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Licensed in MA and NH

February 2, 2009

Debra A. Howland  
Executive Director and Secretary  
New Hampshire Public Utilities Commission  
21 Fruit Street – Suite 10  
Concord, NH 03301



RE: DW 08-098; Aquarion Water Company of New Hampshire

Dear Ms. Howland:

I am enclosing one copy of Aquarion Water Company of New Hampshire's testimony and schedules concerning its permanent rate request in this docket. Exhibit 3 was reserved for the enclosed copy, which is the same as the materials filed with the Company's original filing in this case but with Bates numbering added in the bottom right hand corner and two corrective pages (pages 191 and 192) that were submitted on December 31, 2008 inserted to replace the original pages. An electronic copy of the enclosed document is being provided to all parties. If the Commission or any party has questions regarding these corrections, please let me know.

Sincerely,

Steven V. Camerino

SVC  
Enclosure

cc: Service List

ORIGINAL
N.H. P.U.C. Case No. 08-098
Exhibit No. #3
Witness
DO NOT REMOVE FROM FILE



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MANCHESTER  
CONCORD  
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WOBURN, MA

STEVEN V. CAMERINO  
Internet: steven.camerino@mclane.com

August 28, 2008

Debra A. Howland  
Executive Director and Secretary  
New Hampshire Public Utilities Commission  
21 S. Fruit Street, Suite 10  
Concord, NH 03301

Re: DW 08-098; Aquarion Water Company of New Hampshire

Dear Ms. Howland:

Enclosed on behalf of Aquarion Water Company of New Hampshire are the following documents for filing with the Commission:

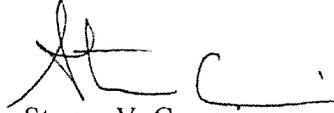
1. An original and six copies of a binder containing Aquarion's Petition for Temporary Rates and a Report of Proposed Rate Changes, prefiled testimony of Linda M. Discepolo and supporting schedules relating to Aquarion's request for temporary rate relief;
2. An original and six copies of a binder containing a Report of Proposed Rate Changes, tariff pages, prefiled testimony of Larry L. Bingaman, Linda M. Discepolo, Troy M. Dixon and Jay W. Shutt and supporting schedules relating to Aquarion's request for permanent rate relief;
3. An original and five copies of a binder containing materials submitted in compliance with the filing requirements set forth in to N.H. Code of Admin. Rule Puc 1604.01; and
4. A computer diskette in Word, Excel and pdf format with the information in items 1 and 2 above.

This filing is in support of Aquarion's request for an overall increase of 21.08% in its permanent rates, in order to generate an increase in annual revenues of \$1,056,070. On behalf of Aquarion, I would request that the Commission issue an order of notice and schedule a hearing on the company's Petition for Temporary Rates at its earliest convenience.

Debra A. Howland  
August 28, 2008  
Page 2

Please let me know if you have any questions regarding the enclosed materials.

Sincerely,



Steven V. Camerino

cc: Meredith A. Hatfield, Esq.  
Larry L. Bingaman  
Linda M. Discepolo

## REPORT OF PROPOSED RATE CHANGES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Page 1 of 1

Line No.	Rate/Class of Service	Effect of Proposed Change	Avg. # of Customers	Est. Annual Revenue		Proposed Change	
				Present Rates	Proposed Rates	Amount	% Change
1							
2							
3	Residential	Increase	7794	\$ 2,769,922	\$ 3,332,555	\$ 562,632	20.31%
4	Commercial	Increase	633	897,965	1,117,921	219,956	24.50%
5	Industrial	Increase	2	19,010	23,085	4,075	21.44%
6	Public Authority	Increase	58	47,015	58,010	10,995	23.38%
7	Seasonal	Increase		347,654	421,635	73,981	21.28%
8	Private Fire	Increase	279	223,467	271,078	47,611	21.31%
9	Public Fire	Increase	4	602,578	730,961	128,384	21.31%
10	Miscellaneous	Increase		102,304	110,530	8,226	8.04%
11							
12			Grand Total	<u>\$ 5,009,914</u>	<u>\$ 6,065,774</u>	<u>\$ 1,055,860</u>	<u>21.08%</u>
13							
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30							

Signed By: \_\_\_\_\_

Title: \_\_\_\_\_



President, CEO.

**MISCELLANEOUS CHARGES**

**Establishment of Service:**

Whenever it is necessary for the Company to establish or restore service for any reason during the normal Company working hours, other than an emergency termination, a charge of fifteen dollars (\$15.00) will be made.

Whenever it is necessary for the Company to establish or restore service, including emergency termination, after the normal Company working hours, the charge shall be seventy-five dollars (\$75.00)

**Meter Test Fees:**

In accordance with Rule 21 of the Company's Rules and Regulations, a charge will be made for testing meters as follows:

For meters up to an including 1" in size	- \$15.00
For meters over 1" in size	- Actual Cost

**Penalty for Bad Checks:**

Whenever a check or draft presented for payment of service (by any customer who receives service under the tariff) is not accepted by the institution on which it is written, a charge of \$15.00 or 5% of the face value of the check or draft, whichever is greater, will be added to the customers' account.

**Cross-Connection Testing:**

One Device Testing	- \$75.00
Each Additional Device	- \$25.00

Issued: April 29, 2002

Effective: April 25, 2002

Issued by: Grant B. Henman

Title: President

**SCHEDULE OF WATER RATES FOR METERED SERVICE**

**Available:**

To all customers except those using the Company's service for fire service and those who do not take metered water service for four (4) consecutive quarters.

**Rate:**

All general water service customers shall pay a service charge based on the size of the meter installed. Rate for consumption in addition to the service charge provided for herein: Residential, Commercial, Public Authority Customers - \$3.447 per 100 cubic feet for the first 1,500 cubic feet per quarter (first 500 cubic feet per month) and \$3.852 per 100 cubic feet thereafter. Industrial Customers – All usage at \$3.689 per 100 cubic feet.

**All Customers:**

**Service Charge:**

<u>Size of Meter</u>	<u>Per Month</u>	<u>Per Quarter</u>
5/8 inch	\$ 12.69	\$ 38.07
3/4 inch	\$ 19.03	\$ 57.09
1 inch	\$ 31.72	\$ 95.16
1 1/2 inch	\$ 63.47	\$ 190.41
2 inch	\$ 101.54	\$ 304.62
3 inch	\$ 190.38	\$ 571.14
4 inch	\$ 296.48	\$ 889.44
6 inch	\$ 530.51	\$ 1,591.53
8 inch	\$ 973.72	\$ 2,921.16
10 inch	\$ 1,501.22	\$ 4,503.66

**Terms of Payment:**

Bills for the service charge shall be rendered for three months in advance on the first day of each month following the quarterly meter readings. The billing for water consumed in the previous quarter shall be included with billing of the quarterly service charge.

**Penalty:**

A penalty of five percent (5%) will be added to bills which are unpaid after the due date printed on the bill as evidenced by the date of payment to the utility's authorized agent.

Issued: August 29, 2008

Effective: September 26, 2008

Issued by: \_\_\_\_\_

Title: \_\_\_\_\_

  
President, CEO

**SCHEDULE OF WATER RATES FOR METERED SERVICE**

To all customers taking water service for a period less than four (4) consecutive quarters, except those using the Company's service for fire service.

**Rate:**

All general water service customers shall pay a service charge based on the size of the meter installed. Rate for consumption in addition to the service charge provided for herein: \$4.569 per 100 cubic feet.

**Service Charge:**

<b><u>Size of Meter</u></b>	<b><u>Per Season</u></b>
5/8 inch \$	190.35
3/4 inch \$	285.45
1 inch \$	475.80
1 1/2 inch \$	952.05
2 inch \$	1,523.10
3 inch \$	2,855.70
4 inch \$	4,447.20
6 inch \$	7,957.65
8 inch \$	14,605.80
10 inch \$	22,518.30

**Term of Payment:**

Bills for the service charge shall be rendered as of May 1<sup>st</sup> for each season or any part thereof. Bills for water consumption will be rendered as of September 1<sup>st</sup> or when the meter is removed. However, the Company reserves the right to bill for water consumed at more frequent intervals.

**Penalty:**

A penalty of five percent (5%) will be added to bills which are unpaid after the due date printed on the bill as evidenced by the date of payment to the utility's authorized agent.

Issued: August 29, 2008

Effective: September 26, 2008

Issued by: 

Title: President & CEO

**SCHEDULE OF WATER RATES FOR PRIVATE FIRE SERVICE**

**Available:**

To all customer using the Company's facilities for Private Fire Service.

**Rates:**

<b><u>Fire Service Connection</u></b>	<b><u>Per Year</u></b>
3 inch or less	\$ 358.74
4 inch	\$ 611.25
6 inch	\$ 1,458.26
8 inch	\$ 2,593.05
10 inch	\$ 4,052.76
12 inch	\$ 5,725.93

**Terms of Payment:**

Bills for Private Fire Service will be rendered three months in advance on the first days of January, April, July and October of each year. Bills are due and payable at the office of the Company when rendered.

Issued: August 29, 2008

Effective: September 26, 2008

Issued by: \_\_\_\_\_

Title: \_\_\_\_\_



President, LEO.

**SCHEDULE OF WATER RATES FOR PUBLIC FIRE SERVICE**

**Available:**

To all customers using the Company's facilities for Public Fire Service.

**Rates:**

The hydrant charge for each municipal hydrant shall be \$1,519.67 per annum.

**Terms of Payment:**

Bills for Public Fire Service will be rendered six (6) months in advance of January 1<sup>st</sup> and July 1<sup>st</sup> of each year. Bills are due and payable at the office of the Company on the above dates. The hydrant charge for each municipal hydrant shall be \$1,519.67 per annum.

Issued: August 29, 2008

Effective: September 26, 2008

Issued by: 

Title: President, LEO.

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

**AQUARION WATER COMPANY OF NEW HAMPSHIRE**

**DOCKET NO. DW 08-098**

**DIRECT TESTIMONY**

**OF**

**LARRY L. BINGAMAN**

August 27, 2008

1 Q. Please state your name and business address.

2 A. My name is Larry L. Bingaman and my business address is 900 Main Street,  
3 Hingham, Massachusetts, 02043.

4

5 **I. PROFESSIONAL BACKGROUND**

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

7 A. I am the Senior Vice President in charge of operations for Aquarion Water  
8 Company of New Hampshire and Massachusetts (“Aquarion” or the “Company”).

9

10 Q. Please describe your educational background.

11 A. I have a Bachelor of Science Degree in Business Administration from California  
12 State University at Long Beach and an Executive Master of Business  
13 Administration Degree from the University of New Haven (Connecticut).

14

15 Q. Please describe your business and professional backgrounds.

16 A. On April 1, 2004, I was appointed Senior Vice President of Aquarion Water  
17 Company of New Hampshire and Massachusetts. Prior to this appointment, from  
18 April 2000 to April 2004, I served as Senior Vice President in charge of  
19 Corporate Relations and was the Corporate Secretary, at the parent company,  
20 Aquarion Company, as well as a Director of the parent company and its  
21 subsidiary boards. From 1993 to 2000, I served as Vice President, Corporate  
22 Relations & Secretary of Aquarion Company and its water company subsidiaries.  
23 I joined Aquarion Company in June 1990 as Vice President of Marketing and  
24 Communications after serving in human resources, communications, government

1 relations and management positions of increasing responsibility at Texaco, United  
2 Technologies and its Sikorsky Aircraft subsidiary.

3

4 **Q.** Have you previously testified before the New Hampshire Public Utility  
5 Commission (the “Commission”) or any other regulatory commission?

6 **A.** I have testified in New Hampshire, before the New Hampshire Public Utilities  
7 Commission on behalf of Aquarion’s New Hampshire public water utility on rate  
8 matters. I have also testified in Massachusetts before the Massachusetts  
9 Department of Public Utilities and previously, on occasion, testified before the  
10 Connecticut Department of Public Utility Control.

11

12 **Q.** Are you familiar with the facilities, operations and capital investments of  
13 Aquarion Water Company of New Hampshire?

14 **A.** Yes, I regularly review operational and financial reports prepared for internal use  
15 and for submission to regulatory agencies and take action as appropriate to ensure  
16 the proper level of service to the Company’s customers. Additionally, my  
17 responsibilities include providing overall direction of the Company and daily  
18 assistance, as needed, to the Company’s Operations Manager. Maintaining  
19 regular contact with the management team, including periodic site visits and  
20 regular communication, provides me close and continued familiarity with the  
21 Company’s operations.

22

23 **II. SUMMARY OF TESTIMONY**

24 **Q.** What is the purpose of your testimony?

1    **A.**    My testimony will provide an overview of Aquarion Water Company of New  
2           Hampshire's operations, summarize the capital improvements that the Company  
3           has made since its last rate case, discuss the size of the Company's requested rate  
4           increase and its impact on customers, discuss the Company's efforts at cost  
5           control, propose a water infrastructure and conservation adjustment (WICA)  
6           surcharge, propose a System Development Charge (SDC), discuss a proposal to  
7           implement conservation rates, propose a water balance conservation program,  
8           discuss the issues addressed in the Company's last rate order, and provide an  
9           overview of Aquarion's commitment to quality of service.

10

11   **Q.**    Please describe briefly the other testimony offered by the Company in support of  
12           its requested rate increase.

13   **A.**    In addition to my testimony, the Company is also submitting testimony from  
14           Linda Discepolo, the Company's Director of Rates and Regulation regarding the  
15           pro forma operating and maintenance adjustments, revenue and rate-related  
16           exhibits and rate base. Ms. Discepolo will also testify as to the Company's  
17           capitalization ratios and overall cost of capital. Troy Dixon, Manager of  
18           Regulatory Compliance, will provide testimony related to the development of test  
19           year and pro forma operating revenues along with rate design. In addition, the  
20           Company has retained the services of the Floyd Browne Group to perform a  
21           depreciation study for this rate application. Jay W. Shutt of Floyd Browne will  
22           testify and provide exhibits as to the methodology and approach behind his  
23           findings.

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**III. OVERVIEW OF THE COMPANY**

**Q.** Please provide an overview of Aquarion Water Company of New Hampshire.

**A.** Aquarion Water Company of New Hampshire, with its general office located in Hampton, New Hampshire, is a wholly-owned subsidiary of Aquarion Water Company, which in turn is a wholly-owned subsidiary of Aquarion Company. The Company was organized and incorporated on August 14, 1889 under Chapter 247, Laws of 1889, of the New Hampshire Legislature. Water service to the first customers commenced on July 4, 1907. Since that time, the Company has continued to grow and currently provides water service to an approximate area of 31 square miles. The Company serves approximately 8,770 customers in the Towns of Hampton and North Hampton and in the Rye Beach and Jenness Beach Precincts in the Town of Rye along the New Hampshire seacoast. The water system is hydraulically linked and designed to serve all three towns rather than three independent systems that service each town separately. Approximately, 76% of the customers are in Hampton. There are few major industries in these seacoast towns. In the summer, the population increases and about 1,000 seasonal customers have their meters installed in the spring and summer and removed in the fall.

As of December 31, 2007, there were approximately 137 miles of main in the system. All meters and service connections are owned by the Company. The Company owns the land on which most of its structures are located. However, some source of supply land is leased through a long term lease agreement (Well

1 No. 14 in North Hampton and Well No. 16 in Stratham). Other parcels are held  
2 through easements. The administrative offices are also leased in Hampton.  
3 The water supply for the Company is obtained from a total of 17 ground water  
4 wells, of which 10 are gravel packed wells in unconsolidated material (Wells No.  
5 5 through 12 and 14 and 16) and seven are deep bedrock wells (Wells No. 13A,  
6 13B, 17, 18, 19, 20 and 21). All wells are controlled by the Company's  
7 computerized Supervisory Control and Data Acquisition (SCADA) system.  
8 During 2007, the average daily demand was 2.43 million gallons per day (MGD).  
9 The maximum delivery record was set on August 4, 2007 when the demand was  
10 4.79 MG (million gallons). In 2007, there were 871 MG of water produced, of  
11 which 686 MG of water were sold, 13 MG were used for non-revenue producing  
12 purposes and 172 MG of water were classified as unaccounted. Consensus yield  
13 is 5.07 MGD.

14 All chemical treatment (principally chlorine for disinfection, potassium hydroxide  
15 at some wells for pH enhancement and sodium hexametaphosphate for corrosion  
16 control) of the ground well supplies is handled at each well station except Wells  
17 12, 13A, 13B, 16, 17, 18 and 19, for which treatment occurs at the new  
18 Winnacunnet Road treatment facility. The distribution system has three service  
19 gradients and four storage tanks.

20 The main service gradient serves the towns of Hampton and North Hampton and  
21 the southern portion of the Town of Rye. This gradient is controlled by the Exeter  
22 Road elevated tank (0.750 MG). The Mill Road Standpipe (0.315 MG), also on  
23 this gradient, is a pumped storage facility. A new storage tank (1.0MG) will

1 replace this tank and is expected to be in service the last quarter of 2008. The  
2 Hampton Beach Service gradient serves the Hampton Beach area, which is  
3 controlled by the Glade Path elevated tank (0.500 MG). This gradient is supplied  
4 by the Main Service gradient through the Tide Mill Road and the Kings Highway  
5 pressure reducing valve (PRV) stations, which are metered. The Jenness Beach  
6 Service gradient serves the Rye portion of the system and is controlled by the  
7 Jenness Beach Tank (0.500 MG). This gradient is supplied by the Main Service  
8 gradient through the Maple Avenue and the Willow Street PRV Stations, which  
9 are fully metered. Both PRV stations operate on pressure differentials.

10 All of the above tanks, pump stations, PRV's and chemical feed equipment are  
11 monitored and, all except the PRV's and some chemical feed equipment, are  
12 controlled by the SCADA system.

13

14 **IV. OVERVIEW OF REQUEST FOR RATE RELIEF**

15 **A. Summary of Request for Rate Increase**

16 **Q.** Please summarize the Company's request for rate relief that is the subject of this  
17 proceeding.

18 **A.** The Company is seeking an increase in water revenues of \$1,056,070, or an  
19 overall 21.08% increase. Of this increase, approximately 4.85% relates to the  
20 Hampton Beach project for which a step increase was authorized in 2006, but the  
21 Company chose not to file an application. The customers have saved over  
22 \$400,000 by virtue of the Company's decision to delay implementing this  
23 increase.

24

1 As proposed, a typical residential customer's water bill using 67,000 gallons of  
2 water per year would increase \$0.21 per day from \$1.09 to \$1.30, or an increase  
3 of approximately 18.9%; on an annual basis that typical residential customer's  
4 water bill would increase from the current \$398 to \$473, or less than one cent per  
5 gallon delivered. Even with the proposed increase, the Company believes that the  
6 water and water service it provides remain an excellent value relative to other  
7 common household expenses the average family incurs.

8  
9 The Company's request for rate relief includes a step increase to account for its  
10 \$1.5 million rate base investment to replace the Mill Road Standpipe that  
11 originally was constructed in 1914. The new tank, with a storage capacity of 1.0  
12 MG, replaces the 0.315 MG Mill Road Standpipe and is constructed on the same  
13 site. This increases the storage capacity of the system while providing additional  
14 supply for fire protection. The New Hampshire Department of Environmental  
15 Services ("DES") recommended increasing storage in its January 6, 2004 letter  
16 that approved lifting a moratorium on new connections in the Hampton system.  
17 Additionally, the Company's engineering consultants, Tata & Howard, noted in  
18 the March 2007 Integrated Water Resource Plan prepared for the Company that  
19 the Company's system would experience a storage deficit of about 0.84 MG by  
20 2025. The new tank will address that deficit, comply with the DES  
21 recommendation, improve fire protection in the system and provide additional  
22 storage to help meet peak demands.

23

1 The new storage tank is scheduled to be placed into service in the last quarter of  
2 2008, very shortly after the filing of this rate application. Due to the size of this  
3 project, in relation to the Company's rate base, the Company is requesting a step  
4 increase on this investment. The computation of revenue requirements for this  
5 project can be found on **Schedule 6**. By the Commission approving a step  
6 increase as part of this application, the need for another rate case immediately  
7 following this one can be avoided.

8

9 **Q.** Why did the Company delay implementing the step increase for the Hampton  
10 Beach main replacement project in 2006?

11 **A.** When the project was completed, the Company was going through a particularly  
12 busy period in New Hampshire and generally given the change in ownership to  
13 Macquarie and other matters that required management's attention. We felt that,  
14 in addition to allowing management to focus on these other issues, delaying the  
15 increase was one way that the Company could demonstrate its commitment to its  
16 customers. The Company believes that that commitment has also been  
17 demonstrated by its continued investment in the system and the results of its 2007  
18 customer satisfaction survey, which are discussed later in my testimony.

19

20 **B. Reasons for Need for Rate Relief**

21

22 **Q.** What are the primary drivers behind the Company's need for rate relief?

1 A. This rate application is driven primarily by the investments in source of supply  
2 and water utility infrastructure, such as the replacement of aging and undersized  
3 transmission and distribution mains, meters, services and hydrants along with  
4 other improvements that have been made since the Company file for its last rate  
5 increase in 2005. These investments have improved service reliability and quality  
6 as well as increased water supply, which is critical for the Company. The  
7 Company has increased its safe daily yield since 2003 by 0.5 MG, or 21% of its  
8 average daily production. The rate case is also necessitated by the related  
9 depreciation expense on those investments, as well as a change in depreciation  
10 rates. In addition, increased technology costs, higher wages and benefits,  
11 increased power costs and increased corporate insurance charges have all  
12 adversely affected the Company's expense levels since the last rate case. At the  
13 same time, increased revenues and lower corporate charges since 2005 have  
14 somewhat mitigated the above cost increases.

15  
16 The Company has sought to control its operating, maintenance and other expenses  
17 as much as possible. Total pro forma operating and maintenance expenses of  
18 \$2,576,464 proposed in this application are \$20,531 higher, or only 0.8% more  
19 than the amount expended by the Company for the 12 month period ended  
20 December 31, 2002, over six years ago. Although operating expenses have risen  
21 dramatically since 2002 for such expenditures as electric power, gasoline, health  
22 and liability insurances and wages, and the general effects of inflation have  
23 affected most of the Company's expenses, the Company has continued its efforts

1 to control operating and maintenance expenses by reducing management and  
2 workforce levels in order to operate as efficiently as possible. In 2002, when  
3 Aquarion took over operation of the Company, there were 16 full time employees  
4 in New Hampshire, versus the equivalent of 12 current employees. The cost for  
5 those four additional employees plus benefits would be at least \$300,000 today on  
6 an annual basis.

7  
8 **Q.** Mr. Bingaman, please provide additional detail regarding the capital expenditures  
9 that have led to the Company's filing for an increase in water rates.

10 **A.** Since the Company's last rate increase in 2005, approximately \$5.6M has been  
11 added to utility plant. Those additions offset by retirements, increases to  
12 accumulated depreciation, contributions in aid of construction and advances,  
13 deferred taxes and other items over the period result in an overall increase in rate  
14 base since the last case of approximately \$3.1M.

15  
16 The \$5.6M in utility plant additions are in the following categories: water mains,  
17 \$3.0M, which includes the \$1.7M cost of the Hampton Beach project; wells and  
18 other water source plant, \$1.1M; meters, services, hydrants and other T&D plant,  
19 \$1.2M; treatment, pumping and other, \$0.3M.

20  
21 **Q.** Please summarize the reasons that the Company undertook these capital  
22 improvements.

1    **A.**    The capital improvements undertaken by the Company since its last rate filing  
2           include both the replacement of the Company's existing infrastructure as well as  
3           new plant additions. For transmission and distribution improvements, which  
4           include the replacement of new mains, these benefits include improved fire flows,  
5           the elimination of dead ends, and the ability of the Company to move water more  
6           efficiently throughout the system. Capital dollars expended on supply have  
7           helped to ensure adequacy of supply, improve water supply reliability and  
8           increase the Company's ability to meet peak day demands. Treatment  
9           expenditures benefit customers through improved water quality and enabling the  
10          Company to meet or exceed state and federal water quality regulations. General  
11          plant additions equip the employee with technology to manage the operations  
12          better. The investments in technology enable the Company's employees to better  
13          monitor system reliability through SCADA and improve customer service and  
14          response time and increase overall operating efficiency using the newly installed  
15          SAP information system.

16  
17          **C.    Water Infrastructure and Conservation Adjustment, System**  
18                **Development Charge and Conservation Rate Proposals**

19  
20    **Q.**    Are there changes to the water rate structure the Company is seeking as part of its  
21           filing?

22    **A.**    Yes. The Company is proposing that a Water Infrastructure and Conservation  
23           Adjustment Surcharge (WICA) be implemented to assist the Company in

1 systematically replacing its aging infrastructure (generally water transmission and  
2 distribution mains and related appurtenances), in a timely and cost-effective  
3 manner. The WICA, which is similar to the Distribution System Improvement  
4 Charge (DSIC) that has been implemented in a number of states, is intended to  
5 increase system reliability, improve service to the customer, and reduce water lost  
6 due to leakage. It is also intended to extend the time period between rate  
7 applications, while avoiding high percentage rate increases and rate shock for the  
8 customer.

9  
10 **Q.** Please provide the other states that have adopted a similar process.

11 **A.** The DSIC interim rate mechanism has been adopted in a number of other states  
12 including California, Connecticut, Delaware, Illinois, Mississippi, New York,  
13 Ohio and Pennsylvania.

14  
15 **Q.** Has the National Association of Regulatory Commissioners (NARUC) taken a  
16 position in regard to this type of surcharge mechanism?

17 **A.** Yes. On February 24, 1999, NARUC sponsored a resolution whereby they  
18 cosponsored and endorsed the DSIC that was approved by the Pennsylvania  
19 Public Utility Commission and the Pennsylvania legislature as a promising and  
20 unique regulatory approach that encourages the acceleration of needed  
21 remediation of an aging water utility infrastructure.

22  
23 **Q.** How is the WICA surcharge calculated?

1 A. The WICA surcharge is based on capital spending. It is calculated as a  
2 percentage, based on the original cost of completed eligible projects, multiplied  
3 by the last allowed rate of return, grossed up for income taxes, plus associated  
4 depreciation and property tax expense; divided by the total retail water revenues  
5 approved in the most recent filing for the regulated activities of the Company.

6

7 Q. What are the eligible projects?

8 A. The eligible projects that are intended to improve or protect the quality and  
9 reliability of service to customers are as follows:

- 10 • Mains, valves, services, meters and hydrants
- 11 • Main cleaning and re-lining projects
- 12 • Relocations that are non-reimbursable
- 13 • Purchase of leak detection equipment
- 14 • Installation of production meters and pressure reading valves

15

16 Q. Will the Company file with the Commission a report detailing the projects eligible  
17 for the WICA surcharge?

18 A. If a WICA surcharge mechanism is implemented, the Company intends to file an  
19 initial infrastructure assessment report detailing the capital improvement projects  
20 eligible for the surcharge. The assessment would take into account asset  
21 management (break history, size of pipe, material, water quality, soil type, age,  
22 location, and town paving projects), hydraulic improvements and the need for  
23 redundancy. The report would be updated annually, as needed, and filed with the

1 Commission. It would be the Company's intent to work with the Commission on  
2 the form of the report, agree on the contents and detail, and have the Commission  
3 approve the proposed projects listed and the amounts contained in the report that  
4 is filed on an annual basis. The Company understands the use of the WICA is not  
5 an automatic entitlement, but must be fully justified and supported by the annual  
6 report filed by the Company and reviewed by the Commission.

7  
8 **Q.** How would the surcharge be implemented?

9 **A.** The Company would be eligible to file with the Commission on a semi-annual  
10 basis within 45 days of the close of the previous six month period, or by February  
11 15 and August 15, reporting on capital improvement projects eligible for the  
12 WICA surcharge completed and in service in the prior six month period  
13 (December 31 and June 30). The adjustment would be implemented following  
14 review and approval by the Commission within 45 days, ideally through an order  
15 nisi but also after a hearing if that is determined to be necessary in any given year.  
16 The surcharge would be limited to 5% in any 12 month period and capped at 7.5%  
17 in the aggregate before the filing of the next general rate application, at which  
18 time the WICA surcharge would be included in general rates and reset to zero.

19  
20 **Q.** Can you please summarize the Company's position concerning the Water  
21 Infrastructure and Conservation Adjustment?

22 **A.** The Company believes the WICA provides an important mechanism to address  
23 the need to replace certain water system infrastructure. This includes

1 infrastructure that is aged, or in such condition that it is likely to negatively  
2 impact water quality or reliability of service if it is not replaced. We feel it is a  
3 valuable tool to promote investment in infrastructure replacement that will  
4 provide a benefit to our customers' water quality and level of service, mitigate  
5 rate shock, and preserve natural resources by reducing lost and unaccounted for  
6 water. Equally important, it will reduce the frequency of rate cases, which impose  
7 a cost on customers, the Company and the Commission.

8

9 **Q.** Are there other changes in water rates the Company is seeking as part of its  
10 filing?

11 **A.** Yes, the Company is seeking authorization to implement a System Development  
12 Charge (SDC), also called a connection fee, to offset the cost of system  
13 improvements to accommodate new customers in the Company's service areas.  
14 While System Development Charges are more common among municipal water  
15 utilities, we are aware that in Massachusetts there are at least three DPU-regulated  
16 water companies that have received approval to implement a SDC.

17

18 To my knowledge, there are two approaches to calculating a SDC. Both  
19 approaches involve the issue of how to allocate the cost of service between new  
20 customers and existing customers. One approach focuses on the need to build  
21 new capacity. This concept establishes a system of charges that assigns a portion  
22 of the cost of new facilities directly to new customers and has been called the  
23 "incremental" approach.

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The second approach focuses on the capacity of existing infrastructure available to new customers, the cost of which has previously been borne by existing customers, but which is really necessitated by anticipated growth in the system. This approach has been called the “buy-in” approach.

The Company believes that it is more equitable to ask new customers to help pay the cost of these facilities, which to date have been borne by existing customers. Therefore, we are proposing the buy-in approach for the System Development Connection Charge.

The Company has identified a need to upsize water mains and related appurtenances to improve service delivery and fire protection, which would benefit existing customers, but also help accommodate growth of new customers. We have assumed standard industry cost estimates for eight-inch and 12-inch mains and used the differential between the two to estimate the cost of increasing the size of the mains and related appurtenances in the system to better serve new customers.

The “buy-in” approach calculation of the System Development Charge results in a charge of \$799 for per connection. The SDC for larger meter sizes have been increased using standard American Water Works Association ratios. Ms.

1 Discepolo will further discuss in her testimony the details of how the proposed  
2 SDC was calculated.

3

4 **Q.** Does the proposed SDC result in new customers being charged for plant that is  
5 not in yet in service?

6 **A.** No. If the SDC is calculated based on the buy-in approach, it will cover only  
7 facilities that are already constructed and providing service to customers. The  
8 charge is intended to reflect the fact that before new customers can come onto the  
9 Company's system, the system had to be oversized to serve anticipated new  
10 customers. In order to ensure that existing customers are not charged for plant  
11 that would not have been necessary in the absence of future growth, the SDC is  
12 designed to assign a reasonable portion of these costs to new customers when they  
13 come on the system. Such a charge is somewhat lower than an SDC that is based  
14 on the incremental approach, which would also include future plant and  
15 equipment that are expected to be added to serve new customers. An example of  
16 additional investment that would be included under the incremental approach but  
17 not under the buy-in approach is the cost of developing new sources of supply

18

19 **Q.** Are there other changes in the rate structure the Company is seeking?

20 **A.** Yes. The Company is seeking to implement an inclining block rate to promote  
21 water conservation in its service area. We have been encouraged by the New  
22 Hampshire DES since it lifted the growth moratorium on the Company in January  
23 2004 to implement such a rate structure as a way to help manage demand. The  
24 DES reiterated their position on conservation rates in a March 28, 2007 letter as a

1 follow up to the Company's semi-annual update on supply capacity, storage and  
2 water conservation. In its letter the DES stated:

3 *"At the meeting, the Department suggested that Aquarion more*  
4 *aggressively pursue water efficiency measures. . . . it is advisable for*  
5 *Aquarion to look at more advanced water conservation measures in part*  
6 *to meet future water supply needs. Such measures may include:*

7 *2) Implementing a rate structure that encourages water*  
8 *conservation by increasing the price of a unit volume used that*  
9 *exceeds certain thresholds or by using a seasonal rate structure that*  
10 *discourages excessive water use during the peak summer months."*

11  
12 The DES restated its support of conservation rates in a letter to the Company  
13 dated August 26, 2008. Accordingly, the Company is incorporating in this case a  
14 Conservation Rate Structure of inclining block rates that conforms to the request  
15 of the New Hampshire DES. Mr. Dixon will further address the particulars of the  
16 proposed conservation rate structure.

17  
18 **D. Proposed Changes to Terms and Conditions of Providing Service**

19  
20 **Q.** Is the Company proposing to add any revisions to its tariff aside from the  
21 proposals you have already discussed?

22 **A.** Yes. The Company is proposing to add a Water Balance Plan to its tariff that is  
23 also intended to encourage water conservation. The Company's Massachusetts

1 affiliate has successfully employed a Water Balance Plan program for about six  
2 years. The general goal of the program is to offset increases in water use created  
3 by the addition of new customers (e.g., residential, commercial, and industrial  
4 developments) with decreases in the water use of existing customers through  
5 conservation efforts. The proposed Water Balance Plan would require owners of  
6 new developments that come on to the Company's system to either implement  
7 approved conservation measures or pay a fee that is used to fund conservation  
8 programs that are implemented by the Company.

9 The Water Balance Program would apply to all new and expanded water use  
10 developments that are expected to use 100,000 gallons or more per year with the  
11 exception of: (1) residential developments with only a single service connection  
12 and (2) new and/or expanded water use developments that are expected to require  
13 less than 100,000 gallons per year of water. Applicants will have several options  
14 to comply with the Water Balance Program including:

- 15 • **Applicant-Directed Conservation** – Applicant identifies and implements  
16 water conservation activities. These could include retrofitting public  
17 buildings with low flow toilets and other fixtures to offset the projected usage;  
18 lowering a shallow water main(s) to eliminate “bleeding” the water main in  
19 the winter and thus saving water; installing demand reduction measures, such  
20 as independent irrigation systems, decreasing commercial and industrial  
21 consumptive use; or water audits of significant users
- 22 • **Water Banking** - Applicant provides funding for a Water Bank that will be  
23 used by Aquarion to fund conservation efforts. These efforts could include

1 such activities as: funding commercial and residential water use audits; paying  
2 for the purchase of rain detection sensors on irrigation systems; or funding a  
3 rebate program to encourage installation by customers of low flow appliances,  
4 etc. We have estimated the cost of the Water Banking option would be a one  
5 cost of \$5.20 per gallon of water consumed per day. For example, at the  
6 exclusion limit of 100,000 gallons per year, or 274 gallons per day, the  
7 required funding amount would be \$1,425.

- 8 • **Supplemental Source of Supply** – Applicant identifies and develops a  
9 supplemental source of supply for Aquarion.

