219	35,063	18,895	21.14	894
1984	81,506.30	61,501	64,914	36,969	21.80	1,696
1985	108,030.96	79,844	84,275	50,764	22.48	2,258

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R2.5						
NET SALVAGE PERCENT.. -25						
1986	93,222.35	67,438	71,181	45,347	23.17	1,957
1987	98,361.79	69,613	73,476	49,476	23.86	2,074
1988	152,727.11	105,624	111,486	79,423	24.57	3,233
1989	130,520.73	88,131	93,022	70,129	25.29	2,773
1990	100,969.28	66,525	70,217	55,995	26.01	2,153
1991	48,184.09	30,937	32,654	27,576	26.75	1,031
1992	88,834.88	55,522	58,603	52,441	27.50	1,907
1993	154,497.12	93,927	99,140	93,981	28.25	3,327
1994	191,380.39	113,046	119,320	119,905	29.01	4,133
1995	154,908.24	88,755	93,681	99,954	29.79	3,355
1996	151,786.24	84,276	88,953	100,780	30.57	3,297
1997	182,174.26	97,878	103,310	124,408	31.36	3,967
1998	221,071.85	114,805	121,177	155,163	32.15	4,826
1999	156,734.13	78,510	82,867	113,051	32.96	3,430
2000	265,516.99	128,112	135,222	196,674	33.77	5,824
2001	236,449.72	109,680	115,767	179,795	34.59	5,198
2002	142,034.29	63,205	66,713	110,830	35.42	3,129
2003	357,917.52	152,442	160,903	286,494	36.26	7,901
2004	294,132.47	119,657	126,298	241,368	37.10	6,506
2005	273,577.70	106,011	111,895	230,077	37.95	6,063
2006	101,528.94	37,358	39,431	87,480	38.81	2,254
2007	58,784.84	20,481	21,618	51,863	39.67	1,307
2008	80,511.23	26,459	27,927	72,712	40.54	1,794
2009	78,784.68	24,334	25,685	72,796	41.41	1,758
2010	95,876.81	27,674	29,210	90,636	42.30	2,143
2011	135,009.27	36,269	38,282	130,480	43.18	3,022
2012	234,474.62	58,194	61,424	231,669	44.08	5,256
2013	255,443.64	58,171	61,399	257,906	44.98	5,734
2014	265,655.41	55,064	58,120	273,949	45.88	5,971
2015	312,184.39	58,250	61,483	328,747	46.79	7,026
2016	218,275.06	36,215	38,225	234,619	47.70	4,919
2017	270,435.34	39,213	41,389	296,655	48.62	6,102
2018	300,119.11	37,241	39,308	335,841	49.54	6,779
2019	453,159.49	46,653	49,242	517,207	50.47	10,248
2020	1,081,816.72	88,506	93,418	1,258,853	51.40	24,491
2021	870,591.77	52,834	55,766	1,032,474	52.33	19,730

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R2.5						
NET SALVAGE PERCENT.. -25						
2022	2,487,819.73	97,802	103,231	3,006,544	53.27	56,440
2023	897,753.88	16,115	17,009	1,105,183	54.21	20,387
2024	184,979.34	673	711	230,514	54.84	4,203
	12,772,928.47	3,402,517	3,591,354	12,374,807		283,495
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					43.7	2.22

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 336.40 BACKFLOW PREVENTION DEVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
1964	24.60	22	20	5	3.76	1
1973	399.00	342	306	93	5.71	16
1976	159.39	134	120	39	6.49	6
1980	1,599.00	1,292	1,155	444	7.68	58
1987	3,841.00	2,851	2,548	1,293	10.31	125
1989	10,732.00	7,722	6,902	3,830	11.22	341
1990	10,728.00	7,587	6,782	3,946	11.71	337
1991	2,247.35	1,561	1,395	852	12.22	70
1992	6,093.86	4,151	3,710	2,384	12.75	187
1993	5,221.25	3,485	3,115	2,106	13.30	158
1994	9,031.88	5,898	5,272	3,760	13.88	271
1995	5,361.31	3,419	3,056	2,305	14.49	159
1996	6,725.51	4,185	3,741	2,985	15.11	198
1997	6,741.98	4,084	3,651	3,091	15.77	196
1998	19,256.80	11,337	10,134	9,123	16.45	555
1999	10,747.23	6,139	5,487	5,260	17.15	307
2000	29,845.10	16,504	14,752	15,093	17.88	844
2001	14,496.12	7,745	6,923	7,573	18.63	406
2002	3,940.15	2,028	1,813	2,127	19.41	110
2003	29,399.78	14,546	13,002	16,398	20.21	811
2004	18,100.18	8,584	7,673	10,427	21.03	496
2005	34,572.75	15,661	13,999	20,574	21.88	940
2006	19,051.00	8,221	7,349	11,702	22.74	515
2007	15,198.08	6,224	5,563	9,635	23.62	408
2022	65.04	3	3	62	38.17	2
2023	6,380.38	132	118	6,263	39.17	160
	269,958.74	143,857	128,589	141,370		7,677

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.4 2.84

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.20 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - SOURCE OF SUPPLY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S3						
NET SALVAGE PERCENT.. 0						
1950	0.01					
1951	491.31	481	429	62	0.86	62
1952	280.64	274	244	37	0.98	37
1953	138.20	134	120	18	1.12	16
1954	772.46	748	667	105	1.25	84
1955	35.41	34	30	5	1.39	4
1956	694.95	668	596	99	1.53	65
1957	947.11	908	810	137	1.67	82
1958	58.51	56	50	9	1.82	5
1959	25.15	24	21	4	1.97	2
1960	25.15	24	21	4	2.12	2
1965	789.90	731	652	138	2.96	47
1969	0.28					
1975	21.63	19	17	5	5.12	1
1977	127.20	109	97	30	5.66	5
1978	366.98	312	278	89	5.95	15
1980	5,044.00	4,217	3,761	1,283	6.56	196
1988	1,410.12	1,069	953	457	9.67	47
1998	263.58	160	143	121	15.65	8
2000	478.31	273	243	235	17.18	14
2003	363,384.46	184,599	164,629	198,755	19.68	10,099
2004	1,822.00	885	789	1,033	20.56	50
2005	39,673.88	18,379	16,392	23,282	21.47	1,084
	416,851.24	214,104	190,942	225,910		11,925

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.9 2.86

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 339.40 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
NET SALVAGE PERCENT.. 0						
2000	7,789.00	4,165	7,789			
2003	38,092.40	18,322	37,164	928	20.76	45
2004	23,411.94	10,816	21,940	1,472	21.52	68
2005	691.79	306	620	72	22.30	3
	69,985.13	33,609	67,513	2,472		116

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 21.3 0.17

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.50 OFFICE FURNITURE AND EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
1986	5,187.03	5,187	5,187			
1987	15,575.00	15,575	15,575			
1988	9,828.00	9,828	9,828			
1989	4,816.00	4,816	4,816			
1990	9,830.00	9,830	9,830			
1991	10,832.32	10,832	10,832			
1992	6,056.79	6,057	6,057			
1993	6.68	7	7			
1994	129.11	129	129			
1995	590.81	591	591			
1996	14,584.42	14,584	14,584			
1997	1,417.46	1,417	1,417			
1999	621.01	621	621			
2002	2,346.69	2,347	2,347			
2003	850.57	851	851			
2004	371.00	368	259	112	0.17	112
2008	10,410.28	8,240	5,809	4,601	4.17	1,103
2010	262.13	181	128	134	6.17	22
2011	730.03	468	330	400	7.17	56
2012	1,262.12	747	527	735	8.17	90
2013	8,376.48	4,536	3,198	5,178	9.17	565
2014	8,014.51	3,939	2,777	5,238	10.17	515
2016	2,096.64	821	579	1,518	12.17	125
2017	1,022.58	349	246	777	13.17	59
2018	716.96	209	147	570	14.17	40
2019	43,129.60	10,416	7,343	35,787	15.17	2,359
2020	12,197.94	2,336	1,647	10,551	16.17	653
2021	108,490.16	15,351	10,822	97,668	17.17	5,688
2022	1,662,217.11	152,093	107,223	1,554,994	18.17	85,580
2023	608,995.79	25,273	17,817	591,179	19.17	30,839
2024	723,858.85	6,153	4,338	719,521	19.83	36,284
	3,274,824.07	314,152	245,862	3,028,962		164,090

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.5 5.01

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.55 COMPUTER EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
1999	4,243.00	4,243	4,243			
2000	29,132.00	29,132	29,132			
2002	647.00	647	647			
2003	595.00	595	595			
2004	982.00	982	982			
2005	7,721.87	7,722	7,722			
2006	8,911.42	8,911	8,911			
2007	8,254.32	8,254	8,254			
2010	4,980.77	4,981	4,981			
2011	1,622.05	1,622	1,622			
2013	5,688.68	5,689	5,689			
2017	888.90	889	889			
2019	173.30	167	174			
	73,840.31	73,834	73,841			

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

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 340.60 SAP SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2021	2,763,772.90	521,441	501,485	2,262,288	12.17	185,891
2022	325,933.35	39,764	38,242	287,691	13.17	21,844
	3,089,706.25	561,205	539,727	2,549,979		207,735

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.3 6.72

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 341.50 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 12-S0						
NET SALVAGE PERCENT.. +5						
1992	2,901.26	2,756	2,756			
1994	11,138.13	10,581	10,581			
1996	15,270.26	14,507	14,507			
1997	62,866.28	59,723	59,723			
1998	19,387.05	18,418	18,418			
1999	6,383.73	6,065	6,065			
2000	24,835.00	23,456	23,593			
2001	61,388.51	56,230	58,319			
2002	9,895.84	8,774	9,401			
2004	22,352.00	18,492	21,234			
2006	1,332.37	1,020	1,266			
2007	1,220.93	896	1,160			
2009	9,107.03	6,092	8,652			
2010	17,699.35	11,252	16,814			
2011	9,927.62	5,973	9,431			
2012	119,848.78	67,839	113,856			
2014	145,003.46	71,517	137,753			
2016	305,192.80	126,605	289,658	275	6.76	41
2018	343,465.77	113,116	258,796	67,496	7.84	8,609
2019	32,049.07	9,083	20,781	9,666	8.42	1,148
2020	353,994.18	82,954	189,789	146,505	9.04	16,206
2021	161,767.03	29,327	67,097	86,582	9.71	8,917
2022	176,894.05	21,986	50,301	117,748	10.43	11,289
2023	138,843.68	8,353	19,111	112,790	11.24	10,035
2024	85,799.87	1,087	2,487	79,023	11.84	6,674
	2,138,564.05	776,102	1,411,549	620,087		62,919

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 9.9 2.94

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 342.50 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
1985	199.98	200	200			
1997	0.02					
2018	20,392.85	5,945	2,312	18,081	14.17	1,276
	20,592.85	6,145	2,512	18,081		1,276

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 14.2 6.20

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 343.50 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
1980	28.72	29	29			
1981	6.10	6	6			
1982	27.58	28	28			
1983	24.33	24	24			
1984	33.85	34	34			
1985	312.38	312	312			
1986	87.94	88	88			
1987	210.58	211	211			
1988	54.10	54	54			
1989	20,708.00	20,708	20,708			
1990	12,211.00	12,211	12,211			
1991	14,396.38	14,396	14,396			
1992	28,215.55	28,216	28,216			
1993	9,996.44	9,996	9,996			
1994	24,607.29	24,607	24,607			
1995	2,468.70	2,469	2,469			
1996	9,447.14	9,447	9,447			
1997	13,582.58	13,583	13,583			
1998	11,216.23	11,216	11,216			
1999	3,041.16	3,041	3,041			
2000	7,398.17	7,398	7,398			
2001	10,377.58	10,378	10,378			
2002	15,009.89	15,010	15,010			
2003	11,731.38	11,731	11,731			
2004	37,346.96	37,030	26,690	10,657	0.17	10,657
2005	29,511.40	27,785	20,026	9,485	1.17	8,107
2006	380.00	339	244	136	2.17	63
2007	27,542.16	23,177	16,705	10,837	3.17	3,419
2009	40,065.05	29,708	21,412	18,653	5.17	3,608
2010	6,987.31	4,832	3,483	3,504	6.17	568
2011	9,956.98	6,387	4,603	5,354	7.17	747
2012	477,824.28	282,633	203,709	274,115	8.17	33,551
2013	21,812.68	11,812	8,514	13,299	9.17	1,450
2017	91,265.29	31,167	22,464	68,801	13.17	5,224
2018	38,892.69	11,337	8,171	30,722	14.17	2,168
2019	91,513.57	22,101	15,929	75,585	15.17	4,983
2020	23,894.42	4,576	3,298	20,596	16.17	1,274
2021	25,573.44	3,619	2,609	22,964	17.17	1,337

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 343.50 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2022	95,806.12	8,766	6,318	89,488	18.17	4,925
2023	20,843.57	865	623	20,221	19.17	1,055
2024	2,366.01	20	15	2,351	19.83	119
	1,236,775.00	701,347	560,006	676,769		83,255
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					8.1	6.73

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 344.50 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2018	1,095.03	426	524	571	9.17	62
	1,095.03	426	524	571		62
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					9.2	5.66

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 345.50 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S3						
NET SALVAGE PERCENT.. 0						
1989	3,883.32	3,759	3,076	807	0.64	807
1990	1,318.90	1,267	1,037	282	0.78	282
1991	11,417.37	10,892	8,913	2,504	0.92	2,504
1992	4,592.71	4,345	3,555	1,038	1.08	961
1994	2,536.89	2,358	1,929	608	1.41	431
1995	943.40	868	710	233	1.59	147
1996	3,955.00	3,603	2,948	1,007	1.78	566
1997	3,074.00	2,768	2,265	809	1.99	407
1998	7,047.25	6,269	5,130	1,917	2.21	867
2000	67,781.70	58,597	47,948	19,834	2.71	7,319
2001	1,833.04	1,558	1,275	558	3.00	186
2002	9,218.00	7,692	6,294	2,924	3.31	883
2004	8,060.67	6,440	5,270	2,791	4.02	694
2011	182,127.05	110,278	90,237	91,890	7.89	11,646
2015	26,471.03	11,555	9,455	17,016	11.27	1,510
2021	34,572.86	4,892	4,003	30,570	17.17	1,780
	368,833.19	237,141	194,045	174,788		30,990

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 5.6 8.40

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 346.50 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2018	200,355.55	77,872	74,428	125,928	9.17	13,733
2019	280,175.62	90,217	86,227	193,949	10.17	19,071
2020	335,849.69	85,753	81,960	253,890	11.17	22,730
2021	982,554.96	185,379	177,180	805,375	12.17	66,177
2022	14,830.96	1,809	1,729	13,102	13.17	995
2023	383,200.92	21,203	20,265	362,936	14.17	25,613
2024	502,102.83	5,689	5,438	496,665	14.83	33,491
	2,699,070.53	467,922	447,227	2,251,844		181,810

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.4 6.74

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 347.50 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2020	75,817.48	11,615	3,510	72,307	21.17	3,416
2021	101,608.76	11,502	3,476	98,133	22.17	4,426
2022	461.43	34	10	451	23.17	19
2023	50,890.75	1,690	511	50,380	24.17	2,084
2024	0.97		0	1	24.83	
	228,779.39	24,841	7,507	221,273		9,945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 22.2 4.35

AQUA NEW JERSEY, INC.
WATER PLANT

ACCOUNT 348.50 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2000	27,177.97	27,178	27,178			
2002	82.54	83	83			
2003	543.88	544	544			
2005	9,248.36	9,248	9,248			
2008	716.24	716	716			
2009	3,855.76	3,812	3,856			
2011	28,423.96	24,312	28,424			
2012	1,899.04	1,498	1,899			
2014	94,544.35	61,958	94,544			
2017	574,823.77	261,735	574,824			
2018	1,811,776.35	704,183	1,811,776			
2019	586,647.43	188,900	586,647			
2020	1,800,547.19	459,734	1,612,426	188,121	11.17	16,842
2021	947,105.71	178,690	626,719	320,387	12.17	26,326
2022	485,970.18	59,288	207,941	278,029	13.17	21,111
2023	403,427.94	22,322	78,290	325,138	14.17	22,946
2024	80,795.26	915	3,209	77,586	14.83	5,232
	6,857,585.93	2,005,116	5,668,324	1,189,261		92,457

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.9 1.35

CONTRIBUTIONS IN AID OF CONSTRUCTION

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-S2						
NET SALVAGE PERCENT.. 0						
2002	32,456.44	13,463	9,518	22,938	29.26	784
2003	1,938.54	772	546	1,393	30.09	46
2004	2,271.36	866	612	1,659	30.94	54
2005	3,223.56	1,173	829	2,395	31.81	75
2006	1,510.93	523	370	1,141	32.69	35
2007	1,515.10	497	351	1,164	33.59	35
2009	8,214.07	2,394	1,693	6,521	35.43	184
	51,130.00	19,688	13,919	37,211		1,213

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 30.7 2.37

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 307.00 WELLS AND SPRINGS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-R3						
NET SALVAGE PERCENT.. 0						
2002	307,716.78	115,086	139,787	167,930	34.43	4,877
2003	8,228.26	2,946	3,578	4,650	35.31	132
2004	80,396.21	27,481	33,379	47,017	36.20	1,299
2005	15,922.18	5,185	6,298	9,624	37.09	259
2006	8,220.68	2,541	3,086	5,135	38.00	135
2007	13,982.31	4,091	4,969	9,013	38.91	232
2009	27,257.73	7,062	8,578	18,680	40.75	458
2010	801,631.00	194,139	235,809	565,822	41.68	13,575
2021	25,000.00	1,264	1,535	23,465	52.22	449
	1,288,355.15	359,795	437,019	851,336		21,416

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 39.8 1.66

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 311.20 PUMPING EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2002	20,989.09	8,576	2,613	18,376	29.57	621
2003	1,253.62	490	149	1,105	30.44	36
2004	1,468.85	549	167	1,302	31.31	42
2005	2,084.63	743	226	1,859	32.19	58
2006	977.09	331	101	876	33.08	26
2007	979.79	314	96	884	33.98	26
2009	5,311.93	1,509	460	4,852	35.80	136
	33,065.00	12,512	3,812	29,253		945

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 31.0 2.86

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 311.40 PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2010	500,613.37	132,963	186,003	314,610	36.72	8,568
	500,613.37	132,963	186,003	314,610		8,568

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 36.7 1.71

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 320.30 WATER TREATMENT EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 45-S1.5						
NET SALVAGE PERCENT.. 0						
2002	10,112.72	4,375	3,027	7,086	25.53	278
2003	604.01	252	174	430	26.26	16
2004	707.71	283	196	512	27.01	19
2005	1,004.39	384	266	738	27.78	27
2006	470.77	172	119	352	28.57	12
2007	472.07	164	113	359	29.37	12
2009	2,559.33	795	550	2,009	31.03	65
	15,931.00	6,425	4,445	11,486		429

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 26.8 2.69

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 330.40 DISTRIBUTION RESERVOIRS AND STANDPIPES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-R4						
NET SALVAGE PERCENT.. 0						
2002	350,961.73	116,842	116,933	234,029	43.36	5,397
2003	27,583.38	8,767	8,774	18,809	44.34	424
2004	11,492.96	3,481	3,484	8,009	45.31	177
2005	32,804.19	9,443	9,450	23,354	46.29	505
2006	27,125.37	7,399	7,405	19,720	47.27	417
2007	19,264.80	4,961	4,965	14,300	48.26	296
2008	6,086.46	1,476	1,477	4,609	49.24	94
2009	86,896.11	19,745	19,761	67,135	50.23	1,337
2010	163,981.63	34,764	34,791	129,191	51.22	2,522
	726,196.63	206,878	207,040	519,157		11,169

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 46.5 1.54

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 331.40 TRANSMISSION AND DISTRIBUTION MAINS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 65-S2.5						
NET SALVAGE PERCENT.. 0						
2002	10,319,994.74	3,418,292	4,604,652	5,715,343	43.47	131,478
2003	650,964.59	206,108	277,640	373,325	44.42	8,404
2004	1,620,870.07	489,503	659,391	961,479	45.37	21,192
2005	800,821.31	230,020	309,851	490,970	46.33	10,597
2006	2,021,115.67	550,370	741,383	1,279,733	47.30	27,056
2007	545,215.71	140,328	189,031	356,185	48.27	7,379
2008	143,745.07	34,831	46,920	96,825	49.25	1,966
2009	1,958,937.35	445,129	599,616	1,359,321	50.23	27,062
2010	2,676,452.22	567,809	764,874	1,911,578	51.21	37,328
2011	797,775.20	157,098	211,621	586,154	52.20	11,229
2012	4,973,945.12	903,716	1,217,362	3,756,583	53.19	70,626
2013	291,037.00	48,446	65,260	225,777	54.18	4,167
2014	5,749,139.08	868,580	1,170,031	4,579,108	55.18	82,985
2015	310,303.66	42,155	56,785	253,519	56.17	4,513
2016	270,277.00	32,558	43,858	226,419	57.17	3,960
2017	316,438.00	33,251	44,791	271,647	58.17	4,670
2019	21,359,143.46	1,587,198	2,138,055	19,221,088	60.17	319,446
2020	995,243.24	58,640	78,992	916,251	61.17	14,979
2021	489,828.76	21,327	28,729	461,100	62.17	7,417
2022	2,394,483.27	67,405	90,798	2,303,685	63.17	36,468
2023	176,637.93	2,256	3,039	173,599	64.17	2,705
	58,862,368.45	9,905,020	13,342,679	45,519,689		835,627

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 54.5 1.42

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 333.40 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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 35-R2.5						
NET SALVAGE PERCENT.. 0						
2002	1,039.58	555	1,040			
2003	93.45	48	93			
2004	10.88	5	11			
2005	93.54	44	94			
2006	303,826.44	135,768	303,826			
2007	62.18	26	62			
2008	28.82	12	29			
2009	253.99	96	254			
2010	793,818.31	281,464	749,443	44,375	22.59	1,964
2023	10,000.00	226	602	9,398	34.21	275
	1,109,227.19	418,244	1,055,454	53,773		2,239