10  
11 **V. CUSTOMER SERVICE**

12 **Q.** Please provide an overview of the Company's efforts to maintain and improve the  
13 level of customer service it provides.

14 **A.** Aquarion is committed to continuing to provide its customers with high quality  
15 water and water service in the most cost-efficient manner. Consistent with this  
16 mission, since Aquarion's acquisition of Hampton Water Company in 2002, there  
17 has been a significantly increased commitment to improving the water system and  
18 customer service, while trying to carefully control costs.

19  
20 The Company's commitment to customer service cascades from the top down. It  
21 is embodied in Aquarion Company's mission statement, is articulated to  
22 employees and customers in Aquarion's stated customer service philosophy and is

1 translated into business strategies and plans to enhance operational efficiency and  
2 increase customer satisfaction.

3

4 The Company has complied with the request by the Commission and its  
5 customers to maintain a phone system locally in Hampton whereby New  
6 Hampshire customers can call to have their concerns and questions addressed  
7 and/or to schedule appointments. The Company has retained a telephone  
8 notification system to advise customers of planned interruptions of service, which  
9 can also be used for emergency notification regarding an interruption of service or  
10 water quality issues.

11

12 Aquarion has also taken advantage of technology in order to continue to focus on  
13 improving service levels. Appointments are easily and quickly scheduled during  
14 a customer contact because each customer representative in the Hampton office  
15 has access to an on-line appointment calendar. Field service personnel are  
16 scheduled in two hour windows, are committed to arriving on time and record  
17 their arrival time electronically on each work order.

18

19 Customer Service Representatives can send copies of invoices or payment  
20 information to customers via e-mail; and customers can also visit our website for  
21 information and are able to contact the Customer Service representatives or me  
22 directly via e-mail. Customers can also enroll in an electronic payment option  
23 that allows customers to view and pay their bills on line.

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Aquarion is also committed to being involved in the communities in which it operates. Aquarion strongly encourages its employees to participate in community events, charitable causes and non profit organizations. The Company's employees are cognizant of the Company's desire to support the communities in which it operates and have taken up that challenge by spending countless hours of their own personal time to support and improve the quality of life in those communities. Some of the activities our employees have supported include the Penguin Plunge, the Hampton Road Race, the North Hampton People Active in Learning, Hazardous Waste Collection days and various Chamber of Commerce events. Additionally, management has made a special effort to reach out to municipal officials, especially those in North Hampton, to enhance communications and work cooperatively.

- Q.** Please describe the Company's ongoing efforts to further improve the level of service it provides to its customers.
- A.** In 2006, the Company implemented a plan to further improve our customers' interactions with the Company. The first category of the plan is Senior Management Leadership and includes several action steps, such as participation in a series of facilitated workshops about Aquarion's customer commitment. Among other things, these workshops provide exercises to identify, prioritize and create action plans to improve the internal work processes and encourage employees to work together to create enhanced customer service for customers.

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The second category is Logistics and Internal Communication. The action plan for logistics includes the systemic review of all processes that were built into the Company’s SAP information system (which I will discuss below) for work flow to ensure the processes are properly documented and are functioning properly. As the review continues, several processes will be targeted for enhancement, and “integrated business processes” – those processes that cross several departmental lines – will be reviewed for improvement as well.

The third category of the plan involves training, both initial customer service training and ongoing workshops. In addition, billing specialists from Connecticut visit the New Hampshire office on a regular basis to offer continued training on both the computer system and process change.

The fourth category of the plan involves standards for service delivery. Specific standards addressing response time for e-mails and phone calls, along with standards for extended messages for voicemail and e-mails, are some of the topics covered under Aquarion’s standards. New employees are trained on standards, and performance appraisals address standard delivery and customer satisfaction.

Employee recognition is the fifth category of the plan. The Aquarion-wide bulletin board posting system features “Kudos” letters or comments provided by customers on their experience with Aquarion employees. Internally, fellow

1 Aquarion employees can thank each other through a Kudos or a People's Choice  
2 award, a recognition program featuring a certificate and ribbon for providing  
3 assistance or information or going above and beyond the call of duty.

4  
5 Lastly, the sixth category of the plan features customer feedback. In addition to  
6 our annual customer survey which provides an abundance of data on customers'  
7 perceptions of their contact with us, senior representatives and customer service  
8 department management review all calls designated in the SAP information  
9 system as "same issue" calls, which means that the customer issue, question or  
10 concern remained unresolved following contact with the Company. Personal  
11 phone calls are placed by Company personnel to solicit the customer's perception  
12 of their interaction with the Company to ensure that unresolved issues are  
13 investigated for a root cause.

- 14  
15 **Q.** Please describe how the Company tracks customer satisfaction levels.
- 16 **A.** The Company conducted a customer survey in October 2007 to ensure that we are  
17 achieving positive results in the delivery of service to our customers and  
18 improving the customer experience. The survey conducted by the Center for  
19 Research and Public Policy (CRPP), a recognized leader in developing and  
20 conducting customer service satisfaction surveys, was intended to provide a solid  
21 foundation to enable us to track the success of our efforts to improve customer  
22 service. Copies of the survey's Introduction, Methodology and Highlights are  
23 submitted as **Attachment LLB-1.**

1

2 The survey design by CRPP was a careful and deliberate process to ensure the  
3 product was a fair, objective and balanced survey. Customers were asked  
4 questions related to rating the Company's water quality, satisfaction with the  
5 Company, perceptions of customer service, rating customer service and field  
6 personnel, customer expectations and public awareness of Aquarion's activities in  
7 the community.

8

9 In 2007, the CRPP surveyed 400 randomly selected customers in all three New  
10 Hampshire towns we serve, yielding a statistically valid sample. The Customer  
11 Satisfaction Index of 92%, excluding 'don't know' responses, is an average of the  
12 overall customer satisfaction characteristics for three distinct areas: Aquarion as a  
13 company, our office personnel, and our field personnel. According to the Center  
14 for Research and Public Policy, companies with Customer Satisfaction index  
15 figures in the high 80s are considered to be providing excellent customer service.

16

17 The following chart illustrates the components of the Customer Satisfaction Index  
18 and their corresponding results for 2007.

19

Customer Satisfaction Index (CSI)	92.0%
Aquarion as a Company	82.2%
Aquarion Office Personnel	93.3%
Aquarion Field Personnel	95.4%

1

2 **Q.** Please expand on how the Company has utilized technology to improve customer  
3 service.

4 **A.** In January 2007, the Company's parent company upgraded its management and  
5 customer service information systems by adopting SAP software. It is not  
6 uncommon for a customer calling a utility to have more information about what is  
7 happening in the field than the customer service representative responding to the  
8 phone. The new SAP system allows our field service personnel to use mobile  
9 technology to input real time information concerning what is happening in the  
10 field, which in turn allows the customer service representative in the office to  
11 communicate more effectively about distribution system and customer issues.

12

13 **Q.** Please describe the process undertaken to prepare for the implementation of the  
14 new SAP system.

15 **A.** As start ups of new software systems are implemented, it is typical to see a dip in  
16 performance as field personnel and office staff put into practice what they learned  
17 during formal training. It is expected to see an impact on both wait times on the  
18 phone and call handling times while customer service representatives learn to  
19 maneuver through the system; it is also typical to see an increase in missed field  
20 appointments as well as lower productivity in the field as personnel learn how to  
21 input data and properly close work orders on the mobile computer units. We were  
22 cognizant of the fact that we needed to properly prepare for the system  
23 implementation in order to ensure our service levels, and therefore customer

1 satisfaction, remained high. In preparation for going live with the SAP system,  
2 we worked extensively to ensure that representatives were ready to use the system  
3 as soon as business opened on January 2, 2007. Risk mitigation and contingency  
4 plans were developed for the call processing and billing operations.  
5 Comprehensive training was conducted, and our New Hampshire customer  
6 service representatives attended a minimum of 40 hours learning the various  
7 transactions and screens within SAP. "Sandbox" computers equipped with test  
8 environment data were available for representatives to practice and keep their new  
9 SAP skills fresh for the weeks following their training sessions and prior to  
10 implementation.

11  
12 An SAP mobile expert spent several weeks in the New Hampshire office to  
13 ensure immediate answers to field employee questions. In addition, senior  
14 representatives in Connecticut employed a computer shadowing software  
15 application so the more complicated customer billing adjustment transactions  
16 could be viewed simultaneously in New Hampshire and Connecticut; this training  
17 tool allowed a senior representative in Connecticut to train the New Hampshire  
18 customer service representative in real-time by following the transaction. Daily  
19 debriefing sessions were held before and after business hours with representatives  
20 during the first few weeks of implementation to capture questions and concerns  
21 and to debrief them on overnight fixes and the status of the transition.

22  
23 **Q.** What are the benefits of the new system that customers will realize over time?

1 A. The new SAP system includes a major component dedicated to customer service  
2 called Customer Care and Services (CSS). It includes utility specific functions  
3 for billing, account management, revenue management, device management and  
4 service orders, which are described below:

5

6 **One Stop Shopping**

7 The new SAP system greatly enhances our ability to provide the customer with  
8 “one stop shopping” when contacting the Company. Customers want to have  
9 their issue resolved when they call the first time, assuming a field visit is not  
10 required. SAP allows us to do this by providing a centralized repository of all  
11 relevant information. Customer service representatives have complete access to  
12 current and historical billing data by customer and premise. They also have  
13 complete visibility to the status of field work that impacts that customer. This  
14 includes future work such as periodic meter changes. Customer service  
15 representatives are also able to develop final bills in less than two minutes for  
16 customers who are moving. As a result, the billing information can be provided  
17 while the customer is on the phone. The Company’s previous customer and  
18 billing information system took approximately 12 minutes to perform this  
19 function, and as a result the information many times could not be provided while  
20 the customer was on the phone.

21

22 **Minimal Time on the Phone**

1 The improved organization of information available to the customer service  
2 representatives and the improved speed of the SAP system compared to the  
3 Aquarion legacy system have enabled customer service representatives to answer  
4 questions and process transactions in less time, reducing the time that customers  
5 have to spend on the phone.

6  
7 **Scheduling and Visibility of Field Work**

8 SAP is expected to reduce the number of non productive field visits. For  
9 example, the system will allow customer service representatives to combine  
10 customer requested work with Company generated work such as periodic meter  
11 changes, eliminating a second field visit that would have required the customer to  
12 be present. Also, if follow up work is required, as in the case of restorations, the  
13 scheduling of this work is shown on SAP, and the representative can inform the  
14 customer of the schedule.

15  
16 **Customer Appointments**

17 When a field visit is needed that requires the customer to be present, the SAP  
18 system provides an improved scheduling capability that allows an appointment to  
19 be set that meets the customer's needs. Customer service representatives are able  
20 to review available appointment slots that can be matched to the customer's  
21 availability and can be easily changed if required. In addition, the SAP system  
22 improves the Company's ability to meet scheduled appointments. The  
23 appointment schedule is set up by geographic areas, which increases the

1 productivity of the field workers by reducing travel time and covers our service  
2 area in a more consistent manner.

3  
4 **Mobile Technology**

5 Mobile computer units, called Toughbooks, are used by each field employee to  
6 receive work orders and field service notifications, as well as transmit data  
7 wirelessly back to customer records in the customer database. This technology  
8 allows real-time data to be viewed by both the field and customer service  
9 representatives, reducing the number of calls between the two work groups and  
10 allowing customer service representatives to discuss field activities on a real-time  
11 basis with customers. In addition, the barcode scanners employed by the mobile  
12 users increase the accuracy and streamlines recording of meter serial numbers.

13  
14 **Responding to Customers**

15 With the installation of SAP and its mobile capability with field workers, the  
16 Company's ability to respond to emergencies is greatly improved. For customer  
17 premise emergencies, such as leaks, SAP allows the emergency report to be  
18 dispatched immediately to the field worker. This reduces the time the first  
19 responder takes to get to the emergency and begin corrective action.

20  
21 For system emergencies that are not associated with a particular customer's  
22 premise, the notification of the emergency to the call center can be associated  
23 with a town and is visible to all customer service representatives. Therefore,

1 when other customers call in to inquire about a system emergency, prior calls that  
2 have already been recorded in SAP are available to the representative to respond  
3 to the customer.

4  
5 **Improved Bill Accuracy**

6 During the process of converting to the SAP system, we employed a team of “data  
7 scrubbers” who spent several months improving the quality of customer data.  
8 This included standardization of street names, towns and zip codes, as well as  
9 verification of meters on premises. This will ensure bills are sent to the correct  
10 customer address and the billing information is accurate.

11  
12 **Reporting and Measurement**

13 The installation of SAP also provides enhanced reporting and measurement  
14 capabilities. This will allow us to continuously improve our level of customer  
15 service. A number of performance measurements, such as the number of missed  
16 appointments, were established that assisted us through the SAP start up period.

17 SAP also provides enhanced capabilities with regard to reporting. We are  
18 developing a set of reports to track water consumption that will allow us to  
19 monitor and take action to reduce the rate of unaccounted water. It will allow us,  
20 for example, to identify premises that have water consumption but no established  
21 customer account.

22  
23 **VI. FOLLOW UP ON ISSUES FROM SETTLEMENT IN DW 05-119**

- 1 Q. As part of the Settlement Agreement approved in DW 05-119, the Company  
2 agreed to file a number of reports and other information with the Commission.  
3 Has the Company submitted this information and the reports?
- 4 A. In DW 05-119, the Company agreed as follows:
- 5 1. The Company agreed to conduct an engineering review of its system and  
6 provide recommendations within nine (9) months on the following subject areas:
    - 7 a. A review of the overall physical adequacy of the Company's existing  
8 hydrants, including compatibility and interchangeability issues, wet versus dry  
9 hydrants, the need to replace or update older styles, nozzle types, nozzle and  
10 valve opening sizes; and
    - 11 b. The adequacy of the current hydrant inspection and maintenance program.
  - 12 2. The Company agreed to provide staff with a copy of each of the following  
13 when completed:
    - 14 a. Integrated Water Resource Plan;
    - 15 b. Feasibility Study, Mill Road Treatment Center; and
    - 16 c. Source of Supply Study
  - 17 3. The Company agreed to file the following, in accordance with  
18 Commission rules or as otherwise indicated:
    - 19 a. Form E-17, annual Report of Hydrant Inspection;
    - 20 b. Form E-22, Report of Proposed Expenditures for Additions, Extensions  
21 and Capital Improvements to Fixed Capital;
    - 22 c. 2007-2008 Capital Improvements Plan, when completed;
    - 23 d. Five-year Capital Improvements Plan, when completed; and

1 e. Summary of lost water (water produced, water billed, non revenue usage  
2 and lost water) by quarter, to be filed annually in conjunction with the Annual  
3 Report.

4 With regard to the first item, the Company submitted the requested information  
5 on March 23, 2007.

6  
7 With respect to the second item, the Company has provided staff with the  
8 following as listed below:

- 9 The Integrated Water Resource Plan on April 4, 2007;  
10 The Feasibility Study, Mill Road Treatment Center also on April 4, 2007;  
11 The Source of Supply Study is contained within the Integrated Resource  
12 Plan.

13 With respect to the third item, the Company has filed Form E-17 annually since  
14 the last rate case. The Company also filed Form E-22 and the 2007-2011 Capital  
15 Improvement Plan (which contained the plan for 2007-08) as well as the  
16 Summary of Lost Water.

17  
18 **Q.** Pages 4 and 5 of the Settlement Agreement in DW 05-119 addressed a number of  
19 issues that the Company indicated it was in the process of resolving or would  
20 resolve subsequent to the Settlement Agreement. Those issues were as follows:

- 21 1. The Company was undertaking a process of computerizing its hydrant  
22 maintenance records and implementing steps to ensure that those records

1           comprehensively reflect the hydrant maintenance program of the  
2           Company.

3           2.     The Company indicated it had begun a program of hydrant beautification,  
4           including painting of hydrants and removal of weeds and other vegetation  
5           in the immediate vicinity of the hydrants. Painting was anticipated to be  
6           completed in 2006, and in subsequent years the Company intended to  
7           follow a four-year rotating schedule.

8           3.     The Company indicated it planned to continue its efforts to limit growth  
9           around hydrants and that those efforts were being undertaken with the fire  
10          chiefs of the town it serves.

11          4.     The Company indicated it planned to continue flushing on an annual basis  
12          with maintenance being provided at that time.

13          5.     The Company indicated it planned to provide general hydrant  
14          maintenance, and back pressuring and winterization each fall.

15          6.     The Company indicated it planned to discuss matters related to the  
16          operation and maintenance of fire hydrants on a quarterly basis with fire  
17          chiefs and any other interested public officials from the towns in which it  
18          serves.

19          Has the Company addressed these issues, and or implemented plans to begin each  
20          program?

21          A.     The Company has responded to each of the above numbered issues. The  
22          Company has either completed the project as described in the settlement or  
23          implemented a plan that calls for action on either a quarterly or annual basis.

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**VII. CONCLUSION**

**Q.** Is there anything else you would like to add to your testimony?

**A.** Yes. To summarize, this rate application is primarily driven by the capital investments made to infrastructure to improve system reliability, provide enhanced fire protection and ensure the water distributed by the Company meets or is better than state and federal water quality standards.

In March 2007, Tata and Howard, engineering consultants completed an Integrated Water Resource Plan (IWRP) for the Company. This Plan, which was filed with the Commission, helps to identify and prioritize areas in the water system where additional investment is needed to improve service. The IWRP is a comprehensive review of the treatment, storage, and distribution components of the water system. It includes the following components: description and inventory of the existing water system; population projections, service area projections, water demand projections; water supply projections and new source needs; improvements needed to meet 20 or more years usage demands; recommended system improvements; a map showing infrastructure improvement components and service area; and documentation and description of costs associated with the system improvements.

Management meets monthly with its engineering firm to review current projects and prioritize new projects that are within the scope of the capital budget.

1

2           Although the Company has experienced increased operating expenses since its  
3           last rate case, its efforts to control costs have been quite successful, and that has  
4           mitigated the need for rate relief. At the same time as it has continued to increase  
5           the efficiency of its operations, the Company has focused on continuing to  
6           maintain and improve the level of customer service it provides.

7

8   **Q.**    Does this conclude your testimony?

9   **A.**    Yes, it does.

AFFIDAVIT

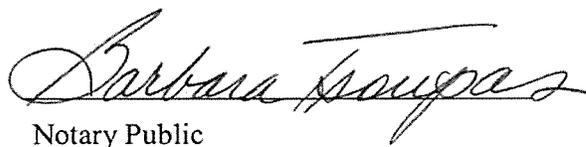
STATE OF NEW HAMPSHIRE PUBLIC UTILITY COMMISSION

LARRY L. BINGAMAN, being first duly sworn, deposes and states:

That he is the Larry L. Bingaman whose direct testimony accompanies this Affidavit, that said direct testimony is a true and accurate statement of his answers to the questions contained herein, and that he adopts those answers as his sworn testimony in this proceeding.

  
LARRY L. BINGAMAN

SWORN TO and SUBSCRIBED before me this 27 day of August.

  
Notary Public

**BARBARA TSOUPAS**  
**NOTARY PUBLIC**  
My Commission Expires July 31, 2008

2007  
CUSTOMER SATISFACTION STUDY  
\*FINAL REPORT\*

*Prepared on behalf of*

Quality Water for Life



AQUARION

*New Hampshire  
November 2007*

# INTRODUCTION

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The Center for Research & Public Policy (“CRPP”) is pleased to present the results to a *2007 Customer Satisfaction Survey* conducted on behalf of Aquarion Water Company (“AWC”).

The study included a telephone survey among New Hampshire customers from Aquarion Water Company’s Hampton, North Hampton and Rye service areas. Each group is represented proportionally to customer population contribution.

This report summarizes statistics collected from a telephone survey that was administered between October 15 – 20, 2007. The survey is comprised of 400 completed interviews among the three service areas.

The *Customer Satisfaction Survey* included the following areas for investigation:

- Rating water quality;
- Satisfaction with Aquarion Water Company as a company;
- Perceptions of customer service;
- Rating customer service and field personnel;
- Awareness of Aquarion Water Company’s activities in the community;
- Customer expectations;
- Public awareness of Aquarion Water Company’s activities; and
- Demographics.

Following this introduction, Section II – contains and explains the methodologies employed in completing this *Customer Satisfaction Survey*, the margins for error and the confidence level for the statistics collected.

Section III – contains Highlights made after a careful analysis of the data which is presented in narrative format in the Summary of Findings, Section IV.

Section V – is the Appendix containing copies of the survey instrument utilized, the composite aggregate data and a crosstabulation table.

## METHODOLOGY

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A total of 400 Aquarion Water Company customers from Hampton, North Hampton and Rye, New Hampshire provided complete responses to a telephone survey administered in October of 2007.

The 400 respondents who completed the survey lived within the three specified service areas. Each town contributed to the 400 sample based on its actual proportional contribution to the overall customer base.

Using a list of customers provided by Aquarion Water Company, CRPP developed an *nth* name stratified sample. This sample was used by CRPP researchers to call prospective respondents.

Survey design at CRPP is a careful, deliberative process to ensure fair, objective and balanced surveys. Staff members, with years of survey design experience, edit out any bias. Further, all scales used by CRPP (either numeric, such as one through ten, or wording such as strongly agree, somewhat agree, somewhat disagree or strongly disagree) are balanced evenly. And, placement of questions is carefully determined so that order has minimal impact.

One survey instrument was used to elicit information from all respondents. Skip patterns were developed to further question specific groups of respondents based on certain answers. For example, those respondents not having had contact with Aquarion Water Company personnel could not rate them on such issues as "courtesy."

CRPP achieved an 82% completion rate among the original sample. Completion rates are a critical aspect of any research study. Because one group might be easier to reach than another, it is important that efforts are made to reach all groups to an equal degree. A high completion rate means that a high percentage of the households within the sample were actually contacted, and that the resulting sample is not skewed to one potential audience. This percentage is considered high and can reflect on the level of interest the respondents place on the topic for study.

CRPP used a callback procedure to ensure the randomness of the sample and to reduce non-response bias. When a randomly selected customer was not available during the first telephone contact, additional callbacks were made in order to complete the interview.

All telephone interviews were conducted from CRPP headquarters, located in Trumbull, Connecticut. Research was conducted primarily during the hours of 5:00 p.m. and 9:00 p.m. weekdays and 10:00 a.m. and 4:00 p.m. on weekends. The survey was conducted October 15 – 20, 2007.

All aspects of this project including questionnaire design, sample design, testing and fielding, coding, programming, data entry, editing and analysis were completed by CRPP staff in the Trumbull, Connecticut headquarters.

Statistically, a sample of 400 completed interviews represents an accuracy level of +/-5.0% at the midpoint of a 95 percent confidence level. This level of accuracy pertains to the composite data of "like" questions asked of all respondents. The accuracy level would be lower for questions posed only to respondents, for example, who had contact with Aquarion Water Company personnel. Further, the accuracy level will be lower when viewing the results by town separately.

In theory, a sample of Aquarion Water Company customers will differ no more than +/-5.0% than if all customers were contacted and included in the survey. That is, if random probability sampling procedures were reiterated over and over again, sample results may be expected to approximate the larger population values within plus or minus 5.0% -- 95 out of 100 times.

Readers of this report should note that any survey is analogous to a snapshot in time and results are only reflective of the time period in which the survey was undertaken. Should concerted public relations or information campaigns be undertaken during or shortly after the fielding of the survey, the results contained herein may be expected to change and should be, therefore, carefully interpreted and extrapolated.

Furthermore, it is important to note that all surveys contain some component of "sampling error." Error that is attributable to systematic bias has been significantly reduced by utilizing strict random probability procedures. This sample was strictly random in that selection of each potential customer was an independent event, based on known probabilities.

Each qualified customer had an equal chance for participating in the study. Statistical random error, however, can never be eliminated but may be significantly reduced by increasing sample size.

## HIGHLIGHTS

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The 2007 Customer Satisfaction Index (“CSI”) percent derived from the Customer Satisfaction Survey is 92.0% (without don’t know responses). This number serves as a benchmark for future tracking studies.

The CSI percent is an average of the overall characteristic ratings for Aquarion Water Company as a company (87.2%), Aquarion Water Company office personnel (93.3%) and Aquarion Water Company field personnel (95.4%). Service organizations strive to attain and maintain numbers in the high eighties.

### ON WATER QUALITY...

- When rating the five features of tap water in their home such as “appearance/clarity,” “safe to drink,” “water pressure,” “smell” and “taste,” the highest positive rating was recorded for “water pressure” (92.0%). The tap water feature receiving the lowest positive rating was “taste” (70.3%).
- Importantly, the clear majority of all 2007 respondents surveyed, 91.0%, feel their water has either “improved” (2.5%) or “remained good” (88.5%) over the past year.

### ON RATING AQUARION WATER COMPANY...

- Aquarion Water Company enjoys a strong customer satisfaction level among its New Hampshire residential customers. When rated on 9 different company characteristics, (with “don’t know” responses removed from the data) Aquarion Water Company received an overall positive average of 87.2% in 2007.
- The highest positive rating was recorded for “maintaining an adequate supply of water” (94.4%), while the lowest positive rating was recorded for “providing good service and value for the cost of water” (76.3%).

### ON CUSTOMER SERVICE...

- The average positive rating for the 13 customer service personnel characteristics measured (with “don’t know” responses removed from the data) is 93.3% in 2007.

- The highest positive ratings were recorded for the following: “friendly greeting” (96.7%) and “demonstrating a willingness to be helpful to you” (96.7%).
- While still impressive, the lowest positive ratings were recorded for “responsiveness or listening carefully to you and then acting” (90.0%) and “providing you with results in a reasonable amount of time” (89.8%).
- Among those having an interaction with a customer service representative, more than three-quarters, 77.8%, reported the “first person” who worked with them was able to find a solution to the purpose for the contact. Another 7.9% suggested the “second person” found a solution to the purpose for the contact.
- The average positive rating for the 11 field service personnel characteristics measured (with “don’t know” responses removed from the data) is 95.4% in 2007.
- The highest positive ratings were recorded for the following: “overall appearance” (100.0%), “arriving on time for the work to be performed” (100.0%), “having proper identification available” (100.0%) and “being courteous to you and treating you with respect” (100.0%).

#### ON AQUARION WATER COMPANY IN THE COMMUNITY...

- Awareness of Aquarion Water Company’s taxpayer status is moderate among New Hampshire customer respondents. When asked, more than two-fifths of all respondents, 44.0%, correctly identified Aquarion Water Company as a taxpayer.
- When asked, nearly two-thirds of all respondents, 60.3%, reported having seen “WaterWatch” enclosed with their bills. Of this group, a majority, 74.7%, reported reading either “all of the newsletter” (20.7%) or “some of the newsletter” (53.9%).
- When asked to rate the level of trust they have in Aquarion Water Company with regard to the accuracy and honesty of communication materials, three-quarters of all respondents, 74.8%, reported having either a “great deal” (41.5%) or “some trust” (33.3%) in Aquarion communication and materials.

#### ON EXPECTATIONS...

- In declining order, 2007 New Hampshire customers reported their top five expectations to be: “good quality/clean water,” “nothing specific,” “low rates,” “adequate supply of water” and “prompt response to problems.”

- Importantly, the percentage of respondents who reported Aquarion Water Company is meeting and exceeding their expectations either “all the time” or “most of the time” is 88.8% in 2007.
- Clear majorities of respondents reported “nothing/satisfied” when asked to indicate any “safety & quality concerns” (83.5%) or “service comments” (94.5%) with regard to Aquarion Water Company.

### ON PUBLIC AWARENESS...

- Among those respondents reporting current or future internet access (67.5%), more than two-fifths are reporting a willingness to use the Aquarion Water Company website for the following services:
  - Access water quality information (49.3% willing)
  - Access customer service information (48.1% willing)
  - Access information on rates (45.6% willing)
  - Access payment information (44.8% willing)
  - Access educational materials (41.1% willing)

### ON AQUARION WATER COMPANY ISSUES...

- When asked to consider that 1 gallon of water from Aquarion Water Company costs less than one penny, nearly three-quarters of all 2007 respondents, 73.5%, reported water costs from Aquarion Water Company are either “very reasonable” (26.3%) or “somewhat reasonable” (47.3%), while another 14.8% suggested the costs are “somewhat unreasonable” (11.3%) or “not at all reasonable” (3.5%).
- When discussing their current relationship with Aquarion Water Company, the large majority of all respondents, 92.8%, reported to be either a “satisfied customer” (74.0%), a “loyal customer” (15.3%) or an “advocate for Aquarion Water Company” (3.5%).
- Finally, two-fifths of all respondents reported to be either “very willing” or “somewhat willing” to pay higher water rates for the following: “improve water quality” (45.5%), “replace aging infrastructure to maintain reliability and integrity of the distribution system” (44.5%) and “improve security of water sources and treatment facilities” (41.0%).

Testimony of Linda M. Discepolo

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

**AQUARION WATER COMPANY OF NEW HAMPSHIRE  
DOCKET NO. DW 08-098**

**DIRECT TESTIMONY  
OF  
LINDA M. DISCEPOLO**

**August 27, 2008**

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Q. Please state your name and business address.

A. My name is Linda M. Discepolo. My business address is 600 Lindley Street, Bridgeport, Connecticut.

**I. BACKGROUND**

Q. By whom are you employed?

A. I am employed by Aquarion Water Company of Connecticut (“AWCCT”), an affiliate of Aquarion Water Company of New Hampshire (the “Company”), as Director of Rates and Regulation.

Q. Please describe your educational background.

A. I am a graduate of Quinnipiac University where I received a Bachelors Degree in Accounting and of the University of New Haven (Connecticut) where I received a Master’s Degree in Business Administration concentrating in Finance.

Q. What has been your business experience?

A. I was hired by AWCCT, formerly named Bridgeport Hydraulic Company, in August 1979. During my employment I have been responsible for many functions, including budgeting, finance, cash management, Securities and Exchange Commission compliance and rate case preparation. In July 2000, I was promoted to Director of Rates and Regulation, and have been responsible for

1 financial regulatory matters for each of Aquarion Water Company's three  
2 regulated water utility subsidiaries, including AWCCT and the Company.

3

4 Q. Have you previously testified or submitted written testimony before regulatory  
5 agencies?

6 A. Yes, I have testified on behalf of Aquarion Water Company's regulated water  
7 utility subsidiaries' rate filings and/or financings in the States of Connecticut,  
8 New York, Massachusetts and New Hampshire.

9

10 Q. Are you generally familiar with the books and records of the Company?

11 A. Yes. I am.

12

13 **II. PREPARATION OF SCHEDULES; EARNED RETURN AND REVENUE**  
14 **DEFICIENCY**

15 Q. What system is followed in keeping the general books of accounts and related  
16 records of the Company?

17 A. The general books of accounts and related records of the Company are kept in  
18 conformity with the Uniform System of Accounts for water companies.

19

20 Q. Have you prepared, or caused to be prepared, financial schedules in support of the  
21 Company's application to increase rates?

22 A. Yes, I have. The Company has filed schedules that reflect its accounting and  
23 financial condition and that support the Company's petition for increased rates.

1 The schedules that I am supporting with direct testimony were prepared by me or  
2 under my supervision and direction. These schedules are **Schedule A** and  
3 **Schedule 1** through **Schedule 6**. A table summarizing all Schedules has been  
4 provided with the Company's filing. These schedules are all supported by one or  
5 more of three Company witnesses, Mr. Bingaman, Mr. Dixon, and myself. In  
6 addition, Mr. Jay Shutt, of Floyd Browne Group will sponsor testimony and  
7 schedules relating to a depreciation study that supports the depreciation rates  
8 contained within this application.

9  
10 Q. What is the source of the information in these schedules?

11 A. The schedules have been prepared utilizing the general books and records of the  
12 Company and other supporting data for a test year of the 12 months ended March  
13 31, 2008. Since the purpose of rate making is to set rates to be applied in the  
14 future, recorded test year data has been adjusted on a pro forma basis, where  
15 appropriate, to reflect known and measurable changes in operating conditions  
16 which were not fully reflected in the test year results and which will continue to  
17 impact operations in the future. These adjustments will be explained in the  
18 following schedules.

19  
20 Q. Before you present your exhibits, will you please discuss the Company's present  
21 financial condition?

22 A. The Company's last rate proceeding by Order No. 24,648 (July 18, 2006),  
23 authorized Aquarion to file for a step increase in rates to account for capital

1 expenditures made for distribution mains and related facilities in the Hampton  
2 Beach area. As discussed by Mr. Bingaman, the Company elected not to file for  
3 the step increase due to a change in control by its parent and the Company's  
4 indirect acquisition by Macquarie Utilities, Inc. ("MUI"). The total cost of that  
5 project, which amounted to \$1,683,000, is now included in the Company's rate  
6 base as part of this application.

7 Beginning with the second quarter of 2005, in addition to the Hampton Beach  
8 project, the Company has expended \$3,939,000 on capital improvements  
9 necessary to upgrade aging infrastructure and to ensure adequacy and reliability  
10 of service and supply to our customers. In addition, the Company has  
11 experienced cost increases in expenses such as wages, medical, purchased power  
12 charges, corporate insurance expense, technology upgrades and depreciation  
13 expense over the last three years. As a result of these increased capital and  
14 operating expenses, coupled with not implementing the step increase, the  
15 Company's present pro forma return on rate base has fallen to 5.00%, far below a  
16 reasonable return for a company of this nature. This rate application is critical to  
17 the Company and its financial security and integrity on a going-forward basis.

18 Full rate relief will allow the Company to operate on a stand-alone basis,  
19 internally generate sufficient funds that are necessary to maintain its utility plant;  
20 pay a reasonable return to its shareholder, and keep its borrowing needs at  
21 reasonable levels.

22  
23 Q. What are the results displayed on **Schedule A**?

1 A. **Schedule A** summarizes the computation of the total revenue deficiency and the  
2 proposed revenue increase after pro forma adjustments. It shows that the  
3 Company is experiencing an overall revenue shortfall of \$1,056,070 on a pro  
4 forma basis, resulting in the need for a 21.08% increase to pro forma revenues  
5 based on present rates.

6

7 **III. OPERATING INCOME AND EXPENSES**

8 Q. Please summarize the contents of **Schedule 1**.

9 A. **Schedule 1**, page 1 of 3 sets forth the income statement for the Company for the  
10 12 months ended March 31, 2006, 2007 and 2008. It also reflects pro forma  
11 adjustments to the test year (explained in detail later in my testimony) to arrive at  
12 a pro forma income statement at present rates as well as pro forma net income at  
13 proposed rates. Page 2 of 3 also depicts the income statement; however, the  
14 format is modified to capture the calculation for Utility Operating Income (versus  
15 Net Income on page 1). Page 3 of 3 displays the quarterly consumption levels for  
16 each quarter of the test year, and the customer count at December 31, 2007. Mr.  
17 Dixon will discuss in detail **Schedule 1A**. He will also discuss **Schedule 5A**  
18 through **Schedule 5I** as part of his testimony.

19

20 Q. Please discuss in detail the pro forma adjustments represented in **Schedule 1B**  
21 through **Schedule 1BB**.

22 A. **Schedule 1B – Summary of Pro Forma Adjustments to O&M Expense**. This  
23 schedule simply summarizes the operation and maintenance expense adjustments

1 to the test year figures as well as the corresponding detailed schedule references  
2 and major account classifications. As can be seen, the Company is proposing to  
3 increase test year operating expenses by \$218,839 on a pro forma basis. Even  
4 with this adjustment, the total pro forma operating expenses of \$2,576,464 for the  
5 12 month period ended March 31, 2008 are only \$20,531, or 0.8% higher than the  
6 level expended for the 12 month period ended December 31, 2002, as reported in  
7 the Company's Annual Report to the Commission and representing the year of  
8 acquisition.

9  
10 **Schedule 1C –Salaries and Wages.** This schedule details all wages and salaries  
11 charged to the Company. Total wages, which are comprised of two components,  
12 are calculated as follows:

13 1) The first component of the wage increase relates to the direct charges for the  
14 employees of Aquarion Water Company of New Hampshire. Pro forma officer  
15 wages are based on current annualized salary levels for the Senior Vice President  
16 of Operations, who is in charge of both the New Hampshire and Massachusetts  
17 subsidiaries of Aquarion Water Company. The amount shown of \$68,160  
18 represents 37.5% of total wages and is based on time allocated to the New  
19 Hampshire operation by the Senior Vice President. In addition, there are also  
20 three full time and two part time exempt and non exempt, non union employees.  
21 Pro forma wages of \$136,995 and \$71,188 are based on current annualized salary  
22 levels, which include an open position in the amount of \$95,000 for an Operations  
23 Manager. That position is expected to be filled shortly and the new employee

1 will be in place prior to the implementation of temporary rates. Lastly, pro forma  
2 wages of \$373,922 relate to annualized salary levels at December 1, 2007 for  
3 eight union employees. A 3% union contract salary increase at December 1, 2008  
4 as well as a step increase for one union employee, which total \$12,211 is also  
5 included in pro forma wages. Standby and shift differential pay based on the  
6 amounts included in the test year plus the 3% union contract increase for these  
7 charges is also included in pro forma wages. The resulting amount of gross pro  
8 forma wages of \$691,937 was multiplied by the percent to expense ratio to arrive  
9 at pro forma wages charged to expense. Test year wages were subtracted from the  
10 pro forma wages to arrive at the pro forma adjustment.

11 2) The second component of wages represents service company personnel whose  
12 time was charged to the New Hampshire operations in the test year. This time  
13 represents services from Aquarion Water Company Connecticut's Accounting,  
14 Finance, Accounts Payable, Engineering, Human Resources, Administration and  
15 Water Quality departments. The only adjustment made to the amount of salaries  
16 charged to utility expense in the test year was a 3% pay increase that went into  
17 effect on April 1, 2008.

18  
19 **Schedule 1D – Employee Welfare.** Employee welfare expense includes  
20 employee medical costs, 401K Plan expense, auto allowance, life insurance and  
21 long-term disability. Harvard Pilgrim medical costs are based on a premium  
22 based plan for 11 full time New Hampshire employees. The Company moved to  
23 a premium based medical plan on July 1, 2008 versus a self-insured plan in an

1 effort to control medical expense and to reduce the risk of subsidizing large  
2 claims for serious illnesses in any particular year. Medical expense for the Senior  
3 Vice President, of which 37.5% of the cost is allocated to the New Hampshire  
4 operations, is provided through CIGNA. Pro forma expenses for medical expense  
5 are based on the current annualized costs of those plans, less the amount  
6 contributed by employees. 401K plan expense is based on the current annualized  
7 matching expense based on each employee's current contribution and an assumed  
8 6% contribution level for the operation manager. Union employees receive a 50%  
9 Company match and non union employees receive a 75% Company match. Pro  
10 forma auto allowance is based on a \$400 per month allowance for the Operations  
11 Manager. Pro forma life insurance and long term disability expense are based on  
12 multiples of base wages, as shown on **Schedule 1C**, times the current insurance  
13 rates. For pro forma purposes, all of the above costs have been reduced to reflect  
14 the amount charged to utility expense.

15  
16 **Schedule 1E - Employee Bonus Program.** In an effort to retain and attract  
17 employees, in addition to incentivizing employee behavior toward customer  
18 service, service quality and product quality goals, the Company offers a bonus  
19 program for its non union employees. Amounts for the bonus are based on a  
20 percentage of the employees' annual salary for those employees achieving their  
21 goals and meeting performance targets. Pro forma amounts are based on typical  
22 payouts. For the Senior Vice President, there is a 37.5% allocation, and for the

1 four non exempt, non union employees the amount has been reduced for the  
2 percentage charged to utility expense.

3

4 **Schedule 1F – FAS 106 – Post Retirement Healthcare.** FAS 106 expense is  
5 adjusted based on the current expense level derived by the Company’s actuary,  
6 Deloitte & Touche.

7

8 **Schedule 1G – Pension.** Pension expense is adjusted based on the current  
9 expense level, also derived by the Company’s actuary, Deloitte & Touche.

10

11 **Schedule 1H – Amortization of Depreciation Study.** The Company  
12 commissioned its first depreciation study since acquiring the New Hampshire  
13 operations in 2002. Generally water utilities will prepare depreciation studies  
14 from time to time in conjunction with water service rate applications (see  
15 testimony of Jay Shutt for greater detail). The last study was prepared in May  
16 1999 based on December 31, 1998 asset values. Pro forma expense was computed  
17 by amortizing the cost of the depreciation study over a six year period. The six  
18 year amortization period was chosen to coincide with two rate cycle periods.

19

20 **Schedule 1I – Chemicals Expense.** The Company has adjusted its chemicals  
21 expense to reflect test year volumes of chemicals at most recent prices.

22

1           **Schedule 1J – Purchased Power - Electric.** The Company has two electric  
2 providers, Public Service of New Hampshire and Unitil Corporation. For Unitil,  
3 test year rates have not increased, therefore pro forma power costs are based on  
4 the equivalent of 12 monthly bills. For Public Service of New Hampshire, pro  
5 forma power costs are based on the most recent kilowatt hour rate times the test  
6 year’s kilowatt hour usage. As **Schedule 1 J** depicts, the kilowatt hour charge  
7 changed three times in the test year versus the most current rate. The Schedule  
8 correctly shows the increase in power cost for each period. Although power costs  
9 did increase on a pro forma basis versus the test year, the pro forma adjustment is  
10 a credit as a result of the booking of an over accrual of power expense charged in  
11 the test year.

12  
13           **Schedule 1K – Elimination of Non Recurring Items.** During the preparation of  
14 this rate case, the Company examined its books and found items which would not  
15 be expected to recur in the future; and conversely one charge, leak detection that  
16 was paid after the test year for services performed in the test year. This charge is  
17 expected to recur on an annual basis and is included for pro forma purposes. The  
18 detailed list of these items is found on **Schedule 1K**.

19  
20           **Schedule 1L – Building Lease Expense.** The Company currently leases office  
21 space in Hampton at One Merrill Industrial Drive for its administrative and  
22 operational needs. Pro forma expense is based on the annualization of the current  
23 lease expense.

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**Schedule 1M – Corporate Insurance.** Schedule 1M reflects the Company’s allocated insurance expense as of December 1, 2007 policy year with one insurance contract renewing April 30, 2008. The pro forma expense is based on this amount. The Schedule clearly depicts the type of policy as well as the methodology behind the Company’s allocation. The latest policy year yields a pro forma increase in expense as compared to the test year expense.

**Schedule 1N – Audit Fees.** Pro forma audit fees are based on the proposal given to the Company by its external auditors for the New Hampshire operation, Dworken, Hillman, Lamorte and Sterzala. The pro forma adjustment of \$10,780 is not indicative of test year expense as the test year included the booking of an under accrual for audit expenses. Fees for last year’s audit were \$42,500, while the pro forma amount reflects a minor increase.

**Schedule 1O - Customer Billing.** The Company out sources its customer billing function. The credit adjustment of \$4,400 was necessary to reflect the actual charges incurred by the Company during the test year for billing services such as bill printing, postage and remittances.

**Schedule 1P – Purchased Power: Oil and Gas.** This schedule reflects adjustments to gas, propane and fuel oil. The test year expense was adjusted to reflect the actual test year usage multiplied by the most current prices.

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**Schedule 1Q – C.I.A.C. Amortization.** Pro forma amortization of C.I.A.C. utilizes the proposed depreciation rate for transmission and distribution mains, as set forth in the depreciation study prepared by Jay Shutt, in computing the annual amount. The new rate of 1.20% is lower than the current rate of 1.36% yielding a lower annual amortization amount.

**Schedule 1R – Tank Painting Amortization.** During the test year, the Company began amortization of tank painting costs for the Jennes Beach tank, as well as continuing the amortization of the painting costs for the Glade Path and Exeter Road tanks. The adjustment to test year expense equates to the amortization of the Jennes Beach tank.

**Schedule 1S – Shared Facility Costs.** As in prior years and as part of this rate application, the Company is allocating to the New Hampshire operation facility a share of the costs pertaining to Aquarion Water Company’s three office and operations buildings in Connecticut. This is necessary and fair, as all three Connecticut buildings house employees whose time is charged directly to the New Hampshire operations. The first step in the computation of pro forma shared facility costs is to compute an average hourly wage rate for all employees located in each respective building. That computation is shown on **Schedule 1S, part A**; the second component, **Schedule 1S, part B**, establishes an hourly building overhead cost by dividing total operating expense for each building by the total

1 hours worked by all employees located in each building. Total operating expense  
2 includes depreciation, property taxes, return on investment and operation and  
3 administrative expenses. The hourly building cost rate, part B, divided by the  
4 average hourly wage rate, part A, establishes a new overhead percent for each  
5 individual building. Please see the resulting overhead percent for each building in  
6 **Schedule 1S part C** of the computation. The resulting percentage is then  
7 multiplied by the direct labor dollars charged to the New Hampshire operations  
8 from each building in Connecticut. The resulting amount of \$28,803 for all three  
9 buildings establishes pro forma expense, from which is subtracted the test year  
10 amount to arrive at the adjustment.

11  
12 **Schedule 1T – Management Allocation.** Aquarion Company, the parent  
13 company of Aquarion Water Company which in turn is parent to Aquarion Water  
14 Company of New Hampshire, has corporate charges, a portion of which it  
15 allocates to its subsidiaries. The costs are allocated between the parent's  
16 regulated utilities and non-regulated entity, based on the Massachusetts formula  
17 methodology. This formula is a three-part allocator that uses a weighted cost  
18 average ratio comparing gross revenue, plant and payroll. Costs allocated to the  
19 regulated utilities are then spread to the individual utilities based on each utility's  
20 respective customer count. The utilities receive 98.64% of the overall cost. The  
21 Company's share is 4.18% ( $98.64\% \times 4.24\%$ ), see page 2 of **Schedule 1T**. Pro  
22 forma management fees total \$60,898, which are \$11,489 less than the test year  
23 amount and \$31,674 lower than the amount contained in the last rate application.

1 Lower management fees being charged by the parent company, Macquarie  
2 Utilities Inc. (“MUI”) versus the previous parent, Kelda, Inc., is the reason for  
3 lower management fees being charged to New Hampshire.

4  
5 **Schedule 1U – Shared Customer Service Costs.** As agreed to in the Company’s  
6 *Petition for Approval of Indirect Acquisition by Macquarie Utilities, Inc. Order*  
7 *Approving Acquisition and Settlement Agreement*, Order No. 24,691 (October 31,  
8 2006), the Company has continued to maintain an office in New Hampshire for  
9 bill payments and customer inquiries subsequent to the acquisition. There are,  
10 however, many functions in regard to customer service that are performed by  
11 Connecticut personnel, both in the customer service and collections areas that  
12 benefit the New Hampshire operations. These services include the overall  
13 administration of customer service, the collection of cash payments for New  
14 Hampshire’s water bills through a lock box which are reported directly to the  
15 shared customer service department in Connecticut, management of  
16 uncollectibles, late payments and delinquencies, and support for service  
17 representatives located in New Hampshire to assist with non-routine issues.

18  
19 The customer service employees in Connecticut do not directly charge payroll  
20 time to any affiliate, and they are not included on **Schedule 1C**, Salaries and  
21 Wages, as service company wages. To reflect the cost of these services, for pro  
22 forma purposes, a portion of the Connecticut company’s customer service cost is  
23 allocated to the New Hampshire operation. As **Schedule 1U** shows, the

1 allocation of costs is based on customer count. The customer count used for the  
2 New Hampshire operation allocation is 4,385, which is one half (50%) of the  
3 actual count of 8,770 customers. This allocation reduction recognizes the fact  
4 that calls are directly answered in the New Hampshire office, but administrative  
5 and support services are still provided by the Connecticut operations. As a result  
6 of this computation, pro forma expense is \$34,763.

7  
8 **Schedule 1V – Shared IT Costs.** In accordance with the AWC Service  
9 Agreement, AWC CT provides PC and networking services, software and  
10 hardware maintenance, and data processing services to the Company. Those  
11 services include SAP software systems and licenses along with technical support.  
12 All costs incurred in rendering shared IT services to AWC’s water subsidiaries  
13 are allocated among all utilities receiving such services based on the number of  
14 customers served at the immediately preceding calendar year end. In a decision  
15 issued on December 12, 2007, the Connecticut Department of Public Utility  
16 Control ruled that Connecticut customers could only be charged for their share of  
17 the return and related depreciation on the SAP investment, and therefore AWC  
18 CT would have to seek recovery of the portion of the return allocable to other  
19 jurisdictions from the affiliates operating in those jurisdictions. As SAP and its  
20 related software components are utilized by all of AWC’s regulated entities, the  
21 Company included a pro forma adjustment to Shared IT expense for these costs.  
22 The pro forma expense amounts to \$252,372, as shown on **Schedule 1V**.

23

1       **Schedule 1W – Depreciation Expense.** Pro forma depreciation expense was  
2       computed by multiplying utility plant in service values at March 31, 2008 by the  
3       new depreciation rate supported by the depreciation study contained in this  
4       application. In addition, an amount was added to the total depreciation expense in  
5       order to amortize the difference between book and calculated depreciation  
6       reserves over a ten-year period. This practice is consistent with the Company’s  
7       prior depreciation study filed in Docket DW 99-057 and approved in Order No.  
8       23,412 (February 28, 2000). Test year expense was subtracted from the resulting  
9       pro forma depreciation expense to arrive at the pro forma adjustment.

10  
11       **Schedule 1X – Payroll Taxes.** As a result of the wage adjustments in **Schedule**  
12       **1C**, payroll taxes must also be increased. FICA, federal and state unemployment  
13       insurance are adjusted to correspond to the new salary and wage levels. This  
14       includes payroll taxes relating to both full and part time employees.

15  
16       **Schedule 1Y – Property Taxes.** Pro forma property tax expense is based on the  
17       latest property tax bills the Company received in July 2008. The most recent bills  
18       reflect a reduction in property taxes as compared to the amount used in the test  
19       year. However, the Company has been informed by the Utility Appraiser at the  
20       Department of Revenue Administration that there will be a change in the method  
21       used to value real property. This change, which is expected to be shown on the  
22       December 1, 2008 “Notice of Value and Tax Bill”, would result in an assessed  
23       value for real property of approximately \$14.5 million compared to our latest

1 valuation of \$11.8 million. Assuming the tax rate used to calculate the tax  
2 remains at \$6.60 per \$1,000, the Company would experience an increase in its  
3 property tax expense of approximately \$18,000. Given the magnitude of this  
4 increase, the Company plans to update this expense during the proceeding.  
5

6 **Schedule 1Z - Interest Expense.** Pro forma interest expense includes interest  
7 charges on both the long-term debt and inter-company borrowings as shown on  
8 **Schedule 4D and Schedule 4E** and discussed later in my testimony.  
9

10 **Schedule 1AA – State Income Taxes.** State Income taxes are computed as  
11 follows: the Company first calculates pre tax income by reducing revenues by the  
12 amount of Operations and Maintenance expenses, depreciation, other taxes,  
13 interest expense and net other income. The pre-tax income is next affected by  
14 **Schedule M** (adjustments to income for timing differences) to arrive at state  
15 taxable income. The state business profits tax is applied to state taxable income  
16 to arrive at the pro forma expense.  
17

18 **Schedule 1BB – Federal Income Taxes.** Federal Income Taxes are computed by  
19 starting with taxable income from the state tax calculation page, **Schedule AA**,  
20 Line 5. From that value, State Income Taxes are deducted to arrive at taxable  
21 income, and the federal statutory rate of 35% is applied. To that value the  
22 Company is adding, for rate making purposes, the annual amortization of a tax

1 regulatory asset carried forward from the previous owner, American Water Works  
2 to arrive at the pro forma amount.

3

4 **IV. BALANCE SHEET AND RATE BASE**

5 Q. Please discuss the contents of **Schedule 2** and its supporting sub-schedules.

6 A. **Schedule 2** reflects the Company's balance sheet as of March 31, 2008 as well as  
7 the two prior 12 month periods. Additionally the schedule shows the 13 month  
8 average balance from the period ended March 31, 2008. A column is also present  
9 to reference the detailed supporting schedules of key balance sheet items.

10

11 **Schedule 2A** depicts, for all balance sheet values on **Schedule 2**, each month  
12 necessary to compute the 13 month average.

13

14 **Schedule 2B** provides a monthly balance sheet account level detail of the Utility  
15 Plant grouping from **Schedules 2** and **2A**.

16

17 **Schedule 2C** shows monthly balances of Property Held for Future Use.

18

19 **Schedule 2D** shows accumulated depreciation by account at March 31, 2008, and  
20 at the end of the three prior 12-month periods ending December 31. Additionally,  
21 there is a summary of individual retirements over \$5,000.

22

1           **Schedule 2E** presents, by account, materials and supplies' balances monthly, as a  
2           13-month average, and at the end of the test year and prior two 12 month periods  
3           ending March 31.

4  
5           **Schedule 2F** presents, by account, deferred taxes balances monthly and as a 13-  
6           month average.

7  
8           **Schedule 2G** presents, by account, deferred expense balances monthly and as a  
9           13-month average.

10  
11          **Schedule 2H** presents, by account, contributions in aid of construction (CIAC)  
12          balances monthly and as a 13-month average. Additionally, activity is shown  
13          since Aquarion's acquisition in 2002.

14  
15          Q.     Please discuss the contents of **Schedule 3** and its supporting sub-schedules.

16          A.     **Schedule 3** depicts the Company's rate base as of March 31, 2008, as well as the  
17          two prior years ending March 31. Additionally the schedule shows the 13-month  
18          average balance for the period ended March 31, 2008, as well as the Company's  
19          computation of rate base on a present pro forma basis. Please note, for  
20          computation of pro forma rate base, the Company used values for plant in service  
21          and depreciation as of March 31, 2008 and not the 13-month average. These  
22          values correctly represent the exact amount the Company has expended for utility  
23          plant as of March 31, 2008, which is in service and currently serving the

1 customer. A column is also present to reference the detailed supporting schedules  
2 of key items.

3

4 **Schedule 3A** provides a monthly account level of detail of the Utility Plant  
5 grouping from **Schedule 3**. **Schedule 3A** is identical to **Schedule 2B** less  
6 property held for future use which the Company did not feel is appropriate to  
7 include in rate base.

8

9 **Schedule 3B** shows on a monthly account level basis, accumulated depreciation  
10 and rate base additions for materials and supplies, prepayments, deferred  
11 expenses and a working capital allowance.

12

13 **Schedule 3C** shows on a monthly account level basis, rate base deductions for  
14 customer advances, contributions in aid of construction and deferred taxes.

15

16 **Schedule 3D** shows the detailed calculation for working capital for the test year,  
17 two prior 12 month periods and 13-month average. The rate used of 8.03% is  
18 calculated in a lag study included in the Standard Filing Requirements, item  
19 number 28.

20

21 Q. Are all of the rate base additions included in the Company's rate case filing used  
22 and useful in providing service to its customers?

1 A. Yes, except that the rate base additions related to the replacement of the Mill  
2 Road standpipe as shown in **Schedule 6**. This project will be in service during  
3 the last quarter of 2008 and the Company is requesting a step increase on this  
4 capital investment .

5

6 **V. RATE OF RETURN**

7 Q. What overall rate of return is the Company seeking in this application?

8 A. The Company is requesting an overall rate of return of 8.16%

9

10 Q. How did the Company derive this proposed overall rate of return?

11 A. As shown on **Schedule 4A**, the Company began with its March 31, 2008 actual  
12 capital structure reflecting the balances for three factors: (i) long-term debt,  
13 including inter-company debt (ii) preferred stock and (iii) common equity.  
14 Next, the Company established the overall weighted costs for each of three capital  
15 components with the results shown on **Schedule 4**. The weighted cost of long-  
16 term debt and preferred stock was calculated as detailed on **Schedule 4D**,  
17 **Schedule 4E** and **Schedule 4F**, respectively. The weighted cost of common  
18 equity was derived based on the Company's recommended 10.23% cost of  
19 common equity.

20

21 Q. Has the Company retained a cost of capital consultant?

22 A. No, it has not. The Company is attempting to limit its rate case expense by  
23 eliminating the need to hire a rate of return expert to determine a fair rate of

1 return. Rate of Return consultants can cost in excess of \$50,000 per rate filing. If  
2 a cost of equity can be developed that is both acceptable to the Company and  
3 within the range deemed reasonable by the Commission's Staff, it would serve no  
4 useful purpose for the Company to incur the cost of retaining an expert in this  
5 area, that ultimately our customers will bear. The Company does, however,  
6 reserve the right in this proceeding to hire an expert if an agreement cannot be  
7 reached with Staff. For now, in the interest of cost savings, the Company believes  
8 that the approach it has taken is the most expeditious and beneficial for it and its  
9 customers.

10

11 Q. How was the 10.23% return on equity arrived at?

12 A. The Company surveyed investor owned water utilities throughout the United  
13 States in an effort to obtain recently authorized rates of return on equity ("ROE")  
14 issued during the period 2007 and 2008. The survey results reflect the authorized  
15 ROE's of 31 companies located in 18 regulatory jurisdictions and also includes the  
16 Florida Commission's most recent Staff recommendation for the current leverage  
17 formula for deriving ROE to which the Company's equity ratio was inserted. Each  
18 reported company's last allowed ROE, including the derived Florida Commission  
19 formula, was averaged resulting in an overall allowed return on equity of 10.23%.  
20 I should stress that, while I believe this is a reasonable approach upon which to  
21 base a compromise relating to ROE (i.e., in order to avoid the expense of litigating  
22 the issue), it is obviously possible that an independent expert would recommend a

1 different ROE, particularly after considering any specific regulatory or other risks  
2 facing a utility the size of the Company operating in New Hampshire.

3

4 **VI. REVENUE PROOF**

5

6 Q. What is the nature of **Schedule 5**?

7 A. **Schedule 5**, consisting of 9 schedules, sets forth the revenues by class at both  
8 present pro-forma and proposed pro-forma rates. Mr. Dixon's testimony details  
9 the allocation of the proposed pro-forma revenue requirement by rate class.

10 **Schedule 5** is a summary, **Schedules 5A** through **Schedule 5F** represent each of  
11 the metered classes, **Schedule 5G** and **Schedule 5H** represent public and private  
12 fire service, and finally, **Schedule 5I** represents miscellaneous revenues.

13

14 **VII. STEP INCREASE**

15 Q. Please discuss **Schedule 6**.

16 A. **Schedule 6** reflects the revenue requirement associated with the Company's Mill  
17 Road standpipe replacement project that will be completed beyond the time frame  
18 represented by the Company's rate base as of March 31, 2008. Details of the  
19 project are contained in the testimony of Larry Bingaman.

20

21 Q. Why are these capital investments included as a step increase?

22 A. This investment necessitated a step increase because it will be completed beyond  
23 the end of the test year. In addition, the approximate \$1,525,000 rate base  
24 investment represents 7.7% of rate base, a significant amount to a company the

1 size of Aquarion Water Company of New Hampshire. A step increase will  
2 postpone the Company's need to apply for additional rate relief soon after the  
3 adjudication of this case. The project is also non-revenue producing.  
4

5 **VIII. SYSTEM DEVELOPMENT CHARGE**

6 Q. Please discuss the System Development Charge (SDC) shown in **Exhibit LMD-1**.

7 A. Mr. Bingaman's testimony discusses the necessity for this charge, while **Exhibit**  
8 **LMD-1** provides the calculation of the charge. The SDC will seek to collect from  
9 new metered customers the cost related to the upsizing of mains required to meet  
10 additional demands. This charge analyzes the incremental cost of replacing 8  
11 inch mains with 12 inch mains. The incremental per foot cost is applied to the  
12 average feet of mains per customer to arrive at a one-time charge of \$779; applied  
13 to new customers with a 5/8 inch meter. The larger meters would receive  
14 increased charges based on American Water Works Association's prescribed  
15 meter equivalency ratios. Those charges are set forth on **LMD-1**.

16

17 **IX. CONCLUSION**

18 Q. Ms. Discepolo, does this conclude your testimony?

19 A. Yes it does.

20

21

22

Aquarion Water Company of New Hampshire

SYSTEM DEVELOPMENT CHARGE  
Test Year Ended March 31, 2008

Line  
No.

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**Cost of Upsizing Transmission and Distribution Mains**

Total Feet of Main	721,901		
Total Number of Customers	8,770		
Feet per Customer	82		
Adjustment to account for customer on both sides of road - divide by 2	41	41 ft	
Price Differential for Pipe upsizing Replacing 8" Main with 12" Main		\$ 19	
<b>Calculated System Development Charge for a new 5/8" meter customers</b>			<u>\$ 779</u>
<b>Proposed System Development Charge for a new 5/8" metered customer</b>			<b>\$ 779</b>

**Design of Charges for Connections Larger Than 5/8"**

Meter Size	Capacity GPM	Ratio to 5/8"	Proposed Fee
5/8"	20	1.00	\$ 779
3/4"	30	1.50	\$ 1,169
1"	50	2.50	\$ 1,948
1 1/2"	100	5.00	\$ 3,895
2"	160	8.00	\$ 6,232
3"	320	16.00	\$ 12,464
4"	500	25.00	\$ 19,475

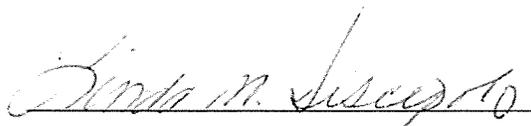
Note: The Company is proposing that the charge for meters larger than 4 inch be determined on a case by case basis.

AFFIDAVIT

STATE OF NEW HAMPSHIRE PUBLIC UTILITY COMMISSION

LINDA M. DISCEPOLO, being first duly sworn, deposes and states:

That she is the Linda M. Discepolo whose direct testimony accompanies this Affidavit, that said direct testimony is a true and accurate statement of her answers to the questions contained herein, and that she adopts those answers as her sworn testimony in this proceeding.



LINDA M. DISCEPOLO

SWORN TO and SUBSCRIBED before me this 27 day of August.



Notary Public

**BARBARA TSOUPAS**  
**NOTARY PUBLIC**  
My Commission Expires July 31, 2009

**STATE OF NEW HAMPSHIRE**  
**BEFORE THE**  
**PUBLIC UTILITIES COMMISSION**

**AQUARION WATER COMPANY OF NEW HAMPSHIRE**

**DOCKET NO. DW 08-098**

**DIRECT TESTIMONY**

**OF**

**TROY M. DIXON**

August 27, 2008

1 Q. Please state your name and business address.

2 A. My name is Troy M. Dixon. My business address is 600 Lindley Street,  
3 Bridgeport, Connecticut.

4

5 Q. By whom are you employed?

6 A. I am employed by Aquarion Water Company of Connecticut (“AWCCT”), an  
7 affiliate of Aquarion Water Company of New Hampshire (the “Company”), as  
8 Manager, Regulatory Compliance.

9

10 Q. Please describe your educational background.

11 A. I have a Bachelor’s Degree in economics and accounting from College of the  
12 Holy Cross in Worcester, MA.

13

14 Q. What has been your business experience?

15 A. I was hired by AWCCT in February 2003. During my employment I have been  
16 responsible for the preparation of regulatory filings for AWCCT and its regulated  
17 water affiliates. Additionally I have been responsible for the bill analysis work  
18 associated with each respective company’s rate case filings.

19

20 Q. Have you previously testified or submitted written testimony before regulatory  
21 agencies?

22 A. Yes, I have testified on behalf of Aquarion Water Company’s regulated water  
23 utility subsidiaries in the states of Connecticut and Massachusetts. I have not

1 previously provided testimony before the New Hampshire Public Utilities  
2 Commission.

3

4 Q. What is the purpose of your testimony in this case?

5 A. My testimony will address the billing analysis and pro forma revenue adjustments  
6 in this case. Additionally I will discuss the rate design as proposed by the  
7 Company.

8

9 Q. Please discuss the billing analysis compiled for this case.

10 A. The billing analysis is contained within Schedule 5. Using actual test year billing  
11 detail as its basis, Schedule 5A sets forth the pro forma revenues by class at both  
12 present and proposed rates. Schedules 5B through 5E represent each of the  
13 metered classes of customers based on the detailed billing units and quantities  
14 from the test year. Schedules 5F and 5G provide pro forma revenues for public  
15 and private fire service. Finally, Schedule 5H represents miscellaneous revenues.

16

17 Q. Please comment on the accuracy of the billing analysis.

18 A. The accuracy of the billing analysis is measured by taking its derived results and  
19 comparing them to the actual book revenues after taking into consideration any  
20 appropriate pro forma adjustments. A minimal variance is needed as the units  
21 contained within the billing analysis are multiplied by the proposed rates to  
22 produce the ultimate revenues requested within the case. The results in this case  
23 are extremely accurate. For example, within the residential class, which accounts

1 for over 73% of metered revenues, the difference between bill analysis and  
2 adjusted billed revenues is a mere 0.03%. Similar results exist for the remainder  
3 of the metered classes.

4  
5 Q. Please explain the results presented on Schedule 1A.

6 A. Schedule 1A compares pro forma revenues at present and proposed rates. It  
7 begins with book revenues. Pro forma adjustments are then applied to arrive at  
8 pro forma revenues at present rates. A further adjustment is then made to reflect  
9 the revenue increases from proposed rates, which then produces total pro forma  
10 revenues at proposed rates. The pro forma revenues at both present and proposed  
11 rates match the results derived in the billing analysis in Schedule 5.

12  
13 Q. Please describe the pro forma adjustments to revenues at present rates, as shown  
14 on page one of Schedule 1A.

15 A. The pro forma adjustments are itemized more fully on page two of the schedule.  
16 The adjustments can be broken down into three major areas:

- 17 1. Unbilled Elimination  
18 2. Surcharge Eliminations  
19 3. Miscellaneous Items

20  
21 Q. Please discuss the unbilled elimination adjustment.

22 A. This adjustment removes the revenue impact created by unbilled revenues booked  
23 in March 2008, which are offset by the reversal of the March 2007 entry for

1 unbilled revenues. Although minimal, elimination of these entries allows for  
2 examination of actual billed revenues within the twelve month test year without  
3 the impact of estimates.

4

5 Q. Please discuss the surcharge eliminations.

6 A. In Order No. 24,665 dated September 12, 2006 and Order No. 24,670 dated  
7 September 22, 2006, as part of Case DW 05-119, the NH PUC authorized the  
8 Company to implement Rate Case Expense and Temporary Rate Recoupment  
9 surcharges. These surcharges were in effect for the 12 month period from  
10 October 2006 through September 2007. As such these surcharges were in place  
11 for six months of the test year and cause an overstatement of operating revenues  
12 for rate setting purposes. This adjustment eliminates the surcharges billed in the  
13 test year period.

14

15 Q. Please discuss the miscellaneous adjustments.

16 A. Miscellaneous adjustments include 1) reclassification of revenues between  
17 metered sales and other water revenues, 2) adjustment of antenna rental income  
18 based on contractual increases and corrections for new and/or expired leases, 3)  
19 adjustments to fire revenues based on year-end hydrant and connection counts,  
20 and 4) adjustment to late payment fees based upon all other pro forma  
21 adjustments made to operating revenues.

22

1 Q. Describe how the adjustments that produce pro forma revenues at proposed rates  
2 are derived on a class by class basis.

3 A. The adjustments to arrive at pro forma revenues at proposed rates are produced as  
4 a direct result of the rate design used in this case. In that rate design, the  
5 Company has two objectives. First, considerable time and money was spent on a  
6 cost of service study in the prior rate case. That study ensured that the appropriate  
7 amount of rate relief was being collected from each class of customer. Therefore,  
8 a key objective for the Company is to continue to follow the findings of that case.  
9 In its simplest form the easiest way to follow the study would be to implement an  
10 across-the-board increase with equal percentage increases for all classes of  
11 customer.

12 The second objective, however was to introduce inclining block rates designed to  
13 promote conservation. It became clear from the start of rate design that the only  
14 way to fully maintain both objectives would be to create volumetric rates and/or  
15 minimum service charges that would be different for each class of customer. This  
16 is as the direct result of introducing multiple usage tiers. Unless each class of  
17 customers had the same proportionate level of usage in its respective usage tiers,  
18 varying rates depending on customer class would be required.

19 The Company chose to accept this minor divergence from the cost of service  
20 study in favor of maintaining uniform pricing amongst the respective classes of  
21 customers. The uniform rates provide for a simpler, easier to understand billing  
22 structure which the Company found to be favorable to the more stringent  
23 adherence to the prior cost of service study. Therefore, while rate increases are

1 uniform across each class, the resulting overall revenue requirement increases are  
2 not entirely uniform.

3

4 Q. Did the Company apply inclining block rates to all metered customers?

5 A. The Company did not apply inclining block rates to industrial customers or  
6 seasonal customers. Regarding industrial customers, the Company is following  
7 the treatment it used in its most recent Massachusetts rate case where inclining  
8 block rates were also implemented, yet not assigned to the Industrial class. The  
9 basic concept here is that industrial usage is fairly steady and not weather  
10 sensitive. As a result, industrial customers are not as susceptible to conservation  
11 as other classes of customer.

12

13 Likewise, the Company chose not to incorporate inclining block rates into the  
14 seasonal rate design. There are really two reasons for this treatment. First and  
15 foremost, seasonal customers are not billed at regular fixed intervals. In general,  
16 the meter is set early in the season but is not read again for billing until the  
17 customer calls to have the meter removed at the end of the season. Therefore,  
18 given the sharp contrast to the regularly read monthly or quarterly billed  
19 customer, the lack of fixed billing intervals makes it difficult to establish an  
20 appropriate and fair consumption level at which conservation rates would initiate.  
21 Secondly, the seasonal volumetric rate as proposed in this case is substantially  
22 higher than even the second tier billing rate for other metered customers. While  
23 the seasonal rate is justified by the previous cost of service study, its

1 comparatively high rate nonetheless bears an inherent price signal for seasonal  
2 customers.

3  
4 Q. Please describe the development of the rate design.