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.0 0.20

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 334.44 OTHER METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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-L1.5						
NET SALVAGE PERCENT.. 0						
2002	39,346.95	23,411	39,347			
2003	1,239.44	721	1,239			
2004	9,774.96	5,557	9,775			
2005	2,039.86	1,132	2,040			
2006	922.66	499	923			
2007	1,855.35	977	1,855			
2008	139.65	71	140			
2009	3,617.69	1,791	3,618			
2010	73,500.00	35,096	84,305	10,805-		
	132,436.56	69,255	143,242	10,805-		

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

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 335.40 HYDRANTS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

YEAR	ORIGINAL COST	CALCULATED ACCRUED	ALLOC. BOOK RESERVE	FUTURE BOOK ACCRUALS	REM. LIFE	ANNUAL ACCRUAL
(1)	(2)	(3)	(4)	(5)	(6)	(7)
SURVIVOR CURVE.. IOWA 55-R2.5						
NET SALVAGE PERCENT.. 0						
2002	3,658.89	1,303	3,659			
2003	218.54	74	219			
2004	256.06	83	256			
2005	363.40	113	363			
2006	170.33	50	170			
2007	170.79	48	171			
2009	925.99	229	926			
2019	32,475.64	2,675	15,744	16,732	50.47	332
	38,239.64	4,575	21,508	16,732		332

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 50.4 0.87

AQUA NEW JERSEY, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 346.50 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF APRIL 30, 2024

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						
2002	1,265.12	1,265	1,265			
2003	75.56	76	76			
2004	88.54	89	89			
2005	125.65	126	126			
2006	58.89	59	59			
2007	59.05	59	59			
2009	320.19	317	319			
	1,993.00	1,991	1,993			
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					0.0	0.00

EXHIBIT JJS-4

AQUA NEW JERSEY, INC.
WATER PLANT

EXHIBIT JJS-4. COMPARISON OF PROPOSED AND CURRENT ANNUAL DEPRECIATION RATES AND EXPENSE AS OF APRIL 30, 2024

	ACCOUNT	ORIGINAL COST AS OF APRIL 30, 2024	PROPOSED RATE	PROPOSED EXPENSE	CURRENT RATE	CURRENT EXPENSE	(INCREASE)/ DECREASE
	(1)	(2)	(3)	(4)	(5)	(6)=(2)x(5)	(7)=(4)-(6)
	WATER PLANT						
	DEPRECIABLE PLANT						
	STRUCTURES AND IMPROVEMENTS						
304.22	POWER AND PUMPING	2,105,458.33	1.89	39,764	1.89	39,793	(29)
304.30	PURIFICATION	16,893,846.50	2.16	364,113	1.65	278,748	85,365
304.40	TRANSMISSION AND DISTRIBUTION	911,335.97	1.85	16,836	1.74	15,857	979
304.50	MISCELLANEOUS	13,981,041.82	3.86	539,205	1.54	215,308	323,897
304.51	OFFICE	3,461,173.06	1.78	61,489	1.54	53,302	8,187
	TOTAL STRUCTURES AND IMPROVEMENTS	**37,352,855.68**	**2.73**	**1,021,407**	**1.61**	**603,008**	**418,399**
307.00	WELLS AND SPRINGS	27,196,087.66	1.79	486,103	2.65	720,696	(234,593)
309.00	SUPPLY MAINS	2,022,933.13	2.19	44,398	3.09	62,509	(18,111)
310.20	POWER GENERATION EQUIPMENT	2,358,083.34	2.46	57,909	5.03	118,612	(60,703)
	PUMPING EQUIPMENT						
311.20	PUMPING EQUIPMENT	11,073,151.58	1.68	185,737	1.67	184,922	815
311.40	TRANSMISSION AND DISTRIBUTION	116,234.20	2.11	2,455	2.17	2,522	(67)
	TOTAL PUMPING EQUIPMENT	**11,189,385.78**	**1.68**	**188,192**	**1.68**	**187,444**	**748**
320.30	WATER TREATMENT EQUIPMENT - Non-PFAS	19,961,927.13	2.26	451,191	1.49	297,433	153,758
320.40	WATER TREATMENT EQUIPMENT - PFAS	6,360,790.00	6.65 *	422,906	1.49 ***	94,776	328,130
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	22,535,018.52	1.68	378,880	1.62	365,067	13,813
330.41	DISTRIBUTION RESERVOIRS AND STANDPIPES - TANK PAINTING	7,994,500.00	7.52	601,408	7.52 ***	601,186	222
331.40	TRANSMISSION AND DISTRIBUTION MAINS	189,970,475.20	1.98	3,754,127	2.15	4,084,365	(330,238)
333.40	SERVICES	76,776,921.55	3.83	2,937,380	3.87	2,971,267	(33,887)
	METERS AND METER INSTALLATIONS						
334.40	METER AND METER INSTALLATIONS	1,716,720.96	5.65	97,046	6.16	105,750	(8,704)
334.42	METER INSTALLATIONS	3,042,565.31	3.41	103,636	5.30	161,256	(57,620)
334.43	ERT DEVICES	2,314,009.12	2.82	65,183	6.16	142,543	(77,360)
334.44	OTHER METERS	15,601,625.67	2.65	414,169	6.16	961,060	(546,891)
	TOTAL METERS AND METER INSTALLATIONS	**22,674,921.06**	**3.00**	**680,034**	**6.04**	**1,370,609**	**(690,575)**
335.40	HYDRANTS	12,772,928.47	2.22	283,495	3.00	383,188	(99,693)
336.40	BACKFLOW PREVENTION DEVICES	269,958.74	2.84	7,677	3.87	10,447	(2,770)
	OTHER PLANT AND MISCELLANEOUS EQUIPMENT						
339.20	SOURCE OF SUPPLY	416,851.24	2.86	11,925	3.03	12,631	(706)
339.40	TRANSMISSION AND DISTRIBUTION	69,985.13	0.17	116	1.52	1,064	(948)
	TOTAL OTHER PLANT AND MISCELLANEOUS EQUIPMENT	**486,836.37**	**2.47**	**12,041**	**2.81**	**13,695**	**(1,654)**

AQUA NEW JERSEY, INC.
WATER PLANT

EXHIBIT JJS-4. COMPARISON OF PROPOSED AND CURRENT ANNUAL DEPRECIATION RATES AND EXPENSE AS OF APRIL 30, 2024

	ACCOUNT	ORIGINAL COST AS OF APRIL 30, 2024	PROPOSED		CURRENT		(INCREASE)/ DECREASE
			RATE	EXPENSE	RATE	EXPENSE	
	(1)	(2)	(3)	(4)	(5)	(6)=(2)x(5)	(7)=(4)-(6)
	OFFICE FURNITURE AND EQUIPMENT						
340.50	OFFICE FURNITURE AND EQUIPMENT	3,274,824.07	5.01	164,090	6.20	203,039	(38,949)
340.55	COMPUTER EQUIPMENT	73,840.31	- **	0	6.20	4,578	(4,578)
340.60	SAP SOFTWARE	3,089,706.25	6.72	207,735	16.18 ***	499,914	(292,179)
	TOTAL OFFICE FURNITURE AND EQUIPMENT	**6,438,370.63**	**5.78**	**371,825**	**10.99**	**707,531**	**(335,706)**
341.50	TRANSPORTATION EQUIPMENT	2,138,564.05	2.94	62,919	20.00	427,713	(364,794)
342.50	STORES EQUIPMENT	20,592.85	6.20	1,276	0.91	187	1,089
343.50	TOOLS, SHOP AND GARAGE EQUIPMENT	1,236,775.00	6.73	83,255	2.87	35,495	47,760
344.50	LABORATORY EQUIPMENT	1,095.03	5.66	62	5.83	64	(2)
345.50	POWER OPERATED EQUIPMENT	368,833.19	8.40	30,990	1.11	4,094	26,896
346.50	COMMUNICATION EQUIPMENT	2,699,070.53	6.74	181,810	-	-	181,810
347.50	MISCELLANEOUS EQUIPMENT	228,779.39	4.35	9,945	-	-	9,945
348.50	OTHER TANGIBLE PLANT	6,857,585.93	1.35	92,457	16.18	1,109,557	(1,017,100)
	TOTAL DEPRECIABLE PLANT	**459,913,289.23**	**2.64**	**12,161,687**	**3.08**	**14,168,943**	**(2,007,256)**
	CONTRIBUTIONS IN AID OF CONSTRUCTION						
	DEPRECIABLE PLANT						
304.40	STRUCTURES AND IMPROVEMENTS - TRANSMISSION AND DISTRIBUTION	51,130.00	2.37	1,213	1.74	890	323
307.00	WELLS AND SPRINGS	1,288,355.15	1.66	21,416	2.65	34,141	(12,725)
311.20	PUMPING EQUIPMENT	33,065.00	2.86	945	0.58	192	753
311.40	PUMPING EQUIPMENT - TRANSMISSION AND DISTRIBUTION	500,613.37	1.71	8,568	0.58	2,904	5,664
320.30	WATER TREATMENT EQUIPMENT	15,931.00	2.69	429	1.49	237	192
330.40	DISTRIBUTION RESERVOIRS AND STANDPIPES	726,196.63	1.54	11,169	1.51	10,966	203
331.40	TRANSMISSION AND DISTRIBUTION MAINS	58,862,368.45	1.42	835,627	2.23	1,312,631	(477,004)
333.40	SERVICES	1,109,227.19	0.20	2,239	4.55	50,470	(48,231)
334.44	OTHER METERS	132,436.56	-	0	8.26	10,939	(10,939)
335.40	HYDRANTS	38,239.64	0.87	332	3.00	1,147	(815)
346.50	COMMUNICATION EQUIPMENT	1,993.00	-	0	-	-	-
	TOTAL DEPRECIABLE CONTRIBUTIONS IN AID OF CONSTRUCTION	**62,759,555.99**	**1.41**	**881,938**	**2.27**	**1,424,517**	**(542,579)**
	TOTAL UTILITY PLANT	**397,153,733.24**	**2.84**	**11,279,749**	**3.21**	**12,744,426**	**(1,464,677)**

* NEW ADDITIONS AS OF MAY 1, 2024 IN ACCOUNT 320.50, WATER TREATMENT EQUIPMENT - FILTER MEDIA WILL USE A RATE OF 20 PERCENT BASED ON A 5 YEAR LIFE.
** NEW ADDITIONS AS OF MAY 1, 2024 WILL USE A RATE OF 20 PERCENT BASED ON THE AMORTIZATION PERIOD OF 5 YEARS AND A NET SALVAGE PERCENT OF 0.
*** NO CURRENT RATE IN EFFECT BUT ASSOCIATED RATE APPLIED TO ACCOUNT FOR COMPARISON PURPOSES

EXHIBIT PT-7

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

BPU DOCKET NO. WR2401____

DIRECT TESTIMONY OF GREGORY R. HERBERT

With regard to Rate Design and Billing Determinants

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
GREGORY R. HERBERT

I. BACKGROUND

Q. Please state your name and business address.

A. My name is Gregory R. Herbert. My business address is 207 Senate Avenue, Camp Hill, Pennsylvania.

Q. By whom are you employed?

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming").

Q. Please describe your position with Gannett Fleming and briefly state your general duties and responsibilities.

A. My position is Analyst, Rate Studies. My duties and responsibilities include the preparation of accounting and financial data for utilities regarding revenues under present and proposed rates, including pro forma adjustments to the base year and projected rate year revenues, and the design of customer rates. Additionally, my responsibilities include developing pro forma revenue requirements, and conducting cost allocations by customer class, capital recovery fee, lead-lag, and depreciation studies for investor-owned and municipal-owned utilities. I joined Gannett Fleming in May 2017.

Q. Please describe your education background.

A. I have a Bachelor of Science Degree in Economics from the Pennsylvania State University.

Q. What are your professional affiliations?

A. I am a member of the American Water Works Associations, the Pennsylvania Municipal

Authorities Association, and the National Association of Water Companies.

Q. Briefly describe your work experience prior to joining Gannett Fleming.

A. Prior to my employment at Gannett Fleming, I was a Senior Analyst, in the Performance Reporting Group of Cambridge Associates, LLC where I oversaw the financial preparation of monthly and annual performance and benchmarking reports for public and private endowment clients.

Q. Have you previously testified before the New Jersey Board of Public Utilities (the "Board")?

A. No. I have not. However, A list of rate cases in which I submitted testimony or assisted Gannett Fleming staff is attached to my Direct Testimony as Exhibit A.

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to explain and support the calculation of Aqua New Jersey's (the "Company" or "Aqua") proposed rate structure including the pro forma billing determinants.

Q. Are you sponsoring any exhibits in this case?

A. Yes. The billing determinants, proposed rates, and revenues that I calculated are contained in Exhibit 17, Pages 1 and 2, to the Company's Petition. Those portions of Exhibit 17 were prepared by me or under my direct supervision and control.

II. PROPOSED WATER RATE STRUCTURE

Q. Please describe the billing determinants you developed.

A. Billing determinants consist of the number of billed-months and gallons consumed for usage by customers by class, the number of hydrants and hose connections to sprinkler systems for

private fire protection customers, and the number of hydrants for public fire protection customers.

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

A. I obtained billing information covering three 12-month periods ending September 2021, 2022, and 2023 from the Company. From the reports, I summarized the number of billed months and consumption in each month of the three years by division, class of service, and meter size.

Q. How did you calculate billed-months?

A. I computed the total billed months for each customer bill by considering the dollar amount charged for base or meter size charges and the applicable base charge rate. To illustrate, customers billed on a monthly basis accrued 1.0 billed-months for the regular days of service, while those billed quarterly accumulated 3.0 billed-months for the usual days of service. In instances where the days of service deviated from the standard monthly or quarterly measurement periods, fractional billed-months were calculated. Additionally, for customers with Private Fire Protection sprinkler connections, as well as for Private and Public hydrants, I determined the number of billed unit-months reflected on each quarterly bill.

Q. How did you calculate consumption?

A. The Company data shows for each bill the amount of water consumption that was billed. The consumption amounts for the test year from the Company data were then identified by the respective tariff volumetric rate to determine the annual consumption for each rate group.

Q. How did you reconcile the accuracy of your test year billing determinants?

A. I employed the base and usage rates applicable during the test year for different rate groups. I utilized the base charge corresponding to their meter size for the billed-months and applied the usage rate to the consumption volume. For sprinkler connections and hydrants, the base charge by hose size was multiplied by the billed unit-months. This process resulted in the calculated expected revenue based on my developed billing determinants, which I then compared to the booked revenue for the same time period. The calculated percent difference was found to be within a half of percent for the five-months actuals of the base year, confirming the accuracy of the billing determinants I developed.

Q. Are you satisfied that the billing determinants for the test year accurately represent historical activity?

A. Yes.

Q. Did you include an organic growth adjustment in the development of the Pro Forma billed-months billing determinants?

A. Yes. I analyzed the data for the three-year period described above and found a small organic growth in the number of residential customers for Aqua's Central Division. Additionally, the Company provided organic growth of 83 customers, all of whom were residential, which I incorporated into the Pro Forma billing determinants of the Central Division.

Q. Did you make an adjustment for consumption in the development of the Pro Forma usage billing determinants?

A. Yes. From my analysis of the billing data, I found that the three-year average usage per Customer Equivalent Unit ("CEU") was slightly higher than the annualized test year data.

Therefore, I determined and applied a small usage adjustment factor, of 1.006, to adjust consumption upwards for Pro Forma purposes.

Q. Do you believe that the level of Pro Forma Revenues at Present Rates as shown on Exhibit P-17 is appropriate for setting rates in this case?

A. Yes, I do. I calculated Pro Forma Revenues at Present Rates by applying present rates to the Pro Forma billing determinants that I developed and described earlier in my Direct Testimony.

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

A. Yes, I did, in collaboration with Company Witness Constance Heppenstall, who prepared the Cost of Service Study ("COSS"). I developed base charges to recover 38% of the revenue requirement by relying on the calculated customer charge in Schedule E of Witness Heppenstall's COSS to assist with setting the base charge. The volumetric rates were increased so that revenues by class moved towards the allocated costs to provide water service which, when applied to the Pro Forma billing determinants, resulted in an expected revenue amount which was within 0.0029% of the requested revenue requirement.

Q. What are the appropriate factors to be considered in designing a water utility's rate structure?

A. In preparing a proposed rate structure, I considered the allocated cost of service; the impact of radical changes from the present rate structure, *i.e.*, gradualism; the understandability and ease of application of the rate structure; community and social influences; the value of service; and input from the Company's management.

Q. Please describe the proposed water rates.

A. The proposed customer charge in Aqua's tariff for customers having a 5/8" meter size is

$23.36 per month, an increase of $4.24 from the present rate of $19.12 (including DSIC). Charges for customers with meters greater than 5/8" are increased based on meter equivalents, which are sourced from the AWWA M1 manual.

Q. How did you develop the level of rates for Public Fire Protection?

A. The Company is not proposing any changes to the All Service Areas (Except as Noted Below) ("Central Division") rates for Public Fire Protection, which will remain at the current $53.65 monthly charge. The Company is proposing to move the Califon Borough, Holland Township – Church St., and Tranquility Springs rates to the monthly $53.65 rate to continue the Company's goal of a uniform Public Fire Protection rate, as these service areas' increases from present rates were reasonable for consolidation. The remaining Public Fire Protection rates, which are significantly lower than the Central Division rate, were increased to help move closer to a uniform Public Fire Protection rate in future rate proceedings.

III. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement my Direct Testimony as needed during this proceeding.

EXHIBIT A

GREGORY R. HERBERT
LIST OF CASES ASSISTED OR TESTIFIED

Year	Jurisdiction	Docket No.	Client Utility	Subject
2017	MO PSC	SR-2017-0286	Missouri-American Water Company	Cost of Service/Rate Design
2018	PA PUC	2018-200208	SUEZ Water Pennsylvania	Revenue Requirements
2018	NJ BPU	WR18050593	SUEZ Water New Jersey, Inc	Cost Allocation/Rate Design
2019	PA PUC	2018-3006814	UGI Utilities Inc. - Gas Division	Cost of Service Allocation Studies
2019	PA PUC	2019-3006904	Newtown Artesian Water Co.	Revenue Req./Rate Design
2019	PA PUC	2019-3010955	City of Lancaster – Sewer Fund	Rev. Req../Cost of Service/Rates
2020	PA PUC	2020-3017206	Philadelphia Gas Works	Cost of Service
2020	PA PUC	2020-3019369	Pennsylvania American Water	Cost of Service
2020	PA PUC	2020-3019371	Pennsylvania American Water	Cost of Service
2020	PA PUC	2020-3020256	City of Bethlehem	Rev. Req./Cost of Service/Rates
2020	CA PUC	A2101003	San Jose Water Company	Rate Design
2021	PA PUC	2021-3026116	Borough of Hanover	Revenue and Revenue Requirements
2021	PA PUC	2021-3026682	City of Lancaster – Water Fund	Revenue and Revenue Requirements
2021	PA PUC	2021-3027385	Aqua Pennsylvania, Inc.	Cost of Service/Rate Design
2021	PA PUC	2021-3027386	Aqua Pennsylvania Wastewater, Inc.	Cost of Service/Rate Design
2022	PA-PUC	2022-3031704	Borough of Ambler	Rev. Req./Rate Design
2022	PA-PUC	2022-3031673	Pennsylvania American Water	Cost of Service
2022	PA-PUC	2022-3031340	York Water Company	Cost of Service/Rate Design
2022	PA-PUC	2022-3032806	York Water Company	Cost of Service/Rate Design
2022	KY-PSC	2022-00161	Northern Kentucky Water District	Cost of Service/Rate Design
2022	PUCO	22-1094-WW-AIR	Aqua Ohio Inc.	Cost of Service
2022	PUCO	22-1096-ST-AIR	Aqua Ohio Inc.	Cost of Service
2023	PA-PUC	2023-3037933	Philadelphia Gas Works	Cost of Service
2023	VA-SCC	PUR-2023-00073	Aqua Virginia, Inc.	Bill Analysis/Rate Design

EXHIBIT PT-8

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

BPU DOCKET NO. WR2401____

DIRECT TESTIMONY OF CONSTANCE E. HEPPENSTALL

With regard to Cost of Service

January 19, 2024

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
CONSTANCE E. HEPPENSTALL

I. INTRODUCTION

Q. Please state your name and address.

A. My name is Constance E. Heppenstall. My business address is 1010 Adams Avenue, Audubon, PA 19403.

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

A. I am employed by Gannett Fleming Valuation and Rate Consultants, LLC (formerly Gannett Fleming, Inc.) ("Gannett Fleming") as Senior Project Manager, Rate Studies. My duties and responsibilities include the preparation of accounting and financial data for revenue requirement and cash working capital claims, the allocation of cost of service to customer classifications, and the design of customer rates in support of public utility rate filings.

Q. What is your educational background?

A. I have a Bachelor of Arts degree in Economics from the University of Virginia, Charlottesville, Virginia and a Master of Science in Industrial Administration from the Carnegie-Mellon University Tepper School of Business, Pittsburgh, Pennsylvania.

Q. Do you have any professional affiliations?

A. I am a member of the American Water Works Association ("AWWA"), the Pennsylvania Municipal Authorities Association and the National Association of Water Companies.

Q. Please briefly describe your work experience.

A. I joined Gannett Fleming in August 2006, as a Rate Analyst. Prior to my employment at

Gannett Fleming, I was a Vice President of PriMuni, LLP where I developed financial analyses to test proprietary software to ensure its pricing accuracy in accordance with securities industry conventions. From 1987 to 2001, I was employed by Commonwealth Securities and Investments, Inc. as a public finance professional where I created and implemented financial models for public finance clients to create debt structures to meet clients' needs. From 1986 to 1987, I was a public finance associate with Mellon Capital Markets.

Q. Have you previously testified in rate case proceedings before regulatory agencies?

A. Yes. I have previously testified before the New Jersey Board of Public Utilities ("Board") concerning revenue requirements, cost of service allocation, and rate design. I have also testified before various other state regulatory agencies on these topics, including: the Pennsylvania Public Utility Commission, the Kentucky Public Service Commission, the Arizona Corporation Commission, the Missouri Public Service Commission, the Virginia State Corporation Commission, the Hawaii Public Utility Commission, the West Virginia Public Service Commission, the Indiana Utility Regulatory Commission, the Public Utilities Commission of Ohio, the Nevada Public Utility Commission, and the California Public Utility Commission. A list of cases in which I have testified is attached to my testimony as Exhibit A.

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

A. The purpose of my Direct Testimony is to explain Aqua New Jersey, Inc.'s ("Aqua" or the "Company") cost of service allocation study for its water operations, set forth in Exhibit B to my Direct Testimony. This exhibit presents the results of the cost of service study ("COSS" or the "study") I performed for the Company's water operations.

Q. Are you sponsoring any exhibits as part of your Direct Testimony?

A. Yes. Attached to my Direct Testimony are Aqua Exhibits A and B, as described above, which exhibits were prepared by me or under my direct supervision and direction.

II. COST OF SERVICE ALLOCATION – WATER OPERATIONS

Q. Please briefly describe the purpose of your cost allocation study for Aqua's water operations.

A. The purpose of the study was to allocate the total cost of service, which is the total revenue requirement for all the service areas of the Company, to the several customer classifications. In the study, the total costs were allocated to the residential, commercial, industrial, public authorities, and private and public fire protection classifications in accordance with generally accepted principles and procedures. The cost of service allocation results in indications of the relative cost responsibilities of each class of customers. The allocated cost of service is one of several criteria appropriate for consideration in designing customer rates to produce the required revenues. The results of my allocation of the Pro Forma cost of service for the test year ended April 30, 2024, compared to the revenues under present and proposed rates as of that date, are presented in the study.

Q. Please describe the method of cost allocation that was used in your study.

A. The base-extra capacity method, as described in 2017 and prior Water Rates Manuals published by the AWWA, was used to allocate the Pro Forma costs. Base-extra capacity is a recognized method for allocating the cost of providing water service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services. It is generally accepted as a sound method for allocating the cost of water

service and has been used by the Company in its previous cost allocation studies.

Q. Please describe the procedure you used to perform the study presented in Exhibit B.

A. Each identified classification of cost in the Pro Forma cost of service was allocated to the customer classifications through the use of appropriate factors. These allocations are presented in Exhibit B, Schedule B. The items of cost, which include operation and maintenance expenses, depreciation expense, taxes and income available for return, are identified in column 1 of Schedule B. The cost of each item, shown in column 3, is allocated to the several customer classifications based on allocation factors referenced in column 2. The development of the allocation factors is presented in Exhibit B, Schedule C. I will use some of the larger cost items to illustrate the principles and considerations used in the cost allocation methodology.

Purchased electric power, treatment chemicals, and waste disposal are examples of costs that tend to vary with the amount of water consumed and are thus considered base costs. They are allocated to the several customer classifications in direct proportion to the average daily consumption of those classifications through the use of Factor 1. The development of Factor 1 is shown on Schedule C (Exhibit B). Other source of supply, pumping, water treatment, and transmission costs are associated with meeting usage requirements in excess of the average, generally to meet maximum day requirements. Costs of this nature were allocated to customer classifications partially as base costs, proportional to average daily consumption, partially as maximum day extra capacity costs, proportional to maximum day extra capacity, and, in the case of certain pumping stations and transmission mains, partially as fire protection costs, through the use of

Factors 2 and 3. The development of the allocation factors, referenced as Factors 2 and 3, is shown on Schedule C (Exhibit B).

Costs associated with storage facilities and the capital costs of distribution mains were allocated partly on the basis of average consumption and partly on the basis of maximum hour extra demand, including the demand for fire protection service, because these facilities are designed to meet maximum hour and fire demand requirements. The development of the factors, referenced as Factors 4 and 5, used for these allocations is shown on Schedule C (Exhibit B).

Fire demand costs were allocated to public and private fire protection service in proportion to the relative potential demands on the system by public fire hydrants and private service lines as presented in Exhibit B, Schedule D.

For operation and maintenance of mains, the relative weightings of Factor 3 (maximum day and fire) and Factor 4 (maximum hour) were based on the inch-feet of transmission and distribution mains. For cost allocation purposes, mains 12” and larger were classified as serving a transmission function, and mains less than 12” were classified as serving a distribution function. The development of this weighted factor, referenced as Factor 6, is presented in Schedule C (Exhibit B). Costs associated with Public Fire Hydrants were allocated directly to the Public Fire Protection Classification, as shown in Factor 7.

Costs associated with meters were allocated to customer classifications in proportion to the capacity requirements of the sizes and quantities of meters serving each classification. The development of the factor for meters, referenced as Factor 8, is presented in Schedule C (Exhibit B). Factor 9, Allocation of Services in Schedule C

(Exhibit B), was developed in a similar manner as Factor 8, using cost ratios by size for service lines.

Costs for customer accounting, billing and collecting, and customer related management fees were allocated on the basis of the number of bills rendered for each classification. Costs related to uncollectible accounts are allocated based on the net write-offs by class. The development of these factors, referenced as Factors 12 and 20, are presented in Schedule C (Exhibit B). Factor 13, allocation of meter reading, is the same as Factor 12, except that private and public fire protection classes are excluded, because these customers are not metered.

Administrative and general costs were allocated on the basis of allocated direct costs, excluding those costs such as purchased water, purchased power, purchased chemicals, and waste disposal, which require little administrative and general expense. The development of factors for this allocation, referenced as Factor 14, is presented in Schedule C (Exhibit B).

Annual depreciation accruals were allocated on the basis of the function of the facilities represented by the depreciation expense for each depreciable plant account. The original cost less depreciation of utility plant in service was similarly allocated for the purpose of developing factors, referenced as Factor 18, for allocating items such as income taxes and return. The development of Factor 18 is presented in Schedule C (Exhibit B).

Factors 14 and 18, as well as Factors 11, 12, 16, 17 and 19, are composite allocation factors. These factors are based on the result of allocating other costs and are

computed internally in the cost allocation program. Refer to Schedule C (Exhibit B) for a description of the bases for each composite allocation factor.

Q. What was the source of the total cost of service data set forth in Column 3 of Schedule B (Exhibit B)?

A. The Pro Forma costs of service were furnished by the Company and are set forth in various Company schedules sponsored by Aqua New Jersey witnesses.

Q. Referring to Schedule C (Exhibit B), pages 4 and 6, please explain the source of system maximum day and maximum hour ratios used in the development of factors referenced as Factors 2, 3, and 4.

A. The ratios were based on prior cost of service studies of the Company, which I reviewed and determined to be reasonable.

Q. What was the source of the maximum day extra capacity and maximum hour extra capacity demands used for the customer classifications in the development of Factors 2, 3, and 4?

A. The ratios were based on prior cost of service studies of the Company, which I reviewed and determined to be reasonable.

Q. Have you summarized the results of the study?

A. Yes. The results are summarized in Schedule A, columns 1, 2 and 3 of Exhibit B. Column 2 sets forth the total allocated Pro Forma cost of service for the test year ending April 30, 2024, for each customer classification identified in column 1. Column 3 presents each customer classification's cost responsibility as a percent of the total cost.

Q. Have you compared these cost responsibilities with the proportionate revenue under existing rates for each customer classification?

A. Yes. A comparison of the allocated cost responsibilities and the percentage revenue under existing rates can be made by comparing columns 3 and 5 of Schedule A (Exhibit B). A similar comparison of the percentage cost responsibilities (relative cost of service) and the percentage of Pro Forma revenues (relative revenues) under proposed rates can be made by comparing columns 3 and 7 of Schedule A (Exhibit B). This comparison shows that revenues under proposed rates generally move toward the indicated cost of service. It should be emphasized that the COSS is used as one of the guidelines for rate design, but that there are other considerations that are taken into account when designing rates, such as the concept of gradualism.

III. CONCLUSION

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

EXHIBIT A

CONSTANCE E. HEPPENSTALL
LIST OF CASES TESTIFIED

Year	Jurisdiction	Docket No.	Client Utility	Subject
2010	AZ CC	W-01303A-09-0343 and SW-01303A-09-0343	Arizona American Water Company	Rate Consolidation
2010	PA PUC	R-2010-2179103	City of Lancaster – Bureau of Water	Revenue Requirements
2012	PA PUC	R-2012-2311725	Hanover Borough	Cost of Service/Revenue Requirements
2012	PA PUC	R-2012-2310366	City of Lancaster – Sewer Fund	Revenue Requirements
2013	PA PUC	R-2013-2350509	City of DuBois – Bureau of Water	Revenue Requirements
2013	PA PUC	R-2013-2390244	City of Bethlehem – Bureau of Water	Revenue Requirements
2014	PA PUC	R-2014-2418872	City of Lancaster – Bureau of Water	Revenue Requirements
2014	PA PUC	R-2014-2428304	Hanover Borough	Revenue and Revenue Requirements
2015	KY PSC	Case No.2015-000143	Northern Kentucky Water District	Cost of Service
2016	AZ CC	WS-01303A-16-0145	EPCOR Water Arizona, Inc.	Cost of Service/Rate Design
2016	PA PUC	R-2016-2554150	City of DuBois – Bureau of Water	Cost of Service/Revenue Requirements
2017	AZ CC	WS-01303A-17-0257	EPCOR Water Arizona, Inc	Cost of Service/Rate Design
2017	HI PUC	2017-0446	Hana Water Systems, LLC – North	Cost of Service/Rate Design
2017	HI PUC	2017-0447	Hana Water Systems, LLC – South	Cost of Service/Rate Design
2017	MO PSC	WR-2017-0285	Missouri-American Water Company	Cost of Service/Rate Design
2017	MO PSC	SR-2017-0286	Missouri-American Water Company	Cost of Service/Rate Design
2017	VA SCC	PUR-2017-00082	Aqua Virginia, Inc	Cost of Service
2018	IN IRC	50208	Indiana American Water Company	Cost of Service/Demand Study
2018	KY PSC	2018-00208	Water Service Corp of KY	Cost of Service/Rate Design
2018	KY PSC	2018-00291	Northern Kentucky Water District	Cost of Service/Rate Design
2018	KY PSC	2018-0358	Kentucky American Water	Cost of Service/Rate Design
2018	PA PUC	2018-200208	SUEZ Water Pennsylvania	Revenue Requirements
2018	WV PSC	18-0573-W-42t	West Virginia American Water Co.	Cost of Service
2019	PA PUC	R-2019-3006904	Newtown Artesian Water Co.	Revenue Reqmts./Rate Design
2019	PA PUC	R-2019-3010955	City of Lancaster – Sewer Fund	Rev. Reqmts./Cost of Service/Rates
2020	CA PUC	A2101003	San Jose Water Company	Rate Design
2020	PA PUC	R-2020-3017206	Philadelphia Gas Works	Cost of Service
2020	PA PUC	R-2020-3019369	Pennsylvania American Water Co.	Cost of Service/Rate Design
2020	PA PUC	R-2020-3019371	Pennsylvania American Water Co.	Cost of Service/Rate Design
2020	PA PUC	R-2020-3020256	City of Bethlehem	Rev. Reqmts./Cost of Service/Rates
2020	VA SCC	PUR-2020-00106	Aqua Virginia, Inc.	Cost of Service
2021	NJ BPU	WR21071007	Atlantic City Sewerage Co.	Rev. Reqmts./Cost of Service/Rates
2021	NV PUC	21-12025	Great Basin Water Company	Cost of Service/Rate Design
2021	PA PUC	R-2021-3026116	Hanover Borough	Cost of Service
2021	PA PUC	R-2021-3027385	Aqua Pennsylvania	Cost of Service/Rate Design
2021	PA PUC	R-2021-3027386	Aqua Pennsylvania	Cost of Service/Rate Design
2021	PA PUC	R-2021-3026682	City of Lancaster – Bureau of Water	Cost of Service/Rate Design
2021	PUCO	21-0595-WW-AIR	Aqua Ohio, Inc	Cost of Service
2021	PUCO	21-0596-ST-AIR	Aqua Ohio, Inc	Cost of Service
2022	KY PSC	2022-00161	Northern Kentucky Water District	Cost of Service/Rate Design
2022	PA PUC	R-2021-3030218	UGI Utilities, Inc. – Gas Division	Cost of Service
2022	PA PUC	R-2022-3031704	Borough of Ambler	Rev. Req./Rate Design
2022	PA PUC	R-2022-30316732	Pennsylvania American Water	Cost of Service
2022	PA PUC	R-2022-3031340	York Water Company	Cost of Service/Rate Design
2022	PA PUC	R-2022-3032806	York Water Company	Cost of Service/Rate Design
2022	PUCO	22-1094-WW-AIR	Aqua Ohio Inc.	Cost of Service
2022	PUCO	22-1096-ST-AIR	Aqua Ohio Inc.	Cost of Service
2023	NJBPU	WR23050292	Middlesex Water Company	Cost of Service/Rate Design
2023	PA PUC	R-2023-3037933	Philadelphia Gas Works	Cost of Service
2023	PA PUC	R-2023-3043189	Pennsylvania American Water Co.	Cost of Service
2023	PA PUC	R-2023-3043190	Pennsylvania American Water Co.	Cost of Service

EXHIBIT B

Exhibit B
Witness: C.E. Heppenstall

AQUA NEW JERSEY, INC.

Hamilton, NJ

WATER OPERATIONS

COST OF SERVICE ALLOCATION STUDY

FOR THE TEST YEAR ENDED APRIL 30, 2024

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

January 15, 2024

Aqua New Jersey, Inc.
10 Black Forest Road
Hamilton, NJ 08691

Ladies and Gentlemen:

Pursuant to your request, we have conducted a cost of service allocation study based on the pro forma revenue requirements for the test year ended April 30, 2024. The cost of service study for water operations is Exhibit B to my direct testimony.

The attached report presents the results of the allocation studies, as well as supporting schedules which set forth the detailed cost allocation calculations and the proposed schedule of rates. Schedule A presents a comparison of the cost of service by customer classification with the pro forma revenues produced by each classification under present and proposed rates.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

CONSTANCE E. HEPPENSTALL
Senior Project Manager, Rate Studies

CONTENTS

PART I. INTRODUCTION

AQUA NEW JERSEY, INC.

COST OF SERVICE ALLOCATION STUDY
FOR THE TEST YEAR ENDED APRIL 30, 2024

PART I. INTRODUCTION

PLAN OF REPORT

The report sets forth the results of the cost of service allocation study based on pro forma revenue requirements for Aqua Illinois, Inc., based on a test year ended April 30, 2024. Part I, Introduction, contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Part II, Cost of Service by Customer Classification, presents detailed schedules of the allocation of costs to customer classifications, as well as the bases for the allocations. Schedule A in Part II summarizes the cost allocation and the revenues produced under present and proposed rates. Part III of the report presents the proposed state-wide water rate structure.

BASIS OF STUDY

The purpose of the cost allocation studies was to determine the relative cost of service responsibilities of the several customer classifications within each tariff group, based on considerations of quantity of water consumed, variability of rate of consumption, and costs associated with customer metering, billing and accounting. The allocation studies incorporated generally-accepted principles and procedures for allocating the several categories of cost to customer classifications in proportion to each classification's use of facilities, commodities and services required in providing water service.

ALLOCATION PROCEDURES

The allocation studies were based on the Base-Extra Capacity Method for allocating costs to customer classifications. The method is described in the 2017 and prior editions of the Water Rates Manual published by the American Water Works Association. The four basic categories of cost responsibility are base, extra capacity, customer, and fire protection costs. The following discussion presents a brief description of these costs and the manner in which they were allocated.

Base Costs are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping, and distributing water to customers under average load conditions, without the elements necessary to meet peak demands. Base costs were allocated to customer classifications on the basis of average daily usage.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of the average. They include operating and capital costs for additional plant and system capacity beyond that required for average use. The extra capacity costs in this study are subdivided into costs necessary to meet maximum day extra demand and costs to meet maximum hour extra demand. The extra capacity costs were allocated to customer classifications on the bases of each classification's maximum day and hour usage in excess of average usage.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating and capital costs related to meters and services, meter reading costs, and billing and collecting costs. The customer costs were allocated on the bases of the relative cost of meters and services, and the number of customers.

Fire Protection Costs are costs associated with providing the facilities to meet the potential peak demand of fire protection service. Fire Protection costs are subdivided into costs to meet Public Fire Protection and Private Fire Protection demands. The extra capacity costs assigned to fire protection service were allocated to Public and Private Fire Protection on the basis of the total relative demands of the hydrants and fire service lines, sized to provide fire protection.

RESULTS OF STUDY

The results of the cost of service allocation study are set forth in Part II. The data summarized for each tariff group in Schedule A, Comparison of Pro Forma Cost of Service with Revenues Under Present and Proposed Rates for the Test Year Ended April 30, 2024, constitute the principal results of the cost allocation studies and proposed revenue distribution.

The cost of service by customer classification shown in column 2 of Schedule A is developed in Schedule B, Cost of Service for the Twelve Months Ended April 30, 2024, Allocated to Customer Classifications. The allocation of the total cost of service to the several customer classifications was performed by applying the allocation factors referenced in column 2 of Schedule B to the cost of service set forth in column 3. The bases for the allocation factors are presented in Schedule C.

Schedule D presents the basis for allocating demand related costs of fire service to private and public fire protection classifications. Schedule E presents the calculation of customer costs per month for a 5/8-inch meter.

PART II. COST OF SERVICE BY CUSTOMER CLASSIFICATION

AQUA NEW JERSEY, INC.

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED APRIL 30, 2024

Customer Classification	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent Increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Residential	$ 45,637,021	81.6%	$ 35,119,567	73.8%	$ 41,671,119	74.5%	$ 6,551,552	18.7%
Commercial	5,375,080	9.6%	7,200,389	15.1%	8,523,991	15.2%	1,323,602	18.4%
Industrial	455,139	0.8%	681,269	1.4%	800,269	1.4%	119,001	17.5%
Public Authority	354,569	0.6%	532,277	1.1%	637,097	1.1%	104,819	19.7%
Private Fire Service	1,737,208	3.1%	1,772,098	3.7%	1,926,541	3.4%	154,442	8.7%
Public Fire Service	2,350,569	4.2%	2,289,310	4.8%	2,350,569	4.2%	61,259	2.7%
Total Sales	55,909,585	100.0%	47,594,910	100.0%	55,909,585	100.0%	8,314,675	17.5%
Other Revenues	493,167		493,167		493,167		-	0.0%
Raw Water Revenue	43,071		29,366		43,071		13,705	
Total	$ 56,445,823		$ 48,117,443		$ 56,445,823		$ 8,328,380	17.3%

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OPERATION AND MAINTENANCE EXPENSES								
SOURCE OF SUPPLY EXPENSES								
Operating Labor	2	532,301	456,551	65,163	7,127	3,361	24	77
Operating - Other Expense	2		0	0	0	0	0	0
Outside Services - Operations	2	69,559	59,660	8,515	931	439	3	10
Purchased Water	1	857,782	675,927	156,531	17,732	7,313	66	213
Purchased Fuel and Power	1	1,147,542	904,256	209,407	23,721	9,784	89	285
Supplies	2	14,209	12,187	1,739	190	90	1	2
Transportation	2	16,600	14,238	2,032	222	105	1	2
TOTAL SOURCE OF SUPPLY - OPERATION		2,637,993	2,122,818	443,387	49,924	21,091	183	590
Maintenance Labor	2	10,615	9,104	1,299	142	67	0	2
Maintenance - Other Expense	2	986	845	121	13	6	0	0
Outside Services - Maintenance	2	154,299	132,341	18,889	2,066	974	7	22
Supplies	2	21,399	18,353	2,620	287	135	1	3
Transportation	2	439	377	54	6	3	0	0
TOTAL SOURCE OF SUPPLY - MAINTENANCE		187,737	161,020	22,982	2,514	1,185	8	27
TOTAL SOURCE OF SUPPLY EXPENSE		2,825,730	2,283,838	466,370	52,438	22,277	191	617
WATER TREATMENT								
Operating Labor	2	65,986	56,595	8,078	884	417	3	9
Chemicals	1	1,385,240	1,091,560	252,783	28,635	11,810	107	345
Purchased Fuel and Power	1	10,691	8,424	1,951	221	91	1	3
Other Operating Expenses	2	333	285	41	4	2	0	0
Outside Services - Lab Testin	2	240,264	206,073	29,412	3,217	1,517	11	35
Outside Services - O&M	2	1,147,842	984,495	140,515	15,369	7,247	51	165
Supplies	2	(8,803)	(7,550)	(1,078)	(118)	(56)	(0)	(1)
Transportation	2	729	626	89	10	5	0	0
TOTAL WATER TREATMENT EXPENSE - OPERATION		2,842,281	2,340,508	431,791	48,222	21,033	172	555
Maintenance Labor	2	19,501	16,725	2,387	261	123	1	3
Chemicals	1	6,502	5,124	1,187	134	55	1	2
Leases	2	336	288	41	4	2	0	0
Outside Services - O&M	2	50,618	43,414	6,196	678	320	2	7
Maintenance - Other Expense	2	(826)	(708)	(101)	(11)	(5)	(0)	(0)
Supplies	2	15,910	13,646	1,948	213	100	1	2
Transportation	2	322	276	39	4	2	0	0
TOTAL WATER TREATMENT EXPENSE - MAINTENANCE		92,362	78,765	11,697	1,284	597	4	14
TOTAL WATER TREATMENT EXPENSE		2,934,643	2,419,273	443,489	49,506	21,630	177	569