5 A. Schedule A of the rate filing shows a required revenue increase of \$1,056,070  
6 over pro forma revenues at present rates of \$5,009,914, or a 21.08% increase.

7 Within the \$5,009,914 of revenues, though, are miscellaneous charges which will  
8 not be increased. Subtraction of these unaffected miscellaneous revenues yields a  
9 revenue pool \$4,596,773 to be increase at the rate of 21.3%.

10  
11 The first step in the design was to increase the anticipated late payment fee by this  
12 percentage. Additionally all fixed items, inclusive of minimum service charges,  
13 public fire hydrants and private fire connection would receive this increase as  
14 well as the volumetric rates for seasonal and industrial customers. These increases  
15 represent \$497,235 of the total required increase. The remaining \$558,835 must  
16 be collected from the volumetric charges for the residential, commercial and  
17 public authority classes of customer.

18  
19 Next, the Company needed to determine the amount of water to be included in the  
20 first billing tier, or put more simply, at what point customers should begin to  
21 experience the higher rate for increased usage. The Company determined, based  
22 on the test year billing data that the “base” usage for a regular residential  
23 customer was 15 CCF per quarter, or 5CCF per month. “Base” usage is defined

1 here as that usage used during the winter quarter of January through March. That  
2 period is generally deemed as representative of the non-weather sensitive portion  
3 of consumption. The Company believes that amounts over those levels are more  
4 susceptible to conservation efforts, and therefore chose to set this as the break  
5 point for the pricing signal.

6 The Company then separated the test year consumption into the newly created  
7 rate blocks. From that point, a 2:1 second tier to first tier ratio of price increases  
8 was judged to be adequate to send a pricing signal to conserve. Finally, a 13.34%  
9 increase to the first tier and a corresponding 26.68% second tier increase  
10 produced all but \$209 of the required revenue shortfall. While the proposed  
11 overall increase to the volumetric charges is consistent with the 21.3% increases  
12 applied to the other rates, variation between usage patterns in the different classes  
13 yielded smaller increases for the residential classes as compared to the  
14 commercial and public authority classes.

15  
16 Q. Mr. Dixon, in your opinion, does the proposed rate design provide for the  
17 implementation of inclining block rates while still preserving the findings of the  
18 prior rate case's cost of service study.

19 A. Yes, it does.

20  
21 Q. Mr. Dixon, does this conclude your testimony?

22 A. Yes, it does.

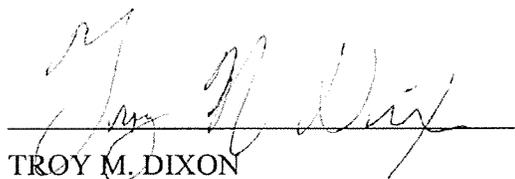
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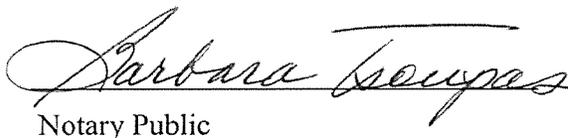
STATE OF NEW HAMPSHIRE PUBLIC UTILITY COMMISSION

TROY M. DIXON, being first duly sworn, deposes and states:

That he is the Troy M. Dixon whose direct testimony accompanies this Affidavit, that said direct testimony is a true and accurate statement of his answers to the questions contained herein, and that he adopts those answers as his sworn testimony in this proceeding.

  
TROY M. DIXON

SWORN TO and SUBSCRIBED before me this 27 day of August

  
Notary Public

**BARBARA TSOUPAS**  
**NOTARY PUBLIC**  
My Commission Expires July 31, 2009

STATE OF NEW HAMPSHIRE  
BEFORE THE  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DIRECT TESTIMONY OF  
JAY W. SHUTT, P.E.  
ON BEHALF OF  
AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.

DW 08-098

AUGUST 28, 2008

Jay W. Shutt

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

2 A. My name is Jay W. Shutt.

3 My business address is 3769 Columbus Pike, P. O. Box 8016, Delaware, Ohio 43015.

4

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

6 A. I am President and Chief Executive Officer of Floyd Browne Group, Inc.

7

8 **Q. On whose behalf are you testifying in this proceeding?**

9 A. I am testifying on behalf of Aquarion Water Company of New Hampshire, Inc.

10 (“Aquarion”).

11

12 **Q. What is the business of Floyd Browne Group, Inc.?**

13 A. Floyd Browne Group, Inc. is a professional engineering, scientific and environmental  
14 management consulting firm which provides a broad range of services related to water  
15 treatment, storage and distribution, wastewater collection and treatment, hazardous waste  
16 management, remediation, solid waste management, geoscientific investigation and  
17 construction management.

18

19 Floyd Browne Group, Inc. provides management, valuation and rate consulting services  
20 for municipal and investor-owned utilities. In addition, Floyd Browne Group, Inc.  
21 previously owned and operated a privatized water treatment plant in Lee County, North  
22 Carolina and currently operates the Bellefontaine, Ohio wastewater treatment plant. As a

Jay W. Shutt

1 result, we are directly involved in the financial aspects of utility operations on a day-to-  
2 day basis.

3  
4 **Q. Please describe your educational training and involvement with professional**  
5 **associations.**

6 A. I received a Bachelor of Science degree in Agricultural Engineering and a Master of  
7 Science degree in Engineering from the Ohio State University, Columbus, Ohio in 1973  
8 and 1974 respectively. I received a Master of Business Administrative degree from the  
9 University of Dayton, Dayton, Ohio in 1979.

10  
11 I am a Registered Professional Engineer in Ohio. I am a member of the American Water  
12 Works Association where under the auspice of the Water Utility Council, I served as  
13 Chairman of the Risk Management Technical Advisory Group and sat on its Technical  
14 Advisory Group from 1987 through 1994. I am an Associate Member of the National  
15 Association of Water Companies (“NAWC”) and serve on its Water Technology  
16 committee; I am also associate member of the Ohio Chapter of NAWC. I am a former  
17 President of the American Council of Engineering Companies of Ohio.

18  
19 **Q. Please describe your professional experience.**

20 A. From 1974 to 1981, I was employed by Floyd Browne Associates, Ltd. where my  
21 assignments included engineering studies, design, environmental assessments; cost  
22 estimates, evaluation of financial requirements, and estimation of user charges, for water,

Jay W. Shutt

1 wastewater and stormwater facilities. These assignments included water and wastewater  
2 facilities projects for numerous communities in Ohio and Indiana. I was employed by  
3 Indiana Cities Water Corporation (“Indiana Cities”) from 1981 to 1987, where as Vice  
4 President Engineering and Vice President and General Manager, my assignments  
5 included cost of service studies, reproduction cost new less depreciation studies,  
6 assistance with depreciation analyses and preparation for and testimony at various rate  
7 proceedings. My assignments also included negotiation of wholesale water sales and  
8 purchase agreements. In addition, I was responsible for development and implementation  
9 of the Company’s capital and major maintenance programs. While at Indiana Cities my  
10 assignments included engineering support for sister utilities in Ohio and Missouri.

11  
12 From 1987 to 1992, I was employed as Vice President of Operations for Aquarion Water  
13 Company of Connecticut’s Eastern Division (formerly Bridgeport Hydraulic Company),  
14 Bridgeport, Connecticut, where my assignments included annual updates of fire service  
15 rates, facilities valuation studies, and development of various miscellaneous, non-  
16 consumption rates and fees. The valuation studies were related to property tax issues and  
17 facility asset purchase issues and involved use of the Handy-Whitman and Engineering  
18 News-Record (ENR) indices to determine reproduction costs and estimate original costs  
19 when such records were not available.

20  
21 Since 1992, I have been employed as President of Floyd Browne Group, Inc. I have  
22 prepared studies of the reproduction cost new less depreciation of the utility properties of

Jay W. Shutt

1 Indiana Cities Water Corporation and of Indiana American Water Company. I have  
2 developed a utility capacity fee system for the City of Delaware, Ohio which is based  
3 upon the concept of new customers “buying-in” to a share of the utility’s current value.  
4 The Handy-Whitman and ENR indexes were used to determine the current value of the  
5 Delaware utilities. In 1996 I prepared a depreciation study for Aquarion Water Company  
6 of Connecticut’s Eastern Division (formerly Bridgeport Hydraulic Company). In 2007 I  
7 prepared a depreciation study for Aquarion Water Company of Connecticut. In 2008 I  
8 prepared a depreciation study for Aquarion Water Company of Massachusetts. I have  
9 also prepared a Cost of Service Study for the Ohio-American Water Company.

10  
11 **Q. Have you previously testified in regulatory proceedings involving utilities?**

12 A. Yes I have. I have testified on rate making matters before the Connecticut Department of  
13 Public Utility Control, before what was then known as the Public Service Commission of  
14 Indiana, before the Indiana Utility Regulatory Commission and before the Public Utilities  
15 Commission of Ohio. My testimony before the Indiana Commission concerned, among  
16 other things, the reproduction cost new (“RCN”) and reproduction cost new less  
17 depreciation (“RCNLD”) of Indiana Cities Water Corporation’s utility property and the  
18 RCNLD of Indiana-American Water Company’s utility property. My testimony before  
19 the Public Utilities Commission of Ohio concerned cost of service. My previous  
20 testimony before the Connecticut Department of Public Utility Control has related to  
21 operational issues, non-consumptive rates, and depreciation studies. I have also testified  
22 before the Connecticut State Legislature on various utility regulatory issues.

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**Q. What is your experience in performing depreciation studies of the type you have performed for Aquarion?**

A. While employed by Indiana Cities, I worked directly with an outside consultant to prepare a depreciation study of the type I have performed for Aquarion Water Company of New Hampshire. Under the consultant's guidance, I compiled the necessary data and performed the analyses necessary to determine depreciation rates.

The aspects of the depreciation study related to evaluating the physical condition and useful life of water facilities are the same as those employed in the performance of replacement cost new less depreciation studies and utility capacity fee studies which were mentioned earlier in my testimony. Each of these types of studies involves identifying utility plant by vintage year, evaluating the useful life of the facilities and calculating the depreciated value of the utility plant.

In 1996, I performed a detailed depreciation study and provided Direct Testimony relative to Aquarion Water Company of Connecticut's Eastern Division's (formerly Bridgeport Hydraulic Company) depreciation rates under Docket No. 96-01-26.

In 2004, I was retained by Aquarion to provide an opinion on the appropriateness of adopting uniform depreciation rates for all of the Company's divisions.

Jay W. Shutt

1 In 2007, I performed a detailed depreciation study and provided Direct Testimony  
2 relative to Aquarion Water Company of Connecticut's depreciation rates under Docket  
3 No. 07-05-19.

4  
5 In 2008, I performed a detailed depreciation study and provided Direct Testimony  
6 relative to Aquarion Water Company of Massachusetts' depreciation rates under D.P.U.  
7 08-27.

8  
9 **Q. What is the scope of your testimony in this proceeding?**

10 A. Floyd Browne Group, Inc. was retained by Aquarion to conduct a study of the  
11 depreciation rates of the Company's utility plant in service as of March 31, 2008.

12  
13 **Q. Are you personally familiar with the properties of Aquarion?**

14 A. Yes, I am. As a part of my current assignment, I have examined the utility property used  
15 to provide service for Aquarion's water system which included a review of the original  
16 cost of the property and property's vintage and condition.

17  
18 I also examined utility plant additions and retirements through March 2008. I have  
19 discussed with Company employees the nature of the property to the extent that I deemed  
20 necessary. Finally, I have made site visits to selected facilities to gain a first hand  
21 understanding of their use and usefulness to the Company and its customers and the

Jay W. Shutt

1 overall condition and maintenance level to augment my understanding gained through  
2 other methods.

3  
4 **Q. Are you sufficiently familiar with the Aquarion utility property to render an opinion**  
5 **on the appropriateness of adopting uniform depreciation rates for each of its water**  
6 **systems?**

7 A. Yes. I am able to provide such an opinion based on my knowledge of the property, the  
8 Company's capital improvement and replacement policies, and my engineering training  
9 and experience. When combined with my engineering knowledge and experience and  
10 through the use of the procedures discussed in this testimony, I am able to render an  
11 opinion as to the depreciation rates for Aquarion's utility property as of March 31, 2008.

12  
13 **Q. Please describe your assignment.**

14 A. I was asked to prepare a depreciation study of all utility property for the Company's  
15 water system and recommend annual depreciation rates. The results of the depreciation  
16 study are contained in my Report on Depreciation Rates which is identified as  
17 Attachment JWS-1.

18  
19 **Q. Would you briefly define what you mean by depreciation and explain a few of the**  
20 **basic fundamentals associated with depreciation?**

21 A. The dictionary defines depreciation as a loss in value. A valuation expert may use market  
22 value, replacement cost, reproduction cost, or even sentimental value as different

Jay W. Shutt

1 approaches to establishing value of any given property. A study of the history of  
2 depreciation as applied to regulated public utility property reveals a narrowing of the  
3 meaning of depreciation to the allocation of cost concept.  
4

5 Depreciation expense also includes a provision for removal costs or salvage proceeds,  
6 which take place upon retirement. Annual depreciation expense consists of two  
7 components: (1) the recovery of the original capital cost and (2) the recovery, or credit,  
8 for net salvage proceeds associated with the property item. For some categories of utility  
9 property, removal cost exceeds any salvage proceeds.  
10

11 Depreciation expense, therefore, is the process of allocating the cost of a depreciable  
12 asset over its productive life. Many of the assets used by the Company are long-lived.  
13 The costs associated with these assets, when they have been used up, are considered an  
14 expense of doing business.  
15

16 **Q. Are parts of the water utility system, such as mains, meters or services, depreciated**  
17 **on an individual basis or are they handled as a group?**

18 A. Depreciation rates for water utility property are based on group depreciation procedures.  
19 Under the group method of depreciation, all property of similar nature, such as all water  
20 mains or all meters, is depreciated at a uniform annual rate. The rate would apply to all  
21 property in the account, regardless of its actual age.  
22

Jay W. Shutt

1 **Q. What is the basis of the Company's present depreciation rates?**

2 A. The present depreciation rates were established in docket DW 99-057, the Company's  
3 last rate proceeding before it was acquired by Aquarion Water Company. Those rates  
4 were based upon a depreciation study applicable to utility plant at December 31, 1998.

5

6 **Q. Do you propose that the Commission approve the application of the depreciation  
7 rates recommended in your report?**

8 A. Yes.

9

10 **Q. What depreciation method do you propose?**

11 A. The Calculated Accumulated Depreciation method of depreciation should be used. This  
12 method is based on the recovery of the original cost, less depreciation and net salvage, over  
13 the estimated service life of each account of property. The Calculated Accumulated  
14 Depreciation method is a well accepted method for recovering the total depreciable cost  
15 over the service life of the property and when coupled with amortization of any depreciation  
16 reserve variance reflects changes in depreciation rates caused by revisions in total and  
17 remaining service lives. It is also consistent with the method used in previous depreciation  
18 studies of the Company's property.

19

20 **Q. Please explain the Calculated Accrued Depreciation method.**

21 A. The Calculated Accrued Depreciation method is based on recovering the original  
22 investment, less the depreciation reserve, plus net salvage over the estimated service life of  
23 the property in question.

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**Q. Please identify the document identified as Attachment JWS-1.**

A. Attachment JWS-1 is my report entitled Aquarion Water Company of New Hampshire Report on Depreciation Rates, August, 2008.

**Q. Would you briefly describe and discuss the contents of this exhibit?**

A. Yes. Section 1 of the report provides a general discussion and some background information on Aquarion and a brief summary of certain factors which affect the service lives of the property and the annual depreciation rates. These include technical and economical factors which affect the service lives and net salvage of Company property.

Section 2 of Attachment JWS-1 contains some general definitions relating to depreciation and descriptions of the analysis procedures used in the study.

Section 3 of Attachment JWS-1 explains the service life study procedures more fully. Service lives were determined for individual plant accounts using the following approaches:

1. A service life analysis was conducted through computer processing by analyzing the history of additions, retirements, and plant balances over a select period of years for accounts where there have been sufficient retirements for study. The method used in this process is known as the Simulated Plant-Record Analysis Method. The Simulated Plant-Record Analysis compares the actual history of a utility plant account with the series of Iowa curves and identifies the curve or curves which best fit the data. The method also estimates the average service life of the facilities included in that utility plant account. The Iowa curves are a family of retirement

1 patterns and average service lives which collectively reflect the patterns of  
2 retirements for utility property.

- 3
- 4 2. For each account evaluated, specific factors with respect to current and anticipated  
5 technological changes, obsolescence, physical condition and other elements unique  
6 to the account were reviewed.

7

8 Section 4 of Attachment JWS-1 contains an account-by-account discussion of the factors  
9 considered for recommended depreciation rates. Section 5 of Attachment JWS-1 contains a  
10 summary of the proposed depreciation rates recommended in the study. The proposed rates  
11 were applied to the adjusted account balances at March 31, 2008 for comparison with  
12 present rates.

13

14 **Q. Could you please explain how the actual computation was made in determining**  
15 **depreciation rates using the Calculated Accrued Depreciation method?**

16 A. Annual depreciation, using the Calculated Accrued Depreciation method, was computed by  
17 first determining the straight line annual depreciation accrual rate based on the estimated  
18 average service life, applying that rate to the account balance and adding in a net salvage  
19 adjustment percentage to arrive at the annual accrual amount for each plant account. Next  
20 the calculated accrued depreciation was determined by multiplying each vintage year's  
21 surviving balance by an accrued depreciation ratio taken from the appropriate Iowa Curve  
22 table for that vintage year's percent of the account's estimated average age. These vintage  
23 year calculated accruals are then summed and a net salvage adjustment percentage added to  
24 determine the entire account's calculated accrued depreciation. The account's calculated  
25 accrued depreciation is then compared to the book depreciation reserve to determine the

1 reserve variance. A ten year amortization of any reserve variance is added to the previously  
2 calculated annual accrual amount to determine the total proposed annual depreciation  
3 expense. A table showing the depreciation rate development for each account is shown in  
4 Attachment JWS-1, Table 5-1.  
5

6 **Q. Were there particular factors that are unique to the Company that you used in**  
7 **developing its depreciation rates?**

8 A. Yes. The service lives have been determined on the basis of studies of past retirement  
9 history for the major accounts, and on the basis of the Company's replacement programs.  
10

11 **Q. Did you consider the past service life history of the property?.**

12 A. Yes. I have considered the past service life history for all accounts where there has been  
13 retirement activity, including the retirement characteristics and service life resulting from  
14 past retirements. I used the Simulated Plant-Record Analysis Method for this analysis.  
15 Section 4 of Attachment JWS-1 describes this analysis and provides a sample illustration of  
16 actual accounts included.  
17

18 **Q. Are the results of these methods indicative for all accounts?**

19 A. No. They can only be used where there have been sufficient retirements to provide enough  
20 history for analysis. For certain accounts, the retirements have been limited, the life results  
21 cover a wide range, or the Index of Variation was high. For these accounts, I have also  
22 relied upon the present service lives and/or typical industry service lives to estimate the  
23 average and remaining lives.  
24

1 **Q. Where average service lives are indicated by the past history, is this service life always**  
2 **appropriate to use for present and future depreciation purposes?**

3 A. No. With each account or each class of equipment, it is necessary to consider the conditions  
4 which have resulted in retirements and determine whether or not these same conditions  
5 prevail presently or are expected to prevail in the future. The past history is only one of  
6 several kinds of information required in order to determine an appropriate average service  
7 life or remaining life.

8  
9 **Q. Why are both positive and negative numbers shown in the Estimated Salvage or**  
10 **Retirement cost columns of Table 5-1 of Attachment JWS-1?**

11 A. The positive numbers represent a positive salvage value meaning that when the property is  
12 retired from utility service its remaining value can be captured by selling it. A good  
13 example of this is selling retired water meters for their scrap metal value. On the other  
14 hand, there is often a cost associated with removing utility property from service. A typical  
15 example would be a water main that, while the bulk of the pipe is abandoned in place, there  
16 is a cost of excavation to disconnect the retired pipe from the active portion of the water and  
17 from service lines, fire hydrants, etc. The cost of the excavation, backfill and pavement  
18 repairs can be quite significant at current prices in comparison to the pricing levels when the  
19 water main was originally installed, in many cases 60 to 100 or more years ago.

20  
21 **Q. Why is it important that proper net salvage factors be included in the Company's**  
22 **depreciation rates?**

23 A. The reason is that the Company has incurred and is expected to incur removal costs of  
24 retired property which, for several accounts, has not been adequately reflected in the  
25 depreciation rates. Should this situation continue for a period of time, there would tend to

1 be a deficiency in the depreciation reserve. Eventually, future customers would be burdened  
2 with costs that should have been paid by present day customers through depreciation rates.

3  
4 **Q. How should an accumulation of the negative net salvage portion of the allowed**  
5 **depreciation expense over a period of years be viewed in relation to the utility's**  
6 **recorded negative net salvage (or retirement) cost for that same period?**

7 A. If the Calculated Annual Depreciation method is used to establish the depreciation rates  
8 including the negative net salvage portion of the allowed depreciation expense, the negative  
9 net salvage expense will accumulate in roughly equal amounts each year since the method is  
10 a form of straight-line depreciation. However, the actually experienced negative net salvage  
11 (or retirement) cost is not expected to occur in a uniform, straight-line manner. Rather, the  
12 actually experienced costs would be expected to follow the retirement pattern represented by  
13 one of the Iowa type curves. The Iowa curves discussed in my Report of Depreciation Rates  
14 are not linear. Therefore, one would not expect to see a close correlation in the pattern of  
15 the accumulation of booked net salvage expense and actually experienced net salvage cost.

16  
17 Depending upon the shape of the Iowa type curve that the particular utility plant follows,  
18 over any given period of years, the booked net salvage expense could either significantly  
19 exceed or significantly lag behind the net salvage costs. By the end of the life of the utility  
20 property in question, the booked expense and the actual cost would be expected to coincide.  
21 The point of allowed depreciation expenses, including the net negative salvage portion of  
22 the expense, is to spread the depreciation cost uniformly over the life of the utility plant  
23 rather than to charge the cost to the customers in the year that an actual retirement event  
24 occurs. It is believed by most regulators that this approach is the fairest way to distribute the

1 non-linear costs over the life of the utility plant. Further, it is believed that this provides for  
2 the most equitable distribution of the costs between past, present and future customers.

3  
4 **Q. Would you summarize your recommended depreciation rates?**

5 A. Yes. A summary of my depreciation recommendations is contained in Attachment JWS-1,  
6 Table 5-1. The proposed depreciation rates result in a total annual expense of \$938,623  
7 based on the property in service March 31, 2008.

8  
9 **Q. Can you summarize the effect of the proposed rates and your conclusions as to the  
10 basis for these rates?**

11 A. Yes. The proposed rates reflect the service lives for each utility plant account for the  
12 composite utility plant in service. The proposed rates are based upon the best estimates of  
13 anticipated service lives, along with consideration of the expected net salvage or removal  
14 costs, where applicable. The proposed rates are considered reasonable for the capital cost  
15 recovery of the water system investment and removal costs.

16  
17 **Q. In summary, what is your recommendation regarding the service lives which you have  
18 presented in the report?**

19 A. I recommend the continuation of the Calculated Accrued Depreciation method of  
20 determining annual depreciation rates and amortization of the reserve variance over ten  
21 years consistent with prior Commission policies resulting in the proposed rates shown in the  
22 report. These changes will, in my opinion, provide an equitable and reasonable capital  
23 recovery for the investment in the water system plant than the present depreciation rates.  
24 The proposed rates will ensure that such recovery is more consistent with the services  
25 provided than under the present rates.

Jay W. Shutt

1 Q. Does this conclude your testimony?

2 A. Yes.

Table 5-1

**Aquarion Water Company of New Hampshire  
 Estimated Survivor Curve, Net Salvage, Original Cost, Calculated Annual and Accrued Depreciation  
 As Applied to Plant Investment as of March 31,**

Account Number	Account Description	Survivor Curve		Net Salvage Percent (%)	Total Plant Balance 03/31/08 (\$)	Calculated Annual Accrual		Calculated Accrued Depreciation (\$)	Book Depreciation Reserve 03/31/08 (\$)	Reserve Variance (\$)	Annual Amortization (\$)
		Iowa Service Curve	Avg. Life			Amount (\$)	Rate (%)				
	<i>Source of Supply Plant</i>										
301	Organization				17,700						
303	Miscellaneous Intangible Plant	SQ	30	0%	20,727	691	3.33%	3,624	2,073	1,551	155
310	Land & Land Rights (Supply)				460,591						
311	Structures & Improvements	R5	40	-10%	611,459	16,815	2.75%	82,740	25,217	57,523	5,752
312	Collecting & Impounding Reservoirs										
314	Wells & Springs	R3	30	-10%	2,775,032	101,751	3.67%	1,044,100	465,652	578,448	57,845
316	Supply Mains	R3	100	-20%	182,935	2,195	1.20%	68,879	59,704	9,175	917
317	Other Water Source Plant	SQ	20	0%	1,499,100	74,955	5.00%	285,381	64,354	221,027	22,103
					5,567,543	196,407		1,484,724	617,000	867,724	86,772
	<i>Pumping Plant</i>										
320	Land & Land Rights (Pumping)				709						
321	Structures & Improvements	R5	40	-10%	1,275,322	35,071	2.75%	488,486	373,821	114,665	11,467
325	Electric Pumping Equipment, Booster	R1	35	-20%	880,695	30,195	3.43%	389,514	515,790	(126,276)	(12,628)
326	Diesel Pumping Equipment	R1	30	-10%	32,297	1,184	3.67%	32,297	22,582	9,715	972
328	Other Pumping Equipment	R1	25	-10%	34,764	1,530	4.40%	29,160	25,773	3,387	339
					2,223,786	67,980		939,456	937,966	1,490	149
	<i>Water Treatment Plant</i>										
330	Land & Land Rights (Treatment)										
331	Structures & Improvements	R5	40	-10%	176,164	4,845	2.75%	34,403	30,299	4,104	410
332	Water Treatment Equipment	R5	30	-10%	282,411	10,355	3.67%	131,519	195,265	(63,746)	(6,375)
					458,575	15,200		165,922	225,564	(59,642)	(5,964)
	<i>Transmission &amp; Distribution Plant</i>										
340	Land & Land Rights (T & D)				154,202						
341	Structures & Improvements	R5	40	-10%	289,440	7,960	2.75%	44,771	136,815	(92,044)	(9,204)
342	Distribution Reservoirs & Standpipes	R5	60	-20%	1,272,926	25,459	2.00%	701,225	672,993	28,232	2,823
343	Transmission & Distribution Mains	R3	100	-20%	13,946,093	167,353	1.20%	2,649,725	2,687,999	(38,274)	(3,827)
345	Services	R3	65	-20%	4,464,538	81,991	1.85%	1,260,585	1,400,931	(140,346)	(14,035)
346	Meters	R1	25	5%	740,054	28,122	3.80%	304,460	293,720	10,740	1,074
347	Meter Installation	R1	25	5%	243,519	9,254	3.80%	100,184	17,923	82,261	8,226
348	Hydrants	S3	50	-20%	592,797	14,227	2.40%	289,593	220,362	69,231	6,923
349	Other T & D Plant	SQ	20	0%	98,704	4,935	5.00%	16,532	3,697	12,835	1,283
					21,802,273	339,300		5,367,075	5,434,440	(67,365)	(6,736)
	<i>General Plant</i>										
389	Land & Land Rights(General)										
390	Structures & Improvements	R1	35	-10%	590,808	18,568	3.14%	179,214	117,199	62,015	6,202
391	Office Furniture & Equipment	R1	13	0%	80,398	6,184	7.69%	73,116	12,314	60,802	6,080
391H/S	Computer Hardware	SQ	5	0%	568,558	113,712	20.00%	559,740	443,827	115,913	11,591
392	Transportation Equipment	S6	8	10%	292,784	32,938	11.25%	175,349	148,330	27,019	2,702
393	Stores Equipment	SQ	20	0%	17,891	895	5.00%	4,215	2,018	2,197	220
394	Tools, Shop & Garage Equipment	SQ	20	0%	142,771	7,139	5.00%	82,885	68,542	14,343	1,434
395	Laboratory Equipment	SQ	15	0%	23,907	1,594	6.67%	19,169	16,903	2,266	227
396	Power Operated Equipment	R3	15	0%	162,947	10,863	6.67%	58,154	41,384	16,770	1,677
397	Communications Equipment (non-telephon	SQ	10	0%	286,606	28,661	10.00%	260,810	329,642	(68,832)	(6,883)
398	Miscellaneous Equipment	SQ	15	0%	26,780	1,785	6.67%	14,615	15,352	(737)	(74)
					2,193,452	222,339		1,427,266	1,195,511	231,755	23,176
	<b>Total Utility Plant</b>				<b>32,245,628</b>	<b>841,227</b>	<b>2.61%</b>	<b>9,384,444</b>	<b>8,410,481</b>	<b>973,963</b>	<b>97,396</b>
	<b>Annual Reserve Deficiency Amortization:</b>										<b>97,396</b>
	<b>Proposed Depreciation Expense:</b>										<b>938,623</b>

Table 5-2

Aquarion Water Company of New Hampshire  
Comparison of Current and Proposed Depreciation Rates

Account Number	Account Description	Current Rates (%)	Proposed Rates (%)	Current Annual Accrual Amount (\$)	Proposed Annual Accrual Amount (\$)	Current Annual Reserve Shortfall Amortization (\$)	Proposed Annual Reserve Shortfall Amortization (\$)
<i>Source of Supply Plant</i>							
301	Organization						
303	Miscellaneous Intangible Plant	5.00%	3.33%	1,036	691	0	155
310	Land & Land Rights (Supply)						
311	Structures & Improvements	1.60%	2.75%	9,783	16,815	13	5,752
312	Collecting & Impounding Reservoirs						
313	Lake, river and other intakes						
314	Wells & Springs	1.45%	3.67%	40,238	101,751	5,378	57,845
316	Supply Mains	1.36%	1.20%	2,488	2,195	1,290	917
317	Other Water Source Plant	1.33%	5.00%	19,938	74,955	38	22,103
<i>Pumping Plant</i>							
320	Land & Land Rights (Pumping)						
321	Structures & Improvements	2.47%	2.75%	31,500	35,071	4,845	11,467
325	Electric Pumping Equipment, Booster	4.28%	3.43%	37,694	30,195	8,574	(12,628)
328	Other Pumping Equipment	5.00%	3.67%	1,615	1,184	385	972
		4.08%	4.40%	1,418	1,530	511	339
<i>Water Treatment Plant</i>							
330	Land & Land Rights (Treatment)						
331	Structures & Improvements	2.47%	2.75%	4,351	4,845	1,967	410
332	Water Treatment Equipment	6.56%	3.67%	18,526	10,355	289	(6,375)
<i>Transmission &amp; Distribution Plant</i>							
340	Land & Land Rights (T & D)						
341	Structures & Improvements	2.04%	2.75%	5,905	7,960	3,641	(9,204)
342	Distribution Reservoirs & Standpipes	2.04%	2.00%	25,968	25,459	14,883	2,823
343	Transmission & Distribution Mains	1.36%	1.20%	189,667	167,353	53,204	(3,827)
345	Services	2.00%	1.85%	89,291	81,991	26,495	(14,035)
346	Meters	5.94%	3.80%	43,959	28,122	3,710	1,074
347	Meter Installation	1.54%	3.80%	3,750	9,254	1,501	8,226
348	Hydrants	2.27%	2.40%	13,457	14,227	4,488	6,923
349	Other T & D Plant	1.33%	5.00%	1,313	4,935	0	1,283
<i>General Plant</i>							
389	Land & Land Rights(General)						
390	Structures & Improvements	2.99%	3.14%	17,665	18,568	0	6,202
391	Office Furniture & Equipment	3.09%	7.69%	2,484	6,184	812	6,080
391H	Computer Hardware & Software	12.65%	20.00%	71,923	113,712	2,987	11,591
392	Transportation Equipment	10.00%	11.25%	29,278	32,938	13	2,702
393	Stores Equipment	2.87%	5.00%	513	895	34	220
394	Tools, Shop & Garage Equipment	3.46%	5.00%	4,940	7,139	1,163	1,434
395	Laboratory Equipment	6.67%	6.67%	1,595	1,594	300	227
396	Power Operated Equipment	4.73%	6.67%	7,707	10,863	179	1,677
397	Communications Equipment (non-telephon	10.00%	10.00%	28,661	28,661	3,943	(6,883)
398	Miscellaneous Equipment	6.28%	6.67%	1,682	1,785	43	(74)
<b>Total Utility Plant</b>		<b>2.20%</b>	<b>2.61%</b>	<b>\$708,345</b>	<b>\$841,227</b>	<b>\$140,687</b>	<b>\$97,396</b>

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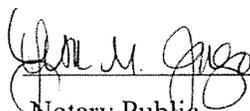
STATE OF NEW HAMPSHIRE PUBLIC UTILITY COMMISSION

JAY W. SHUTT, being first duly sworn, deposes and states:

That he is the Jay W. Shutt whose direct testimony accompanies this Affidavit, that said direct testimony is a true and accurate statement of his answers to the questions contained herein, and that he adopts those answers as his sworn testimony in this proceeding.

  
\_\_\_\_\_  
JAY W. SHUTT

SWORN TO and SUBSCRIBED before me this 22nd day of August.

  
\_\_\_\_\_  
Notary Public



LISA M. JAGO  
NOTARY PUBLIC, STATE OF OHIO  
MY COMMISSION EXPIRES 5/31/2011

**AQUARION WATER COMPANY OF NEW HAMPSHIRE  
REPORT ON DEPRECIATION RATES**

**AUGUST, 2008**

**JAY W. SHUTT, PE  
FLOYD BROWNE GROUP**

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## AQUARION WATER COMPANY OF NEW HAMPSHIRE

### Report on Depreciation Rates

#### General

This report contains a description of the depreciation study of the property and plant of the Aquarion Water Company of New Hampshire as of March 31, 2008. The Aquarion Water Company of New Hampshire, an Aquarion subsidiary, is the public water supply company for approximately 8,770 customer accounts in Hampton, North Hampton and Rye.

The present depreciation rates were established in the Company's rate proceeding, DW 99-057, based upon a depreciation study applicable to utility plant at December 31, 1998. Table 5 -2 includes a tabulation of the present depreciation rates for each utility plant account.

This depreciation study includes an evaluation of historical service lives experienced by the Company for various types of plant property and equipment, a consideration of the cost of removal and salvage proceeds associated with property retirements, and the preparation of recommended depreciation rates for the various accounts.

Depreciation expenses are a regular and fundamental part of the cost of providing utility services. The annual depreciation expense charged against income over the service life of the property is a mechanism by which the capital investments in physical assets are recovered by water utilities. The depreciation rate also provides recognition of net salvage costs. These costs--salvage proceeds less the cost of retirement--are also provided for in the annual depreciation expense rate.