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
TRANSMISSION AND DISTRIBUTION EXPENSES								
Operating Labor - Mains	6	84,979	49,830	4,778	481	245	7,008	22,638
Operating Labor - Services	9	226,612	203,407	14,433	360	976	7,435	0
Operating Labor - Meters	8	169,959	142,329	23,259	1,209	3,162	0	0
Operating Labor - Hydrants	7	84,979	0	0	0	0	0	84,979
Purchased Fuel and Power	1	106,973	84,294	19,521	2,211	912	8	27
Leases	6	442	259	25	3	1	36	118
Operating Supplies - Mains	6	863	506	49	5	2	71	230
Operating Supplies - Services	9	2,301	2,065	147	4	10	75	0
Operating Supplies - Meters	8	1,726	1,445	236	12	32	0	0
Operating Supplies - Hydrants	7	863	0	0	0	0	0	863
Transportation Expenses	10	5,134	3,654	468	32	40	111	828
Outside Services- Mains	6	3,938	2,309	221	22	11	325	1,049
Outside Services- Services	9	10,502	9,427	669	17	45	345	0
Outside Services- Meters	8	7,877	6,596	1,078	56	147	0	0
Outside Services- Hydrants	7	3,938	0	0	0	0	0	3,938
Operating Expenses - Other	10	27,226	19,378	2,484	169	214	590	4,390
TOTAL T & D EXPENSE OPERATION		738,313	525,501	67,369	4,580	5,798	16,005	119,060
Maintenance Labor - Mains	6	13,408	7,862	754	76	39	1,106	3,572
Maintenance Labor - Services	9	35,754	32,093	2,277	57	154	1,173	0
Maintenance Labor - Meters	8	26,816	22,456	3,670	191	499	0	0
Maintenance Labor - Hydrants	7	13,408	0	0	0	0	0	13,408
Leases	6	278	163	16	2	1	23	74
Maint. Supplies and Expenses - Mains	6	4,710	2,762	265	27	14	388	1,255
Maint. Supplies and Expenses - Services	9	12,560	11,274	800	20	54	412	0
Maint. Supplies and Expenses - Meters	8	9,420	7,888	1,289	67	175	0	0
Maint. Supplies and Expenses - Hydrants	7	4,710	0	0	0	0	0	4,710
Outside Services- Mains	6	44,908	26,333	2,525	254	130	3,703	11,963
Outside Services- Services	9	119,755	107,492	7,627	190	516	3,929	0
Outside Services- Meters	8	89,816	75,215	12,292	639	1,671	0	0
Outside Services- Hydrants	7	44,908	0	0	0	0	0	44,908
Transportation	11	2,945	2,056	221	11	23	75	560
Other Expenses	11	8	5	1	0	0	0	1
TOTAL T & D EXPENSE - MAINTENANCE		423,403	295,600	31,736	1,532	3,274	10,810	80,451
TOTAL T & D EXPENSE		1,161,716	821,101	99,105	6,112	9,072	26,814	199,511

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CUSTOMER ACCOUNTS								
Operating Labor	12	438,507	412,482	19,695	307	835	5,189	0
Management Fees	12	602,238	566,494	27,048	422	1,147	7,126	0
Other Expenses	12	17,214	16,192	773	12	33	204	0
Outside Services - Other	12	9,140	8,598	411	6	17	108	0
Supplies	12	0	0	0	0	0	0	0
Transportation	12	15,873	14,931	713	11	30	188	0
Uncollectible Accts	20	287,576	274,133	13,443	0	0	0	0
TOTAL CUSTOMER ACCOUNTING EXPENSE		1,370,548	1,292,830	62,082	759	2,063	12,814	0
ADMINISTRATIVE AND GENERAL EXPENSES								
Salaries and Wages	14	2,107,726	1,785,326	189,808	15,989	11,071	17,501	88,031
Leases	14	2,359	1,998	212	18	12	20	99
Supplies	14	68,963	58,414	6,210	523	362	573	2,880
Management Fees - Administrative	14	1,494,705	1,266,074	134,603	11,339	7,851	12,411	62,427
Management Fees - HR	16		0	0	0	0	0	0
Management Fees - Customer Related	12		0	0	0	0	0	0
Management Fees - Water Quality	1		0	0	0	0	0	0
Outside Services - Accounting	14	70,137	59,409	6,316	532	368	582	2,929
Outside Services - Legal	14	200,160	169,543	18,025	1,518	1,051	1,662	8,360
Outside Services - Other	14	530,646	449,478	47,786	4,025	2,787	4,406	22,163
Insurance	14	388,048	328,692	34,945	2,944	2,038	3,222	16,207
Insurance - Work Comp	14	48,682	41,236	4,384	369	256	404	2,033
Advertising	14	46,428	39,326	4,181	352	244	385	1,939
Employee Pension & Benefits	16	655,300	546,534	57,412	4,633	3,584	6,747	36,390
Reg Commision Exp	19	523,617	398,118	45,551	4,013	2,670	16,275	56,990
Other Expenses	14	443,794	375,911	39,965	3,367	2,331	3,685	18,535
Transportation	14	147,930	125,302	13,322	1,122	777	1,228	6,178
Purchased Power	14	39	33	3	0	0	0	2
Advertising	14	46,428	39,326	4,181	352	244	385	1,939
TOTAL A & G EXPENSE		6,774,960	5,684,720	606,905	51,098	35,649	69,486	327,102
Total Operation & Maintenance Expenses		15,067,597	12,501,761	1,677,950	159,913	90,691	109,483	527,799

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DEPRECIATION EXPENSE								
Source of Supply Plant								
Structures and Improvements	2	3,871	3,320	474	52	24	0	1
Collecting & Impounding Res.	2	0	0	0	0	0	0	0
Lake, River and Other Intakes	2	0	0	0	0	0	0	0
Wells and Springs	2	461,927	396,191	56,548	6,185	2,916	21	66
Supply Mains	2	44,302	37,998	5,423	593	280	2	6
Other Plant and Equipment	2	11,922	10,225	1,459	160	75	1	2
Pumping Plant								
Structures and Improvements	3	35,719	20,919	2,986	327	154	2,679	8,654
Power Generating Equipment	3	57,060	33,417	4,770	522	246	4,280	13,825
Electric Pumping Equipment	3	185,382	108,569	15,496	1,695	799	13,906	44,917
Water Treatment Plant								
Structures and Improvements	2	364,907	312,978	44,671	4,886	2,304	16	52
Water Treatment Equipment	2	870,694	746,788	106,588	11,658	5,497	39	125
Transmission & Dist. Plant								
Structures and Improvements	10	15,650	11,139	1,428	97	123	339	2,524
Electric Pumping Equipment	10	(6,092)	(4,336)	(556)	(38)	(48)	(132)	(982)
Dist. Reservoirs & Standpipes	5	962,635	616,185	53,194	5,196	2,724	67,444	217,892
T & D Mains - Transmission	3	709,216	415,353	59,283	6,484	3,057	53,199	171,840
T & D Mains - Distribution	4	2,213,980	1,298,555	112,100	10,951	5,741	185,940	600,693
Services	9	2,932,132	2,631,889	186,754	4,656	12,632	96,200	0
Meters	8	679,444	568,989	92,984	4,832	12,639	0	0
Meter Installations	8	0	0	0	0	0	0	0
Hydrants	7	282,869	0	0	0	0	0	282,869
Backflow Prevention Devices	8	7,667	6,420	1,049	55	143	0	0
Other Plant & Misc. Equipment	10	119	85	11	1	1	3	19
General Plant								
Structures and Improvements	14	601,623	509,598	54,178	4,564	3,160	4,995	25,127
Laboratory Equipment	1	62	49	11	1	1	0	0
Office Furniture	14	388,026	328,673	34,943	2,944	2,038	3,222	16,206
Personal Computers	14	0	0	0	0	0	0	0
PC Software	14	0	0	0	0	0	0	0
MainFrame Computers	14	0	0	0	0	0	0	0
MainFrame Software	14	0	0	0	0	0	0	0
Other Machinery & Equipment	14	0	0	0	0	0	0	0
Stores Equipment	14	1,277	1,081	115	10	7	11	53
Power Equipment	14	30,982	26,243	2,790	235	163	257	1,294
Communication Equipment	14	181,917	154,091	16,382	1,380	956	1,510	7,598
Miscellaneous Equipment	14	9,952	8,430	896	75	52	83	416
Transportation Equipment	14	62,653	53,070	5,642	475	329	520	2,617
Tools, Shop and Garage Equip.	14	83,235	70,503	7,496	631	437	691	3,476
Other Tangible Plant	14	88,125	74,646	7,936	669	463	732	3,681
Other Adjustments	14	0	0	0	0	0	0	0
Total Depreciation Expense		11,281,257	8,441,068	875,051	69,296	56,912	435,958	1,402,971

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Amortization Expense								
Utility Plant Acquisition Adj.	18	261,038	187,560	19,648	1,683	1,175	11,392	39,580
Tank Painting Amortization	5	0	0	0	0	0	0	0
Total Amortization Expense		261,038	187,560	19,648	1,683	1,175	11,392	39,580
Taxes Other Than Income								
Gross Receipts and Franchise Taxes	19	7,539,524	5,732,472	655,886	57,790	38,447	234,339	820,590
Payroll Taxes	16	292,890	244,276	25,661	2,071	1,602	3,016	16,265
Other Taxes	18	983,658	706,775	74,039	6,344	4,426	42,927	149,147
Total Taxes, Other Than Income		8,816,071	6,683,523	755,586	66,204	44,476	280,281	986,002
Income Taxes	18	(1,044,773)	(750,687)	(78,640)	(6,738)	(4,701)	(45,594)	(158,413)
Utility Income Available for Return	18	22,064,632	15,853,819	1,660,796	142,292	99,290	962,895	3,345,540
Total Cost of Service		56,445,823	42,917,045	4,910,390	432,651	287,842	1,754,415	6,143,478
Less: Other Water Revenues	19	493,167	374,966	42,902	3,780	2,515	15,328	53,676
Less: Raw Water Revenues	18	43,071	30,947	3,242	278	194	1,880	6,531
Total Cost of Service Related to Sales of Water		55,909,585	42,511,132	4,864,246	428,593	285,134	1,737,208	6,083,272
Reallocation of Public Fire	21		3,125,889	510,833	26,546	69,436	0	(3,732,704)
Total		$ 55,909,585	$ 45,637,021	$ 5,375,080	$ 455,139	$ 354,569	$ 1,737,208	$ 2,350,569

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1. ALLOCATION OF COSTS WHICH VARY WITH THE AMOUNT OF WATER CONSUMED.

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

Customer Classification	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Residential	9,186.9	0.7880
Commercial	2,127.5	0.1825
Industrial	241.0	0.0207
Public Authority	99.4	0.0085
Private Fire Protection	0.9	0.0001
Public Fire Protection	2.9	0.0002
Total	11,658.6	1.0000

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

	Average Daily Consumption		Maximum Day Extra Capacity		
Customer Classification	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.5780	(4)	(5)=(4)x 0.4220	(6)=(3)+(5)
Residential	0.7880	0.4555	0.9532	0.4022	0.8577
Commercial	0.1825	0.1055	0.0401	0.0169	0.1224
Industrial	0.0207	0.0119	0.0034	0.0014	0.0134
Public Authority	0.0085	0.0049	0.0033	0.0014	0.0063
Private Fire Protection	0.0001	0.0000			0.0000
Public Fire Protection	0.0002	0.0001			0.0001
Total	1.0000	0.5780	1.0000	0.4220	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Daily Consumption, Thousand Gal.	Maximum Day Extra Capacity Factor*	Maximum Day Extra Capacity Rate of Flow, Thousand Gal. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	9,186.9	1.10	10,105.6	0.9532
Commercial	2,127.5	0.20	425.5	0.0401
Industrial	241.0	0.15	36.2	0.0034
Public Authority	99.4	0.35	34.8	0.0033
Total	11,654.8		10,602.1	1.0000

The weighting of the factors is based on the maximum day ratio of 1.73, based on the prior cost of service study.

	Maximum Day Ratio	Weight
Average Day	1.00	0.5780
Maximum Day Extra Capacity	0.73	0.4220
Total	1.73	1.0000

* Ratio of maximum day to average day minus 1.0.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		
Customer Classification	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2) X 0.3947	(4)	(5)=(4) X 0.2881	(6)	(7)=(6) X 0.3172	(8)=(3)+(5)+(7)
Residential	0.7880	0.3110	0.9532	0.2746			0.5857
Commercial	0.1825	0.0720	0.0401	0.0116			0.0836
Industrial	0.0207	0.0082	0.0034	0.0010			0.0091
Public Authority	0.0085	0.0034	0.0033	0.0009			0.0043
Private Fire Protection	0.0001	0.0000			0.2364	0.0750	0.0750
Public Fire Protection	0.0002	0.0001			0.7636	0.2422	0.2423
Total	1.0000	0.3947	1.0000	0.2881	1.0000	0.3172	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.73 and the average daily system sendout for 2022 of 7.5 MGD. The system demand for fire protection is 10,000 Gallons per minute for 10 hours.

	Ratio	Rate of Flow, (GPD)	Weight
Average Day	1.00	7,466,387	0.3947
Maximum Day Extra Capacity	0.73	5,450,463	0.2881
Subtotal	1.73	12,916,850	0.6828
Fire Protection		6,000,000	0.3172
Total		18,916,850	1.0000

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		
Customer Classification	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)	(4)=(3) X 0.1842	(5)	(6)=(5) X 0.4605	(7)	(8)=(7) X 0.3553	(9)=(4)+(6)+(8)
Residential	382.8	0.7883	0.1452	0.9583	0.4413			0.5865
Commercial	88.6	0.1825	0.0336	0.0370	0.0170			0.0506
Industrial	10.0	0.0206	0.0038	0.0025	0.0012			0.0049
Public Authority	4.1	0.0084	0.0016	0.0023	0.0010			0.0026
Private Fire Protection	0.0	-	-			0.2364	0.0840	0.0840
Public Fire Protection	0.1	0.0002	0.0000			0.7636	0.2713	0.2713
Total	485.6	1.0000	0.1842	1.0000	0.4605	1.0000	0.3553	1.0000

The maximum hour extra capacity factors in column 5 are determined on the following page.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 3.50 and the average daily system sendout for 2022 of 7.5 MGD. The system demand for fire protection is 10,000 gallons per minute

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	5,185	0.1842
Maximum Hour Extra Capacity	2.50	12,963	0.4605
Subtotal	3.50	18,148	0.6447
Fire Protection		10,000	0.3553
Total		28,148	1.0000

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	382.8	3.00	1,148.4	0.9583
Commercial	88.6	0.50	44.3	0.0370
Industrial	10.0	0.30	3.0	0.0025
Public Authority	4.1	0.65	2.7	0.0023
Total	485.5		1,198.4	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		
Customer Classification	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)	(4)=(3) X 0.2010	(5)	(6)=(5) X 0.5026	(7)	(8)=(7) X 0.2964	(9)=(4)+(6)+(8)
Residential	382.8	0.7883	0.1585	0.9583	0.4816			0.6401
Commercial	88.6	0.1825	0.0367	0.0370	0.0186			0.0553
Industrial	10.0	0.0206	0.0041	0.0025	0.0013			0.0054
Public Authority	4.1	0.0084	0.0017	0.0023	0.0011			0.0028
Private Fire Protection	0.0	-	-			0.2364	0.0701	0.0701
Public Fire Protection	0.1	0.0002	0.0000			0.7636	0.2263	0.2263
Total	485.6	1.0000	0.2010	1.0000	0.5026	1.0000	0.2964	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 4 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity.

Fire not updated.

Fire Protection Weight = $\frac{10{,}000 \text{ GPM X } 60 \text{ Min. X } 10 \text{ Hrs.}}{20{,}245{,}000 \text{ Gallons}}$ = 0.2964

General Service Weight = 1.0000 - 0.2964 = 0.7036

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	28.57	0.2010
Extra Capacity Maximum Hour	2.50	71.43	0.5026
Total	3.50	100.00	0.7036

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity Factor*	Maximum Hour Extra Capacity 1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	382.8	3.0	1,148.4	0.9583
Commercial	88.6	0.5	44.3	0.0370
Industrial	10.0	0.3	3.0	0.0025
Public Authority	4.1	0.7	2.7	0.0023
Total	485.5		1,198.4	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6. ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

	Maximum Daily Consumption w/ Fire		Maximum Hourly Consumption		
Customer Classification	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)X 0.1697	(4)	(5)=(4)X 0.8303	(6)=(3)+(5)
Residential	0.5857	0.0994	0.5865	0.4870	0.5864
Commercial	0.0836	0.0142	0.0506	0.0420	0.0562
Industrial	0.0091	0.0016	0.0049	0.0041	0.0057
Public Authority	0.0043	0.0007	0.0026	0.0022	0.0029
Private Fire Protection	0.0750	0.0127	0.0840	0.0697	0.0825
Public Fire Protection	0.2423	0.0411	0.2713	0.2253	0.2664
Total	1.0000	0.1697	1.0000	0.8303	1.0000

The weighting of the factors is based on the total inch-feet of mains, designated as either transmission mains or distribution mains, as follows:

	Total Footage of Mains	Weight
Transmission Mains	51,466	0.1697
Distribution Mains	251,889	0.8303
Total	303,355	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7. ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

Customer Classification	Allocation Factor
(1)	(3)
Public Fire Protection	1.0000
Total	1.0000

FACTOR 8. ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	58,524	0.8374
Commercial	9,564	0.1369
Industrial	497	0.0071
Public Authority	1,300	0.0186
Private Fire	-	-
Total	69,885	1.0000

AQUA NEW JERSEY, INC.

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential Number of Meters	Residential Weighting	Commercial Number of Meters	Commercial Weighting	Industrial Number of Meters	Industrial Weighting	Large Industrial Number of Meters	Large Industrial Weighting	Public Authority Number of Meters	Public Authority Weighting	Total Number of Meters	Total Weighting
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)
5/8	1.0	45,360	45,360	1,222	1,222	10	10	0	0	19	19	46,611	46,611
3/4	1.5	5,590	8,385	150	225	1	2	0	0	0	0	5,741	8,612
1	2.5	1,087	2,718	357	893	1	3	0	0	3	8	1,448	3,622
1-1/2	5.0	144	720	177	885	3	15	0	0	10	50	334	1,670
2	8.0	152	1,216	513	4,104	14	112	0	0	56	448	735	5,880
3	15.0	5	75	44	660	0	0	0	0	4	60	53	795
4	25.0	0	0	21	525	7	175	0	0	3	75	31	775
6	50.0	1	50	5	250	2	100	0	0	8	400	16	800
8	80.0	0	0	10	800	1	80	0	0	3	240	14	1,120
10	115.0	0	0	0	0	0	0	0	0	0	0	0	0
12	160.0					0	0					0	0
Total		52,339	58,524	2,499	9,564	39	497	0	0	106	1,300	54,983	69,885

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 9. ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

Customer Classification	3/4" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	53,130	0.8976
Commercial	3,770	0.0637
Industrial	94	0.0016
Public Authority	255	0.0043
Private Fire Protection	1,942	0.0328
Total	59,191	1.0000

AQUA NEW JERSEY, INC.

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size	3/4" Dollar Equivalent	Residential		Commercial		Industrial		Large Industrial		Public Authority		Private Fire Protection		Total	
		Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)
3/4	1.00	50,950	50,950	1,372	1,372	11	11	0	0	19	19	0	0	52,352	52,352
1	1.40	1,087	1,522	357	500	1	1	0	0	3	4	0	0	1,448	2,027
1-1/2	1.80	144	259	177	319	3	5	0	0	10	18	0	0	334	601
2	2.50	152	380	513	1,283	14	35	0	0	56	140	0	0	735	1,838
3	3.00	5	15	44	132	0	0	0	0	4	12	12	36	65	195
4	4.00	0	0	21	84	7	28	0	0	3	12	160	640	191	764
6	4.00	1	4	5	20	2	8	0	0	8	32	170	680	186	744
8	6.00	0	0	10	60	1	6	0	0	3	18	67	402	81	486
10	6.50	0	0	0	0	0	0	0	0	0	0	25	163	25	163
12	7.00	0	0	0	0	0	0	0	0	0	0	3	21	3	21
Total		52,339	53,130	2,499	3,770	39	94	0	0	106	255	437	1,942	55,420	59,191

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10. ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 502,469	0.7118
Commercial	64,416	0.0912
Industrial	4,379	0.0062
Large Industrial	-	0.0000
Public Authority	5,544	0.0079
Sales for Resale	-	0.0000
Private Fire Protection	15,303	0.0217
Public Fire Protection	113,842	0.1613
Total	705,953	1.0000

FACTOR 11. ALLOCATION OF TRANSMISSION AND DISTRIBUTION MAINTENANCE SUPERVISION AND ENGINEERING, STRUCTURES AND IMPROVEMENTS, AND OTHER EXPENSES.

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 293,538	0.6982
Commercial	31,515	0.0750
Industrial	1,522	0.0036
Large Industrial	-	0.0000
Public Authority	3,251	0.0077
Sales for Resale	-	0.0000
Private Fire Protection	10,734	0.0255
Public Fire Protection	79,889	0.1900
Total	$420,450	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 12. ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	52,339	0.94065
Commercial	2,499	0.04491
Industrial	39	0.00070
Public Authority	106	0.00191
Private Fire Protection	658	0.01183
Public Fire Protection	-	-
Total	55,641	1.00000

FACTOR 13. ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	52,339	0.9519
Commercial	2,499	0.0455
Industrial	39	0.0007
Public Authority	106	0.0019
Total	54,983	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 14. ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 4,052,581	0.8470
Commercial	430,852	0.0901
Industrial	36,295	0.0076
Public Authority	25,132	0.0053
Private Fire Protection	39,726	0.0083
Public Fire Protection	199,824	0.0418
Total	$ 4,784,408	1.0000

FACTOR 15. ALLOCATION OF ADMINISTRATIVE AND CASH WORKING CAPITAL

Factors are based on the allocation of all operation and maintenance expenses including purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 12,103,644	0.8322
Commercial	1,632,399	0.1122
Industrial	155,900	0.0107
Public Authority	-	0.0061
Private Fire Protection	93,208	0.0064
Public Fire Protection	470,809	0.0324
Total	$ 14,543,981	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16. ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$ 3,194,761	0.8340
Commercial	335,601	0.0876
Industrial	27,083	0.0071
Public Authority	20,949	0.0055
Private Fire Protection	39,438	0.0103
Public Fire Protection	212,718	0.0555
Total	$ 3,830,550	1.0000

FACTOR 17. ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS, MISCELLANEOUS INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$ 209,714,657	0.7184
Commercial	21,963,310	0.0752
Industrial	1,881,570	0.0064
Public Authority	1,313,126	0.0045
Private Fire Protection	12,746,932	0.0437
Public Fire Protection	44,287,564	0.1517
Total	$ 291,907,158	1.0000

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18. ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$ 200,437,688	0.7185
Commercial	20,997,215	0.0753
Industrial	1,798,984	0.0064
Public Authority	1,255,309	0.0045
Private Fire Protection	12,173,754	0.0436
Public Fire Protection	42,297,204	0.1516
Total	$ 278,960,154	1.0000

FACTOR 19. ALLOCATION OF REGULATORY COMMISSION EXPENSES, ASSESSMENTS AND OTHER WATER REVENUES.

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$ 36,786,456	0.7603
Commercial	4,208,954	0.0870
Industrial	370,848	0.0077
Public Authority	246,725	0.0051
Private Fire Protection	1,503,802	0.0311
Public Fire Protection	5,265,898	0.1088
Total	$ 48,382,682	1.0000

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
RATE BASE								
Intangible Plant								
Organization	17	1,063,478	764,033	80,017	6,855	4,784	46,440	161,349
Franchises & Consents	17	628,834	451,773	47,314	4,053	2,829	27,460	95,405
Source of Supply Plant								
Land and Land Rights	2	1,179,863	1,011,959	144,435	15,798	7,449	53	170
Structures and Improvements	2	204,805	175,660	25,072	2,742	1,293	9	29
Collecting & Impounding Res.	2	-	-	-	-	-	-	-
Lake, River and Other Intakes	2	-	-	-	-	-	-	-
Wells and Springs	2	17,706,467	15,186,696	2,167,566	237,082	111,786	790	2,546
Supply Mains	2	1,687,228	1,447,122	206,545	22,591	10,652	75	243
Other Plant and Equipment	2	225,910	193,761	27,655	3,025	1,426	10	32
Pumping Plant								
Land and Land Rights	3	78,759	46,126	6,583	720	340	5,908	19,083
Structures and Improvements	3	924,632	541,512	77,289	8,454	3,986	69,358	224,034
Power Generating Equipment	3	1,054,166	617,374	88,116	9,638	4,544	79,074	255,419
Electric Pumping Equipment	3	6,154,073	3,604,142	514,412	56,265	26,529	461,625	1,491,101
Water Treatment Plant								
Land and Land Rights	2	361,847	310,353	44,296	4,845	2,284	16	52
Structures and Improvements	2	11,617,285	9,964,053	1,422,149	155,550	73,344	518	1,670
Water Treatment Equipment	2	20,662,245	17,721,843	2,529,403	276,659	130,447	922	2,971
Transmission & Dist. Plant								
Land and Land Rights	10	478,295	340,431	43,643	2,967	3,756	10,368	77,130
Structures and Improvements	10	570,136	405,800	52,023	3,537	4,477	12,359	91,940
Electric Pumping Equipment	10	(198,283)	(141,130)	(18,093)	(1,230)	(1,557)	(4,298)	(31,975)
Dist. Reservoirs & Standpipes	5	22,876,666	14,643,404	1,264,143	123,491	64,735	1,602,779	5,178,113
T & D Mains - Distribution	4	76,651,820	44,958,209	3,881,110	379,136	198,747	6,437,577	20,797,042
T & D Mains -Transmission	3	24,554,288	14,380,253	2,052,464	224,493	105,850	1,841,848	5,949,380
Services	9	61,364,243	55,080,709	3,908,418	97,451	264,363	2,013,302	-
Meters	8	8,615,590	7,214,979	1,179,073	61,271	160,267	-	-
Meter Installations	8	-	-	-	-	-	-	-
Hydrants	7	9,148,796	-	-	-	-	-	9,148,796
Back Flow Preventing Devices	8	141,370	118,388	19,347	1,005	2,630	-	-
Other Plant & Misc. Equipment	10	2,472	1,759	226	15	19	54	399
General Plant								
Land and Land Rights	14	25,883	21,924	2,331	196	136	215	1,081
Structures and Improvements	14	14,999,390	12,705,070	1,350,744	113,786	78,789	124,542	626,460
Laboratory Equipment	1	571	450	104	12	5	0	0
Office Furniture	14	5,898,721	4,996,447	531,199	44,748	30,985	48,978	246,364
Personal Computers	14	-	0	0	0	0	0	0
PC Software	14	-	0	0	0	0	0	0
MainFrame Computers	14	-	0	0	0	0	0	0
MainFrame Software	14	-	0	0	0	0	0	0
Other Machinery & Equipment	14	-	0	0	0	0	0	0
Stores Equipment	14	18,081	15,315	1,628	137	95	150	755

AQUA NEW JERSEY, INC.

COST OF SERVICE FOR THE TWELVE MONTHS ENDED APRIL 30, 2024 ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Fire Protection	
							Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Power Equipment	14	174,788	148,052	15,740	1,326	918	1,451	7,300
Communication Equipment	14	2,251,844	1,907,400	202,786	17,083	11,829	18,697	94,050
Miscellaneous Equipment	14	221,273	187,427	19,926	1,679	1,162	1,837	9,242
Transportation Equipment	14	719,508	609,451	64,794	5,458	3,779	5,974	30,051
Tools, Shop and Garage Equip.	14	676,769	573,250	60,945	5,134	3,555	5,619	28,266
Other Tangible Plant/Rounding	14	857,657	726,469	77,235	6,506	4,505	7,121	35,821
Adjustments	14	0	0	0	0	0	0	0
Total Utility Plant In Service		293,599,469	210,930,463	22,090,640	1,892,478	1,320,739	12,820,831	44,544,318
Acquisition Adjustment - Net	17	(254,178)	(182,609)	(19,125)	(1,638)	(1,143)	(11,099)	(38,563)
PrePayments	19	652,368	496,011	56,751	5,000	3,327	20,277	71,003
Materials & Supplies	17	3,174,396	2,280,579	238,844	20,461	14,280	138,619	481,613
Customer Deposits	12	(12,566)	(11,820)	(564)	(9)	(24)	(149)	0
Consolidated Tax Adjustment	17	0	0	0	0	0	0	0
Deferred Income Taxes - Total	17	(18,199,336)	(13,074,936)	(1,369,331)	(117,309)	(81,869)	(794,724)	(2,761,166)
Total Other Rate Base Elements		(14,639,315)	(10,492,776)	(1,093,425)	(93,494)	(65,429)	(647,077)	(2,247,114)
Total Original Cost Measure of Value		$ 278,960,154	$ 200,437,688	$ 20,997,215	$ 1,798,984	$ 1,255,309	$ 12,173,754	$ 42,297,204

AQUA NEW JERSEY, INC.

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 20. ALLOCATION OF BAD DEBT EXPENSE

Factors are based on the net write-off by class, as follows:

Customer Classification	Net Write-offs	Allocation Factor
(1)	(2)	(3)
Residential	$ 1,150,286	0.9533
Commercial	56,407	0.0467
Industrial	-	-
Public Authority	-	-
Private Fire Protection	-	-
Public Fire Protection	-	-
Total	$ 1,206,693	1.0000

FACTOR 21. REALLOCATION OF PUBLIC FIRE

Factors are based on the relative cost of meters by size and customer classification.

Customer Classification	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	58,524	0.8374
Commercial	9,564	0.1369
Industrial	497	0.0071
Large Industrial	0	0.0000
Public Authority	1,300	0.0186
Private Fire	0	0.0000
Total	69,885	1.0000

AQUA NEW JERSEY, INC.

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description	Restrictive Diameters Squared	Quantity	Relative Demand*	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
PRIVATE FIRE PROTECTION				
Fire Lines				
3 -inch	7.07	12	85	
4 -inch	12.57	160	2,011	
6 -inch	28.27	170	4,806	
8 -inch	50.27	67	3,368	
10 -inch	78.54	25	1,964	
12 -inch	113.10	3	339	
Private Hydrants	12.57	221	2,783	
Total Private Fire Protection		658	15,356	0.2364
PUBLIC FIRE PROTECTION				
Hydrant				
5 1/4" Valve	12.57	3,947	49,614	
Total Public Fire Prorection		3,947	49,614	0.7636
Total Fire Protection		4,605	64,970	1.0000

AQUA NEW JERSEY, INC.

CALCULATION OF CUSTOMER COST PER MONTH FOR A 5/8-INCH METER

Cost Function	Cost of Service	Total Units		Cost Per 5/8-inch Meter	Cost Per 5/8-inch Meter Monthly Bill
(1)	(2)	(3)		(4)	(5)
Meters	$ 2,733,965	69,885	5/8-inch Equivalents	$ 39.12	$ 3.26
Services	10,009,808	57,249	3/4-inch Equivalents	174.85	14.57
Billing, Collecting and Meter Reading	4,826,391	54,983	Customers	87.78	7.32
Subtotal Customer Costs	17,570,165				25.15
Unrecovered Public Fire	3,732,704	69,885	5/8-inch Equivalents	53.41	4.45
Total Customer Costs and Public Fire	$ 21,302,868				$ 29.60

EXHIBIT PT-9

BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES

AQUA NEW JERSEY, INC.

Docket No. WR2401___

DIRECT TESTIMONY OF MATTHEW R. HOWARD

With regard to Rate of Return
and Capital Structure

January 19, 2024

TABLE OF CONTENTS

Page

AQUA NEW JERSEY, INC.

DIRECT TESTIMONY
OF
MATTHEW R. HOWARD

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Matthew R. Howard. My business address is 3 Speen Street, Suite 150, Framingham, MA 01701.

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

A. I am a Director at ScottMadden, Inc.

Q. Please summarize your professional experience and educational background.

A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues, including return on common equity ("ROE"),[1] capital structure, and cost of debt. I have also authored and co-authored several fair market valuation reports on behalf of municipalities and investor-owned utilities. On behalf of the American Gas Association ("AGA"), I assist in the calculation of the AGA Gas Index, which serves as the benchmark against which the performance of the American Gas Index Fund ("AGIF") is measured on a monthly basis. The AGA Gas Index and AGIF are a market capitalization weighted index and mutual fund, respectively, comprised of the common stocks of the publicly traded corporate members of the AGA.

I am a member of the Society of Utility and Regulatory Financial Analysts ("SURFA"). In May 2022, I was awarded the professional designation "Certified Rate of

[1] Also referred to throughout my Direct Testimony as cost of common equity.

Return Analyst" by SURFA, which is based on education, experience, and the successful completion of a comprehensive written examination.

I hold a Bachelor's degree in Psychology from the University of Colorado at Boulder and received a Master of Business Administration degree from Babson College, with honors, and a concentration in Finance. My educational background and regulatory experience are attached as Appendix A.

II. PURPOSE OF TESTIMONY

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide evidence on behalf of Aqua New Jersey, Inc. ("Aqua" or the "Company") regarding the appropriate weighted average cost of capital ("WACC"), or overall rate of return, on its jurisdictional rate base. This is comprised of the appropriate capital structure, cost of debt, and cost of common equity for Aqua.

Q. Have you prepared an exhibit in support of your recommendation?

A. Yes. I have prepared Schedules MRH-1 through MRH-6.

Q. Were your Direct Testimony and Schedules prepared by you or under your direct supervision?

A. Yes. This Direct Testimony and the Schedules thereto were prepared by me or under my direct supervision and control.

III. SUMMARY OF RECOMMENDATION

Q. Please summarize your recommendation with respect to the overall rate of return for Aqua.

A. I recommend the New Jersey Board of Public Utilities (the "Board") authorize the Company the opportunity to earn an overall rate of return of 7.91 percent based on a

ratemaking capital structure consisting of 47.00 percent long-term debt at an embedded cost rate of 4.25 percent and 53.00 percent common equity at a common equity cost rate of 11.15 percent. The overall rate of return is summarized on page 1 of Schedule MRH-1 and in Table 1 below:

Table 1: Summary of Overall Rate of Return

Description	Percent Total Capital	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.25%	2.00%
Common Equity	53.00%	11.15%	5.91%
Total	100.00%		7.91%

Q. Please summarize the determination of the recommended cost of common equity for Aqua.

A. The determination of the recommended cost of common equity for Aqua is guided in part by the regulatory principles established in *Bluefield Waterworks & Imp. Co. v. Public Service Commission of W. Va.*, 262 U.S. 679 (1923) ("*Bluefield*") and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) ("*Hope*"). As discussed more in depth below, *Bluefield* and *Hope* establish the standard, among others, that a utility's returns should provide it the opportunity to earn a return similar to enterprises of comparable risk. To ensure the cost of common equity reflects enterprises of comparable risk, it is necessary to look to the market data of a proxy group of publicly traded companies comparable in risk to Aqua's utility operations (the "Utility Proxy Group"). However, the Utility Proxy Group is not identical to Aqua. Therefore, it is necessary to then reflect any Company-specific risks or factors not captured by the Utility Proxy Group.

Q. How have you applied the approach described above in arriving at your recommended cost of common equity for Aqua?

A. In arriving at my recommended cost of common equity for Aqua, I first applied the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), and the Risk Premium Model ("RPM") (as discussed below) to the market data of the Utility Proxy Group as summarized on page 2 of Schedule MRH-1 and in Table 2 below:

Table 2: Summary of ROE Results

DCF[2]	9.02%	8.99%
Midpoint	8.96%	
CAPM[3]	13.37%	13.26%
Midpoint	13.32%	
RPM	11.14%	
Recommended Range Prior to the Application of Company-Specific Adjustments	10.15% - 12.15%	
Size Premium	0.15%	
Flotation Cost Adjustment	0.07%	
Recommended Range Applicable to Aqua	10.35% - 12.35%	
Recommended ROE	**11.15%**	

Based on the model results, I determined the appropriate ROE for the Utility Proxy Group to be in the range of 10.15 percent to 12.15 percent, prior to any Company-specific adjustments. I then applied a size premium of 0.15 percent to account for Aqua's smaller size relative to the Utility Proxy Group. I then made a flotation cost adjustment of 0.07 percent, which reflects the cost of issuing equity. Accounting for these two Company-specific adjustments increases the ROE range applicable to the Utility Proxy Group to

[2] Mean and median results, respectively.
[3] Results based on current and projected interest rates, respectively.

10.35 percent to 12.35 percent for Aqua. Given that range, I recommend an ROE of 11.15 percent.

As shown in Table 2 above, in determining the range of model results, I relied on multiple analytical models which reflect two important considerations: (1) it is impossible to know with absolute certainty which methods or approaches, and their subsequent results, best reflect market and economic conditions at any one point in time; and (2) each result reflects a return required currently by the market, regardless of where it falls on the distribution of required returns. That said, it is necessary to carefully consider where on the distribution the results fall. Doing so mitigates the potential of misrepresenting investor required returns due to the assignment of undue weight on a result, or results, that fall at the higher or lower ends of the distribution. At the same time, those same results cannot be dismissed outright. My recommended ROE therefore appropriately balances the range of results while also applying careful judgment in assessing those results.

IV. GENERAL PRINCIPLES

Q. What regulatory principles guide the determination of an ROE to be included in the fair rate of return?

A. As established in *Bluefield* and *Hope,* the fair rate of return, including the cost of common equity, should provide the utility the opportunity to earn returns comparable to other investments with similar risk, at a level sufficient to assure investors that the enterprise will maintain its financial integrity. Because utilities compete for capital with other firms of comparable risk, the return authorized by the regulatory process should provide the utility with the ability to attract capital at a reasonable cost. In addition, the return should enable the utility to fulfill its obligations to the public of providing safe and reliable service at all

times. Specifically in *Hope*, the Supreme Court noted:

> The rate-making process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests. Thus we stated in the Natural Gas Pipeline Co. case that 'regulation does not insure [sic] that the business shall produce net revenues.' 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. Chicago & Grand Trunk R. Co. v. Wellman, 143 U.S. 339, 345, 346 12 S.Ct. 400, 402. **By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.**[4]

Q. Please comment on the forward-looking nature of ratemaking and the cost of capital in general.

A. Rates set in this proceeding for Aqua will be implemented on a going-forward basis, as rates are designed to recover costs that will be incurred in the future. The cost of capital is also forward-looking, as is the return (*i.e.*, cost) required by investors, which is reflective of the risks an investment may face in the future.

Q. Please comment on the use of multiple analytical models in determining the appropriate ROE applicable to Aqua.

A. Unlike the costs of debt or preferred stock, which are generally contractually defined, the cost of common equity is not directly observable in the market. Therefore, analysts must look to multiple financial and economic models using market data to estimate the investor required ROE. Further, no model is perfect, and all models have strengths and weaknesses.

[4] *Hope*, 320 U.S. at 603 (emphasis added).

Generally, however, it is difficult to determine which model/models best reflect investor sentiment at any one time. The use of multiple models is therefore preferable to the selection of any single model at any one point in time. Further, to avoid an assessment of current market and economic conditions that over- or under-emphasizes any one model, the use of multiple models is necessary.

The use of multiple models is also well supported in financial literature, as is the need to exercise judgment in assessing those models and their results. For example, Dr. Roger A. Morin[5] states:

> Each methodology requires the exercise of considerable judgment on the reasonableness of the assumptions underlying the methodology and on the reasonableness of the proxies used to validate a theory. The inability of the DCF model to account for changes in relative market valuation, discussed below, is a vivid example of the potential shortcomings of the DCF model when applied to a given company. Similarly, the inability of the CAPM to account for variables that affect security returns other than beta tarnishes its use.
>
> No one individual method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data.[6]

Based on the above, the use of multiple analytical models, as well as the application of careful judgment, should be used in determining the appropriate ROE for Aqua.

[5] Dr. Roger A. Morin is Emeritus Professor of Finance at the College of Business Administration, Georgia State University, and Distinguished Professor of Finance for Regulated Industry at the Center for the Study of Regulated Industry at Georgia State University. Dr. Morin has published four widely-used treatises on regulatory finance: Utilities' Cost of Capital, Regulatory Finance, New Regulatory Finance, and more recently, Modern Regulatory Finance. Dr. Morin is a leading expert witness in matters of corporate finance and has appeared as an expert witness in some 200 cases before some 50 federal and provincial/state regulatory boards in the United States, Canada, and abroad, including the Federal Energy Regulatory Commission and the Federal Communications Commission.

[6] Roger A. Morin, Modern Regulatory Finance, PUR Books 2021, at 476. ("Morin")

Q. Is it important that the authorized return on common equity reflect the risks applicable to Aqua on a "stand-alone" basis?

A. Yes, it is. The stand-alone regulatory principle treats each utility as its own company, meaning the authorized return must reflect the risks applicable to Aqua. This is true regardless of the source of invested funds. All investors, whether it be a parent entity or an external investor, will assess opportunities based on whether the expected return provides adequate compensation given the perceived risks. Doing otherwise is inconsistent with rational decision-making and financial theory.

Therefore, given that a regulated subsidiary must still compete for capital, even from a parent entity, it is important that subsidiary be authorized a return commensurate with the risks involved in the operations of the stand-alone entity.

V. AQUA AND THE UTILITY PROXY GROUP

Q. Are you familiar with the operations of Aqua?

A. Yes. Aqua's operations span the state of New Jersey and are broken into four regions: Northern, Central, Southern, and Eastern. Aqua is headquartered in Hamilton, NJ and provides water service to more than 55,000 customers. Aqua is not publicly-traded; however, its parent company, Essential Utilities, Inc. ("Essential") is publicly-traded.

Q. Please describe the selection process for your Utility Proxy Group.

A. The basis of selection for the Utility Proxy Group was to select those companies which met the following criteria:

i. The water utilities must be covered by *Value Line Investment Survey's ("Value Line")* Standard Edition (October 6, 2023);

ii. The water utilities must have a *Value Line*-reported Beta coefficient;

iii. The water utilities must have an earnings growth projection from at least one of the following sources: Zacks, Yahoo! Finance, or *Value Line;*

iv. Any water utility that recently cut or suspended dividend payments was excluded;

v. Any water utility that is currently a party to a merger or significant transaction was excluded; and

vi. Any water utility that did not derive either 60 percent or greater of operating income, or 60 percent or greater of total assets attributable to, regulated water utility operations in the most recent fiscal year was excluded.

The following six companies met these criteria: American States Water Company, American Water Works Company, Inc., California Water Service Group, Essential, Middlesex Water Company, and SJW Group.

VI. CAPITAL STRUCTURE

Q. What capital structure ratios do you recommend be employed in developing an overall fair rate of return appropriate for the Company?

A. I recommend the use of a ratemaking capital structure consisting of 47.00 percent long-term debt and 53.00 percent common equity as shown on page 1 of Schedule MRH-1. This capital structure is based on the projected capital structure for Aqua at the end of the Test Year, April 30, 2024.

Q. How does the proposed ratemaking common equity ratio of 53.00 percent for Aqua compare with the equity ratios maintained by the companies in your Utility Proxy Group?

A. Aqua's ratemaking common equity ratio of 53.00 percent is reasonable and consistent with the range of common equity ratios maintained by the companies in the Utility Proxy Group.