In accordance with the policy of the New Hampshire Public Utility Commission, the recommended amortization of the variance between the book and accumulated depreciation and the calculated accrued depreciation is based on a ten-year amortization period for each property group. The calculated accrued depreciation represents that portion of the depreciable cost which will not be allocated to expense through future depreciation accruals, if current forecasts of service life characteristics and net salvage materialize and are used as a basis for depreciation accounting. The calculated accrued depreciation provides a measure of the book accumulated depreciation. The use of this measure is recommended in the amortization of book accumulated depreciation variances to insure complete recovery of capital over the life of the property.

The Company is being subjected to a number of factors which have a direct bearing on depreciation rates and expense. Older pumps, motors, valves, instrumentation and other operating mechanisms are being replaced and modernized. Older style meters are being supplanted with newer and more efficient meters. Switchgear and instrumentation are being upgraded with computerized systems and hydrants and water mains are being replaced. Some of the water plant facilities may be physically sound but may need replacement for a variety of reasons such as requirements of the Safe Drinking Water Act. Thus, a variety of factors may influence the remaining life of a particular piece of equipment. The requirements for improvements in water quality, safety and reliability, including technical and economic obsolescence, all have an impact on the service lives and remaining lives of the Company's property.

The historical retirement experience of the Company has been used as a guide to the average service life. Wherever possible a statistical analysis of the retirement history of

the asset account was performed to provide an estimate of the average service live. For some accounts, insufficient retirement history data was available to support a statistical analysis because total retirements have been only a small portion of the plant in service. In such cases, the service lives proposed have been developed with reference to industry and regulatory authority standards.

Section 2 of the report discusses and defines basic depreciation terms and analysis procedures used for this Study. Section 3 details the service life studies that were used and the depreciation computation procedures. Section 4 provides a discussion of the specific factors which were taken into consideration in developing the depreciation rates for each asset account or subaccount. Section 5 contains a summary of the study results and proposed rates. The Appendix contains printouts of the various information and studies used as a guide in preparing the proposed rates.

## **SECTION 2 DEPRECIATION DEFINITIONS AND PROCEDURES**

For water utility rate making purposes, the principal associated with the cost of capital expenditures which will provide service over a number of years is recovered as an annual charge termed depreciation expense. The annual expense is accumulated in a depreciation reserve. Upon retirement, the cost of the asset is charged to the depreciation reserve thus reducing the original cost and the amount of the reserve by an equal amount. The annual depreciation expense is modified according to whether or not it is expected that the retirement of the asset will result in a positive salvage amount, or if it will result in additional cost to be incurred to effect the retirement, or negative salvage.

Public water utility depreciation practices are typically based on group accounting methods. A single depreciation rate is applied to like items, either an entire account or by subaccount, rather than determining a separate rate for each individual asset. Average service lives, or average remaining lives, are determined for the group for depreciation purposes. The use of groups and averages means that some assets in the group will be retired before the average life and others after the average life.

### **Basis of Study**

The purpose of the depreciation study was to determine the annual depreciation accrual rates applicable to the cost of utility plant in service at March 31, 2008, and to measure the adequacy of Accumulated Depreciation. For most accounts, the straight line whole life method using attained ages and estimated survivor curves was the basis for the calculation of annual and accrued depreciation. For some accounts, the annual and accrued depreciation amounts were based on the age of the property and the selected

amortization period.

### **Simulated Plant-Record Method**

A common method of analysis of past service life history involves the use of the Simulated Plant-Record method (SPR). This method does not require detailed dated retirement information but instead uses gross additions by years, actual plant balances and a set of standard utility mortality curves. The gross addition and plant balance information is almost always available so that the SPR procedure can be used where detailed records are lacking, or where abstracting the detailed data is costly and time consuming.

There are two procedures that can be used under the SPR, one involving the simulated balances and the other the simulated retirements. The simulated retirement method is subject to considerable variations (annual retirements can vary substantially from year to year depending on the construction budget of the utility) and is not used extensively. In the simulated balances method, a mortality or retirement curve is applied to the gross additions to determine the simulated balances. The simulated balances are compared with the actual plant balances (usually for a span of 5, 10 or more years) using the least squares method of computation. Many curves and service lives are applied until the curve(s) with the best fit (smallest least squares total) is determined. As shown in Appendix A of the report, tables are produced which list the various curves ranked according to fit.

The tabulation also shows an Index of Variation which is a measure of how consistently the simulated balances match the actual balances. The following table shows the relative rating of the two indexes:

Index of Variation (IV)	Rating
<13	Excellent
13 to 20	Good
20 to 40	Fair
>40	Poor

Another qualitative measure of the Simulated Plant-Record analysis is the Retirements Experience Index (REI). The REI is the percent of the property retired from the oldest vintage in the test year by the end of the test year. A low REI indicates that the data may not contain enough history to uncover the life characteristics of the property being studied. The following ratings are suggested by depreciation experts:

REI	Rating
>75%	Excellent
50% to 75%	Good
33% to 50%	Fair
17% to 33%	Poor
0% to 17%	Valueless

### **Net Salvage**

Net salvage is defined as the salvage, proceeds realized upon retirement, less any cost of removal incurred. For example, an automobile costing \$24,000 and traded in or sold for \$6,000 would have 25 percent net salvage factor (as there is no cost of removal). Similarly, a building costing \$250,000 and removed upon retirement at a cost of \$25,000 would have a negative 10 percent net salvage. The net salvage costs are related to the

original cost of the plant retired. The net salvage costs are present day costs while the original costs of property retired were frequently incurred 50 or more years ago, at much lower costs levels. For these reasons, it is not uncommon to have the cost of removal (primarily current labor costs) be a significant percentage of the cost of the plant retired. This information was used as a guide for the proposed service lives and remaining lives and net salvage factors.

### **Iowa Survivor Curves**

The Iowa Curves used extensively in the depreciation study practice were developed during the 1930's at Iowa State University. The Curves are a family of retirement patterns and average service lives which collectively reflect the patterns of retirements for utility property.

There are three basic types of curves, R, L and S. The R family of curves designates patterns where the maximum rate of retirements occurs to the right or after the average service life. The S family denotes peak retirements at the average service life and the L set of curves reflect the peak retirements to the left or earlier than the average service life. There are several other types of curves which have been developed to reflect a single one time retirement of the property and the straight line or uniform rate of retirement over the service life history. The curves are designated within each of the three basic sets from zero to six. Where retirements occur at a fairly uniform rate over the service life, the zero curves such as L0 would be indicated. Where retirements occur at a rapid rate with very few retirements during the early and later years of service, the 6 type such as L6 curve would be indicated. Curves are normally designated by the curve type and the years of

service such as an R2-40 year curve.

Assuming an R1-40 year service life, the remaining life of the new property at the end of the year when it is installed would be 39.5 years (at December 31, property installed at a given year is considered to have an age of 0.5 years). At 10.5 years, there would be 92 percent of the original property surviving and a remaining life of 32.5 years. Thus, the total life at that point is 43 years for the surviving property (10.5 plus 32.5 years). At age 50.5, there will be 32.6 percent of the original property surviving and 10 years remaining life for a total of 60.5 years. The utility survivor curves are like human mortality curves. When born, infants may have an expected life of 72 years on the average. At age 60, the remaining expectancy may be 20 years for a total of 80 years. At age 80, the expectancy may be 6 years for a total of 86 years. The humans who live longer than the average offset infant mortality and deaths of people prior to the age 72.

The Iowa Curves used in service life studies using both the retirement rate and simulated plant-record methods, are used to calculate depreciation reserves, and are used to estimate remaining service life. The availability of computers has greatly enhanced the use of the curves in such studies. The original tables developed at Iowa State University in the 1930's required several man-years of mechanical calculator computations. Similar tables can be generated by modern computers in a few minutes or less.

**SECTION 3  
SERVICE LIFE STUDIES AND  
DEPRECIATION COMPUTATION PROCEDURES**

**Service Life Study Procedures**

Several procedures were used to determine the service lives as the basis for computing the depreciation accrual rates in this study. The average service life was determined by individual account and was based primarily on three factors:

1. The specific history of additions and plant balances over a select period of years for group properties was studied through the use of actuarial methodologies (simulated plant-record analysis).
2. The depreciation rates used by other water utilities, various properties and the range of rates for several water utilities recommended by the NARUC were considered. The service lives presently used by the Company have also been considered.
3. Specific factors with respect to current and anticipated technological changes, obsolescence, physical condition and other elements unique to the property were evaluated. These included a review of present and prospective construction and replacement programs, consideration of terminal or replacement dates for certain types of property and the net salvage or cost of removal required to take equipment out of service.

**Simulated Plant-Record Method**

The Simulated Plant-Record Method was applied to accounts where there was adequate retirement experience. The Simulated Plant-Record software allows making a

variety of studies looking at the retirement experience covering different spans of years. Original cost, retirement, transfer and adjustment data used in the depreciation study were obtained from the Company's continuing property records. Data used in the study extended through March 31, 2008. As discussed earlier, standard utility retirement curves known as the Iowa Curves were used for the study.

Tabulations of simulated plant balance studies are included in Appendix A.

### **Estimation of Net Salvage Percents**

The estimates of net salvage were based primarily on judgment which considered a number of factors including a) data compiled for the years 1993 through 1998 and analyzed for a previous depreciation study in 1998, b) comparison of those findings to previous studies of other water companies, c) engineering and operational knowledge of retirement means and methods, and d) environmental regulatory requirements. Net salvage estimates are expressed as a percent of the original cost of plant retired. Recommended net salvage percentages for each plant account are included in Appendix B.

### **Depreciation Computation Procedure**

Proposed depreciation rates were computed after weighing all the facts with respect to the remaining service life, average service life, age and Iowa curves based on historical data, comparison of typical industry rates, determination of net salvage, physical and functional aspects of the property and all other factors, including future expectations, which might also have a bearing on the remaining life of the property.

### **Calculate Annual Depreciation Expense**

Simulated Plant-Record studies and other service life analyses provide the average

years of service life and a representative retirement pattern by means of an Iowa Curve selection. The first step in calculating the annual depreciation expense was to apply a straight line whole life approach. That is, assuming a uniform straight line depreciation percentage over the estimated average service life. After the average service life is determined, the annual depreciation rate can be computed by the following equation:

$$100\% / \text{Average Service Life} = \text{Annual Accrual Rate (percent)}$$

For example, assuming a 20 year average service life:  $100\% / 20 = 5\%$

This annual depreciation percentage was then applied to each vintage year plant balance and summed to arrive at a total for the plant account.

The Net Salvage Adjustment as then added to arrive at the Annual Depreciation for each plant account. This adjustment is calculated by multiplying the Net Salvage Factor expressed as a percent of the original cost times the plant account's calculated total annual depreciation amount.

The calculations of the annual depreciation expense by plant account are included in Appendix B.

### **Calculated Accrued Depreciation**

The Calculated Accrued Depreciation for each depreciable property group represents that portion of the depreciable cost of the group which will not be allocated to expense through future depreciation accruals, if current forecasts of life characteristics are used as a basis for straight line depreciation accounting.

The accrued depreciation calculation consists of applying an appropriate ratio taken from the Iowa Curve table to the surviving original cost of each vintage of each account, based upon the attained age and the estimated survivor curve of each vintage. The

vintage year accrued depreciation was calculated as follows:

Vintage Year Accrued Depreciation = Ratio (*based on vintage year percent of average age*) x Vintage Year Surviving Balance

The vintage year accruals are added and a net salvage adjustment is added to arrive at the total calculated accrued depreciation for the plant account. The calculations of the accrued depreciation by plant account are included in Appendix B.

**SECTION 4  
WATER SYSTEM REMAINING LIFE  
AND NET SALVAGE FACTORS**

**General**

The annual depreciation accrual and the calculated accrued depreciation have been analyzed for each account. An analysis of the retirement history of the major accounts was conducted where there was adequate retirement activity and information available. Since the mathematical analyses are based only on historical data, which is sometimes limited, the results of the retirement analysis are not necessarily considered to be definitive. Judgments were applied considering other factors, including the present lives and lives used for other water systems.

The determination of the proposed depreciation expense is shown in Table 5-1. The annual depreciation expense proposed for the water system is \$938,623 as shown in Table 5-1. This amount represents a composite annual accrual rate of 2.61 percent on the total plant investment of \$32,245,628 plus an additional amortization of \$97,396 to correct the \$973,963 reserve variance.

Following is a brief discussion of the recommended average service and the net salvage factors for each account.

**Source of Supply**

**Account 303 – Miscellaneous Intangible Plant**

There has been limited activity in this account and it is of relatively small dollar value. A 30 year amortization period is proposed for this account.

**Account 311 - Structures and Improvements**

Data for all the various utility plant structures and improvement accounts (Accounts

311, 321, 331, and 341) were combined in order to accumulate adequate activity to support the use of statistical analysis. This was possible because the utility plant in these various accounts are very similar in age and general type of construction. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. The lowa curve of best fit for Structures and Improvements per the statistical analysis is an R5 - 38 year curve. Figure 1 suggests an average service life of 35 – 40 years. An R5-40 lowa Curve was selected to fall within the suggested range. Net salvage of minus 10 percent is proposed for the account to provide for the removal costs for concrete and other structures and to be consistent with prior practices.

#### **Account 314 - Wells and Springs**

There has been limited activity in this account. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Wells and Springs Plant is 25 – 35 years. An R3-30 lowa Curve was selected to fall within the suggested range. Net salvage of minus 10 percent is proposed for the account to provide for the removal costs for properly sealing the retired wells and to be consistent with prior practices.

#### **Account 316 - Supply Mains**

These lines convey the raw water from the raw water intake to the treatment facilities. The Simulated Plant-Record analysis did not produce meaningful results due to the limited activity in this account. Supply Mains are similar to transmission and distribution

mains so use of the R5-100 Iowa Curve as indicated for transmission and distribution mains is proposed. A net salvage of minus 20 percent is proposed to also consistent with that proposed for transmission and distribution mains.

#### **Account 317 - Other Water Source Plant**

This account contains the costs of various master planning studies. Since such studies typically use a 20 year planning horizon we can expect their value and usefulness to diminish over that time period. Therefore, a 20 year amortization is proposed. **Pumping Plant**

#### **Account 321 - Structures and Improvements**

Data for all the various utility plant structures and improvement accounts (Accounts 311, 321, 331, and 341) were combined in order to accumulate adequate activity to support the use of statistical analysis. This was possible because the utility plant in these various accounts are very similar in age and general type of construction. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. The Iowa curve of best fit for Structures and Improvements per the statistical analysis is an R5 - 38 year curve. Figure 1 suggests an average service life of 35 – 40 years. An R5-40 Iowa Curve was selected to fall within the suggested range. Net salvage of minus 10 percent is proposed for the account to provide for the removal costs for concrete and other structures and to be consistent with prior practices.

#### **Account 325 - Electric Pumping Equipment**

The Simulated Plant-Record analysis was inconclusive but seemed to indicate an average service life higher than the 20 year life suggested by FIGURE 1 of Depreciation

Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979. The R1-35 lowa curve was selected for this account. A minus 20 percent net salvage factor is recommended for this account based on the complexity of removal of the various electrical apparatus, wiring, etc. which are associated with this type of equipment.

#### **Account 326 – Diesel Pumping Equipment**

The Simulated Plant-Record analysis was inconclusive. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Pumping Equipment is 20 - 25 years. Indications are, however, that the average life is somewhat longer at this utility. The R1-30 lowa curve was selected for this account. Net salvage of minus 10 percent is proposed for the account.

#### **Account 328 - Other Pumping Equipment**

The Simulated Plant-Record analysis was inconclusive. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Other Pumping Equipment is 25 years. The R1-25 lowa curve was selected for this account. Net salvage of minus 10 percent is proposed for the account.

#### **Treatment Plant**

#### **Account 331 - Structures and Improvements**

Data for all the various utility plant structures and improvement accounts (Accounts 311, 321, 331, and 341) were combined in order to accumulate adequate activity to support the use of statistical analysis. This was possible because the utility plant in these

various accounts are very similar in age and general type of construction. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. The Iowa curve of best fit for Structures and Improvements per the statistical analysis is an R5 - 38 year curve. Figure 1 suggests an average service life of 35 – 40 years. An R5-40 Iowa Curve was selected to fall within the suggested range. Net salvage of minus 10 percent is proposed for the account to provide for the removal costs for concrete and other structures and to be consistent with prior practices.

#### **Account 332 - Water Treatment Equipment**

The retirement analysis indicates an average age of about 30 years. The Retirement Experience Index (REI) is 100% which is excellent but the Index of Variation score is only in the fair range. Balancing this Index of Variation score is the consistency with which various Iowa Curves indicate an average service life in the 28 to 34 year range. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. Figure 1 suggests a range of 20 – 35 years as the average service life for water treatment equipment. The simulated plant record indicated 28 to 34 year average service life is therefore consistent. Such a range is also indicated because the typical design period used when engineers design water treatment plants is 20 years. The average service life is likely to be somewhat longer than 20 years because after the 20 year design period a WTP is typically upgraded or expanded rather than being completely replaced. In recognition of the above factors a 30 year life is proposed. The R5 - 30 year curve was selected to fall within the range. Net salvage of minus 10 percent is proposed for the

account.

## **Transmission and Distribution Plant**

### **Account 341 - Structures and Improvements**

Data for all the various utility plant structures and improvement accounts (Accounts 311, 321, 331, and 341) were combined in order to accumulate adequate activity to support the use of statistical analysis. This was possible because the utility plant in these various accounts are very similar in age and general type of construction. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. The Iowa curve of best fit for Structures and Improvements per the statistical analysis is an R5 - 38 year curve. Figure 1 suggests an average service life of 35 – 40 years. An R5-40 Iowa Curve was selected to fall within the suggested range. Net salvage of minus 10 percent is proposed for the account to provide for the removal costs for concrete and other structures and to be consistent with prior practices.

### **Account 342 - Distribution Reservoirs and Standpipes**

The retirement analysis indicates the R5-61.4 Iowa Curve is the curve of best fit. The Retirement Experience Index (REI) is 100% which is excellent and the Index of Variation score of 11 is also excellent. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. Figure 1 suggests a range of 30 – 60 years as the average service life. Since Aquarion has a good track record of maintaining their water tanks a 60 year average service life is considered reasonable for the account. Therefore, an R5-60

Iowa Curve was selected. The net salvage is proposed at minus 20 percent based upon the cost of retirement caused by requirements for lead paint abatement.

#### **Account 343 - Transmission and Distribution Mains**

The Simulated Plant-Record analysis was inconclusive, but suggested an average service life in the range of 100 years. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Transmission and Distribution Mains is 50 – 75 years. We will use an R3-100 curve. A net salvage factor of minus 20 percent is proposed because many transmission and distribution mains are installed under streets and roads and while the bulk of the length of pipe is abandoned in place it is still necessary to excavate in several locations to disconnect the retired main from the rest of the mains, fire hydrants, and service lines. The bulk of the retirement costs are due to the costs of compacted backfill and pavement repairs at the point of the excavations. Also, due to the relative long life of transmission and distribution mains the cost basis of the retired main is very low in comparison to the current cost basis for the required excavations and pavement repairs.

#### **Account 345 - Services**

The Simulated Plant-Balance analysis was inconclusive due to an extremely high index of variation, but did indicate a higher than typical average service life. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was also referenced for guidance. Figure 1 suggests a range of 30 – 50 years as the average service life. An R3-65 Iowa Curve is proposed for this account to be consistent with prior practice and to recognize the indications of a fairly

long average service life. A net salvage factor of minus 20 percent is proposed because of the excavation, backfill and pavement repair costs typically associated with a service retirement as discussed under transmission and distribution mains.

#### **Accounts 346 and 347 – Meters and Meter Installations**

Company records provided for this study were not segregated between Accounts 346 and 347, therefore, the two accounts were treated as one for the purposes of this analysis. The Company has adopted a policy of replacing all 5/8-inch, 3/4-inch, 1-inch and 2-inch meters every 10 years. The analysis of data shows an indicated composite average service life between 24 and 30 years. This is longer than the 10 year replacement policy might seem to indicate, but since this account also includes the larger, more expensive meters that are tested and repaired in place rather than being retired after 10 years, and since it also includes meter installations that are not replaced every 10 years it seems appropriate. An R1-25 year Iowa Curve is proposed for use with both Account 346 and 347. Retired meters are sold for scrap metal and consequently there is a positive salvage value. Since the accounts were jointly analyzed, a net salvage factor of 5% is proposed to be applied to both Accounts 346 and 347 even though there is not likely to be a positive salvage value for meter installations.

#### **Account 348 - Hydrants**

The simulated plant record analysis indicated a range of 46 to 65 years with the curve of best fit being an S3-49 curve. The Index of Variation was consistent across various Iowa Curves in the fair range. An S3-50 Iowa curve is proposed. A minus 20 percent net salvage factor is proposed for the account since excavation and pavement repair is often required at current cost levels versus the lower cost basis of the original

asset given its relatively long life.

#### **Account 349 - Other Transmission and Distribution Plant**

This account contains the costs of various master planning studies. Since such studies typically use a 20 year planning horizon we can expect their value and usefulness to diminish over that time period. Therefore, a 20 year amortization is proposed.

#### **General Plant**

#### **Account 390 - Structures and Improvements**

There has not been adequate activity in this account to support the use of statistical analysis. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for General Plant Structures and Improvements is 35 – 40 years. An R1-35 Iowa Curve was selected to fall within the suggested range and to be consistent with the prior practices. A minus 10 percent net salvage is proposed for this account.

#### **Account 391 - Office Furniture and Equipment**

The Simulated Plant Record Analysis showed a consistent estimated average service life of 13 years although the Index of Variation was very high. Therefore, caution is indicated. However, due to the extreme consistency of results pointing to a 13 year average service life it is proposed to be accepted. An R1-13 Iowa Curve is proposed for this account.

#### **Account 391H/S – Computer Hardware & Software**

Retirements of computer hardware and software are mostly driven by rapid technology change which enables providing the company and its customers with more and

better information in a more timely fashion. As a part of this study data were collected on public utility commission approved computer hardware and software average service lives from five other states (Connecticut, Kentucky, Ohio, Tennessee, Pennsylvania, and Virginia). The approved hardware average service lives from this sample ranged from 4 to 8 years. The norm for non-regulated companies is to depreciate computer hardware and software using a 5 year average service life in accordance with Internal Revenue Service guidelines. A 5 year average service life for computer hardware and software is proposed. Zero net salvage is recommended since retired computers are of little value and there is no significant cost of retirement.

#### **Account 392 - Transportation Equipment**

An Iowa S6-8 curve is indicated as the curve of best fit by a Simulated Plant-Record analysis. Most other competing curves also indicate an 8 year average service life. Again there is a high Index of Variation, but consistency of results. An 8 year life seems reasonable given the mixture of vehicle types included in this account and the Company's vehicle replacement policies. An S6-8 Iowa Curve is proposed for this account. A 10 percent net salvage is recommended for the account to reflect vehicle trade-in values.

#### **Account 393 - Stores Equipment**

There has not been adequate activity in this account to support the use of statistical analysis. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Stores Equipment is 20 years. A 20 year straight line amortization was selected to fall within the suggested range and to be consistent with the prior practices.

### **Account 394 - Tools, Shop and Garage Equipment**

There has not been adequate activity in this account to support the use of statistical analysis. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Tools, Shop & Garage Equipment is 20 years. A 20 year straight line amortization was selected to fall within the suggested range and to be consistent with the prior practices.

### **Account 395 - Laboratory Equipment**

The Simulated Plant-Record analysis was inconclusive. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Laboratory Equipment is 15 – 20 years. A 15 year straight line amortization was selected to fall within the suggested range and to be consistent with the prior practices.

### **Account 396 - Power Operated Equipment**

Although the Simulated Plant-Record analysis results had poor index of variation scores, they consistently indicated an average service life in the 12 to 14 year range. Based upon that consistency an R3-15 Iowa Curve is proposed for this account.

### **Account 397 - Communication Equipment**

The Simulated Plant-Record analysis was inconclusive. FIGURE 1 of Depreciation Practices for Small Water Utilities, National Association of Regulatory Utility Commissioners, August 15, 1979 was referenced for guidance. The suggested average service life for Communication Equipment is 10 years. A 10 year straight line amortization

was selected to fall within the suggested range and to be consistent with the prior practices.

**Account 398 - Miscellaneous Equipment**

The Simulated Plant-Record analysis was inconclusive. A 10 year straight line amortization was selected to be consistent with the prior practices.

## SECTION 5

### SUMMARY AND RECOMMENDATIONS

The goal of a depreciation study is to determine the annual depreciation expense that must be recognized in order to allow the utility to recover its original investment in a plant asset and any cost of retirement of that asset over the life of the asset. The process is fairly straightforward but it does involve a large amount of data and number crunching.

Fundamentally the process is to analyze the past history of a utility's plant additions and retirements to discern a pattern that can be used to predict the average life span that can be expected and the pattern of retirements as the assets reach the end of their used and useful lives.

The type of analysis that is typically used for water utilities is a curve fitting process. Back in the 1930s a series of life curves were developed by researchers at Iowa State. These curves predict what percentage of an asset will be retired in a given year of age. The process is to compare the actual past history of retirements to those predicted by the various Iowa Curves. This is an iterative process facilitated by computer whereby the retirement pattern of each Iowa Curve for every possible average service life is compared to the actual addition and retirement history of a given plant account or sub account. The validity of the Iowa Curve and average service life prediction is tested in essentially two mathematical ways and by engineering judgment. The mathematical tests include a measure of the closeness of the actual annual data points to the standardized curve. This is measured by a statistical test called the sum of the squared differences which can also be reduced to an index called the Index of

Variation.

The second mathematical test is called the Retirement Experience Index. This is a measure of the percent of the predicted total life cycle represented by the actual plant account data. The less of the predicted total life cycle covered by the actual plant account data, the less likely that the true pattern has emerged and been detected.

The final test is one of engineering judgment. Given the nature of the plant in question, what type of retirement pattern makes sense? Some things tend to have relatively high failure rates early on – like computer hard drives – then settle down to a more gradual retirement rate. Other assets tend to have few retirements until well into their life expectancy – like water mains. In other words the blind mathematical analysis must be seasoned with a good dose of engineering knowledge and experience.

Once the most appropriate Iowa Curve and average service life is determined and net salvage value is estimated, the next step is to calculate the annual depreciation accrual and calculated accrued depreciation of the assets in a plant account. This is done by applying the expected life ratios from the selected Iowa Curve and average service life to plant balance and attained ages by vintage years and summing them to arrive at a total.

That last statement introduced one other element of the process and that is the salvage value or retirement cost that is either recovered or incurred at the time an asset is retired from service. If the utility can sell the retired asset it can recover part of its original investment – that is called salvage value. It is not necessary or appropriate to accrue depreciation expenses to cover that portion of the original cost. On the other hand, if additional costs are incurred at the time of retirement, public utility accounting

procedure is to recover that cost over the life of the asset so that those customers who have benefited from the asset pay the cost rather than future customers who will not benefit from the asset. Since the utility plant asset accounting process is based upon the original cost of the asset, the retirement costs or salvage values is expressed in terms of a percentage of the original cost. This can sometimes be confusing because, due to inflation, what appears to be a relatively small dollar amount in today's dollars can represent a significant percentage of the original cost – especially for long lived water utility assets.

The final step is to compare the calculated accrued depreciation to the book depreciation reserve of the account to determine the reserve variance that must be corrected. In accordance with the past policy of the New Hampshire Public Utility Commission, the variance between the book accumulated depreciation and the calculated accrued depreciation is proposed to be amortized over ten years for each plan account.

Revisions are proposed for the depreciation, service lives and net salvage factors for the Company. A schedule of depreciation rates is developed and shown in Table 5-1. The proposed annual depreciation expense, based on plant as of March 31, 2008, is \$938,623 with a composite rate of 2.61 percent of the total utility plant investment plus an additional 0.30 percent to amortize the Reserve Variance.

A comparison of the depreciation expense using the present and proposed rates is shown in Table 5-2.

The proposed rates are recommended as reasonable and necessary for the

Company to recover the costs associated with the investment in water system plant through depreciation expense.

**APPENDIX A**  
**SIMULATED PLANT RECORD ANALYSIS**

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SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-26-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 311/321/331/341 STRUCTURES & IMPROVEMENTS

ACCOUNT CONTROL INFORMATION
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EARLIEST ADDITION = 1900      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1938      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1938      LATEST RETIREMENT = 2006      INPUT = ADD & RET

ANALYSIS BAND = 1938 THRU 2008

INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S4	38.2 YRS.	0.2449E+10	14	71	100.00
S5	38.1 YRS.	0.2357E+10	14	71	100.00
S6	37.9 YRS.	0.2399E+10	14	71	100.00
L4	39.5 YRS.	0.2526E+10	15	66	100.00
L5	38.5 YRS.	0.2406E+10	14	71	100.00
R4	39.3 YRS.	0.2322E+10	14	71	100.00
R5	38.0 YRS.	0.2282E+10	14	71	100.00
O1	157.8 YRS.	0.5839E+10	22	45	34.38
O2	178.0 YRS.	0.5838E+10	22	45	34.28
O3	261.9 YRS.	0.5860E+10	23	43	32.55
O4	353.8 YRS.	0.5870E+10	23	43	31.94

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Jun-26-08

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(X) CURVE OVERLAP  
 (.) S5 38.1  
 (+) L5 38.5  
 (\*) R5 38.0

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SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 332 WATER TREATMENT PLANT WATER TREATMENT EQUIPMENT

ACCOUNT CONTROL INFORMATION

EARLIEST ADDITION = 1935      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1969      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1969      LATEST RETIREMENT = 2008      INPUT = ADD & RET

ANALYSIS BAND = 1969 THRU 2008

INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S5	29.7 YRS.	0.2516E+09	25	40	100.00
S6	28.7 YRS.	0.2090E+09	23	43	100.00
SQ	31.3 YRS.	0.3193E+09	29	34	100.00
L4	33.3 YRS.	0.3698E+09	31	32	100.00
L5	30.7 YRS.	0.2917E+09	27	37	100.00
R4	33.6 YRS.	0.3900E+09	32	31	100.00
R5	30.1 YRS.	0.2794E+09	27	37	100.00
O1	139.0 YRS.	0.3596E+09	31	32	26.44
O2	156.7 YRS.	0.3597E+09	31	32	26.37
O3	230.6 YRS.	0.3592E+09	31	32	25.52
O4	311.5 YRS.	0.3589E+09	31	32	25.26



SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 342 T & D PLANT DISTRIBUTION RESERVOIRS & STANDPIPES

ACCOUNT CONTROL INFORMATION

EARLIEST ADDITION = 1900      LATEST ADDITION = 2008  
EARLIEST BALANCE = 1937      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1937      LATEST RETIREMENT = 2000      INPUT = ADD & RET

ANALYSIS BAND = 1937 THRU 2008      INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S5	60.7 YRS.	0.2615E+10	12	83	100.00
S6	59.2 YRS.	0.2380E+10	11	90	100.00
SQ	64.5 YRS.	0.4168E+10	15	66	100.00
L4	66.5 YRS.	0.2863E+10	12	83	99.11
L5	62.6 YRS.	0.2656E+10	12	83	99.99
R4	67.3 YRS.	0.3064E+10	13	76	100.00
R5	61.4 YRS.	0.2453E+10	11	90	100.00
O1	470.7 YRS.	0.3385E+10	13	76	11.52
O2	525.6 YRS.	0.3385E+10	13	76	11.60
O3	781.0 YRS.	0.3384E+10	13	76	11.40
O4	***** YRS.	0.3383E+10	13	76	11.42



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SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 346 & 347 T & D PLANT METERS & METER INSTALLATIONS

ACCOUNT CONTROL INFORMATION
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EARLIEST ADDITION = 1900      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1913      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1913      LATEST RETIREMENT = 2007      INPUT = ADD & RET

ANALYSIS BAND = 1913 THRU 2008

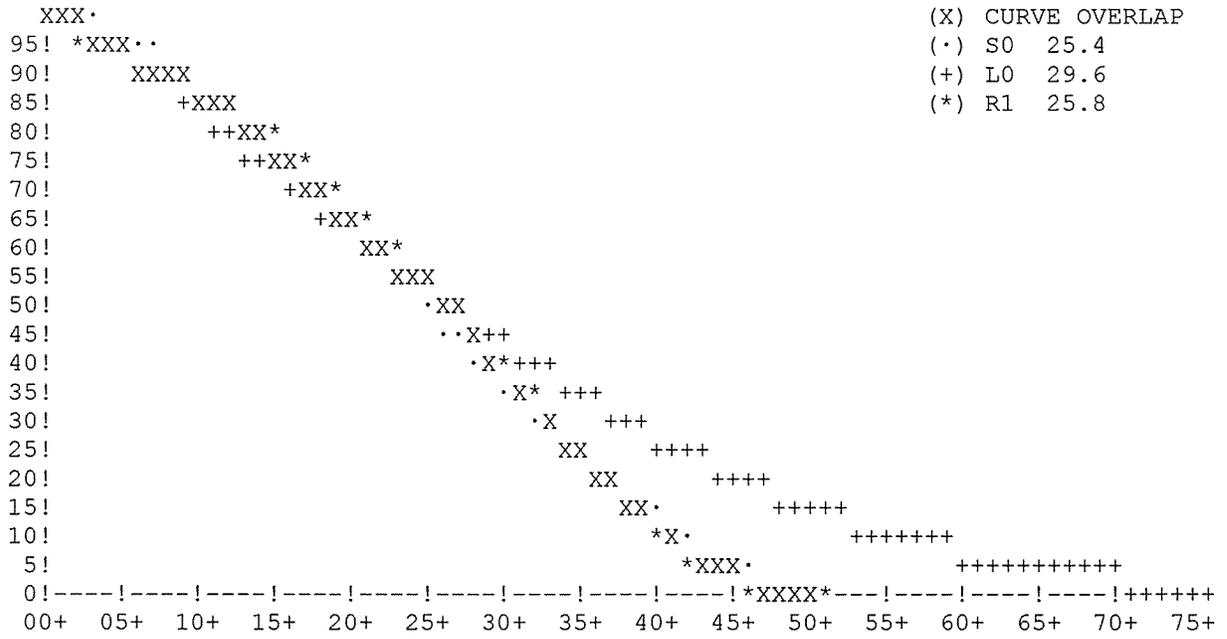
INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S0	25.4 YRS.	0.4528E+11	113	8	100.00
S0.5	24.4 YRS.	0.5148E+11	120	8	100.00
L0	29.6 YRS.	0.3711E+11	102	9	100.00
L0.5	27.6 YRS.	0.4151E+11	108	9	100.00
R1	25.8 YRS.	0.4282E+11	110	9	100.00
R1.5	24.2 YRS.	0.4972E+11	118	8	100.00
O1	29.7 YRS.	0.3087E+11	93	10	100.00
O2	32.5 YRS.	0.3255E+11	96	10	100.00
O3	42.2 YRS.	0.3115E+11	93	10	91.30
O4	54.3 YRS.	0.3048E+11	92	10	82.81

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Jun-25-08



SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 348 TRANSMISSION & DISTRIBUTION PLANT HYDRANTS

ACCOUNT CONTROL INFORMATION

EARLIEST ADDITION = 1900      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1914      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1914      LATEST RETIREMENT = 2007      INPUT = ADD & RET

ANALYSIS BAND = 1914 THRU 2008

INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S2.5	50.9 YRS.	0.1076E+10	23	43	100.00
S3	49.0 YRS.	0.1040E+10	23	43	100.00
L4	47.8 YRS.	0.1073E+10	23	43	100.00
L5	45.7 YRS.	0.1126E+10	24	41	100.00
R2	64.8 YRS.	0.1076E+10	23	43	98.75
R2.5	58.4 YRS.	0.1017E+10	22	45	100.00
R3	53.2 YRS.	0.1023E+10	22	45	100.00
O1	142.7 YRS.	0.1022E+10	22	45	38.02
O2	159.3 YRS.	0.1023E+10	22	45	38.30
O3	234.4 YRS.	0.1020E+10	22	45	35.95
O4	316.7 YRS.	0.1019E+10	22	45	35.11



SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

SURFACE TRANSPORTATION BOARD  
Jul-21-08

CARRIERS -  
402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT -  
42 GENERAL PLANT COMPUTER HARDWARE

ACCOUNT CONTROL INFORMATION

EARLIEST ADDITION = 1950      LATEST ADDITION = 2003  
EARLIEST BALANCE = 1965      LATEST BALANCE = 2003  
EARLIEST RETIREMENT = 1965      LATEST RETIREMENT = 1998      INPUT = ADD & RET

ANALYSIS BAND = 1965 THRU 2003

INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S0.5	13.3 YRS.	0.2406E+10	186	5	100.00
S1	13.1 YRS.	0.2401E+10	186	5	100.00
S1.5	13.0 YRS.	0.2468E+10	188	5	100.00
L1.5	13.8 YRS.	0.2222E+10	179	5	100.00
L2	13.5 YRS.	0.2208E+10	178	5	100.00
L2.5	13.2 YRS.	0.2273E+10	181	5	100.00
R1	13.4 YRS.	0.2678E+10	196	5	100.00
R1.5	13.1 YRS.	0.2631E+10	194	5	100.00
R2	12.8 YRS.	0.2647E+10	195	5	100.00
O1	14.9 YRS.	0.2863E+10	203	4	100.00
O2	16.3 YRS.	0.2794E+10	200	5	100.00
O3	21.2 YRS.	0.2848E+10	202	4	90.92
O4	26.7 YRS.	0.2921E+10	205	4	82.86



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SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 392 GENERAL PLANT TRANSPORTATION EQUIPMENT

ACCOUNT CONTROL INFORMATION
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EARLIEST ADDITION = 1931      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1933      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1933      LATEST RETIREMENT = 2003      INPUT = ADD & RET

ANALYSIS BAND = 1933 THRU 2008

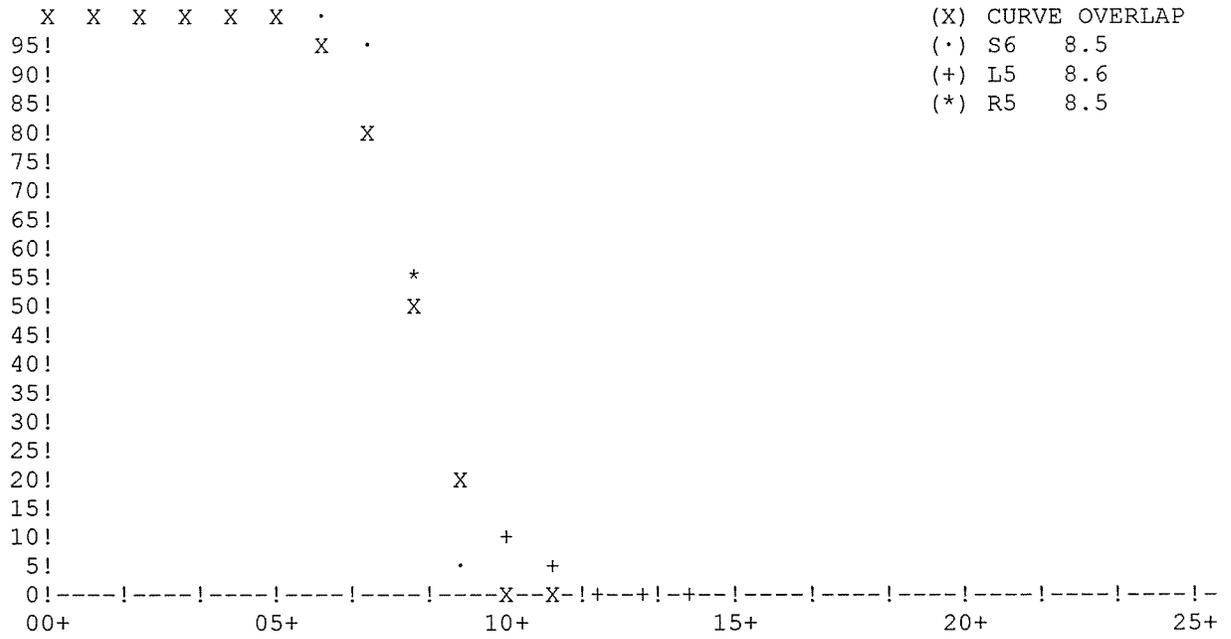
INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S5	8.6 YRS.	0.1028E+11	354	2	100.00
S6	8.5 YRS.	0.1016E+11	352	2	100.00
SQ	8.4 YRS.	0.1111E+11	368	2	100.00
L4	8.6 YRS.	0.1168E+11	377	2	100.00
L5	8.6 YRS.	0.1068E+11	361	2	100.00
R4	8.5 YRS.	0.1101E+11	366	2	100.00
R5	8.5 YRS.	0.1027E+11	354	2	100.00
O1	9.3 YRS.	0.2960E+11	601	1	100.00
O2	10.4 YRS.	0.3277E+11	632	1	100.00
O3	13.0 YRS.	0.3971E+11	696	1	100.00
O4	15.2 YRS.	0.4364E+11	730	1	100.00

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Jun-25-08



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SIMULATED PLANT RECORD ANALYSIS  
SIMULATED BALANCE METHOD

FLOYD BROWNE GROUP  
Jun-25-08

UTILITY - 402 AQUARION WATER COMPANY OF NEW HAMPSHIRE  
ACCOUNT - 396 GENERAL PLANT POWER OPERATED EQUIPMENT

ACCOUNT CONTROL INFORMATION
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EARLIEST ADDITION = 1900      LATEST ADDITION = 2007  
EARLIEST BALANCE = 1919      LATEST BALANCE = 2008  
EARLIEST RETIREMENT = 1919      LATEST RETIREMENT = 1986      INPUT = ADD & RET

ANALYSIS BAND = 1919 THRU 2008      INCREMENT = 1

DISP	MEAN	SSD	IV	CI	REI
S5	12.6 YRS.	0.1388E+10	235	4	100.00
S6	12.4 YRS.	0.1384E+10	234	4	100.00
SQ	13.4 YRS.	0.1449E+10	240	4	100.00
L4	12.6 YRS.	0.1439E+10	239	4	100.00
L5	12.6 YRS.	0.1396E+10	236	4	100.00
R4	12.7 YRS.	0.1469E+10	242	4	100.00
R5	12.5 YRS.	0.1393E+10	235	4	100.00
O1	17.5 YRS.	0.4314E+10	414	2	100.00
O2	19.1 YRS.	0.4275E+10	412	2	100.00
O3	23.5 YRS.	0.4903E+10	442	2	100.00
O4	28.5 YRS.	0.5377E+10	463	2	96.24

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**APPENDIX B**  
**CALCULATED ANNUAL AND ACCRUED DEPRECIATION**

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 303 Misc. Intangible Plant  
 Iowa Curve Type: SQ  
 Avg. Service Life: 30 Years  
 Net Salvage Percent: 0%

	<u>Beq Bal</u>	<u>Add</u>	<u>Ret</u>	<u>Adj/Trans</u>	<u>End Bal</u>	<u>Net Change</u>	<u>Age</u>	<u>Percent of</u>		<u>Annual Depreciation</u>		<u>Accrued Depreciation</u>	
								<u>Avg. Age</u>	<u>Rate</u>	<u>Amount</u>	<u>Ratio</u>	<u>Amt.</u>	
2003	-	20,613			20,613	20,613	5.5	18.33	3.33%	687	0.1750	3607	
2004	20,613	114			20,727	114	4.5	15.00	3.33%	4	0.1450	17	
2005	20,727				20,727	-	3.5	11.67	3.33%	-	0.1050	0	
2006	20,727				20,727	-	2.5	8.33	3.33%	-	0.0750	0	
2007	20,727				20,727	-	1.5	5.00	3.33%	-	0.0450	0	
2008	20,727				20,727	-	0.5	1.67	3.33%	-	0.0050	0	
	-	20,727	-		124,248	20,727				691		3,624	

Net Salvage Adjustment: -  
 Annual Depreciation: 691  
 Accrued Depreciation: 3,624  
 Composit 3.33%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 311 SOURCE OF SUPPLY STRUCTURES & IMPROVEMENTS  
 Iowa Curve Type: R5  
 Avg. Service Life: 40 Years  
 Net Salvage Percent: -10%

	<u>Beq Bal</u>	<u>Add</u>	<u>Ret</u>	<u>Adj/Trans</u>	<u>End Bal</u>	<u>Net Change</u>	Percent of		Annual Depreciation		Accrued Depreciation	
							<u>Age</u>	<u>Avg. Age</u>	<u>Rate</u>	<u>Amount</u>	<u>Ratio</u>	<u>Amt.</u>
2001	-	6,370			6,370	6,370	7.5	18.75	2.50%	159	0.1800	1147
2002	6,370	3,102			9,472	3,102	6.5	16.25	2.50%	78	0.1600	496
2003	9,472	514,326			523,798	514,326	5.5	13.75	2.50%	12,858	0.1300	66862
2004	523,798	21,812			545,610	21,812	4.5	11.25	2.50%	545	0.1100	2399
2005	545,610	53,933			599,543	53,933	3.5	8.75	2.50%	1,348	0.0800	4315
2006	599,543	11,920	(23,860)		587,603	(11,940)	2.5	6.25	2.50%	(298)	0.0600	-716
2007	587,603	23,856			611,459	23,856	1.5	3.75	2.50%	596	0.0300	716
2008	611,459				611,459	-	0.5	1.25	2.50%	-	0.0100	0
	-	635,319	(23,860)		3,495,313	611,459				15,286		75,219

Net Salvage Adjustment: 1,529  
 Annual Depreciation: 16,815  
 Accrued Depreciation: 82,740

Composite Annual Accrual Rate, Percent: 2.75%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 314 SOURCE OF SUPPLY WELLS & SPRINGS  
Iowa Curve Type: R3  
Avg. Service Life: 30 Years  
Net Salvage Percent: -10%

Year	Ben Bal	Add	Ret	Adl/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	9,179			9,179	9,179	93.5	311.67	3.33%	306	1,000	9179	
1916	9,179				9,179	-	92.5	308.33	3.33%	-	1,000	0	
1917	9,179				9,179	-	91.5	305.00	3.33%	-	1,000	0	
1918	9,179				9,179	-	90.5	301.67	3.33%	-	1,000	0	
1919	9,179				9,179	-	89.5	298.33	3.33%	-	1,000	0	
1920	9,179				9,179	-	88.5	295.00	3.33%	-	1,000	0	
1921	9,179				9,179	-	87.5	291.67	3.33%	-	1,000	0	
1922	9,179				9,179	-	86.5	288.33	3.33%	-	1,000	0	
1923	9,179				9,179	-	85.5	285.00	3.33%	-	1,000	0	
1924	9,179				9,179	-	84.5	281.67	3.33%	-	1,000	0	
1925	9,179				9,179	-	83.5	278.33	3.33%	-	1,000	0	
1926	9,179				9,179	-	82.5	275.00	3.33%	-	1,000	0	
1927	9,179				9,179	-	81.5	271.67	3.33%	-	1,000	0	
1928	9,179				9,179	-	80.5	268.33	3.33%	-	1,000	0	
1929	9,179				9,179	-	79.5	265.00	3.33%	-	1,000	0	
1930	9,179				9,179	-	78.5	261.67	3.33%	-	1,000	0	
1931	9,179				9,179	-	77.5	258.33	3.33%	-	1,000	0	
1932	9,179				9,179	-	76.5	255.00	3.33%	-	1,000	0	
1933	9,179				9,179	-	75.5	251.67	3.33%	-	1,000	0	
1934	9,179				9,179	-	74.5	248.33	3.33%	-	1,000	0	
1935	9,179				9,179	-	73.5	245.00	3.33%	-	1,000	0	
1936	9,179				9,179	-	72.5	241.67	3.33%	-	1,000	0	
1937	9,179				9,179	-	71.5	238.33	3.33%	-	1,000	0	
1938	9,179				9,179	-	70.5	235.00	3.33%	-	1,000	0	
1939	9,179	25,371	(3,321)		31,229	22,050	69.5	231.67	3.33%	735	1,000	22050	
1940	31,229	6,781			38,009	6,781	68.5	228.33	3.33%	226	1,000	6781	
1941	38,009				38,009	-	67.5	225.00	3.33%	-	1,000	0	
1942	38,009				38,009	-	66.5	221.67	3.33%	-	1,000	0	
1943	38,009				38,009	-	65.5	218.33	3.33%	-	1,000	0	
1944	38,009				38,009	-	64.5	215.00	3.33%	-	1,000	0	
1945	38,009				38,009	-	63.5	211.67	3.33%	-	1,000	0	
1946	38,009				38,009	-	62.5	208.33	3.33%	-	1,000	0	
1947	38,009				38,009	-	61.5	205.00	3.33%	-	1,000	0	
1948	38,009				38,009	-	60.5	201.67	3.33%	-	1,000	0	
1949	38,009				38,009	-	59.5	198.33	3.33%	-	1,000	0	
1950	38,009	8,512			46,521	8,512	58.5	195.00	3.33%	284	1,000	8512	
1951	46,521	288			46,809	288	57.5	191.67	3.33%	10	1,000	288	
1952	46,809				46,809	-	56.5	188.33	3.33%	-	1,000	0	
1953	46,809				46,809	-	55.5	185.00	3.33%	-	1,000	0	
1954	46,809				46,809	-	54.5	181.67	3.33%	-	1,000	0	
1955	46,809				46,809	-	53.5	178.33	3.33%	-	1,000	0	
1956	46,809	112			46,921	112	52.5	175.00	3.33%	4	1,000	112	
1957	46,921		(3,793)		43,127	(3,793)	51.5	171.67	3.33%	(126)	1,000	-3793	
1958	43,127	9,031	(3,307)		48,852	5,724	50.5	168.33	3.33%	191	0.9950	5696	
1959	48,852				48,852	-	49.5	165.00	3.33%	-	0.9895	0	
1960	48,852				48,852	-	48.5	161.67	3.33%	-	0.9875	0	
1961	48,852	165			49,017	165	47.5	158.33	3.33%	6	0.9875	163	
1962	49,017				49,017	-	46.5	155.00	3.33%	-	0.9689	0	
1963	49,017				49,017	-	45.5	151.67	3.33%	-	0.9556	0	
1964	49,017	30,444			79,460	30,444	44.5	148.33	3.33%	1,015	0.9490	28891	
1965	79,460				79,460	-	43.5	145.00	3.33%	-	0.9439	0	
1966	79,460				79,460	-	42.5	141.67	3.33%	-	0.9310	0	
1967	79,460	29,203			108,663	29,203	41.5	138.33	3.33%	973	0.9233	26963	
1968	108,663				108,663	-	40.5	135.00	3.33%	-	0.9156	0	
1969	108,663		(23,654)		85,009	(23,654)	39.5	131.67	3.33%	(788)	0.9052	-21412	
1970	85,009				85,009	-	38.5	128.33	3.33%	-	0.8972	0	
1971	85,009	11,008			96,016	11,008	37.5	125.00	3.33%	367	0.8918	9817	
1972	96,016		308		96,325	308	36.5	121.67	3.33%	10	0.8775	270	
1973	96,325	2,119			98,444	2,119	35.5	118.33	3.33%	71	0.8682	1640	
1974	98,444				98,444	-	34.5	115.00	3.33%	-	0.8550	0	
1975	98,444				98,444	-	33.5	111.67	3.33%	-	0.8443	0	
1976	98,444				98,444	-	32.5	108.33	3.33%	-	0.8328	0	
1977	98,444				98,444	-	31.5	105.00	3.33%	-	0.8247	0	
1978	98,444	32,088			130,532	32,088	30.5	101.67	3.33%	1,070	0.8029	25763	
1979	130,532				130,532	-	29.5	98.33	3.33%	-	0.7887	0	
1980	130,532	61,993			192,525	61,993	28.5	95.00	3.33%	2,066	0.7736	47958	
1981	192,525				192,525	-	27.5	91.67	3.33%	-	0.7521	0	
1982	192,525				192,525	-	26.5	88.33	3.33%	-	0.7351	0	
1983	192,525	42,391			234,916	42,391	25.5	85.00	3.33%	1,413	0.7172	30403	
1984	234,916				234,916	-	24.5	81.67	3.33%	-	0.6923	0	
1985	234,916				234,916	-	23.5	78.33	3.33%	-	0.6727	0	
1986	234,916	1,428			236,344	1,428	22.5	75.00	3.33%	48	0.6525	932	
1987	236,344	120,516	(200)		356,660	120,316	21.5	71.67	3.33%	4,011	0.6245	75137	
1988	356,660				356,660	-	20.5	68.33	3.33%	-	0.6029	0	
1989	356,660	115,160	(1,000)		470,820	114,160	19.5	65.00	3.33%	3,805	0.5807	66293	
1990	470,820				470,820	-	18.5	61.67	3.33%	-	0.5579	0	
1991	470,820				470,820	-	17.5	58.33	3.33%	-	0.5268	0	
1992	470,820				470,820	-	16.5	55.00	3.33%	-	0.5029	0	
1993	470,820			(38,333)	432,487	(38,333)	15.5	51.67	3.33%	(1,278)	0.4704	-18032	
1994	432,487				432,487	-	14.5	48.33	3.33%	-	0.4454	0	
1995	432,487		(314)		432,173	(314)	13.5	45.00	3.33%	(10)	0.4200	-132	
1996	432,173				432,173	-	12.5	41.67	3.33%	-	0.3855	0	
1997	432,173	956,093			1,388,266	956,093	11.5	38.33	3.33%	31,870	0.3591	343333	
1998	1,388,266	431,708			1,819,974	431,708	10.5	35.00	3.33%	14,390	0.3324	143500	
1999	1,819,974	198,043			2,018,017	198,043	9.5	31.67	3.33%	6,601	0.2962	58660	
2000	2,018,017	867		134,745	2,153,629	135,612	8.5	28.33	3.33%	4,520	0.2687	36439	
2001	2,153,629	41,032			2,194,661	41,032	7.5	25.00	3.33%	1,368	0.2408	9881	
2002	2,194,661				2,194,661	-	6.5	21.67	3.33%	-	0.2033	0	
2003	2,194,661	155,804			2,350,465	155,804	5.5	18.33	3.33%	5,193	0.1748	27235	
2004	2,350,465	5,837	(9,000)		2,347,302	(3,163)	4.5	15.00	3.33%	(105)	0.1461	-462	
2005	2,347,302	3,390			2,350,692	3,390	3.5	11.67	3.33%	113	0.1075	364	
2006	2,350,692	2,782	(15,424)		2,338,050	(12,642)	2.5	8.33	3.33%	(421)	0.0784	-991	
2007	2,338,050	83,052			2,421,102	83,052	1.5	5.00	3.33%	2,768	0.0491	4078	
2008	2,421,102	353,930			2,775,031	353,930	0.5	1.67	3.33%	11,798	0.0098	3469	
	-	2,738,325	(59,706)	96,412	35,063,610	2,775,031				92,501		949,182	

Net Salvage Adjustment: 9,250  
Annual Depreciation: 101,751  
Accrued Depreciation: 1,044,100

Composite Annual Accrual Rate, Percent: 3.67%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 316 SOURCE OF SUPPLY SUPPLY MAINS  
 Iowa Curve Type: R3  
 Avg. Service Life: 100 Years  
 Net Salvage Percent: -20%

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	2,528			2,528	2,528	93.5	93.50	1.00%	25	0.7630	1929	
1916	2,528				2,528	-	92.5	92.50	1.00%	-	0.7576	0	
1917	2,528	18,969			21,497	18,969	91.5	91.50	1.00%	190	0.7521	14267	
1918	21,497	694			22,191	694	90.5	90.50	1.00%	7	0.7465	518	
1919	22,191	3,903			26,094	3,903	89.5	89.50	1.00%	39	0.7409	2892	
1920	26,094	5,451			31,545	5,451	88.5	88.50	1.00%	55	0.7351	4007	
1921	31,545				31,545	-	87.5	87.50	1.00%	-	0.7292	0	
1922	31,545	2,542			34,087	2,542	86.5	86.50	1.00%	25	0.7233	1839	
1923	34,087	3,835			37,922	3,835	85.5	85.50	1.00%	38	0.7172	2750	
1924	37,922	55,117			93,039	55,117	84.5	84.50	1.00%	551	0.7111	39193	
1925	93,039	11,172			104,211	11,172	83.5	83.50	1.00%	112	0.7049	7875	
1926	104,211				104,211	-	82.5	82.50	1.00%	-	0.6986	0	
1927	104,211	3,587			107,798	3,587	81.5	81.50	1.00%	36	0.6923	2483	
1928	107,798	1,014			108,812	1,014	80.5	80.50	1.00%	10	0.6858	695	
1929	108,812	4,768			113,580	4,768	79.5	79.50	1.00%	48	0.6793	3239	
1930	113,580				113,580	-	78.5	78.50	1.00%	-	0.6727	0	
1931	113,580				113,580	-	77.5	77.50	1.00%	-	0.6660	0	
1932	113,580				113,580	-	76.5	76.50	1.00%	-	0.6593	0	
1933	113,580				113,580	-	75.5	75.50	1.00%	-	0.6525	0	
1934	113,580	(113,580)			0	(113,580)	74.5	74.50	1.00%	(1,136)	0.6456	-73327	
1935	0				0	-	73.5	73.50	1.00%	-	0.6387	0	
1936	0				0	-	72.5	72.50	1.00%	-	0.6316	0	
1937	0				0	-	71.5	71.50	1.00%	-	0.6245	0	
1938	0				0	-	70.5	70.50	1.00%	-	0.6174	0	
1939	0				0	-	69.5	69.50	1.00%	-	0.6102	0	
1940	0				0	-	68.5	68.50	1.00%	-	0.6029	0	
1941	0				0	-	67.5	67.50	1.00%	-	0.5956	0	
1942	0				0	-	66.5	66.50	1.00%	-	0.5882	0	
1943	0				0	-	65.5	65.50	1.00%	-	0.5807	0	
1944	0				0	-	64.5	64.50	1.00%	-	0.5732	0	
1945	0				0	-	63.5	63.50	1.00%	-	0.5656	0	
1946	0				0	-	62.5	62.50	1.00%	-	0.5579	0	
1947	0	7,476			7,476	7,476	61.5	61.50	1.00%	75	0.5579	4171	
1948	7,476	3,156			10,633	3,156	60.5	60.50	1.00%	32	0.5425	1712	
1949	10,633				10,633	-	59.5	59.50	1.00%	-	0.5347	0	
1950	10,633	5,320			15,953	5,320	58.5	58.50	1.00%	53	0.5268	2803	
1951	15,953	99			16,052	99	57.5	57.50	1.00%	1	0.5189	51	
1952	16,052				16,052	-	56.5	56.50	1.00%	-	0.5110	0	
1953	16,052				16,052	-	55.5	55.50	1.00%	-	0.5029	0	
1954	16,052				16,052	-	54.5	54.50	1.00%	-	0.4949	0	
1955	16,052				16,052	-	53.5	53.50	1.00%	-	0.4867	0	
1956	16,052				16,052	-	52.5	52.50	1.00%	-	0.4786	0	
1957	16,052				16,052	-	51.5	51.50	1.00%	-	0.4704	0	
1958	16,052	3,612	(238)		19,425	3,373	50.5	50.50	1.00%	34	0.4621	1559	
1959	19,425				19,425	-	49.5	49.50	1.00%	-	0.4538	0	
1960	19,425	(610)			18,815	(610)	48.5	48.50	1.00%	(6)	0.4454	-272	
1961	18,815		(40)		18,775	(40)	47.5	47.50	1.00%	(0)	0.4370	-17	
1962	18,775				18,775	-	46.5	46.50	1.00%	-	0.4285	0	
1963	18,775				18,775	-	45.5	45.50	1.00%	-	0.4200	0	
1964	18,775		278		19,053	278	44.5	44.50	1.00%	3	0.4114	115	
1965	19,053				19,053	-	43.5	43.50	1.00%	-	0.4028	0	
1966	19,053				19,053	-	42.5	42.50	1.00%	-	0.3942	0	
1967	19,053	61,226			80,279	61,226	41.5	41.50	1.00%	612	0.3855	23603	
1968	80,279				80,279	-	40.5	40.50	1.00%	-	0.3767	0	
1969	80,279				80,279	-	39.5	39.50	1.00%	-	0.3679	0	
1970	80,279				80,279	-	38.5	38.50	1.00%	-	0.3591	0	
1971	80,279				80,279	-	37.5	37.50	1.00%	-	0.3503	0	
1972	80,279				80,279	-	36.5	36.50	1.00%	-	0.3413	0	
1973	80,279				80,279	-	35.5	35.50	1.00%	-	0.3324	0	
1974	80,279				80,279	-	34.5	34.50	1.00%	-	0.3234	0	
1975	80,279				80,279	-	33.5	33.50	1.00%	-	0.3144	0	
1976	80,279				80,279	-	32.5	32.50	1.00%	-	0.3053	0	
1977	80,279				80,279	-	31.5	31.50	1.00%	-	0.2962	0	
1978	80,279		(56,902)		23,377	(56,902)	30.5	30.50	1.00%	(569)	0.2871	-16337	
1979	23,377				23,377	-	29.5	29.50	1.00%	-	0.2779	0	
1980	23,377				23,377	-	28.5	28.50	1.00%	-	0.2687	0	
1981	23,377				23,377	-	27.5	27.50	1.00%	-	0.2594	0	
1982	23,377	28,778			52,155	28,778	26.5	26.50	1.00%	288	0.2501	7197	
1983	52,155	6,841	(536)		58,460	6,305	25.5	25.50	1.00%	63	0.2408	1518	
1984	58,460	57	536		59,053	593	24.5	24.50	1.00%	6	0.2315	137	
1985	59,053				59,053	-	23.5	23.50	1.00%	-	0.2221	0	
1986	59,053				59,053	-	22.5	22.50	1.00%	-	0.2127	0	
1987	59,053				59,053	-	21.5	21.50	1.00%	-	0.2033	0	
1988	59,053				59,053	-	20.5	20.50	1.00%	-	0.1938	0	
1989	59,053	121,199			180,252	121,199	19.5	19.50	1.00%	1,212	0.1843	22337	
1990	180,252	2,555	(75)		182,732	2,480	18.5	18.50	1.00%	25	0.1748	434	
1991	182,732		(97)		182,635	(97)	17.5	17.50	1.00%	(1)	0.1653	-16	
1992	182,635				182,635	-	16.5	16.50	1.00%	-	0.1557	0	
1993	182,635	1,634	(1,334)		182,935	300	15.5	15.50	1.00%	3	0.1461	44	
1994	182,935				182,935	-	14.5	14.50	1.00%	-	0.1365	0	
1995	182,935				182,935	-	13.5	13.50	1.00%	-	0.1269	0	
1996	182,935				182,935	-	12.5	12.50	1.00%	-	0.1172	0	
1997	182,935				182,935	-	11.5	11.50	1.00%	-	0.1075	0	
1998	182,935				182,935	-	10.5	10.50	1.00%	-	0.0978	0	
1999	182,935				182,935	-	9.5	9.50	1.00%	-	0.0881	0	
2000	182,935				182,935	-	8.5	8.50	1.00%	-	0.0784	0	
2001	182,935				182,935	-	7.5	7.50	1.00%	-	0.0686	0	
2002	182,935				182,935	-	6.5	6.50	1.00%	-	0.0589	0	
2003	182,935				182,935	-	5.5	5.50	1.00%	-	0.0491	0	
2004	182,935				182,935	-	4.5	4.50	1.00%	-	0.0393	0	
2005	182,935				182,935	-	3.5	3.50	1.00%	-	0.0295	0	
2006	182,935				182,935	-	2.5	2.50	1.00%	-	0.0197	0	
2007	182,935				182,935	-	1.5	1.50	1.00%	-	0.0098	0	
2008	182,935				182,935	-	0.5	0.50	1.00%	-	0.0000	0	
	-	241,343	(58,408)		6,661,786	182,935				1,829		57,399	

Net Salvage Adjustment: 366  
 Annual Depreciation: 2,195  
 Accrued Depreciation: 68,879

Composite Annual Accrual Rate, Percent: 1.20%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 317 SOURCE OF SUPPLY OTHER WATER SOURCE PLANT  
Iowa Curve Type: SQ  
Avg. Service Life: 20 Years  
Net Salvage Percent: 0%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation		Accrued Depreciation		
								Avg. Age	Rate	Amount	Ratio	Amt.
1990	-	10,512			10,512	10,512	18.5	92.50	5.00%	526	0.9150	9618
1991	10,512				10,512	-	17.5	87.50	5.00%	-	0.8550	0
1992	10,512				10,512	-	16.5	82.50	5.00%	-	0.8150	0
1993	10,512				10,512	-	15.5	77.50	5.00%	-	0.7650	0
1994	10,512				10,512	-	14.5	72.50	5.00%	-	0.7150	0
1995	10,512				10,512	-	13.5	67.50	5.00%	-	0.6650	0
1996	10,512				10,512	-	12.5	62.50	5.00%	-	0.6150	0
1997	10,512				10,512	-	11.5	57.50	5.00%	-	0.5550	0
1998	10,512				10,512	-	10.5	52.50	5.00%	-	0.5150	0
1999	10,512				10,512	-	9.5	47.50	5.00%	-	0.4650	0
2000	10,512				10,512	-	8.5	42.50	5.00%	-	0.4150	0
2001	10,512				10,512	-	7.5	37.50	5.00%	-	0.3650	0
2002	10,512				10,512	-	6.5	32.50	5.00%	-	0.3150	0
2003	10,512	705,158			715,670	705,158	5.5	27.50	5.00%	35,258	0.2650	186867
2004	715,670	113,808	(3,300)		826,178	110,508	4.5	22.50	5.00%	5,525	0.2150	23759
2005	826,178	171,281		3,300	1,000,759	174,581	3.5	17.50	5.00%	8,729	0.1650	28806
2006	1,000,759	78,775			1,079,534	78,775	2.5	12.50	5.00%	3,939	0.1150	9059
2007	1,079,534	419,566			1,499,100	419,566	1.5	7.50	5.00%	20,978	0.0650	27272
2008	1,499,100				1,499,100	-	0.5	2.50	5.00%	-	0.0150	0
	-	1,499,100	(3,300)		6,756,997	1,499,100				74,955		285,381

Net Salvage Adjustment: -  
Annual Depreciation: 74,955  
Accrued Depreciation: 285,381