As shown on page 3 of Schedule MRH-1, the common equity ratios of the Utility Proxy Group ranged from 40.70 percent to 61.35 percent for the respective fiscal years ended 2022. In my opinion, Aqua's ratemaking equity ratio of 53.00 percent is appropriate.

Q. What cost rate for long-term debt is most appropriate for use in a cost of capital determination for Aqua?

A. A long-term debt cost rate of 4.25 percent is reasonable and appropriate as it is based on the expected long-term debt cost rate for the Company at April 30, 2024.

VII. COST OF COMMON EQUITY ANALYSIS

Q. Please summarize your cost of common equity analysis.

A. The cost of common equity reflects the return investors require to make an equity investment in a given enterprise. In making that determination, investors are guided by the financial principle that the return required must compensate for their perceived level of risk, with that level of risk reflected in the market prices they are willing to pay, and with greater risk requiring a greater return.[7] Thus, multiple analytical models have been developed to estimate the relationship between investors' perception of risk and the return they require to bear that risk. Because regulation acts as a substitute for marketplace competition, the assessment of the appropriate ROE must look to the capital markets in which investors make their pricing decisions. Therefore, in my determination of the appropriate ROE for Aqua, I have applied three financial models that are generally accepted academically,[8] and commonly applied in regulatory proceedings, to the Utility Proxy Group: the DCF, the CAPM, and the RPM. I discuss each of these models and their results in more detail below.

[7] *See, e.g.*, Morin, at 27-29.
[8] *See, e.g.*, Morin at 477-478.

Lastly, because the Utility Proxy Group is comparable in risk but not identical to Aqua, I have examined the applicable risk adjustment based on Aqua's size relative to that of the Utility Proxy Group. I have also made an adjustment to reflect the issuance costs of common stock (*i.e.*, flotation costs).

A. Constant Growth DCF Model

Q. Please describe the Constant Growth DCF model.

A. The DCF model is based on the theory that the price of a stock is dependent on the present value of the future cash-flows for the company in question. In conducting my DCF analysis, I have applied the Constant Growth DCF model, which takes the following form:

$$k = \frac{D_0\ (1+g)}{P} + g \quad \text{Equation [1]}$$

where:

K = the required return on common equity;
D_0 = the annualized dividend per share;
P = the current stock price; and
g = the *expected* growth rate.

Q. Please describe the dividend yield you used in your application of the Constant Growth DCF model.

A. The unadjusted dividend yields are based on each Utility Proxy Group company's annualized dividends per share as of October 31, 2023, divided by the 30-day average closing market prices for the period ending October 31, 2023. However, because dividends are paid periodically throughout the year, as opposed to continuously, an adjustment must be made to the dividend yield.[9] Further, because utilities increase their quarterly dividend at various times during the year, it is a reasonable assumption to reflect one-half of the

[9] *See, e.g.,* Myron J. Gordon and Eli Shapiro, C*apital Equipment Analysis: The Required Rate of Profit*, Management Science, Vol., No. 1 (October 1956), at 106.

annual dividend growth rate in the dividend yield component. This adjustment has been applied in Column 4 of Schedule MRH-2.

Q. Why do you rely on a 30-day average stock price in calculating your dividend yields?

A. Because anomalous events can affect the stock price on any particular trading day, it is important to use an averaging period that mitigates the effects of any such event, while also accounting for current market conditions. As such, a 30-day average reasonably accomplishes this objective.

Q. Please describe the growth rates used in your Constant Growth DCF model.

A. Because the ROE is forward-looking in nature, it is important that the models and their inputs reflect the use of forward-looking data. As such, I have relied on the five-year earnings per share ("EPS") growth estimates as published by *Value Line*, Zacks, and Yahoo! Finance, all three of which are widely available to investors.

Q. Why are projected EPS growth rates appropriate for use in the Constant Growth DCF model?

A. Over the long run, a utility's dividends, cash flow, or book value cannot grow without a corresponding growth in earnings. Specifically, over time, if a utility's earnings do not grow commensurately with dividends or cash flow then it will be forced to rely on alternative sources of cash, primarily depreciation. Because depreciation reflects the level of capital expenditures (or replacements) necessary to maintain a safe and reliable system, the utility will ultimately face a shortfall in its ability to both maintain dividends and capital expenditures if earnings growth is not maintained. In addition, any earnings not paid out as dividends or allocated to capital expenditures will be recorded as retained earnings,

which increases book value. As such, book value, dividends, and cash flow are all dependent on earnings growth.

Earnings growth is the appropriate measure of growth moving forward, and more specifically, the use of projected earnings growth, based on analysts' forecasts. It is also well supported in academic research that analyst earnings forecasts are reflected in the market. For example, research by Robert S. Harris notes that "a growing body of knowledge shows that analysts' earnings forecasts are indeed reflected in stock prices."[10] Further, James H. Vander Weide and Willard T. Carleton have demonstrated that earnings growth projections have a statistically significant relationship to stock valuation levels.[11] As such, the use of analyst-projected earnings growth rates are appropriate for use as the growth component of the Constant Growth DCF model.

Q. What are the results of your Constant Growth DCF analysis?

A. My Constant Growth DCF analysis results in a mean and median estimated cost of common equity of 8.74 percent and 8.87 percent, respectively, as shown on Schedule MRH-2.

Q. Do you have any comments regarding your Constant Growth DCF model results?

A. Yes, I do. Middlesex Water Company's ("MSEX") Constant Growth DCF result of 5.87 percent is below the current yield of 6.22 percent for Moody's A2-rated utility bonds.[12] Because MSEX maintains an A rating from Standard & Poor's ("S&P"), which is equivalent to a Moody's Investor Services ("Moody's") A2, an investor would be able to achieve a higher return investing in marginal debt for MSEX compared to that earned

[10] Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rate of Return*, Financial Management (Spring 1986), at 59.
[11] James H. Vander Weide and Willard T. Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management (Spring 1988), at 81. The Vander Weide and Carleton study was updated in 2004 under the direction of Dr. Vander Weide. The results of the updated study were consistent with the original study's conclusions.
[12] *See* Schedule MRH-4, page 3, column 2. MSEX's indicated DCF result is also below the prospective yield on Moody's A2-rated utility bonds of 5.92 percent.

investing in MSEX equity. This violates the basic financial principle of risk and return, as it is generally accepted that common equity faces greater investment risk than debt, given common equity shareholders are behind debt holders in any claim on a company's assets and earnings. Given this, it would be irrational and illogical for an investor to invest in MSEX equity when they would otherwise earn a higher return with less risk by investing in MSEX marginal debt issuances.

Q. Given the above, what is the indicated ROE based on your Constant Growth DCF model?

A. Excluding the MSEX Constant Growth DCF result produces indicated mean and median ROEs of 9.31 percent and 8.91 percent for the Utility Proxy Group, respectively. However, in determining the applicable Constant Growth DCF-based mean and median ROEs of 9.02 percent and 8.89 percent, respectively, for the Utility Proxy Group, I have relied on the average of the mean and median values including and excluding MSEX's indicated Constant Growth DCF result. As this result still factors in MSEX's Constant Growth DCF result, it should be considered conservative.

B. <u>CAPM Analysis</u>

Q. Please describe the CAPM.

A. The CAPM is a risk premium-based method of estimating the cost of common equity in which the ROE is determined by adding a risk premium to an estimate of the risk-free rate. The risk premium is defined as the difference between the return required to invest in the broad market, less the risk-free rate ($r_m - r_f$). This is commonly referred to as the Market Risk Premium ("MRP") and is discussed in more detail below. The CAPM is defined as:

$$K_e = r_f + B(r_m - r_f) \quad \text{Equation [2]}$$

where:

k = the required market ROE for a security;

β = the Beta coefficient of that security;

r_f = the risk-free rate of return; and

r_m = the required return on the market as a whole.

According to the underlying theory of the CAPM, unsystematic risk can be diversified away, meaning investors should only be compensated for systematic risk. Systematic, or non-diversifiable risk, is measured by the Beta coefficient ("β"), which is defined as:

$$\beta_j = \frac{\sigma_j}{\sigma_m} x\, \rho_{j,m} \quad \text{Equation [3]}$$

Where σ_j is the standard deviation of returns for company "j," σ_m is the standard deviation of returns for the broad market (as measured, for example, by the S&P 500 Index ("S&P 500")), and $\rho_{j,m}$ is the correlation of returns between company j and the broad market. The Beta coefficient therefore represents both relative volatility (*i.e.*, the standard deviation) of returns and the correlation in returns between the subject company and the overall market.

Q. Have you also relied on an alternative form of the CAPM?

A. Yes. In addition to relying on the traditional CAPM as defined in Equation [2] above, I also rely on the Empirical CAPM ("ECAPM"). The ECAPM reflects the reality that, although the results of numerous studies support the notion that the Beta coefficient is related to security returns, the empirical Security Market Line ("SML") described by the CAPM formula is not as steeply sloped as the predicted SML. Morin states:

> With few exceptions, the empirical studies agree that … low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.
>
> * * *
>
> Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:
>
> $$K = R_F + x\,\beta(R_M - R_F) + (1-x)\,\beta(R_M - R_F)$$
>
> where x is a fraction to be determined empirically. The value of x that best explains the observed relationship Return = 0.0829 + 0.0520 β is between 0.25 and 0.30. If x = 0.25, the equation becomes:
>
> $$K = R_F + 0.25(R_M - R_F) + 0.75\,\beta(R_M - R_F)$$[13]

Considering the theoretical and practical support, I have relied on both the CAPM and ECAPM and have applied the inputs described below in both forms.

Q. How have you calculated the risk-free rates in your CAPM analyses?

A. The risk-free rates applied in my CAPM analyses are based on: (1) a current 30-day average yield on 30-year Treasury bonds (4.84 percent); and (2) a projected 30-year Treasury yield based on projections from *Blue Chip Financial Forecasts ("Blue Chip")* for the six quarters ending with the first-calendar quarter of 2025 and long-term projections for the periods 2025-2029 and 2030-2034 (4.34 percent).[14]

Q. Why have you relied on the 30-year Treasury yield in your CAPM analysis?

A. Because equity investments are assumed to continue into perpetuity, the appropriate risk-free rate selected should ideally match the life of the underlying investment. Therefore, it is appropriate to rely on 30-year Treasury yields as the risk-free rate in applying the CAPM.

[13] Morin, at 207, 221.
[14] Schedule MRH-3, at 1, Column 3.

Q. Have you applied both a current and projected measure of the risk-free rate in your CAPM analysis?

A. Yes, I have. I rely on both current and projected measures of 30-year Treasury yields because the extent to which current interest rates or analyst projections are ultimately better estimators of future interest rates can vary. Therefore, the use of both current and projected interest rates best captures the range of expected risk-free rates.[15]

Q. What Beta coefficients did you apply in your CAPM analysis?

A. I have relied on Beta coefficients provided by *Value Line* and Bloomberg Professional ("Bloomberg"), as shown on page 3 of Schedule MRH-3. Both sources adjust their calculated Beta coefficients to reflect the tendency of Beta coefficients to regress to the market mean of 1.00. While *Value Line* relies on five years of weekly returns, Bloomberg relies on two years of weekly returns.

Q. Please describe your approach to estimating the MRP.

A. As noted above, the MRP, $(r_m - r_f)$ in Equation [2] above, reflects the additional return investors require to invest in the broad market rather than a risk-free security. Because the cost of capital is expectational in nature, I calculated three expectational measures of the market required return: a market return based on (1) data from Bloomberg; (2) data from *Value Line*; and (3) alternative data as published in *Value Line's* Summary & Index.

I then averaged the three market return estimates discussed above and subtracted the respective risk-free rates from that average market return to determine the applicable MRPs for my CAPM analysis.[16]

[15] *See*, Morin, at 202.
[16] Schedule MRH-3, page 1, column 4.

Q. Please describe your market return estimates based on the S&P 500 companies.

A. The first two market return estimates are based on a market capitalization-weighted ROE derived by the application of the Constant Growth DCF model to the companies in the S&P 500. I derived two separate estimates using this approach, relying on expected dividend yields and forecasted earnings growth rates from both Bloomberg and *Value Line*, respectively, applying the one-half growth rate assumption described above. Market capitalizations for the S&P 500 companies were also sourced from Bloomberg and *Value Line*. This approach resulted in market return estimates of 16.73 percent and 14.23 percent, based on data from Bloomberg and *Value Line*, respectively.

Q. Please describe your market return estimate based on *Value Line's* Summary & Index.

A. The third estimate is based on the application of the average three- to five-year median market price appreciation potential for the seven weeks ended November 3, 2023,[17] as published by *Value Line*, plus an average of the median estimated dividend yield for the common stocks of the 1,700 firms covered by *Value Line's* Standard Edition for the same period. This approach resulted in a market return estimate of 15.68 percent.

Q. What is the applicable market return for use in the CAPM?

A. In applying the expected market return, I relied on the average of the three market return estimates of 15.55 percent as shown on Schedule MRH-3, page 2 (*see also*, Column 2 of page 1 of Schedule MRH-3).

[17] Consistent with the timeframe used in my DCF analysis.

Q. What are the results of your CAPM analyses?

A. The results of my CAPM analyses are shown on page 1 of Schedule MRH-3 and in Table 3 below.

Table 3: Summary of CAPM Results

	CAPM	ECAPM	Average
Current Risk Free-Rate (4.84%)			
Mean	13.32%	13.88%	13.60%
Median	12.79%	13.48%	13.14%
Average of Mean and Median	13.06%	13.68%	13.37%
Projected Risk Free-Rate (4.34%)			
Mean	13.21%	13.80%	13.51%
Median	12.66%	13.38%	13.02%
Average of Mean and Median	12.94%	13.59%	13.26%

Based on the above results, the ROE range as indicated by the CAPM is 13.26 percent (average mean and median based on projected risk-free rate) to 13.37 percent (average mean and median based on current risk-free rate).

C. RPM Analysis

Q. Please describe the RPM.

A. The RPM is based on the theory of risk and return, *i.e.*, that investors require greater returns for bearing greater risk. The RPM specifically reflects the fact that equity shareholders are subordinate to holders of debt and are last in line to any claims on a company's assets or earnings. As such, they require a premium to compensate for that added risk. In other words, equity investors require an Equity Risk Premium ("ERP") to invest in common stock relative to the return they would have otherwise earned by investing in a debt instrument of a company with comparable risk.

Q. Please summarize the application of the RPM.

A. In applying the RPM, one must calculate an ERP, or ERPs, derived from debt and equity of corresponding risk. Those ERPs are then ultimately added to a representative bond yield to determine the RPM-based ROE. As such, in determining an RPM-based ROE, I have relied on current and projected measures of debt, which are added to several ERP measures.

Q. What measures of debt have you applied in your RPM?

A. In this case, the debt instruments I applied are based on: (1) a current 30-day average yield on the Moody's utility bond yield that corresponds with the average Utility Proxy Group credit rating and (2) the corresponding projected Moody's utility bond yield, derived from projections from *Blue Chip* for the six quarters ending with the first-calendar quarter of 2025, and for the periods 2025-2029 and 2030-2034.

Q. How have you determined the credit rating for the Utility Proxy Group?

A. To capture the long-term credit ratings representative of the regulated operations of each Utility Proxy Group company, I reviewed the credit ratings from both S&P and Moody's for each of the operating subsidiaries to the extent available. As presented in Schedule MRH-4, page 4, the resulting Moody's and S&P long-term issuer ratings for the Utility Proxy Group are A3 and A, respectively.[18]

Q. How have you calculated current and projected Moody's bond yields applicable to the Utility Proxy Group?

A. I began with current bond yields based on a 30-day average Moody's A2 utility bond yield (6.22 percent) and a 30-day average Moody's Baa2 utility bond yield (6.50 percent), as reported by Bloomberg, shown on Schedule MRH-4, page 3, Columns 2 and 4,

[18] Reflects the average rating for the Utility Proxy Group based on numerically weighted ratings as shown on page 5 of Schedule MRH-4.

respectively. Next, because the Utility Proxy Group's average Moody's long-term rating is A3, as noted above, it is necessary to adjust the current Moody's A2 utility bond yield average upwards by one-third (0.09 percent) of the spread between the recent Moody's Baa2 utility bond yield and A2 utility bond yield (0.28 percent).[19] The resulting current Moody's utility A3 utility bond yield is 6.32 percent (*see* Table 4 below).

Table 4: Derivation of Current Moody's A3 Utility Bond Yield[20]

Current Moody's A2 Utility Bond Yield	6.22%
Adjustment to Reflect Current A3 Utility Bond Yield	0.09%
Current A3 Utility Bond Yield	6.32%

For the projected Moody's A3 utility bond yield, because I am not aware of any published projected Moody's A3 utility bond yields, I began with a projection of Moody's Aaa corporate bond yields (5.20 percent)[21] as published by *Blue Chip*. I then determined the spread between Moody's A2 utility and Aaa corporate bond yields (0.72 percent),[22] based on the 30-day average Moody's Aaa corporate bond yields (5.51 percent) and the 30-day average Moody's A2 utility bond yields (6.22 percent), as reported by Bloomberg and shown on Schedule MRH-4, page 3, Columns 1 and 2, respectively. I then applied the spread between Moody's A2 utility bond yields and Moody's Aaa corporate bond yields (0.72 percent)[23] to the forecasted Moody's Aaa corporate bond yield (5.20 percent),[24] which results in a projected Moody's A2 utility bond yield of 5.92 percent.[25]

[19] Schedule MRH-4, page 3, Column 5.
[20] Schedule MRH-4, page 3, Column 8 (differences due to rounding).
[21] Schedule MRH-4, page 3, Column 6.
[22] Schedule MRH-4, page 3, Column 3.
[23] Schedule MRH-4, page 3, Column 3.
[24] Schedule MRH-4, page 3, Column 6.
[25] Schedule MRH-4, page 3, Column 7.

Finally, as noted above, it is necessary to adjust the projected Moody's A2 utility bond yield upwards by the previously discussed 0.09 percent spread between recent Moody's Baa2 and A2 utility bond yields, resulting in a projected Moody's A3 utility bond yield of 6.01 percent (see Table 5 below).[26]

Table 5: Derivation of Projected Moody's A3 Utility Bond Yield

Projected Moody's Aaa Corporate Bond Yield	5.20%
Adjustment to Reflect Projected A2 Utility Bond Yield	0.72%
Projected Moody's A2 Utility Bond Yield	5.92%
Adjustment to Reflect Projected A3 Utility Bond Yield	0.09%
Projected A3 Utility Bond Yield	6.01%

Q. How have you calculated the ERP applicable to the Utility Proxy Group?

A. As discussed previously, because the cost of capital is expectational in nature, I have calculated three expectational measures of the ERP. The first two measures are based on the application of the Constant Growth DCF and CAPM to the S&P 500 Utilities Index. The third measure estimates the ERP using previously authorized returns for water and wastewater utilities from 2008 through October 2023.

Q. Why have you relied on the S&P 500 Utilities Index in calculating two of your ERP measures?

A. The S&P 500 Utilities Index is comprised of the companies within the S&P 500 which are classified as utilities. As such, in assessing the ERP for utility equity over utility debt, one can capture a broad measure of the required ERP through a broad-based utility index, such as the S&P 500 Utilities Index. Because utility bond yields reflect a broad array of risks, a correspondingly broad set of companies is practical in reflecting the incremental common

[26] Schedule MRH-4, page 3, Column 9.

equity risks relative to the Moody's utility bond yields. As such, the use of the S&P 500 Utilities Index is appropriate.

Q. How have you applied the S&P 500 Utilities Index in calculating your ERP?

A. I have applied a market capitalization-weighted DCF and CAPM to the market data of each utility in the S&P 500 Utilities Index. Although the S&P 500 Utilities Index is comprised solely of utilities, in order to match its return one would necessarily have to allocate their funds in accordance with the specific market weights of the component utilities.[27]

Q. Please describe how you applied the DCF to the S&P Utilities Index in calculating an expected ERP.

A. I derived an expected DCF return using the same approach as applied in determining my expected market return in my CAPM analyses, using data from both Bloomberg and *Value Line*. The resulting DCF returns for the S&P 500 Utilities Index were 10.50 percent (Bloomberg) and 10.75 percent (*Value Line*).[28] I then averaged the two S&P 500 Utilities Indexes, resulting in a 10.63 percent expected DCF return.

Q. Please describe how you applied the CAPM to the S&P 500 Utilities Index in calculating an expected ERP.

A. I calculated the CAPM-based return for the S&P 500 Utilities Index in the same manner as applied to the Utility Proxy Group, with the exception being that I derived a market capitalization-weighted Beta coefficient based on the companies within the S&P 500 Utilities Index. The average market capitalization-weighted Beta coefficient for the S&P

[27] Investors have the ability to purchase the Utilities Select Sector SPDR® Fund (NYSE: XLU) which seeks to provide an effective representation of the utilities sector of the S&P 500 Index, and although an investment in the XLU would achieve approximately the same outcome, an investor still would have to determine the required return for the XLU based on the market capitalization- weighted estimates.

[28] Schedule MRH-4, at 7. Because the S&P 500 Utilities Index-derived DCF and CAPM reflect market capitalization weighted averages it is not practical to calculate a median result.

500 Utilities Index is 0.81,[29] based on Bloomberg (0.75) and *Value Line* (0.87). The indicated equity returns for the S&P Utilities Index based on the CAPM are 13.78 percent and 13.69 percent based on current and projected interest rates, respectively.

Q. Did you apply the Moody's utility bond yield applicable to the rating of the S&P 500 Utilities Index in calculating the respective ERPs?

A. Yes, I did. As noted above, because the risk premium reflects the premium equity investors require over the return on debt of similar corresponding risk, it is appropriate to apply the market capitalization-weighted Moody's long-term credit rating for the S&P 500 Utilities Index (A3) in deriving both the DCF- and CAPM-derived ERPs based on the S&P 500 Utilities Index. I described the determination of the current and projected Moody's A3 utility bond yields earlier in my Direct Testimony.