Composite Annual Accrual Rate, Percent: 5.00%

**Aquation Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: Iowa Curve Type: Avg. Service Life: Net Salvage Percent:	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1944	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875</
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**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 325 PUMPING PLANT ELECTRIC PUMPING EQUIPMENT  
 Iowa Curve Type: R1  
 Avg. Service Life: 35 Years  
 Net Salvage Percent: -20%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	5,159			5,159	5,159	93.5	267.14	2.86%	147	1.0000	5159	
1916	5,159				5,159	-	92.5	264.29	2.86%	-	1.0000	0	
1917	5,159				5,159	-	91.5	261.43	2.86%	-	1.0000	0	
1918	5,159				5,159	-	90.5	258.57	2.86%	-	1.0000	0	
1919	5,159				5,159	-	89.5	255.71	2.86%	-	1.0000	0	
1920	5,159				5,159	-	88.5	252.86	2.86%	-	1.0000	0	
1921	5,159				5,159	-	87.5	250.00	2.86%	-	1.0000	0	
1922	5,159				5,159	-	86.5	247.14	2.86%	-	1.0000	0	
1923	5,159				5,159	-	85.5	244.29	2.86%	-	1.0000	0	
1924	5,159				5,159	-	84.5	241.43	2.86%	-	1.0000	0	
1925	5,159				5,159	-	83.5	238.57	2.86%	-	1.0000	0	
1926	5,159				5,159	-	82.5	235.71	2.86%	-	1.0000	0	
1927	5,159				5,159	-	81.5	232.86	2.86%	-	1.0000	0	
1928	5,159				5,159	-	80.5	230.00	2.86%	-	1.0000	0	
1929	5,159				5,159	-	79.5	227.14	2.86%	-	1.0000	0	
1930	5,159				5,159	-	78.5	224.29	2.86%	-	1.0000	0	
1931	5,159				5,159	-	77.5	221.43	2.86%	-	1.0000	0	
1932	5,159				5,159	-	76.5	218.57	2.86%	-	1.0000	0	
1933	5,159				5,159	-	75.5	215.71	2.86%	-	1.0000	0	
1934	5,159				5,159	-	74.5	212.86	2.86%	-	1.0000	0	
1935	5,159				5,159	-	73.5	210.00	2.86%	-	1.0000	0	
1936	5,159	27			5,186	27	72.5	207.14	2.86%	1	1.0000	27	
1937	5,186	768			5,953	768	71.5	204.29	2.86%	22	1.0000	768	
1938	5,953				5,953	-	70.5	201.43	2.86%	-	1.0000	0	
1939	5,953	2,590			8,543	2,590	69.5	198.57	2.86%	74	0.9896	2563	
1940	8,543	1,770			10,313	1,770	68.5	195.71	2.86%	51	0.9801	1735	
1941	10,313				10,313	-	67.5	192.86	2.86%	-	0.9701	0	
1942	10,313	10			10,324	10	66.5	190.00	2.86%	0	0.9634	10	
1943	10,324				10,324	-	65.5	187.14	2.86%	-	0.9533	0	
1944	10,324				10,324	-	64.5	184.29	2.86%	-	0.9435	0	
1945	10,324		(2,337)		7,987	(2,337)	63.5	181.43	2.86%	(67)	0.9342	-2183	
1946	7,987				7,987	-	62.5	178.57	2.86%	-	0.9252	0	
1947	7,987				7,987	-	61.5	175.71	2.86%	-	0.9163	0	
1948	7,987	1,486			9,473	1,486	60.5	172.86	2.86%	42	0.9074	1349	
1949	9,473				9,473	-	59.5	170.00	2.86%	-	0.9014	0	
1950	9,473	7,407			16,880	7,407	58.5	167.14	2.86%	212	0.8924	6610	
1951	16,880	183			17,064	183	57.5	164.29	2.86%	5	0.8831	162	
1952	17,064				17,064	-	56.5	161.43	2.86%	-	0.8737	0	
1953	17,064	5,167	(900)		21,330	4,267	55.5	158.57	2.86%	122	0.8641	3687	
1954	21,330	1,831			23,161	1,831	54.5	155.71	2.86%	52	0.8543	1564	
1955	23,161	112			23,273	112	53.5	152.86	2.86%	3	0.8443	95	
1956	23,273				23,273	-	52.5	150.00	2.86%	-	0.8376	0	
1957	23,273				23,273	-	51.5	147.14	2.86%	-	0.8272	0	
1958	23,273	10,934	(2,526)		31,681	8,408	50.5	144.29	2.86%	240	0.8166	6866	
1959	31,681	246			31,927	246	49.5	141.43	2.86%	7	0.8058	198	
1960	31,927	216			32,143	216	48.5	138.57	2.86%	6	0.7948	171	
1961	32,143		(38)		32,105	(38)	47.5	135.71	2.86%	(1)	0.7835	-30	
1962	32,105	2,414	(1,183)		33,336	1,231	46.5	132.86	2.86%	35	0.7720	951	
1963	33,336				33,336	-	45.5	130.00	2.86%	-	0.7642	0	
1964	33,336	4,273	(264)		37,345	4,009	44.5	127.14	2.86%	115	0.7523	3016	
1965	37,345	738			38,084	738	43.5	124.29	2.86%	21	0.7401	546	
1966	38,084	1,480	(815)		38,749	665	42.5	121.43	2.86%	19	0.7276	484	
1967	38,749	14,057	(325)		52,480	13,732	41.5	118.57	2.86%	392	0.7149	9817	
1968	52,480	1,165			53,645	1,165	40.5	115.71	2.86%	33	0.7019	818	
1969	53,645	75	(2,048)		51,672	(1,973)	39.5	112.86	2.86%	(56)	0.6887	-1359	
1970	51,672		(75)		51,597	(75)	38.5	110.00	2.86%	(2)	0.6797	-51	
1971	51,597	264	(36)		51,826	229	37.5	107.14	2.86%	7	0.6659	152	
1972	51,826				51,826	-	36.5	104.29	2.86%	-	0.6519	0	
1973	51,826				51,826	-	35.5	101.43	2.86%	-	0.6376	0	
1974	51,826	293			52,119	293	34.5	98.57	2.86%	8	0.6230	183	
1975	52,119				52,119	-	33.5	95.71	2.86%	-	0.6080	0	
1976	52,119				52,119	-	32.5	92.86	2.86%	-	0.5928	0	
1977	52,119	462	(97)		52,484	365	31.5	90.00	2.86%	10	0.5824	213	
1978	52,484	38,941	(292)		91,133	38,649	30.5	87.14	2.86%	1,104	0.5667	21902	
1979	91,133	17,568	(4,932)		103,769	12,636	29.5	84.29	2.86%	361	0.5506	6957	
1980	103,769	13,807			117,576	13,807	28.5	81.43	2.86%	394	0.5342	7376	
1981	117,576	55,827			173,403	55,827	27.5	78.57	2.86%	1,595	0.5174	28885	
1982	173,403	71,048	(4,050)		240,401	66,998	26.5	75.71	2.86%	1,914	0.5004	33526	
1983	240,401	22,856			263,257	22,856	25.5	72.86	2.86%	653	0.4831	11042	
1984	263,257	1,551	(536)		264,272	1,015	24.5	70.00	2.86%	29	0.4714	478	
1985	264,272	13,069	(275)		277,066	12,794	23.5	67.14	2.86%	366	0.4535	5802	
1986	277,066	11,828	(7,248)		281,646	4,580	22.5	64.29	2.86%	131	0.4354	1994	
1987	281,646	15,295			296,941	15,295	21.5	61.43	2.86%	437	0.4170	6378	
1988	296,941				296,941	-	20.5	58.57	2.86%	-	0.3983	0	
1989	296,941	252,614	(2,844)		546,711	249,770	19.5	55.71	2.86%	7,136	0.3794	94763	
1990	546,711	12,410	(3,140)		555,981	9,270	18.5	52.86	2.86%	265	0.3602	3339	
1991	555,981	36,226	(22,329)		569,878	13,897	17.5	50.00	2.86%	397	0.3473	4827	
1992	569,878	4,419	(1,237)		573,060	3,182	16.5	47.14	2.86%	91	0.3278	1043	
1993	573,060	8,278	(18,734)		562,604	(10,456)	15.5	44.29	2.86%	(299)	0.3080	-3220	
1994	562,604	23,732	(294)		586,042	23,438	14.5	41.43	2.86%	670	0.2881	6752	
1995	586,042	29,160	(4,535)		610,667	24,625	13.5	38.57	2.86%	704	0.2680	6600	
1996	610,667	8,992	(6,009)		613,641	2,973	12.5	35.71	2.86%	85	0.2477	737	
1997	613,641	70,023	(1,898)		681,766	68,125	11.5	32.86	2.86%	1,946	0.2273	15485	
1998	681,766	40,855	(4,495)		718,126	36,360	10.5	30.00	2.86%	1,039	0.2136	7766	
1999	718,126	42,936			761,062	42,936	9.5	27.14	2.86%	1,227	0.1930	8287	
2000	761,062	1,276	(319)	(2,360)	759,659	(1,403)	8.5	24.29	2.86%	(40)	0.1722	-242	
2001	759,659	575	(710)		759,524	(135)	7.5	21.43	2.86%	(4)	0.1513	-20	
2002	759,524	12,140			771,664	12,140	6.5	18.57	2.86%	347	0.1302	1581	
2003	771,664	71,425			843,089	71,425	5.5	15.71	2.86%	2,041	0.1090	7785	
2004	843,089		(34,543)		808,546	(34,543)	4.5	12.86	2.86%	(987)	0.0876	-3026	
2005	808,546	45,892		(3,300)	851,138	42,592	3.5	10.00	2.86%	1,217	0.0732	3118	
2006	851,138	10,572			861,710	10,572	2.5	7.14	2.86%	302	0.0515	544	
2007	861,710	21,587			883,297	21,587	1.5	4.29	2.86%	617	0.0295	637	
2008	883,297	6,532	(9,157)	24	880,695	(2,601)	0.5	1.43	2.86%	(74)	0.0074	-19	
	-	1,024,551	(138,219)		17,881,465	880,695				25,163		324,595	

Net Salvage Adjustment: 5,033  
 Annual Depreciation: 30,195  
 Accrued Depreciation: 389,514

Composite Annual Accrual Rate, Percent: 3.43%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 326 PUMPING PLANT DIESEL PUMPING EQUIPMENT  
 Iowa Curve Type: R1  
 Avg. Service Life: 30 Years  
 Net Salvage Percent: -10%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1991	-	32,297			32,297	32,297	17.5	58.33	3.33%	1,077	0.3983	12864	
1992	32,297				32,297	-	16.5	55.00	3.33%	-	0.3794	0	
1993	32,297				32,297	-	15.5	51.67	3.33%	-	0.3538	0	
1994	32,297				32,297	-	14.5	48.33	3.33%	-	0.3343	0	
1995	32,297				32,297	-	13.5	45.00	3.33%	-	0.3146	0	
1996	32,297				32,297	-	12.5	41.67	3.33%	-	0.2881	0	
1997	32,297				32,297	-	11.5	38.33	3.33%	-	0.2680	0	
1998	32,297				32,297	-	10.5	35.00	3.33%	-	0.2477	0	
1999	32,297				32,297	-	9.5	31.67	3.33%	-	0.2205	0	
2000	32,297				32,297	-	8.5	28.33	3.33%	-	0.1999	0	
2001	32,297				32,297	-	7.5	25.00	3.33%	-	0.1792	0	
2002	32,297				32,297	-	6.5	21.67	3.33%	-	0.1513	0	
2003	32,297				32,297	-	5.5	18.33	3.33%	-	0.1302	0	
2004	32,297				32,297	-	4.5	15.00	3.33%	-	0.1090	0	
2005	32,297				32,297	-	3.5	11.67	3.33%	-	0.0804	0	
2006	32,297				32,297	-	2.5	8.33	3.33%	-	0.0587	0	
2007	32,297				32,297	-	1.5	5.00	3.33%	-	0.0369	0	
2008	32,297				32,297	-	0.5	1.67	3.33%	-	0.0074	0	
	-	32,297	-		581,346	32,297				1,077		12,864	

Net Salvage Adjustment: 108 1,286  
 Annual Depreciation: 1,184  
 Accrued Depreciation: 14,150

Composite Annual Accrual Rate, Percent: 3.67%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 328 PUMPING PLANT OTHER PUMPING EQUIPMENT  
Iowa Curve Type: R1  
Avg. Service Life: 25 Years  
Net Salvage Percent: -10%

	Beg Bal	Add	Ret	Adi/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	2,330			2,330	2,330	93.5	374.00	4.00%	93	1.0000	2330	
1916	2,330				2,330	-	92.5	370.00	4.00%	-	1.0000	0	
1917	2,330				2,330	-	91.5	366.00	4.00%	-	1.0000	0	
1918	2,330				2,330	-	90.5	362.00	4.00%	-	1.0000	0	
1919	2,330				2,330	-	89.5	358.00	4.00%	-	1.0000	0	
1920	2,330				2,330	-	88.5	354.00	4.00%	-	1.0000	0	
1921	2,330				2,330	-	87.5	350.00	4.00%	-	1.0000	0	
1922	2,330				2,330	-	86.5	346.00	4.00%	-	1.0000	0	
1923	2,330				2,330	-	85.5	342.00	4.00%	-	1.0000	0	
1924	2,330				2,330	-	84.5	338.00	4.00%	-	1.0000	0	
1925	2,330				2,330	-	83.5	334.00	4.00%	-	1.0000	0	
1926	2,330				2,330	-	82.5	330.00	4.00%	-	1.0000	0	
1927	2,330				2,330	-	81.5	326.00	4.00%	-	1.0000	0	
1928	2,330				2,330	-	80.5	322.00	4.00%	-	1.0000	0	
1929	2,330				2,330	-	79.5	318.00	4.00%	-	1.0000	0	
1930	2,330				2,330	-	78.5	314.00	4.00%	-	1.0000	0	
1931	2,330				2,330	-	77.5	310.00	4.00%	-	1.0000	0	
1932	2,330	256			2,586	256	76.5	306.00	4.00%	10	1.0000	256	
1933	2,586	15			2,601	15	75.5	302.00	4.00%	1	1.0000	15	
1934	2,601				2,601	-	74.5	298.00	4.00%	-	1.0000	0	
1935	2,601				2,601	-	73.5	294.00	4.00%	-	1.0000	0	
1936	2,601				2,601	-	72.5	290.00	4.00%	-	1.0000	0	
1937	2,601	3,498	(256)		5,843	3,242	71.5	286.00	4.00%	130	1.0000	3242	
1938	5,843				5,843	-	70.5	282.00	4.00%	-	1.0000	0	
1939	5,843	12,224			18,067	12,224	69.5	278.00	4.00%	489	1.0000	12224	
1940	18,067	(1,458)			16,609	(1,458)	68.5	274.00	4.00%	(58)	1.0000	-1458	
1941	16,609				16,609	-	67.5	270.00	4.00%	-	1.0000	0	
1942	16,609				16,609	-	66.5	266.00	4.00%	-	1.0000	0	
1943	16,609				16,609	-	65.5	262.00	4.00%	-	1.0000	0	
1944	16,609				16,609	-	64.5	258.00	4.00%	-	1.0000	0	
1945	16,609				16,609	-	63.5	254.00	4.00%	-	1.0000	0	
1946	16,609				16,609	-	62.5	250.00	4.00%	-	1.0000	0	
1947	16,609				16,609	-	61.5	246.00	4.00%	-	1.0000	0	
1948	16,609				16,609	-	60.5	242.00	4.00%	-	1.0000	0	
1949	16,609				16,609	-	59.5	238.00	4.00%	-	1.0000	0	
1950	16,609				16,609	-	58.5	234.00	4.00%	-	1.0000	0	
1951	16,609				16,609	-	57.5	230.00	4.00%	-	1.0000	0	
1952	16,609				16,609	-	56.5	226.00	4.00%	-	1.0000	0	
1953	16,609				16,609	-	55.5	222.00	4.00%	-	1.0000	0	
1954	16,609				16,609	-	54.5	218.00	4.00%	-	1.0000	0	
1955	16,609				16,609	-	53.5	214.00	4.00%	-	1.0000	0	
1956	16,609				16,609	-	52.5	210.00	4.00%	-	1.0000	0	
1957	16,609		(2,337)		14,272	(2,337)	51.5	206.00	4.00%	(93)	1.0000	-2337	
1958	14,272		(1,590)		12,682	(1,590)	50.5	202.00	4.00%	(64)	1.0000	-1590	
1959	12,682				12,682	-	49.5	198.00	4.00%	-	0.9896	0	
1960	12,682				12,682	-	48.5	194.00	4.00%	-	0.9768	0	
1961	12,682		(12,682)		-	(12,682)	47.5	190.00	4.00%	(507)	0.9634	-12218	
1962	-	5,999			5,999	5,999	46.5	186.00	4.00%	240	0.9499	5699	
1963	5,999				5,999	-	45.5	182.00	4.00%	-	0.9372	0	
1964	5,999	2,231			8,231	2,231	44.5	178.00	4.00%	89	0.9252	2065	
1965	8,231	385			8,616	385	43.5	174.00	4.00%	15	0.9134	352	
1966	8,616				8,616	-	42.5	170.00	4.00%	-	0.9014	0	
1967	8,616	17,163			25,778	17,163	41.5	166.00	4.00%	687	0.8893	15263	
1968	25,778				25,778	-	40.5	162.00	4.00%	-	0.8769	0	
1969	25,778				25,778	-	39.5	158.00	4.00%	-	0.8641	0	
1970	25,778				25,778	-	38.5	154.00	4.00%	-	0.8510	0	
1971	25,778				25,778	-	37.5	150.00	4.00%	-	0.8376	0	
1972	25,778				25,778	-	36.5	146.00	4.00%	-	0.8237	0	
1973	25,778				25,778	-	35.5	142.00	4.00%	-	0.8094	0	
1974	25,778				25,778	-	34.5	138.00	4.00%	-	0.7948	0	
1975	25,778				25,778	-	33.5	134.00	4.00%	-	0.7797	0	
1976	25,778				25,778	-	32.5	130.00	4.00%	-	0.7642	0	
1977	25,778				25,778	-	31.5	126.00	4.00%	-	0.7482	0	
1978	25,778				25,778	-	30.5	122.00	4.00%	-	0.7318	0	
1979	25,778				25,778	-	29.5	118.00	4.00%	-	0.7149	0	
1980	25,778				25,778	-	28.5	114.00	4.00%	-	0.6931	0	
1981	25,778				25,778	-	27.5	110.00	4.00%	-	0.6797	0	
1982	25,778				25,778	-	26.5	106.00	4.00%	-	0.6613	0	
1983	25,778				25,778	-	25.5	102.00	4.00%	-	0.6424	0	
1984	25,778				25,778	-	24.5	98.00	4.00%	-	0.6230	0	
1985	25,778				25,778	-	23.5	94.00	4.00%	-	0.6030	0	
1986	25,778				25,778	-	22.5	90.00	4.00%	-	0.5824	0	
1987	25,778	4,528			30,306	4,528	21.5	86.00	4.00%	181	0.5613	2542	
1988	30,306				30,306	-	20.5	82.00	4.00%	-	0.5397	0	
1989	30,306		(3,200)		27,106	(3,200)	19.5	78.00	4.00%	(128)	0.5174	-1656	
1990	27,106		(2,500)		24,606	(2,500)	18.5	74.00	4.00%	(100)	0.4947	-1237	
1991	24,606		(3,100)		21,506	(3,100)	17.5	70.00	4.00%	(124)	0.4714	-1462	
1992	21,506				21,506	-	16.5	66.00	4.00%	-	0.4475	0	
1993	21,506				21,506	-	15.5	62.00	4.00%	-	0.4232	0	
1994	21,506				21,506	-	14.5	58.00	4.00%	-	0.3920	0	
1995	21,506				21,506	-	13.5	54.00	4.00%	-	0.3730	0	
1996	21,506	17,817	(5,734)		33,589	12,083	12.5	50.00	4.00%	463	0.3473	4196	
1997	33,589				33,589	-	11.5	46.00	4.00%	-	0.3212	0	
1998	33,589				33,589	-	10.5	42.00	4.00%	-	0.2947	0	
1999	33,589				33,589	-	9.5	38.00	4.00%	-	0.2680	0	
2000	33,589	1,297	(122)		34,764	1,175	8.5	34.00	4.00%	47	0.2409	283	
2001	34,764				34,764	-	7.5	30.00	4.00%	-	0.2136	0	
2002	34,764				34,764	-	6.5	26.00	4.00%	-	0.1861	0	
2003	34,764				34,764	-	5.5	22.00	4.00%	-	0.1583	0	
2004	34,764				34,764	-	4.5	18.00	4.00%	-	0.1302	0	
2005	34,764				34,764	-	3.5	14.00	4.00%	-	0.1019	0	
2006	34,764				34,764	-	2.5	10.00	4.00%	-	0.0732	0	
2007	34,764				34,764	-	1.5	6.00	4.00%	-	0.0442	0	
2008	34,764				34,764	-	0.5	2.00	4.00%	-	0.0148	0	
	-	66,285	(31,521)		1,637,135	34,764				1,391		26,509	

Net Salvage Adjustment: 139 2,651  
Annual Depreciation: 1,530  
Accrued Depreciation: 29,160

Composite Annual Accrual Rate, Percent: 4.40%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 331 WATER TREATMENT PLANT STRUCTURES & IMPROVEMENTS  
 Iowa Curve Type: R5  
 Avg. Service Life: 40 Years  
 Net Salvage Percent: .10%

	Orig Bal	Add	Ret	Add/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation	Accrued Depreciation	Am't.		
							Avg. Age	Rate	Amount	Ratio		
1939	-	400			400	400	69.5	173.75	2.50%	10	1.0000	400
1940	-				400	-	68.5	171.25	2.50%	-	1.0000	0
1941	400				400	-	67.5	168.75	2.50%	-	1.0000	0
1942	400				400	-	66.5	166.25	2.50%	-	1.0000	0
1943	400				400	-	65.5	163.75	2.50%	-	1.0000	0
1944	400				400	-	64.5	161.25	2.50%	-	1.0000	0
1945	400				400	-	63.5	158.75	2.50%	-	1.0000	0
1946	400				400	-	62.5	156.25	2.50%	-	1.0000	0
1947	400	(400)			-	(400)	61.5	153.75	2.50%	(10)	1.0000	-400
1948	-				-	-	60.5	151.25	2.50%	-	1.0000	0
1949	-				-	-	59.5	148.75	2.50%	-	1.0000	0
1950	-				-	-	58.5	146.25	2.50%	-	1.0000	0
1951	-				-	-	57.5	143.75	2.50%	-	1.0000	0
1952	-				-	-	56.5	141.25	2.50%	-	1.0000	0
1953	-				-	-	55.5	138.75	2.50%	-	1.0000	0
1954	-				-	-	54.5	136.25	2.50%	-	0.9950	0
1955	-				-	-	53.5	133.75	2.50%	-	0.9898	0
1956	-				-	-	52.5	131.25	2.50%	-	0.9854	0
1957	-				-	-	51.5	128.75	2.50%	-	0.9783	0
1958	-				-	-	50.5	126.25	2.50%	-	0.9734	0
1959	-				-	-	49.5	123.75	2.50%	-	0.9660	0
1960	-				-	-	48.5	121.25	2.50%	-	0.9617	0
1961	-				-	-	47.5	118.75	2.50%	-	0.9558	0
1962	-				-	-	46.5	116.25	2.50%	-	0.9518	0
1963	-				-	-	45.5	113.75	2.50%	-	0.9451	0
1964	-				-	-	44.5	111.25	2.50%	-	0.9400	0
1965	-	1,740			1,740	1,740	43.5	108.75	2.50%	44	0.9312	1620
1966	1,740				1,740	-	42.5	106.25	2.50%	-	0.9245	0
1967	1,740				1,740	-	41.5	103.75	2.50%	-	0.9134	0
1968	1,740				1,740	-	40.5	101.25	2.50%	-	0.9051	0
1969	1,740				1,740	-	39.5	98.75	2.50%	(44)	0.8914	-1581
1970	-		(1,740)		-	(1,740)	38.5	96.25	2.50%	-	0.8814	0
1971	-				-	-	37.5	93.75	2.50%	-	0.8650	0
1972	-				-	-	36.5	91.25	2.50%	-	0.8531	0
1973	-				-	-	35.5	88.75	2.50%	-	0.8340	0
1974	-				-	-	34.5	86.25	2.50%	-	0.8203	0
1975	-				-	-	33.5	83.75	2.50%	-	0.7987	0
1976	-				-	-	32.5	81.25	2.50%	-	0.7834	0
1977	-				-	-	31.5	78.75	2.50%	-	0.7695	0
1978	-				-	-	30.5	76.25	2.50%	-	0.7430	0
1979	-				-	-	29.5	73.75	2.50%	-	0.7174	0
1980	-				-	-	28.5	71.25	2.50%	-	0.6998	0
1981	-				-	-	27.5	68.75	2.50%	-	0.6728	0
1982	-				-	-	26.5	66.25	2.50%	-	0.6544	0
1983	-				-	-	25.5	63.75	2.50%	-	0.6263	0
1984	-				-	-	24.5	61.25	2.50%	-	0.6073	0
1985	-				-	-	23.5	58.75	2.50%	-	0.5784	0
1986	-				-	-	22.5	56.25	2.50%	-	0.5589	0
1987	-				-	-	21.5	53.75	2.50%	-	0.5295	0
1988	-				-	-	20.5	51.25	2.50%	-	0.5097	0
1989	-				-	-	19.5	48.75	2.50%	-	0.4799	0
1990	-				-	-	18.5	46.25	2.50%	-	0.4599	0
1991	-				-	-	17.5	43.75	2.50%	-	0.4300	0
1992	-				-	-	16.5	41.25	2.50%	-	0.4100	0
1993	-				-	-	15.5	38.75	2.50%	-	0.3800	0
1994	-				-	-	14.5	36.25	2.50%	-	0.3600	0
1995	-				-	-	13.5	33.75	2.50%	-	0.3300	0
1996	-				-	-	12.5	31.25	2.50%	-	0.3100	0
1997	-				-	-	11.5	28.75	2.50%	-	0.2800	0
1998	-				-	-	10.5	26.25	2.50%	-	0.2600	0
1999	-	108,204			108,204	108,204	9.5	23.75	2.50%	2,705	0.2300	24887
2000	108,204	19,401			127,605	19,401	8.5	21.25	2.50%	485	0.2100	4074
2001	127,605	2,521			130,126	2,521	7.5	18.75	2.50%	63	0.1800	454
2002	130,126	1,012			131,138	1,012	6.5	16.25	2.50%	25	0.1600	162
2003	131,138				131,138	-	5.5	13.75	2.50%	-	0.1300	0
2004	131,138	518			131,656	518	4.5	11.25	2.50%	13	0.1100	57
2005	131,656	4,746			136,402	4,746	3.5	8.75	2.50%	119	0.0800	380
2006	136,402				136,402	-	2.5	6.25	2.50%	-	0.0600	0
2007	136,402	39,762			176,164	39,762	1.5	3.75	2.50%	994	0.0300	1193
2008	176,164				176,164	-	0.5	1.25	2.50%	-	0.0100	0
		177,904		(1,740)	1,395,159	176,164				4,404		31,276

Net Salvage Adjustment: 440  
 Annual Depreciation: 4,845  
 Accrued Depreciation: 34,403  
 Composite Annual Accrual Rate, Percent: 2.75%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 332 WATER TREATMENT PLANT WATER TREATMENT EQUIPMENT  
 Iowa Curve Type: R5  
 Avg. Service Life: 30 Years  
 Net Salvage Percent: -10%

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation		Accrued Depreciation		
								Avg. Age	Rate	Amount	Ratio	Amt.
1947	-	927			927	927	61.5	205.00	3.33%	31	1.0000	927
1948	927	115			1,042	115	60.5	201.67	3.33%	4	1.0000	115
1949	1,042				1,042	-	59.5	198.33	3.33%	-	1.0000	0
1950	1,042				1,042	-	58.5	195.00	3.33%	-	1.0000	0
1951	1,042				1,042	-	57.5	191.67	3.33%	-	1.0000	0
1952	1,042				1,042	-	56.5	188.33	3.33%	-	1.0000	0
1953	1,042				1,042	-	55.5	185.00	3.33%	-	1.0000	0
1954	1,042				1,042	-	54.5	181.67	3.33%	-	1.0000	0
1955	1,042				1,042	-	53.5	178.33	3.33%	-	1.0000	0
1956	1,042				1,042	-	52.5	175.00	3.33%	-	1.0000	0
1957	1,042	345			1,386	345	51.5	171.67	3.33%	11	1.0000	345
1958	1,386	53			1,439	53	50.5	168.33	3.33%	2	1.0000	53
1959	1,439				1,439	-	49.5	165.00	3.33%	-	1.0000	0
1960	1,439				1,439	-	48.5	161.67	3.33%	-	1.0000	0
1961	1,439	2,933			4,373	2,933	47.5	158.33	3.33%	98	1.0000	2933
1962	4,373				4,373	-	46.5	155.00	3.33%	-	1.0000	0
1963	4,373				4,373	-	45.5	151.67	3.33%	-	1.0000	0
1964	4,373	1,000			5,372	1,000	44.5	148.33	3.33%	33	1.0000	1000
1965	5,372	6			5,378	6	43.5	145.00	3.33%	0	1.0000	6
1966	5,378				5,378	-	42.5	141.67	3.33%	-	1.0000	0
1967	5,378	863			6,241	863	41.5	138.33	3.33%	29	1.0000	863
1968	6,241	207			6,448	207	40.5	135.00	3.33%	7	0.9937	205
1969	6,448	113	(440)		6,120	(328)	39.5	131.67	3.33%	(11)	0.9854	-323
1970	6,120	69	(48)		6,142	22	38.5	128.33	3.33%	1	0.9783	21
1971	6,142	263			6,405	263	37.5	125.00	3.33%	9	0.9709	256
1972	6,405				6,405	-	36.5	121.67	3.33%	-	0.9617	0
1973	6,405				6,405	-	35.5	118.33	3.33%	-	0.9558	0
1974	6,405				6,405	-	34.5	115.00	3.33%	-	0.9475	0
1975	6,405				6,405	-	33.5	111.67	3.33%	-	0.9400	0
1976	6,405	448	(324)		6,529	124	32.5	108.33	3.33%	4	0.9312	115
1977	6,529				6,529	-	31.5	105.00	3.33%	-	0.9210	0
1978	6,529				6,529	-	30.5	101.67	3.33%	-	0.9051	0
1979	6,529	4,379			10,908	4,379	29.5	98.33	3.33%	146	0.8914	3903
1980	10,908	790			11,698	790	28.5	95.00	3.33%	26	0.8761	692
1981	11,698	1,334			13,032	1,334	27.5	91.67	3.33%	44	0.8531	1138
1982	13,032	22,477			35,509	22,477	26.5	88.33	3.33%	749	0.8340	18746
1983	35,509	(3,729)			31,780	(3,729)	25.5	85.00	3.33%	(124)	0.8133	-3033
1984	31,780	1,461			33,241	1,461	24.5	81.67	3.33%	49	0.7834	1145
1985	33,241	1,308			34,549	1,308	23.5	78.33	3.33%	44	0.7595	993
1986	34,549	21,772			56,321	21,772	22.5	75.00	3.33%	726	0.7345	15992
1987	56,321	1,561			57,882	1,561	21.5	71.67	3.33%	52	0.6998	1092
1988	57,882	1,912	(2,600)		57,194	(688)	20.5	68.33	3.33%	(23)	0.6728	-463
1989	57,194	33,952	(467)		90,679	33,485	19.5	65.00	3.33%	1,116	0.6451	21601
1990	90,679				90,679	-	18.5	61.67	3.33%	-	0.6073	0
1991	90,679				90,679	-	17.5	58.33	3.33%	-	0.5784	0
1992	90,679	5,154			95,833	5,154	16.5	55.00	3.33%	172	0.5491	2830
1993	95,833	5,656	(836)		100,653	4,820	15.5	51.67	3.33%	161	0.5097	2457
1994	100,653	3,816			104,469	3,816	14.5	48.33	3.33%	127	0.4799	1831
1995	104,469	2,890			107,359	2,890	13.5	45.00	3.33%	96	0.4500	1301
1996	107,359				107,359	-	12.5	41.67	3.33%	-	0.4100	0
1997	107,359				107,359	-	11.5	38.33	3.33%	-	0.3800	0
1998	107,359				107,359	-	10.5	35.00	3.33%	-	0.3500	0
1999	107,359	25,540			132,899	25,540	9.5	31.67	3.33%	851	0.3100	7917
2000	132,899	96,662	(1,000)		228,561	95,662	8.5	28.33	3.33%	3,189	0.2800	26785
2001	228,561	1,780			230,341	1,780	7.5	25.00	3.33%	59	0.2500	445
2002	230,341				230,341	-	6.5	21.67	3.33%	-	0.2100	0
2003	230,341	23,041			253,382	23,041	5.5	18.33	3.33%	768	0.1800	4147
2004	253,382	8,290			261,672	8,290	4.5	15.00	3.33%	276	0.1500	1244
2005	261,672	19,074			280,746	19,074	3.5	11.67	3.33%	636	0.1100	2098
2006	280,746				280,746	-	2.5	8.33	3.33%	-	0.0800	0
2007	280,746	4,193			284,939	4,193	1.5	5.00	3.33%	140	0.0500	210
2008	284,939		-2528		282,411	(2,528)	0.5	1.67	3.33%	(84)	0.0100	-25
	-	290,654	(7,243)		3,932,415	282,411				9,414		119,563

Net Salvage Adjustment: 941  
 Annual Depreciation: 10,355  
 Accrued Depreciation: 131,519

Composite Annual Accrual Rate, Percent: 3.67%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 341 TRANSMISSION & DISTRIBUTION PLANT STRUCTURES & IMPROVEMENTS  
 Iowa Curve Type: R5  
 Avg. Service Life: 40 Years  
 Net Salvage Percent: -10%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avq. Age	Rate	Amount	Ratio	Amt.	
1991	-	2,850			2,850	2,850	17.5	43.75	2.50%	71	0.4300	1226	
1992	2,850				2,850	-	16.5	41.25	2.50%	-	0.4100	0	
1993	2,850				2,850	-	15.5	38.75	2.50%	-	0.3800	0	
1994	2,850	13,100			15,950	13,100	14.5	36.25	2.50%	328	0.3600	4716	
1995	15,950	8,760			24,710	8,760	13.5	33.75	2.50%	219	0.3300	2891	
1996	24,710	7,994			32,704	7,994	12.5	31.25	2.50%	200	0.3100	2478	
1997	32,704				32,704	-	11.5	28.75	2.50%	-	0.2800	0	
1998	32,704				32,704	-	10.5	26.25	2.50%	-	0.2600	0	
1999	32,704				32,704	-	9.5	23.75	2.50%	-	0.2300	0	
2000	32,704			(32,704)	-	(32,704)	8.5	21.25	2.50%	(818)	0.2100	-6868	
2001	-				-	-	7.5	18.75	2.50%	-	0.1800	0	
2002	-				-	-	6.5	16.25	2.50%	-	0.1600	0	
2003	-	39,158		227,648	266,806	266,806	5.5	13.75	2.50%	6,670	0.1300	34685	
2004	266,806	1,733			268,539	1,733	4.5	11.25	2.50%	43	0.1100	191	
2005	268,539	6,464			275,003	6,464	3.5	8.75	2.50%	162	0.0800	517	
2006	275,003	14,411			289,414	14,411	2.5	6.25	2.50%	360	0.0600	865	
2007	289,414	26			289,440	26	1.5	3.75	2.50%	1	0.0300	1	
2008	289,440				289,440	-	0.5	1.25	2.50%	-	0.0100	0	
	-	94,496	-		1,858,668	289,440				7,236		40,701	

Net Salvage Adjustment: 724 4,070  
 Annual Depreciation: 7,960  
 Accrued Depreciation: 44,771