Q. What is your conclusion of the ERPs applicable to the S&P 500 Utilities Index?

A. Based on the application of the DCF- and CAPM-based equity returns for the S&P 500 Utilities Index, and the corresponding Moody's A3 utility bond yields, I derived the following ERP estimates as shown in Table 6, below:

[29] Schedule MRH-4, page 8, Column 1.

Table 6: Summary of DCF-and CAPM-Derived ERPs[30]

	Current Yields	Projected Yields
Average DCF-Derived S&P Utilities Index Return	10.63%	10.63%
Moody's A3 Utility Bond Yield	6.32%	6.01%
Equity Risk Premium	4.31%	4.62%
CAPM-Derived S&P Utilities Index Return	13.78%	13.69%
Moody's A3 Utility Bond Yield	6.32%	6.01%
Equity Risk Premium	7.46%	7.68%

Averaging the ERPs based on current and projected yields ultimately results in ERPs applicable to the S&P 500 Utilities Index of 5.89 percent and 6.15 percent, respectively (as shown in Table 7 below, and on page 6 of Schedule MRH-4).

Table 7: S&P 500 Utilities Index-Derived ERP[31]

	Current Yields	Projected Yields
DCF-Derived S&P 500 Utilities Index Equity Risk Premium	4.31%	4.62%
CAPM-Derived S&P 500 Utilities Index Equity Risk Premium	7.46%	7.68%
Average	5.89%	6.15%

Q. Have you adjusted the S&P 500 Utilities Index-derived ERP estimates to reflect the average issuer rating of the Utility Proxy Group?

A. No. Because the Utility Proxy Group rating of A3 is comparable to the A3 rating of the S&P 500 Utilities Index, I have not applied any adjustments to the ERP estimates based on the S&P 500 Utilities Index.

[30] Schedule MRH-4, page 7 (DCF) and page 8 (CAPM).
[31] Schedule MRH-4, page 6.

Q. Please summarize the use of authorized returns for water and wastewater utilities in calculating an ERP.

A. The use of previously authorized returns is an appropriate and important measure available to investors as previously authorized returns reflect the market conditions and forward-looking investor required returns over time. The relationship between authorized return ERPs and utility bond yields therefore reflects the relationship between forward-looking ERPs and the corresponding interest rates over time. Applying that relationship to current and projected utility bond yields produces forward-looking ERP measures. The relationship between forward-looking ERP data and interest rates is both statistically significant and inverse (*i.e.*, as interest rates increase, the ERP decreases, and vice versa), which is consistent with the well-documented financial literature on the subject.[32]

Q. Please explain your calculation of the ERP based on previously authorized returns for water and wastewater utilities.

A. Page 9 of Schedule MRH-4 presents the results of a regression analysis of 186 authorized returns for water and wastewater utilities from 2008 through October 2023. Subtracting the available monthly Moody's A3 utility bond yield[33] as of the date of the order setting the authorized ROE I was able to determine the applicable ERP. Using ERPs as the dependent variable and the Moody's A3 utility bond yields as the independent variable, I performed a linear regression to estimate the ERP applicable to the current and projected Moody's A3 utility bond yields described above. The current and projected Moody's A3

[32] *See*, *e.g.*, Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts*, Financial Management, (Summer 1992), at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, (Spring 1985), at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, *An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry*, Financial Management, (Autumn 1995), at 89-95.

[33] Calculated as the 30-day average of the Moody's A2 utility bond yield plus one-third the spread of the Moody's Baa2/A2 utility bond yields as of the date of the order.

utility bond yields of 6.32 percent and 6.01 percent, respectively, produce ERP estimates of 3.81 percent and 4.05 percent, respectively.

Q. Please summarize your ERP estimates.

A. As shown in Table 8, below, my analyses produce average ERP estimates of 4.85 percent and 5.10 percent, applicable to current and projected Moody's A3 utility bond yields, respectively.

Table 8: Summary of Equity Risk Premium Estimates[34]

	Current Moody's A3 Utility Yields	Projected Moody's A3 Utility Yields
S&P 500 Utilities Index	5.89%	6.15%
Regression Analysis of Authorized ROEs	3.81%	4.05%
Average	4.85%	5.10%

Q. What are the results of your RPM?

A. The results of my RPM can be found on page 1 of Schedule MRH-4. When the average ERPs of 4.85 percent and 5.10 percent are added to their respective current and projected A3 utility bond yields of 6.32 percent and 6.01 percent, it produces RPM-derived ROEs of 11.17 percent and 11.11 percent, respectively. Averaging those estimates results in an average ROE estimate for the RPM of 11.14 percent.

[34] Schedule MRH-4, page 2.

Table 9: Summary of Equity RPM Results[35]

	Current Moody's A3 Utility Yield	Projected Moody's A3 Utility Yield
Average Equity Risk Premium	4.85%	5.10%
Utility Bond Yield	6.32%	6.01%
Return on Equity	11.17%	11.11%
Risk Premium Derived Return on Equity	11.14%	

D. Summary of the Results Applicable to the Utility Proxy Group

Q. Please summarize the results of your cost of common equity models as applied to the Utility Proxy Group.

A. As shown in Table 10 below, the application of the multiple cost of common equity models to the market data of the Utility Proxy Group results in an indicated ROE range of 10.15 percent to 12.15 percent.

Table 10: Summary of ROE Results Applicable to the Utility Proxy Group[36]

DCF[37]	9.02%	8.89%
Midpoint	8.96%	
CAPM[38]	13.37%	13.26%
Midpoint	13.32%	
RPM	11.14%	
Recommended Range Prior to the Application of Company-Specific Adjustments	10.15% - 12.15%	

However, as noted above, the use of a Utility Proxy Group cannot fully reflect the risks of Aqua. Therefore, it is necessary to conduct a relative risk analysis between Aqua

[35] Schedule MRH-4, page 1.
[36] Schedule MRH-1, page 2.
[37] Mean and median results, respectively.
[38] Results based on current and projected interest rates, respectively.

and the Utility Proxy Group to determine whether additional adjustments need to be made due to its size; one must also account for flotation costs.

VIII. ADDITIONAL RISK FACTORS AND ADJUSTMENTS

A. Size Premium

Q. Please explain the basis for applying a size premium to Aqua.

A. Size affects business risk because smaller companies are less able to handle fluctuations in revenues, expenses, and capital outlays than larger companies. Significant events or unexpected capital needs could have more serious consequences for smaller companies that exceed those of larger, more diverse companies. For example, a smaller company that loses several large customers, or requires significant expenditures, ultimately has fewer options in which to generate returns on its investments compared to a larger company with a broad and diverse customer base. As such, investors require an increased return to compensate for this additional risk.

That size is an additional risk factor has also been well documented in financial literature. For example, Duff & Phelps (now Kroll) notes:

> The size effect is based on the empirical observation that companies of smaller size are associated with greater risk and, therefore, have greater cost of capital. The "size" of a company is one of the most important risk elements to consider when developing cost of equity capital estimates for use in valuing a business simply because size has been shown to be a *predictor* of equity returns. In other words, there is a significant (negative) relationship between size and historical equity returns - as size *decreases*, returns tend to *increase*, and vice versa.[39]

***

[39] Kroll, Cost of Capital Navigator: U.S. Cost of Capital Module, Size as a Predictor of Returns, at 1 (emphasis in original) (updated 2021).

> Despite many criticisms of the size effect, it continues to be observed in data sources.

Similarly, Eugene Brigham states:

> A number of researchers have observed that portfolios of small-firms (sic) have earned consistently higher average returns than those of large-firm stocks; this is called the "small-firm effect." On the surface, it would seem to be advantageous to the small firms to provide average returns in a stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; **what the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms.**[40]

It is clear from the above that the market compensates investors for taking on small size as a risk factor. Therefore, the size of Aqua relative to the Utility Proxy Group should be considered in determining the Company's ROE.

Q. How have you calculated the estimated market capitalization for Aqua?

A. Because Aqua is not a separately traded entity, it is necessary to estimate an implied stand-alone market capitalization for the Company. To do so, I applied the median market-to-book ("M/B") ratio for the Utility Proxy Group of 2.20 to Aqua's implied common equity of $147.85 million.[41] Applying the proxy group M/B ratio to that amount results in an implied market capitalization of $325.46 million.[42]

Q. What is the applicable size premium for Aqua?

A. In its *Cost of Capital Navigator*, Kroll calculates the size premium for deciles of market capitalizations relative to the S&P 500. As shown on Schedule MRH-5, as of October 31, 2023, the median market capitalization of the Utility Proxy Group is approximately $2.835

[40] Eugene F. Brigham, Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623 (emphasis added).
[41] Schedule MRH-5; calculated as Aqua's proposed rate base multiplied by common equity ratio.
[42] Schedule MRH-5.

billion, which corresponds to the 5th decile, or a size premium of 0.93 percent, based on Kroll's market capitalization data. The implied market capitalization for Aqua as noted earlier is approximately $325.46 million, which falls within the 9th decile and corresponds to a size premium of 2.15 percent. The difference between those size premiums is 1.22 percent (2.15 percent – 0.93 percent).

Q. Have you applied a size premium of 1.22 percent in your recommendation?

A. No. As noted above, I conservatively applied a size premium of 0.15 percent, which accounts for Aqua's smaller size relative to the Utility Proxy Group.

B. <u>Flotation Cost Adjustment</u>

Q. What are flotation costs?

A. Flotation costs are the costs associated with the sale of new issuances of common stock. Those costs include the compensation to the underwriting firm for distributing the shares, direct fees such as filing and legal expenses, and market pressure (*i.e.*, downward pressure on the stock due to the increased supply of shares). Flotation costs ultimately reflect the fact that for every dollar raised through the issuances of debt or common stock, less than one full dollar is ultimately received.

Q. Why is it important to recognize flotation costs in the authorized return for Aqua?

A. Flotation costs are a permanent loss of investment to the utility and should be accounted for. When any company, including a utility, issues common stock, flotation costs are incurred for legal, accounting, printing fees and the like. For each dollar of issuing market price, a small percentage is expensed and is permanently unavailable for investment in utility rate base. Morin notes:

> The costs of issuing these securities are just as real as operating and maintenance expenses or costs incurred to build utility plants, and fair regulatory treatment must permit recovery of these costs….

> The simple fact of the matter is that common equity capital is not free….[Flotation costs] must be recovered through a rate of return adjustment.[43]

In other words, if a company issues stock at $1.00 with 5.00 percent in flotation costs, it will net $0.95 in investment. Assuming the investor in that stock requires a 10 percent return on his or her invested $1.00 (*i.e.*, a return of $0.10), the company needs to earn approximately 10.50 percent on its invested $0.95 to receive a $0.10 return.

Q. Can flotation costs be directly expensed or amortized like debt issuance expenses?

A. While it may be possible to directly expense flotation costs for common equity when they occur, this unfairly burdens current customers as the benefits gained from raising capital extend indefinitely. Similarly, because the capital raised through an equity issuance has no predetermined maturity, it is not possible to amortize those expenses.

Q. How did you calculate the flotation cost allowance?

A. I modified the DCF calculation to provide a dividend yield that would reimburse investors for issuance costs in accordance with the method cited in literature by Brigham and Daves,[44] as well as by Morin. The flotation cost adjustment recognizes the costs of issuing equity that were incurred by Essential (formerly known as Aqua America, Inc.) since January 2019. Based upon the issuance costs shown on page 1 of Schedule MRH-6, an adjustment of 0.07 percent is required to reflect the flotation costs applicable to the Company.

[43] Morin, at 321.
[44] Eugene F. Brigham and Phillip R. Daves, Intermediate Financial Management, 9th Edition, Thomson/Southwestern, at 342.

Q. What is the indicated cost of common equity after adjustments for size and flotation costs?

A. Applying the 0.15 percent size premium and the 0.07 percent flotation cost adjustment results in a range of common equity cost rates applicable to Aqua of 10.35 percent to 12.35 percent. Based on that range, I recommended an ROE of 11.15 percent.

IX. SUMMARY AND CONCLUSION

Q. Please summarize your recommendation of the appropriate weighted average cost of capital ("WACC") for the Company.

A. I recommend the Board authorize a WACC of 7.91 percent for Aqua. My recommendation takes into consideration a range of well-documented analytical models, which are applied to relevant market data in determining the appropriate cost of common equity for the Company. My recommendation also accounts for Aqua's proposed capital structure of 47.00 percent long-term debt and 53.00 percent equity, which is consistent with the Utility Proxy Group.

Q. Does this conclude your Direct Testimony?

A. Yes, it does. However, I reserve the right to supplement this Direct Testimony as needed during this proceeding.

scottmadden
MANAGEMENT CONSULTANTS

Appendix A - Resume & Testimony Listing of:
Matthew R. Howard, CRRA
Director

Summary

Matthew is an experienced consultant and a Certified Rate of Return Analyst (CRRA). Matthew joined ScottMadden in 2017 and has provided written testimony as an expert witness on several occasions regarding rate of return. He has also authored and co-authored valuation reports on several occasions and provided primary support on numerous occasions. In addition, he has extensive experience working across a variety of regulatory matters, having supported over 100 proceedings and filings. Matthew earned a B.A. in psychology from the University of Colorado and an M.B.A. with honors, concentrating in finance, from Babson College. Matthew also has experience managing funds for Babson College's endowment and conducting investment research at an investment advisory during a summer internship.

Areas of Specialization

- Return on Equity
- Valuation
- Capital Structure
- Rates and Regulation

Recent Assignments

- Provided expert testimony on the cost of capital for ratemaking purposes before state utility regulatory agencies.
- Authored valuation report on behalf of investor-owned utility for regulatory filing purposes.
- Provides ongoing primary support across various regulatory proceedings on the cost of capital.

EXPERT WITNESS TESTIMONY LISTING

Sponsor Company	Date Filed	Docket No.	Subject Matter
Kansas Corporation Commission			
Atmos Energy Corporation	09/2022	23-ATMG-359-RTS	Return on Equity, Capital Structure
Louisiana Public Service Commission			
Atmos Energy Corporation	01/2023	U-36658	Return on Equity
Maine Public Utilities Commission			
The Maine Water Company	07/2023	2023-00065	Return on Equity
Maryland Public Service Commission			
Maryland Water Service	09/2021	Case No. 9671	Return on Equity
Michigan Public Service Commission			
Alpena Power Company	06/2021	Case No. U-21045	Rate of Return
Pennsylvania Public Utilities Commission			
Community Utilities of Pennsylvania, Inc.	11/2023	R-2023-3043804; R-2023-3042805	Rate of Return
Virginia State Corporation Commission			
Atmos Energy Corporation	06/2023	PUR-2023-00008	Return on Equity

PRIMARY TESTIMONY SUPPORT EXPERIENCE

Sponsor Company	Date Filed	Docket No.	Subject Matter
Alberta Utilities Commission			
AltaLink, L.P., and EPCOR Distribution & Transmission, Inc.	01/2020	Proceeding ID. 24110	Return on Equity, Capital Structure

Sponsor Company	Date Filed	Docket No.	Subject Matter
Arizona Corporation Commission			
EPCOR Water Arizona Inc	08/2022	Docket No. WS-01303A-22-0236	Return on Equity
EPCOR Water Arizona Inc	06/2020	Docket No. WS-01303A-20-0177	Return on Equity
Arizona Water Company – Western Group	12/2019	Docket No. W-01445A-19-0278	Return on Equity
Southwest Gas Corporation	05/2019	Docket No. G-01551A-19-0055	Return on Equity
Arkansas Public Service Commission			
Southwestern Electric Power Company	07/2021	Docket No. 20-070-U	Return on Equity
CenterPoint Energy Resources Corp.	05/2021	Docket No. 21-004-U	Return on Equity
Entergy Arkansas, LLC	11/2020	Docket No. 16-036-FR	Return on Equity
Southwestern Electric Power Company	02/2019	Docket No. 19-008-U	Return on Equity
Liberty Utilities (Pine Bluff Water) Inc.	10/2018	Docket No. 18-027-U	Return on Equity
California Public Utilities Commission			
Southwest Gas Corporation	08/2019	Docket No. A-19-08-015	Return on Equity, Capital Structure
Colorado Public Utilities Commission			
Atmos Energy Corporation	08/2022	Proceeding No. 22AL-0348G	Return on Equity
District of Columbia Public Service Commission			
Washington Gas Light Company	01/2020	Formal Case No. 1162	Return on Equity
Potomac Electric Power Company	05/2019	Formal Case No. 1156	Return on Equity
Federal Energy Regulatory Commission			
LS Power Grid California, LLC	10/2020	Docket No. ER21-195-000	Return on Equity
LS Power Grid New York Corporation I	12/2019	Docket No. ER20-716-000	Return on Equity
Duke Energy Progress, LLC	11/2019	Docket No. EL20-4-000	Respond to Compliant Testimony Regarding Return on Equity
Florida Public Service Commission			
Utilities, Inc. of Florida	06/2020	Docket No. 20200139	Return on Equity
Hawaii Public Utilities Commission			
Launiupoko Irrigation Co., Inc.	12/2020	Docket No. 2020-0217	Return on Equity, Capital Structure
Kansas Corporation Commission			
Empire District Electric Company	02/2019	Docket No. 19-EPDE-223-RTS	Return on Equity
Kentucky Public Service Commission			
Atmos Energy Corporation	07/2022	Case No. 2022-00222	Return on Equity
Louisiana Public Service Commission			
Southwestern Electric Power Company	12/2020	Docket No. U-35441	Return on Equity
Maryland Public Service Commission			
Washington Gas Light Company	04/2019	Case No. 9605	Return on Equity
Potomac Edison Company	08/2018	Case No. 9490	Return on Equity
Massachusetts Department of Public Utilities			
NSTAR Electric Company d/b/a Eversource Energy	11/2018	DPU 18-76/DPU 18-77/DPU 18-78	Response to Direct Testimony by Attorney General Witness regarding Remuneration Rate Section 83C

Sponsor Company	Date Filed	Docket No.	Subject Matter
Michigan Public Service Commission			
Indiana Michigan Power Company	06/2019	Case No. U-20359	Return on Equity
SEMCO Energy Gas Company	05/2019	Case No. U-20479	Return on Equity
Missouri Public Service Commission			
Spire Missouri Inc.	12/2020	Case No. GR-2021-0108	Return on Equity
Nevada Public Utilities Commission			
Southwest Gas Corporation	02/2020	Docket No. 20-02023	Return on Equity
North Carolina Utilities Commission			
Piedmont Natural Gas Company, Inc.	04/2019	Docket No. G-9, Sub 743	Return on Equity
Aqua North Carolina, Inc.	07/2018	Docket No. W-218, Sub 497	Return on Equity
Oklahoma Corporation Commission			
Empire District Electric Company	03/2019	Cause No. PUB 201800133	Return on Equity
Pennsylvania Public Utility Commission			
Borough of Ambler	06/2022	Docket No. R-2022-3031704	Rate of Return
Citizens' Electric Company of Lewisburg	05/2022	Docket No. R-2022-3032369	Rate of Return
Valley Energy Company	05/2022	Docket No. R-2022-3032300	Rate of Return
Vicinity Energy Philadelphia, Inc.	04/2021	Docket No. R-2021-3024060	Rate of Return
Public Utility Commission of Texas			
Oncor Electric Delivery Company LLC	05/2022	Docket No. 53601	Return on Equity
Southwestern Electric Power Company	10/2020	Docket No. 51415	Rate of Return
CenterPoint Energy Houston Electric LLC	02/2019	Docket No. 49421	Return on Equity
Entergy Texas, Inc.	05/2018	Docket No. 48371	Return on Equity
Texas Railroad Commission			
EPCOR Gas Texas Inc.	06/2020	GUD 10988	Return on Equity, Capital Structure, Cost of Debt
CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas	10/2019	GUD 10920	Return on Equity, Capital Structure, Cost of Debt
Atmos Energy Corporation – Mid-Tex Division	10/2018	GUD 10779	Return on Equity, Capital Structure
Atmos Energy Corporation – West Texas Division	06/2018	GUD 10743	Return on Equity
Atmos Energy Corporation – Mid-Texas Division	06/2018	GUD 10742	Return on Equity

SECONDARY TESTIMONY SUPPORT EXPERIENCE

Sponsor Company	Sponsor Company	Sponsor Company
AEP Texas Inc.	Ameren Illinois Company d/b/a Ameren Illinois	Aqua Virginia, Inc.
Arizona Water Company – Northern Group	Atlantic City Electric Company	Boston Gas Company and Colonial Gas Company d/b/a National Grid
Carolina Water Service, Inc. of North Carolina	Citizens' Electric Company of Lewisburg, PA, Wellsboro Electric Company and Valley Energy Company	Colorado Natural Gas, Inc.
Connecticut Light and Power Company	Cook Inlet Natural Gas Storage Alaska, LLC	Delmarva Power & Light Company
Dominion Energy North Carolina	Duke Energy Carolinas, LLC	Duke Energy Indiana, Inc.
El Paso Electric Company	Elizabethtown Gas Company	Emera Maine
Entergy New Orleans, LLC	Fitchburg Gas and Electric Light Company	Hawaiian Electric Company, Inc.
Hawai'i Electric Light Company, Inc.	Hope Gas, Inc., d/b/a Dominion Energy West Virginia	Jersey Central Power & Light
Kansas City Power & Light Company	Laclede Gas Company/Missouri Gas Energy	Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid	Maui Electric Company, Limited
Narragansett Electric Company d/b/a National Grid	Northern Utilities, Inc. d/b/a Unitil	NSTAR Gas Company d/b/a Eversource Energy
Otter Tail Power Company	Potomac Electric Power Company	South Carolina Electric & Gas
Southwestern Public Service Company	SUEZ Water Pennsylvania Inc.	Summit Natural Gas of Missouri, Inc.
Summit Utilities, Inc.	Texas-New Mexico Power Company	Union Electric Company d/b/a Ameren Missouri
Virginia Electric and Power Company	Virginia Natural Gas	Westar Energy

Aqua New Jersey, Inc.
Table of Contents
Schedules Accompanying Direct Testimony of
Matthew R. Howard

Aqua New Jersey, Inc.
Cost of Capital Summary

Type of Capital	Ratio [1]	Cost Rate		Weighted Cost Rate
Long-Term Debt	47.00%	4.25%	[1]	2.00%
Common Equity	53.00%	11.15%	[2]	5.91%
Total	100.00%			7.91%

Notes:

[1] Company Provided.
[2] Page 2 of this Schedule.

Aqua New Jersey, Inc.
Summary of Common Equity Cost Rate

DCF	9.02%		8.89%	[1]
Midpoint		8.96%		
CAPM	13.37%	[2]	13.26%	[3]
Midpoint		13.32%		
Risk Premium		11.14%		[4]
Recommended Range Prior to the Application of Company-Specific Factors		10.15% - 12.15%		
Size Premium		0.15%		[5]
Flotation Cost		0.07%		[6]
Recommended Range Applicable to Aqua New Jersey		10.35% - 12.35%		
Recommended ROE for Aqua New Jersey		11.15%		

Notes:

[1] Schedule MRH-2.
[2] Page 1 of Schedule MRH-3; Average Result Based on Current Interest Rates.
[3] Page 1 of Schedule MRH-3; Average Result Based on Projected Interest Rates.
[4] Page 1 of Schedule MRH-4; Average of Results Based on Current and Projected Utility Bond Yields.
[5] Adjustment to reflect the Company's greater risk relative to the Utility Proxy Group as detailed in Mr. Howard's Direct Testimony.
[6] Schedule MRH-6.

Aqua New Jersey, Inc.
Capital Structures for Fiscal Year 2022
for the Utility Proxy Group

	2022
American States Water Company	
Long-Term Debt	38.65 %
Preferred Stock	0.00
Common Equity	61.35
Total Capital	100.00 %
American Water Works Company, Inc.	
Long-Term Debt	59.29 %
Preferred Stock	0.02
Common Equity	40.70
Total Capital	100.00 %
California Water Service Group	
Long-Term Debt	44.39 %
Preferred Stock	0.00
Common Equity	55.61
Total Capital	100.00 %
Essential Utilities Inc.	
Long-Term Debt	54.99 %
Preferred Stock	0.00
Common Equity	45.01
Total Capital	100.00 %
Middlesex Water Company	
Long-Term Debt	43.33 %
Preferred Stock	0.29
Common Equity	56.37
Total Capital	100.00 %
SJW Group	
Long-Term Debt	57.39 %
Preferred Stock	0.00
Common Equity	42.61
Total Capital	100.00 %
Average	
Long-Term Debt	49.67 %
Preferred Stock	0.05
Common Equity	50.27
Total Capital	100.00 %

Source of Information
Annual Forms 10-K

Aqua New Jersey, Inc.
Constant Growth Discounted Cash Flow Model

Company	Ticker	[1] Annualized Dividend	[2] Average Stock Price	[3] Dividend Yield	[4] Expected Dividend Yield	[5] Zacks Earnings Growth	[6] Yahoo! Finance Earnings Growth	[7] Value Line Earnings Growth	[8] Average Earnings Growth	[9] Mean ROE
American States Water Company	AWR	$1.72	$78.68	2.19%	2.25%	6.30%	4.40%	6.50%	5.73%	7.98%
American Water Works Company, Inc.	AWK	$2.83	$121.46	2.33%	2.40%	8.20%	8.07%	3.00%	6.42%	8.83%
California Water Service Group	CWT	$1.04	$47.85	2.17%	2.27%	NA	10.80%	6.50%	8.65%	10.92%
Essential Utilities Inc.	WTRG	$1.23	$33.92	3.62%	3.73%	5.60%	5.40%	7.50%	6.17%	9.90%
Middlesex Water Company	MSEX	$1.30	$65.50	1.98%	2.02%	NA	2.70%	5.00%	3.85%	5.87%
SJW Group	SJW	$1.52	$60.01	2.53%	2.61%	NA	6.10%	6.50%	6.30%	8.91%
Mean				2.47%	2.55%	6.70%	6.25%	5.83%	6.19%	8.74%
Median				2.26%	2.34%	6.30%	5.75%	6.50%	6.23%	8.87%
Mean Excluding Middlesex's DCF Result										9.31%
Median Excluding Middlesex's DCF Result										8.91%
Indicated Mean										9.02%
Indicated Median										8.89%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, equals 30-trading day average as of October 31, 2023
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [8])
[5] Source: Zacks
[6] Source: Yahoo! Finance
[7] Source: Value Line
[8] Equals Average([5], [6], [7])
[9] Equals [4] + [8]

Aqua New Jersey, Inc.
Capital Asset Pricing Model

Company	Ticker	[1] Average Beta Coefficient	[2] Average Market Return	[3] Current Risk-Free Rate	[4] Market Risk Premium	[5] CAPM	[6] ECAPM	[7] Average
American States Water Company	AWR	0.71	15.55%	4.84%	10.70%	12.43%	13.21%	12.82%
American Water Works Company, Inc.	AWK	0.94	15.55%	4.84%	10.70%	14.93%	15.08%	15.00%
California Water Service Group	CWT	0.71	15.55%	4.84%	10.70%	12.47%	13.24%	12.86%
Essential Utilities Inc.	WTRG	0.90	15.55%	4.84%	10.70%	14.50%	14.76%	14.63%
Middlesex Water Company	MSEX	0.74	15.55%	4.84%	10.70%	12.78%	13.47%	13.13%
SJW Group	SJW	0.74	15.55%	4.84%	10.70%	12.81%	13.49%	13.15%
Mean						13.32%	13.88%	13.60%
Median						12.79%	13.48%	13.14%

Company	Ticker	Average Beta Coefficient	Average Market Return	Projected Risk-Free Rate	Market Risk Premium	CAPM	ECAPM	Average
American States Water Company	AWR	0.71	15.55%	4.34%	11.21%	12.28%	13.10%	12.69%
American Water Works Company, Inc.	AWK	0.94	15.55%	4.34%	11.21%	14.90%	15.06%	14.98%
California Water Service Group	CWT	0.71	15.55%	4.34%	11.21%	12.33%	13.13%	12.73%
Essential Utilities Inc.	WTRG	0.90	15.55%	4.34%	11.21%	14.45%	14.73%	14.59%
Middlesex Water Company	MSEX	0.74	15.55%	4.34%	11.21%	12.65%	13.37%	13.01%
SJW Group	SJW	0.74	15.55%	4.34%	11.21%	12.68%	13.39%	13.04%
Mean						13.21%	13.80%	13.51%
Median						12.66%	13.38%	13.02%

Notes:
[1] Source: Page 3 of this Schedule.
[2] Source: Page 2 of this Schedule.
[3] Current: 30-day average 30-year Treasury yield as of October 31, 2023 from Bloomberg Professional;
Projected: *Blue Chip Financial Forecats* Vol. 42, No. 11, November 1, 2023 at 2 and Vol. 42, No. 6, June 1, 2023 at 14 for the six quarters ending Q1 2025, and the periods 2025-2029 and 2030-2034.
[4] Equals [2] - [3]
[5] Equals [4] x [1] + [3]
[6] Equals (([4] x [1]) x 0.75) + ([4] x 0.25)) + [3]
[7] = Average [5], [6]

Aqua New Jersey, Inc.
Market Returns

Ex-Ante Market Return		
Market DCF - Bloomberg	16.73%	[1]
Market DCF - Value Line	14.23%	[2]
Market DCF - Value Line Summary & Index	15.68%	[3]
Average Market Return	15.55%	

Notes:
[1] Based on the application of a market capitalization weighted Constant Growth DCF to the individual companies within the S&P 500 using data from Bloomberg Professional.
[2] Based on the application of a market capitalization weighted Constant Growth DCF to the individual companies within the S&P 500 using data from Value Line.
[3] Based on the application of the average three- to five-year median market price appreciation by Value Line for the seven weeks ended November 3, 2023 plus an average of the median estimated dividend yield of the 1,700 firms covered by Value Line Standard Edition.

Aqua New Jersey, Inc.
Bloomberg and Value Line Beta Coefficients

Company	Ticker	[1] Bloomberg	[2] Value Line
American States Water Company	AWR	0.72	0.70
American Water Works Company, Inc.	AWK	0.93	0.95
California Water Service Group	CWT	0.73	0.70
Essential Utilities Inc.	WTRG	0.80	1.00
Middlesex Water Company	MSEX	0.73	0.75
SJW Group	SJW	0.64	0.85
Mean		0.76	0.83

Notes:
[1] Source: Bloomberg Professional
[2] Source: Value Line

Aqua New Jersey, Inc.
Risk Premium Summary

	Current Moody's A3 Utility Bond Yield	Projected Moody's A3 Utility Bond Yield	
Average Equity Risk Premium	4.85%	5.10%	[1]
Utility Bond Yield	6.32%	6.01%	[2]
Return on Equity	11.17%	11.11%	
Average	11.14%		

Notes:
[1] Page 2 of this Schedule.
[2] Page 3 of this Schedule.

Aqua New Jersey, Inc.
Summary of Equity Risk Premium Estimates

Equity Risk Premium	Current Moody's A3 Utility Bond Yield	Projected Moody's A3 Utility Bond Yield	
Predicted Risk Premium Based on the S&P Utilities Index	5.89%	6.15%	[1]
Predicted Risk Premium Based on Regression Analysis of Water/Wastewater Utility Rate Cases 2008 - 2023	3.81%	4.05%	[2]
Average	4.85%	5.10%	

Notes:
[1] Page 6 of this Schedule.
[2] Page 9 of this Schedule.

Aqua New Jersey, Inc.
Moody's Bond Yields

[1] Moody's Aaa Corporate Bond Yield	[2] Moody's A2 Utility Bond Yield	[3] Moody's A2 Utility/Aaa Corporate Spread	[4] Moody's Baa2 Utility Bond Yield	[5] Moody's Baa2 Utility/A2 Utility Spread
5.51%	6.22%	0.72%	6.50%	0.28%

[6] Projected Moody's Aaa Corporate Bond Yield	[7] Projected Moody's A2 Utility Bond Yield	[8] Current Moody's A3 Utility Bond Yield	[9] Projected Moody's A3 Utility Bond Yield
5.20%	5.92%	6.32%	6.01%

Notes:

[1] Source: Bloomberg Professional; 30-Day Average as of October 31, 2023

[2] Source: Bloomberg Professional; 30-Day Average as of October 31, 2023

[3] = [2] - [1]

[4] Source: Bloomberg Professional; 30-Day Average as of October 31, 2023

[5] = [4] - [2]

[6] *Blue Chip Financial Forecasts* , Vol. 42, No. 11, November 11, 2023 at 2 and Vol. 42. No.6, June 1, 2023 at 14 for the six quarters ending Q1 2025, and the periods 2025-2029 and 2030-2034.

[7] = [6] + [3]

[8] = [2] + [5] / 3

[9] = [7] + [5] / 3

Aqua New Jersey, Inc.
Moody's and S&P Proxy Group Issuer Ratings

Company	Ticker	Moody's [1]	Numerical Weighting [2]	S&P [1]	Numerical Weighting [2]
American States Water Company	AWR	A2	6.00	A+	5.00
American Water Works Company, Inc.	AWK	A3	7.00	A	6.00
California Water Service Group	CWT	NR	NA	A+	5.00
Essential Utilities Inc.	WTRG	Baa1	8.00	A	6.00
Middlesex Water Company	MSEX	NR	NA	A	6.00
SJW Group	SJW	NR	NA	A-	7.00
Proxy Rating		A3	7.00	A	5.83

Notes:
[1] Source: S&P Global Market Intelligence; Moody's Investor Services
Ratings are the average of each company's utility operating subsidiaries.
[2] From page 5 of this Schedule.

Numerical Assignment for Moody's and Standard & Poor's Bond Ratings

Moody's Bond Rating	Numerical Bond Weighting	Standard & Poor's Bond Rating
Aaa	1	AAA
Aa1	2	AA+
Aa2	3	AA
Aa3	4	AA-
A1	5	A+
A2	6	A
A3	7	A-
Baa1	8	BBB+
Baa2	9	BBB
Baa3	10	BBB-
Ba1	11	BB+
Ba2	12	BB
Ba3	13	BB-
B1	14	B+
B2	15	B
B3	16	B-

Aqua New Jersey, Inc.
Summary of Equity Risk Premium Estimates Based on the S&P Utilities Index

Equity Risk Premium	Current Moody's A3 Utility Bond Yield	Projected Moody's A3 Utility Bond Yield	
Predicted Risk Premium Based on Constant Growth DCF Applied to S&P Utilities Index	4.31%	4.62%	[1]
Predicted Risk Premium Based on CAPM Applied to S&P Utilities Index	7.46%	7.68%	[2]
Average	5.89%	6.15%	

Notes:
[1] Page 7 of this Schedule.
[2] Page 8 of this Schedule.

Aqua New Jersey, Inc.
S&P Utilities Index DCF-Derived Equity Risk Premium

Ex-Ante Return		
S&P Utilities Index DCF - Bloomberg	10.50%	[1]
S&P Utilities Index DCF - Value Line	10.75%	[2]
Average	10.63%	[3]
Current Moody's A3 Utility Bond Yield	6.32%	[4]
Projected Moody's A3 Utility Bond Yield	6.01%	[5]
Risk Premium over Current Moody's A3 Utility Bond Yield	4.31%	[6]
Risk Premium over Projected Moody's A3 Utility Bond Yield	4.62%	[7]

Notes:
[1] Based on the application of a market capitalization weighted Constant Growth DCF to the individual companies within the S&P Utilities Index using data from Bloomberg Professional.
[2] Based on the application of a market capitalization weighted Constant Growth DCF to the individual companies within the S&P Utilities Index using data from Value Line.
[3] Average of [1], [2]
[4] From page 3 of this Schedule; Column [8]
[5] From page 3 of this Schedule; Column [9]
[6] = [3] - [4]
[7] = [3] - [5]

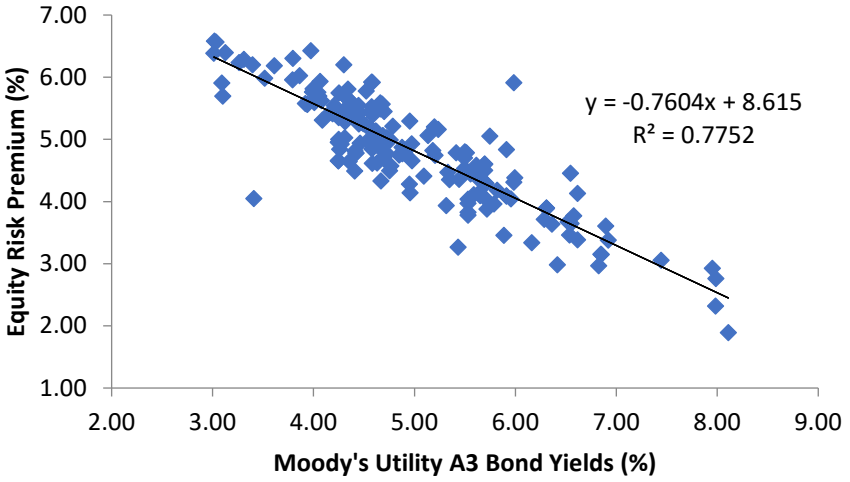
Aqua New Jersey, Inc.
S&P Utilities Capital Asset Pricing Model Dervied Equity Risk Premium

Company	[1] Average Beta Coefficient	[2] Average Market Return	[3] Risk-Free Rate	[4] Market Risk Premium	[5] Expected Return on the S&P Utilities Index Based on CAPM	[6] Expected Return on the S&P Utilities Index Based on ECAPM	[7] Average
S&P Utilities Index - Current Risk-Free Rate	0.81	15.55%	4.84%	10.70%	13.53%	14.03%	13.78%
S&P Utilities Index - Projected Risk-Free Rate	0.81	15.55%	4.34%	11.21%	13.43%	13.96%	13.69%

Current Moody's A3 Utility Bond Yield	6.32%	[8]
Projected Moody's A3 Utility Bond Yield	6.01%	[9]
Risk Premium over Current Moody's A3 Utility Bond Yield	7.46%	[10]
Risk Premium over Projected Moody's A3 Utility Bond Yield	7.68%	[11]

Notes:
[1] Average of Weighted Beta coefficients for the S&P Utilities Index based on data from Bloomberg Professional and Value Line.
[2] Source: Page 2 of Schedule MRH-3.
[3] Source: Page 1 of Schedule MRH-3.
[4] Equals [2] - [3]
[5] Equals [4] x [1] + [3]
[6] Equals (([4] x [1]) x 0.75) + ([4] x 0.25)) + [3]
[7] Average [5], [6]
[8] From page 3 of this Schedule; Column [8]
[9] From page 3 of this Schedule; Column [9]
[10] = Average expected return on the S&P Utilities Index ([7]) using current risk-free rate minus current Moody's A3 utility bond yield ([8])
[11] = Average expected return on the S&P Utilities Index ([7]) using projected risk-free rate minus projected Moody's A3 utility bond yield ([9])

Aqua New Jersey, Inc.
Risk Premium Based on Authorized Returns 2008 - 2023



	[1] Constant	[2] Slope	[3] Moody's A3 Utility Bond Yield	[4] Equity Risk Premium
Current Moody's A3 Utility Bond Yield	8.6150 %	-0.7604 %	6.32 %	3.81 %
Projected Moody's A3 Utility Bond Yield	8.6150 %	-0.7604 %	6.01 %	4.05 %

Notes:

[1] Constant derived from a linear regression of equity risk premiums and monthly Moody's A3 utility bond yields; equity risk premium calculated as authorized ROEs for water and wastewater utilities less 30-day average Moody's A3 utility bond yields available on date of order.
[2] Slope derived from a linear regression of equity risk premiums and monthly Moody's A3 utility bond yields; equity risk premium calculated as authorized ROEs for water and wastewater utilities less 30-day average Moody's A3 utility bond yields available on date of order.
[3] Source: Page 3 of this Schedule; Columns [8], [9]
[4] = [1] + ([2] x [3])
[5] Source: Regulatory Research Associates

Aqua New Jersey, Inc.
Small Size Premium

	[1] ($Mil)
Aqua New Jersey, Inc.	$147.85
Median Market to Book for Utility Proxy Group	2.20
Aqua New Jersey Implied Market Cap	$325.46

Company Name	Ticker	[2] Market Cap ($Mil)	[3] Market to Book Ratio
American States Water Company	AWR	$2,909.5	3.85
American Water Works Company, Inc.	AWK	$23,644.5	2.44
California Water Service Group	CWT	$2,760.9	1.97
Essential Utilities Inc.	WTRG	$8,972.1	1.60
Middlesex Water Company	MSEX	$1,162.6	2.82
SJW Group	SJW	$1,907.3	1.58
Median		$2,835.18	2.20

Market Capitalization ($Mil) [4]			
Decile	Low	High	Size Premium
1	$ 31,549.077	$ 2,203,381.286	-0.26%
2	$ 12,372.885	$ 31,316.513	0.45%
3	$ 5,918.981	$ 12,323.854	0.57%
4	$ 3,770.176	$ 5,916.017	0.58%
5	$ 2,365.425	$ 3,769.877	0.93%
6	$ 1,389.851	$ 2,365.076	1.16%
7	$ 789.019	$ 1,389.118	1.37%
8	$ 377.076	$ 782.383	1.18%
9	$ 218.389	$ 373.879	2.15%
10	$ 2.015	$ 218.227	4.83%
Proxy Group Size Premium		$ 2,835.182	0.93%
9th Decile Size Premium		$ 325.458	2.15%
Difference from Proxy Group			1.22%

Notes:
[1] Rate Base Multiplied by Common Equity Ratio
[2] Source: Bloomberg Professional, 30-day average
[3] Source: Bloomberg Professional, 30-day average
[4] Source: Kroll 2023 Cost of Capital Navigator

Aqua New Jersey, Inc.
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

Equity Issuances and Flotation Costs of the Parent Since 2019

Date	Transaction	[Column 1] Shares Issued	[Column 2] Gross Equity Issue before Costs	[Column 3] Total Flotation Costs	[Column 4] Total Net Proceeds (1)	[Column 5] Flotation Cost Percentage (2)
05/02/22	Equity Offering	7,863,354	$ 690,000,000	$ 16,358,000	$ 673,642,000	2.37%
08/09/21	Equity Offering	6,700,000	$ 308,200,000	$ 8,461,000	$ 299,739,000	2.75%
03/16/20	Equity Offering	21,661,095	$ 749,907,000	$ 20,606,000	$ 729,301,000	2.75%
04/23/19	Equity Offering	37,370,017	$ 1,293,750,000	$ 30,651,000	$ 1,263,099,000	2.37%
			$ 3,041,857,000	$ 76,076,000	$ 2,965,781,000	2.50%

Flotation Cost Adjustment

	[Column 6] Average Dividend Yield (3)	[Column 7] Average Projected EPS Growth Rate (3)	[Column 8] Adjusted Dividend Yield	[Column 9] Average DCF Cost Rate Unadjusted for Flotation (3)	[Column 10] DCF Cost Rate Adjusted for Flotation (4)	[Column 11] Flotation Cost Adjustment (5)
Proxy Group of Six Water Companies	2.47 %	6.19 %	2.55 %	8.74 %	8.80 %	0.07 %

Notes:
(1) Column 2 - Column 3.
(2) (Column 2 - Column 4) / Column 2.
(3) From Schedule MRH-2.
(4) Adjustment for flotation costs based on adjusting the average constant growth DCF cost rate in accordance with the following:

$$K = \frac{D(1+0.5g)}{P(1-F)} + g$$

Where g is the growth factor and F is the percentage of flotation costs.

(5) Column 10 - Column 9.

Source of Information: Company SEC filed documents