Composite Annual Accrual Rate, Percent: 2.75%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 342 TRANSMISSION & DISTRIBUTION PLANT DISTRIBUTION RESERVOIRS & STANDPIPES  
Iowa Curve Type: R5  
Avg. Service Life: 60 Years  
Net Salvage Percent: -20%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	12,508			12,508	12,508	93.5	155.83	1.67%	208	1.0000	12508	
1916	12,508				12,508	-	92.5	154.17	1.67%	-	1.0000	0	
1917	12,508				12,508	-	91.5	152.50	1.67%	-	1.0000	0	
1918	12,508				12,508	-	90.5	150.83	1.67%	-	1.0000	0	
1919	12,508				12,508	-	89.5	149.17	1.67%	-	1.0000	0	
1920	12,508				12,508	-	88.5	147.50	1.67%	-	1.0000	0	
1921	12,508				12,508	-	87.5	145.83	1.67%	-	1.0000	0	
1922	12,508				12,508	-	86.5	144.17	1.67%	-	1.0000	0	
1923	12,508				12,508	-	85.5	142.50	1.67%	-	1.0000	0	
1924	12,508				12,508	-	84.5	140.83	1.67%	-	1.0000	0	
1925	12,508				12,508	-	83.5	139.17	1.67%	-	1.0000	0	
1926	12,508				12,508	-	82.5	137.50	1.67%	-	1.0000	0	
1927	12,508				12,508	-	81.5	135.83	1.67%	-	0.9937	0	
1928	12,508				12,508	-	80.5	134.17	1.67%	-	0.9918	0	
1929	12,508				12,508	-	79.5	132.50	1.67%	-	0.9876	0	
1930	12,508				12,508	-	78.5	130.83	1.67%	-	0.9831	0	
1931	12,508	537			13,045	537	77.5	129.17	1.67%	9	0.9807	527	
1932	13,045				13,045	-	76.5	127.50	1.67%	-	0.9759	0	
1933	13,045				13,045	-	75.5	125.83	1.67%	-	0.9709	0	
1934	13,045				13,045	-	74.5	124.17	1.67%	-	0.9664	0	
1935	13,045				13,045	-	73.5	122.50	1.67%	-	0.9638	0	
1936	13,045				13,045	-	72.5	120.83	1.67%	-	0.9597	0	
1937	13,045		(537)		12,508	(537)	71.5	119.17	1.67%	(9)	0.9577	-515	
1938	12,508				12,508	-	70.5	117.50	1.67%	-	0.9538	0	
1939	12,508	8,357			20,865	8,357	69.5	115.83	1.67%	139	0.9497	7936	
1940	20,865				20,865	-	68.5	114.17	1.67%	-	0.9475	0	
1941	20,865				20,865	-	67.5	112.50	1.67%	-	0.9426	0	
1942	20,865				20,865	-	66.5	110.83	1.67%	-	0.9372	0	
1943	20,865				20,865	-	65.5	109.17	1.67%	-	0.9343	0	
1944	20,865				20,865	-	64.5	107.50	1.67%	-	0.9279	0	
1945	20,865				20,865	-	63.5	105.83	1.67%	-	0.9210	0	
1946	20,865				20,865	-	62.5	104.17	1.67%	-	0.9173	0	
1947	20,865				20,865	-	61.5	102.50	1.67%	-	0.9093	0	
1948	20,865				20,865	-	60.5	100.83	1.67%	-	0.9007	0	
1949	20,865				20,865	-	59.5	99.17	1.67%	-	0.8961	0	
1950	20,865				20,865	-	58.5	97.50	1.67%	-	0.8865	0	
1951	20,865	1,237			22,102	1,237	57.5	95.83	1.67%	21	0.8761	1084	
1952	22,102	781			22,883	781	56.5	94.17	1.67%	13	0.8706	680	
1953	22,883	99,066			121,949	99,066	55.5	92.50	1.67%	1,651	0.8591	85107	
1954	121,949				121,949	-	54.5	90.83	1.67%	-	0.8469	0	
1955	121,949				121,949	-	53.5	89.17	1.67%	-	0.8405	0	
1956	121,949				121,949	-	52.5	87.50	1.67%	-	0.8273	0	
1957	121,949				121,949	-	51.5	85.83	1.67%	-	0.8133	0	
1958	121,949				121,949	-	50.5	84.17	1.67%	-	0.8060	0	
1959	121,949				121,949	-	49.5	82.50	1.67%	-	0.7911	0	
1960	121,949				121,949	-	48.5	80.83	1.67%	-	0.7756	0	
1961	121,949	2,298	(780)		123,467	1,518	47.5	79.17	1.67%	25	0.7676	1166	
1962	123,467				123,467	-	46.5	77.50	1.67%	-	0.7513	0	
1963	123,467				123,467	-	45.5	75.83	1.67%	-	0.7345	0	
1964	123,467				123,467	-	44.5	74.17	1.67%	-	0.7260	0	
1965	123,467				123,467	-	43.5	72.50	1.67%	-	0.7086	0	
1966	123,467		(13,967)		109,500	(13,967)	42.5	70.83	1.67%	(233)	0.6909	-9650	
1967	109,500	59,011			168,511	59,011	41.5	69.17	1.67%	984	0.6819	40240	
1968	168,511	1,340			169,851	1,340	40.5	67.50	1.67%	22	0.6636	889	
1969	169,851	2,270	(138)		171,982	2,131	39.5	65.83	1.67%	36	0.6451	1375	
1970	171,982	79			172,062	79	38.5	64.17	1.67%	1	0.6358	50	
1971	172,062	8,397	(79)		180,379	8,317	37.5	62.50	1.67%	139	0.6169	5131	
1972	180,379		16		180,396	16	36.5	60.83	1.67%	0	0.5977	10	
1973	180,396	2,080			182,476	2,080	35.5	59.17	1.67%	35	0.5881	1223	
1974	182,476				182,476	-	34.5	57.50	1.67%	-	0.5687	0	
1975	182,476				182,476	-	33.5	55.83	1.67%	-	0.5491	0	
1976	182,476				182,476	-	32.5	54.17	1.67%	-	0.5393	0	
1977	182,476				182,476	-	31.5	52.50	1.67%	-	0.5196	0	
1978	182,476				182,476	-	30.5	50.83	1.67%	-	0.4997	0	
1979	182,476		(890)		181,586	(890)	29.5	49.17	1.67%	(15)	0.4898	-436	
1980	181,586				181,586	-	28.5	47.50	1.67%	-	0.4699	0	
1981	181,586				181,586	-	27.5	45.83	1.67%	-	0.4500	0	
1982	181,586	1,515	(276)		182,825	1,239	26.5	44.17	1.67%	21	0.4400	545	
1983	182,825	977,554			1,160,379	977,554	25.5	42.50	1.67%	16,293	0.4200	410573	
1984	1,160,379	11,100			1,171,479	11,100	24.5	40.83	1.67%	185	0.4000	4440	
1985	1,171,479		(2,789)		1,168,690	(2,789)	23.5	39.17	1.67%	(46)	0.3900	-1088	
1986	1,168,690	1,192			1,169,882	1,192	22.5	37.50	1.67%	20	0.3700	441	
1987	1,169,882	62,537			1,232,419	62,537	21.5	35.83	1.67%	1,042	0.3500	21888	
1988	1,232,419		(2,700)		1,229,719	(2,700)	20.5	34.17	1.67%	(45)	0.3400	-918	
1989	1,229,719				1,229,719	-	19.5	32.50	1.67%	-	0.3200	0	
1990	1,229,719	3,010	2,530		1,235,259	5,540	18.5	30.83	1.67%	92	0.3000	1662	
1991	1,235,259				1,235,259	-	17.5	29.17	1.67%	-	0.2900	0	
1992	1,235,259				1,235,259	-	16.5	27.50	1.67%	-	0.2700	0	
1993	1,235,259		(97)	5,804	1,240,966	5,707	15.5	25.83	1.67%	95	0.2500	1427	
1994	1,240,966				1,240,966	-	14.5	24.17	1.67%	-	0.2400	0	
1995	1,240,966				1,240,966	-	13.5	22.50	1.67%	-	0.2200	0	
1996	1,240,966				1,240,966	-	12.5	20.83	1.67%	-	0.2000	0	
1997	1,240,966				1,240,966	-	11.5	19.17	1.67%	-	0.1900	0	
1998	1,240,966				1,240,966	-	10.5	17.50	1.67%	-	0.1700	0	
1999	1,240,966				1,240,966	-	9.5	15.83	1.67%	-	0.1500	0	
2000	1,240,966		(3,516)	(36,742)	1,200,708	(40,258)	8.5	14.17	1.67%	(671)	0.1400	-5636	
2001	1,200,708				1,200,708	-	7.5	12.50	1.67%	-	0.1200	0	
2002	1,200,708				1,200,708	-	6.5	10.83	1.67%	-	0.1000	0	
2003	1,200,708	41,051			1,241,759	41,051	5.5	9.17	1.67%	684	0.0900	3695	
2004	1,241,759				1,241,759	-	4.5	7.50	1.67%	-	0.0700	0	
2005	1,241,759				1,241,759	-	3.5	5.83	1.67%	-	0.0500	0	
2006	1,241,759				1,241,759	-	2.5	4.17	1.67%	-	0.0400	0	
2007	1,241,759				1,241,759	-	1.5	2.50	1.67%	-	0.0200	0	
2008	1,241,759	31167.42			1,272,926	31,167	0.5	0.83	1.67%	519	0.0000	0	
	-	1,327,088	(23,224)	(30,938)	37,005,477	1,272,926				21,215		584,354	

Net Salvage Adjustment: 4,243  
Annual Depreciation: 25,459  
Accrued Depreciation: 701,225

Composite Annual Accrual Rate, Percent: 2.00%  
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**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 343 TRANSMISSION & DISTRIBUTION PLANT TRANSMISSION & DISTRIBUTION MAINS  
 Iowa Curve Type: R3  
 Avg. Service Life: 100 Years  
 Net Salvage Percent: -20%

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Annual Depreciation			Accrued Depreciation	
								Percent of Avg. Age	Rate	Amount	Ratio	Amt.
1915	-	126,843			126,843	126,843	93.5	93.50	1.00%	1,268	0.7630	96781
1916	126,843				126,843	-	92.5	92.50	1.00%	-	0.7576	0
1917	126,843				126,843	-	91.5	91.50	1.00%	-	0.7521	0
1918	126,843				126,843	-	90.5	90.50	1.00%	-	0.7465	0
1919	126,843				126,843	-	89.5	89.50	1.00%	-	0.7409	0
1920	126,843				126,843	-	88.5	88.50	1.00%	-	0.7351	0
1921	126,843	1,448			128,291	1,448	87.5	87.50	1.00%	14	0.7292	1056
1922	128,291				128,291	-	86.5	86.50	1.00%	-	0.7233	0
1923	128,291				128,291	-	85.5	85.50	1.00%	-	0.7172	0
1924	128,291				128,291	-	84.5	84.50	1.00%	-	0.7111	0
1925	128,291				128,291	-	83.5	83.50	1.00%	-	0.7049	0
1926	128,291	2,314			130,605	2,314	82.5	82.50	1.00%	23	0.6986	1617
1927	130,605				130,605	-	81.5	81.50	1.00%	-	0.6923	0
1928	130,605				130,605	-	80.5	80.50	1.00%	-	0.6858	0
1929	130,605				130,605	-	79.5	79.50	1.00%	-	0.6793	0
1930	130,605	1,920			132,525	1,920	78.5	78.50	1.00%	19	0.6727	1291
1931	132,525	1,564			134,088	1,564	77.5	77.50	1.00%	16	0.6660	1041
1932	134,088	3,817	(85)		137,820	3,732	76.5	76.50	1.00%	37	0.6593	2460
1933	137,820	23,337	(517)		160,640	22,820	75.5	75.50	1.00%	228	0.6525	14890
1934	160,640	8,258			168,897	8,258	74.5	74.50	1.00%	83	0.6456	5331
1935	168,897	115,733	(23)		284,607	115,710	73.5	73.50	1.00%	1,157	0.6387	73904
1936	284,607	2,265	(1,080)		286,793	1,185	72.5	72.50	1.00%	12	0.6316	749
1937	285,793	9,328			295,121	9,328	71.5	71.50	1.00%	93	0.6245	5826
1938	295,121	31,642	(6,833)		319,930	24,809	70.5	70.50	1.00%	248	0.6174	15317
1939	319,930	156,584	(193,110)		283,403	(36,527)	69.5	69.50	1.00%	(365)	0.6102	-22289
1940	283,403	9,002			292,406	9,002	68.5	68.50	1.00%	90	0.6029	5427
1941	292,406	4,884	(81)		297,209	4,803	67.5	67.50	1.00%	48	0.5956	2861
1942	297,209	261	(55)		297,414	205	66.5	66.50	1.00%	2	0.5882	121
1943	297,414				297,414	-	65.5	65.50	1.00%	-	0.5807	0
1944	297,414		(3,657)		293,757	(3,657)	64.5	64.50	1.00%	(37)	0.5732	-2096
1945	293,757	102	(74)		293,785	28	63.5	63.50	1.00%	0	0.5656	16
1946	293,785	2,531	(400)		295,916	2,131	62.5	62.50	1.00%	21	0.5579	1189
1947	295,916	31,713	(1,244)		326,385	30,469	61.5	61.50	1.00%	305	0.5519	16999
1948	326,385	3,834			330,219	3,834	60.5	60.50	1.00%	38	0.5425	2080
1949	330,219	8,652	(595)		338,276	8,058	59.5	59.50	1.00%	81	0.5347	4308
1950	338,276	30,384	(1,793)		366,847	28,571	58.5	58.50	1.00%	286	0.5268	15051
1951	366,847	7,254	(52)		374,049	7,202	57.5	57.50	1.00%	72	0.5189	3737
1952	374,049	22,396	(7)		396,438	22,389	56.5	56.50	1.00%	224	0.5110	11441
1953	396,438	30,317	(1,117)		425,638	29,200	55.5	55.50	1.00%	292	0.5029	14685
1954	425,638	41,591	(428)		466,801	41,163	54.5	54.50	1.00%	412	0.4949	20372
1955	466,801	51,664	(537)		517,928	51,127	53.5	53.50	1.00%	511	0.4867	24884
1956	517,928	74,201	(633)		591,497	73,568	52.5	52.50	1.00%	736	0.4786	35210
1957	591,497	57,405	(62)		648,840	57,343	51.5	51.50	1.00%	573	0.4704	26674
1958	648,840	52,391	(477)		700,753	51,914	50.5	50.50	1.00%	519	0.4621	23989
1959	700,753	38,557	(905)		738,405	37,652	49.5	49.50	1.00%	377	0.4538	17086
1960	738,405	45,937	(2,183)		782,159	43,754	48.5	48.50	1.00%	438	0.4454	19488
1961	782,159	47,555	(5,077)		824,637	42,478	47.5	47.50	1.00%	425	0.4370	18563
1962	824,637	47,632	(391)		871,779	47,241	46.5	46.50	1.00%	472	0.4285	20243
1963	871,779	62,243	(638)		933,484	61,605	45.5	45.50	1.00%	616	0.4200	25674
1964	933,484	126,494	(3,402)		1,056,576	123,092	44.5	44.50	1.00%	1,231	0.4114	50640
1965	1,056,576	89,150	(2,288)		1,143,438	86,862	43.5	43.50	1.00%	869	0.4028	34988
1966	1,143,438	127,955	(3,352)		1,268,041	124,603	42.5	42.50	1.00%	1,246	0.3942	49119
1967	1,268,041	76,957	(1,706)		1,343,293	75,252	41.5	41.50	1.00%	753	0.3855	29010
1968	1,343,293	58,617	(1,432)		1,400,478	57,185	40.5	40.50	1.00%	572	0.3767	21542
1969	1,400,478	171,428	(1,451)		1,570,454	169,977	39.5	39.50	1.00%	1,700	0.3679	62534
1970	1,570,454	30,364	(708)		1,600,111	29,656	38.5	38.50	1.00%	297	0.3591	10650
1971	1,600,111	59,102	(420)		1,658,793	58,682	37.5	37.50	1.00%	587	0.3503	20556
1972	1,658,793	61,791	(820)		1,719,765	60,972	36.5	36.50	1.00%	610	0.3413	20810
1973	1,719,765	56,680	(5,578)		1,770,867	51,102	35.5	35.50	1.00%	511	0.3324	16986
1974	1,770,867	63,403	(20,637)		1,813,633	42,766	34.5	34.50	1.00%	428	0.3234	13831
1975	1,813,633	56,276	(207)		1,869,702	56,069	33.5	33.50	1.00%	561	0.3144	17628
1976	1,869,702	34,027	(739)		1,902,990	33,288	32.5	32.50	1.00%	333	0.3053	10163
1977	1,902,990	126,644	(374)		2,029,260	126,270	31.5	31.50	1.00%	1,263	0.2962	37401
1978	2,029,260	298,343	(8,037)		2,319,566	290,306	30.5	30.50	1.00%	2,903	0.2871	83347
1979	2,319,566	98,058	(109)		2,417,515	97,949	29.5	29.50	1.00%	979	0.2779	27220
1980	2,417,515	76,011	(471)		2,493,055	75,540	28.5	28.50	1.00%	755	0.2687	20298
1981	2,493,055	130,266	(361)		2,622,960	129,905	27.5	27.50	1.00%	1,299	0.2594	33697
1982	2,622,960	279,835	(280)		2,902,515	279,555	26.5	26.50	1.00%	2,796	0.2501	69917
1983	2,902,515	318,101	(2,131)		3,218,485	315,970	25.5	25.50	1.00%	3,160	0.2408	76086
1984	3,218,485	141,294			3,359,779	141,294	24.5	24.50	1.00%	1,413	0.2315	32710
1985	3,359,779	368,692		5,500	3,733,971	374,192	23.5	23.50	1.00%	3,742	0.2221	83108
1986	3,733,971	355,668	(1,702)		4,087,937	353,966	22.5	22.50	1.00%	3,540	0.2127	75289
1987	4,087,937	521,400	(20,746)		4,589,591	500,654	21.5	21.50	1.00%	5,007	0.2033	101783
1988	4,589,591	602,043	(21,806)		5,168,828	580,237	20.5	20.50	1.00%	5,802	0.1938	112450
1989	5,168,828	415,583	(5,283)		5,579,128	410,300	19.5	19.50	1.00%	4,103	0.1843	75618
1990	5,579,128	116,589	(7,836)		5,687,881	108,753	18.5	18.50	1.00%	1,088	0.1748	19010
1991	5,687,881	61,029	(2,151)		5,746,759	58,878	17.5	17.50	1.00%	589	0.1653	9733
1992	5,746,759	134,399			5,881,158	134,399	16.5	16.50	1.00%	1,344	0.1557	20926
1993	5,881,158	171,148	(16,563)		6,035,743	154,585	15.5	15.50	1.00%	1,546	0.1461	22585
1994	6,035,743	356,801	(119)		6,392,425	356,682	14.5	14.50	1.00%	3,567	0.1365	48687
1995	6,392,425	144,334		71,061	6,607,820	215,395	13.5	13.50	1.00%	2,154	0.1269	27334
1996	6,607,820	162,606	(11,049)		6,759,379	151,559	12.5	12.50	1.00%	1,516	0.1172	17763
1997	6,759,379	247,093	(131)		7,006,341	246,962	11.5	11.50	1.00%	2,470	0.1075	26548
1998	7,006,341	486,194	(47)		7,492,488	486,147	10.5	10.50	1.00%	4,861	0.0978	47545
1999	7,492,488	754,715			8,247,203	754,715	9.5	9.50	1.00%	7,547	0.0881	66490
2000	8,247,203	1,108,591	(22,816)	312	9,333,290	1,086,087	8.5	8.50	1.00%	10,861	0.0784	85149
2001	9,333,290	272,696	(897)		9,605,089	271,799	7.5	7.50	1.00%	2,718	0.0686	16645
2002	9,605,089	275,152			9,880,241	275,152	6.5	6.50	1.00%	2,752	0.0589	16206
2003	9,880,241	560,621			10,440,862	560,621	5.5	5.50	1.00%	5,606	0.0491	27526
2004	10,440,862	556,745	(22,717)		10,974,890	534,028	4.5	4.50	1.00%	5,340	0.0393	20987
2005	10,974,890	77,352			11,052,242	77,352	3.5	3.50	1.00%	774	0.0295	2282
2006	11,052,242	1,741,105	(96,002)		12,697,345	1,645,103	2.5	2.50	1.00%	16,451	0.0197	32409
2007	12,697,345	451,978	(478)		13,148,845	451,500	1.5	1.50	1.00%	4,515	0.0098	4425
2008	13,148,845	797,248.07		(5)	13,946,088	797,243	0.5	0.50	1.00%			

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 345 TRANSMISSION & DISTRIBUTION PLANT SERVICES  
Iowa Curve Type: R3  
Avg. Service Life: 65 Years  
Net Salvage Percent: -20%

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Annual Depreciation		Accrued Depreciation			
							Age	Rate	Amount	Ratio	Amt.	
1914	-	8,849			8,849	8,849	94.5	1.54%	136	0.9439	8352	
1915	8,849				8,849	-	93.5	1.54%	-	-	0.9352	0
1916	8,849				8,849	-	92.5	1.54%	-	-	0.9336	0
1917	8,849				8,849	-	91.5	1.54%	-	-	0.9285	0
1918	8,849				8,849	-	90.5	1.54%	-	-	0.9259	0
1919	8,849				8,849	-	89.5	1.54%	-	-	0.9207	0
1920	8,849				8,849	-	88.5	1.54%	-	-	0.9182	0
1921	8,849				8,849	-	87.5	1.54%	-	-	0.9130	0
1922	8,849				8,849	-	86.5	1.54%	-	-	0.9104	0
1923	8,849	1,434			10,282	1,434	85.5	1.54%	22	0.9052	1298	
1924	10,282				10,282	-	84.5	1.54%	-	-	0.9026	0
1925	10,282				10,282	-	83.5	1.54%	-	-	0.8972	0
1926	10,282				10,282	-	82.5	1.54%	-	-	0.8918	0
1927	10,282				10,282	-	81.5	1.54%	-	-	0.8918	0
1928	10,282				10,282	-	80.5	1.54%	-	-	0.8833	0
1929	10,282				10,282	-	79.5	1.54%	-	-	0.8804	0
1930	10,282	958	(24)		11,217	934	78.5	1.54%	14	0.8744	817	
1931	11,217	924	(30)		12,110	894	77.5	1.54%	14	0.8714	779	
1932	12,110	1,416	(96)		13,431	1,321	76.5	1.54%	20	0.8550	1129	
1933	13,431	605	(52)		13,983	552	75.5	1.54%	8	0.8518	471	
1934	13,983	473			14,456	473	74.5	1.54%	7	0.8550	404	
1935	14,456	722			15,178	722	73.5	1.54%	11	0.8515	614	
1936	15,178	1,156			16,333	1,156	72.5	1.54%	18	0.8443	976	
1937	16,333	1,570			17,903	1,570	71.5	1.54%	24	0.8405	1320	
1938	17,903	2,296	(774)		19,425	1,522	70.5	1.54%	23	0.8328	1267	
1939	19,425	13,042	(190)		32,277	12,853	69.5	1.54%	198	0.8247	10600	
1940	32,277	1,759	(89)		33,947	1,670	68.5	1.54%	26	0.8247	1377	
1941	33,947	471	(115)		34,303	356	67.5	1.54%	5	0.8119	289	
1942	34,303	887	(138)		35,052	749	66.5	1.54%	12	0.8075	605	
1943	35,052	195	(67)		35,179	127	65.5	1.54%	2	0.7983	102	
1944	35,179	515			35,694	515	64.5	1.54%	8	0.7935	408	
1945	35,694	1,648	(207)		37,135	1,441	63.5	1.54%	22	0.7837	1129	
1946	37,135	3,054	(578)		39,611	2,476	62.5	1.54%	38	0.7787	1928	
1947	39,611	4,519	(605)		43,525	3,914	61.5	1.54%	60	0.7684	3008	
1948	43,525	5,836	(724)		48,637	5,112	60.5	1.54%	79	0.7630	3900	
1949	48,637	3,898	(632)		51,904	3,267	59.5	1.54%	50	0.7521	2457	
1950	51,904	5,309	(335)		56,878	4,974	58.5	1.54%	77	0.7465	3713	
1951	56,878	4,564	(398)		61,044	4,166	57.5	1.54%	64	0.7351	3062	
1952	61,044	6,248	(162)		67,130	6,086	56.5	1.54%	94	0.7233	4402	
1953	67,130	6,417	(327)		73,220	6,090	55.5	1.54%	94	0.7172	4368	
1954	73,220	8,049	(236)		81,033	7,813	54.5	1.54%	120	0.7049	5508	
1955	81,033	9,255	(279)		90,010	8,977	53.5	1.54%	138	0.6986	6271	
1956	90,010	14,419	(378)		104,051	14,041	52.5	1.54%	216	0.6858	9629	
1957	104,051	15,591	(938)		118,704	14,652	51.5	1.54%	225	0.6793	9953	
1958	118,704	11,606	(1,257)		129,052	10,348	50.5	1.54%	159	0.6660	6892	
1959	129,052	15,273	(1,256)		143,069	14,017	49.5	1.54%	216	0.6593	9241	
1960	143,069	18,927	(2,091)		159,905	16,836	48.5	1.54%	259	0.6456	10870	
1961	159,905	15,569	(1,246)		174,228	14,322	47.5	1.54%	220	0.6387	9148	
1962	174,228	18,143	(1,098)		191,273	17,045	46.5	1.54%	262	0.6245	10645	
1963	191,273	16,533	(826)		206,980	15,707	45.5	1.54%	242	0.6174	9698	
1964	206,980	21,983	(1,787)		227,177	20,197	44.5	1.54%	311	0.6029	12177	
1965	227,177	20,340	(1,812)		245,705	18,528	43.5	1.54%	285	0.5882	10898	
1966	245,705	22,116	(1,439)		266,384	20,679	42.5	1.54%	318	0.5807	12008	
1967	266,384	24,405	(753)		290,036	23,652	41.5	1.54%	364	0.5656	13378	
1968	290,036	17,627	(492)		307,170	17,135	40.5	1.54%	264	0.5579	9559	
1969	307,170	25,376	(681)		331,866	24,695	39.5	1.54%	380	0.5425	13397	
1970	331,866	19,994	(292)		351,558	19,692	38.5	1.54%	303	0.5347	10529	
1971	351,558	38,674	(665)		389,567	38,009	37.5	1.54%	585	0.5189	19723	
1972	389,567	40,267	(1,044)		428,789	39,223	36.5	1.54%	603	0.5110	20043	
1973	428,789	39,087	(1,854)		466,022	37,233	35.5	1.54%	573	0.4949	18427	
1974	466,022	10,811			476,833	10,811	34.5	1.54%	166	0.4867	5262	
1975	476,833	15,959	(186)		492,606	15,773	33.5	1.54%	243	0.4704	7420	
1976	492,606	38,675	(322)		530,959	38,353	32.5	1.54%	590	0.4621	17723	
1977	530,959	34,995	(282)		565,672	34,713	31.5	1.54%	534	0.4454	15461	
1978	565,672	51,878	(246)		617,304	51,632	30.5	1.54%	794	0.4285	22124	
1979	617,304	62,551	(910)		678,945	61,641	29.5	1.54%	948	0.4200	25889	
1980	678,945	35,115	(381)		713,679	34,734	28.5	1.54%	534	0.4028	13991	
1981	713,679	33,089	(573)		746,195	32,516	27.5	1.54%	500	0.3942	12818	
1982	746,195	44,688	(35)		790,848	44,653	26.5	1.54%	687	0.3767	16821	
1983	790,848	87,488			878,336	87,488	25.5	1.54%	1,346	0.3679	32187	
1984	878,336	84,937	(15)		963,258	84,922	24.5	1.54%	1,306	0.3503	29748	
1985	963,258	154,647			1,117,905	154,647	23.5	1.54%	2,379	0.3413	52781	
1986	1,117,905	126,609	(119)		1,244,395	126,490	22.5	1.54%	1,946	0.3234	40907	
1987	1,244,395	157,070	(616)		1,400,849	156,454	21.5	1.54%	2,407	0.3144	49189	
1988	1,400,849	156,496	(372)		1,556,973	156,124	20.5	1.54%	2,402	0.2962	46244	
1989	1,556,973	128,905			1,685,878	128,905	19.5	1.54%	1,983	0.2871	37009	
1990	1,685,878	126,251	(652)		1,811,467	125,589	18.5	1.54%	1,932	0.2687	33746	
1991	1,811,467	78,273	(4,740)		1,885,000	73,533	17.5	1.54%	1,131	0.2501	18391	
1992	1,885,000	77,542	(2,680)		1,959,862	74,862	16.5	1.54%	1,152	0.2408	18027	
1993	1,959,862	68,572	(13,777)		2,014,657	54,795	15.5	1.54%	843	0.2221	12170	
1994	2,014,657	116,717	(11,949)		2,119,425	104,768	14.5	1.54%	1,612	0.2127	22284	
1995	2,119,425	150,595	(3,670)		2,266,350	146,925	13.5	1.54%	2,280	0.1938	28474	
1996	2,266,350	135,578	(3,562)		2,398,366	132,016	12.5	1.54%	2,031	0.1843	24331	
1997	2,398,366	162,785	(3,382)		2,557,769	159,403	11.5	1.54%	2,452	0.1653	26349	
1998	2,557,769	213,490	(2,862)		2,768,377	210,608	10.5	1.54%	3,240	0.1557	32792	
1999	2,768,377	222,641	(13,144)		2,977,874	209,497	9.5	1.54%	3,223	0.1365	28596	
2000	2,977,874	243,375	(32,132)	(755)	3,188,362	210,488	8.5	1.54%	3,238	0.1269	26711	
2001	3,188,362	167,459	(10,785)		3,345,036	156,674	7.5	1.54%	2,410	0.1075	16842	
2002	3,345,036	101,725			3,446,761	101,725	6.5	1.54%	1,565	0.0978	9949	
2003	3,446,761	67,451			3,514,212	67,451	5.5	1.54%	1,038	0.0784	5288	
2004	3,514,212	157,058			3,671,270	157,058	4.5	1.54%	2,416	0.0589	9251	
2005	3,671,270	193,351			3,864,621	193,351	3.5	1.54%	2,975	0.0491	9494	
2006	3,864,621	417,800			4,282,421	417,800	2.5	1.54%	6,428	0.0295	12325	
2007	4,282,421	172,212	(13,446)		4,441,187	158,766	1.5	1.54%	2,443	0.0197	3128	
2008	4,441,187	44			4,441,231		0.5					
						4,441,187			68,326		1,050,487	
		4,588,831	(146,845)	(755)	77,088,660							

Net Salvage Adjustment: 13,665 210,097  
Annual Depreciation: 81,991  
Accrued Depreciation: 1,260,585

Composite Annual Accrual Rate, Percent: 1.85%

Account Number: 346 TRANSMISSION & DISTRIBUTION PLANT METERS  
 Iowa Curve Type: R1  
 Avg Service Life: 25 Years  
 Net Salvage Percent: 5%

Aquarion Water Company of New Hampshire  
 Calculated Annual and Accrual Depreciation

Year	Orig Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation	Accrued Depreciation
							Yrs	Rate	Amount
1914	336				336	336	53.5	4.00%	1,000.00
1915	336				336	0	54.5	4.00%	0
1916	336				336	0	55.5	4.00%	0
1917	336				336	0	56.5	4.00%	0
1918	336				336	0	57.5	4.00%	0
1919	336				336	0	58.5	4.00%	0
1920	336				336	0	59.5	4.00%	0
1921	336				336	0	60.5	4.00%	0
1922	336				336	0	61.5	4.00%	0
1923	336				336	0	62.5	4.00%	0
1924	336				336	0	63.5	4.00%	0
1925	336				336	0	64.5	4.00%	0
1926	336				336	0	65.5	4.00%	0
1927	336				336	0	66.5	4.00%	0
1928	336				336	0	67.5	4.00%	0
1929	336				336	0	68.5	4.00%	0
1930	336				336	0	69.5	4.00%	0
1931	336				336	0	70.5	4.00%	0
1932	336				336	0	71.5	4.00%	0
1933	336				336	0	72.5	4.00%	0
1934	336				336	0	73.5	4.00%	0
1935	336				336	0	74.5	4.00%	0
1936	336				336	0	75.5	4.00%	0
1937	336				336	0	76.5	4.00%	0
1938	336				336	0	77.5	4.00%	0
1939	336				336	0	78.5	4.00%	0
1940	336				336	0	79.5	4.00%	0
1941	336				336	0	80.5	4.00%	0
1942	336				336	0	81.5	4.00%	0
1943	336				336	0	82.5	4.00%	0
1944	336				336	0	83.5	4.00%	0
1945	336				336	0	84.5	4.00%	0
1946	336				336	0	85.5	4.00%	0
1947	336				336	0	86.5	4.00%	0
1948	336				336	0	87.5	4.00%	0
1949	336				336	0	88.5	4.00%	0
1950	336				336	0	89.5	4.00%	0
1951	336				336	0	90.5	4.00%	0
1952	336				336	0	91.5	4.00%	0
1953	336				336	0	92.5	4.00%	0
1954	336				336	0	93.5	4.00%	0
1955	336				336	0	94.5	4.00%	0
1956	336				336	0	95.5	4.00%	0
1957	336				336	0	96.5	4.00%	0
1958	336				336	0	97.5	4.00%	0
1959	336				336	0	98.5	4.00%	0
1960	336				336	0	99.5	4.00%	0
1961	336				336	0	100.5	4.00%	0
1962	336				336	0	101.5	4.00%	0
1963	336				336	0	102.5	4.00%	0
1964	336				336	0	103.5	4.00%	0
1965	336				336	0	104.5	4.00%	0
1966	336				336	0	105.5	4.00%	0
1967	336				336	0	106.5	4.00%	0
1968	336				336	0	107.5	4.00%	0
1969	336				336	0	108.5	4.00%	0
1970	336				336	0	109.5	4.00%	0
1971	336				336	0	110.5	4.00%	0
1972	336				336	0	111.5	4.00%	0
1973	336				336	0	112.5	4.00%	0
1974	336				336	0	113.5	4.00%	0
1975	336				336	0	114.5	4.00%	0
1976	336				336	0	115.5	4.00%	0
1977	336				336	0	116.5	4.00%	0
1978	336				336	0	117.5	4.00%	0
1979	336				336	0	118.5	4.00%	0
1980	336				336	0	119.5	4.00%	0
1981	336				336	0	120.5	4.00%	0
1982	336				336	0	121.5	4.00%	0
1983	336				336	0	122.5	4.00%	0
1984	336				336	0	123.5	4.00%	0
1985	336				336	0	124.5	4.00%	0
1986	336				336	0	125.5	4.00%	0
1987	336				336	0	126.5	4.00%	0
1988	336				336	0	127.5	4.00%	0
1989	336				336	0	128.5	4.00%	0
1990	336				336	0	129.5	4.00%	0
1991	336				336	0	130.5	4.00%	0
1992	336				336	0	131.5	4.00%	0
1993	336				336	0	132.5	4.00%	0
1994	336				336	0	133.5	4.00%	0
1995	336				336	0	134.5	4.00%	0
1996	336				336	0	135.5	4.00%	0
1997	336				336	0	136.5	4.00%	0
1998	336				336	0	137.5	4.00%	0
1999	336				336	0	138.5	4.00%	0
2000	336				336	0	139.5	4.00%	0
2001	336				336	0	140.5	4.00%	0
2002	336				336	0	141.5	4.00%	0
2003	336				336	0	142.5	4.00%	0
2004	336				336	0	143.5	4.00%	0
2005	336				336	0	144.5	4.00%	0
2006	336				336	0	145.5	4.00%	0
2007	336				336	0	146.5	4.00%	0
2008	336				336	0	147.5	4.00%	0
<b>Totals</b>	<b>1,353,811</b>	<b>-</b>	<b>(400,238)</b>	<b>-</b>	<b>18,575,631</b>	<b>983,573</b>	<b>35.343</b>	<b>-</b>	<b>425,542</b>

Net Salvage Adjustment: (1,987)  
 Annual Depreciation: 37,376  
 Accrued Depreciation: 404,645  
 Composite Annual Accrual Rate, Percent: 3.80%

Aquation Water Company of New Hampshire  
 Calculated Annual and Accrued Depreciation

Account Number: 348  
 Iowa Curve Type: TRANSMISSION & DISTRIBUTION PLANT HYDRANTS  
 Avg. Service Life: 53 Years  
 Net Salvage Percent: -20%

Year	Bea Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation Allowed	Annual Depreciation Amount	Accrued Depreciation Amount
1915								187.00	107	6245
1916	5,325	5,325			5,325	5,325	53.5	187.00	2,000	0
1917	5,325				5,325		91.5	185.00	2,000	0
1918	5,325				5,325		90.5	181.00	2,000	0
1919	5,325				5,325		88.5	179.00	2,000	0
1920	5,325				5,325		87.5	177.00	2,000	0
1921	5,325				5,325		87.5	175.00	2,000	0
1922	5,325				5,325		85.5	173.00	2,000	0
1923	5,325				5,325		85.5	171.00	2,000	0
1924	5,325	391			5,716	391	84.5	169.00	2,000	376
1925	5,716				5,716		83.5	167.00	2,000	0
1926	5,716				5,716		82.5	165.00	2,000	0
1927	5,716				5,716		81.5	163.00	2,000	0
1928	5,716				5,716		80.5	161.00	2,000	0
1929	5,716	501			6,218	501	79.5	159.00	2,000	0
1930	6,218				6,218		79.5	157.00	2,000	0
1931	6,218				6,218		77.5	155.00	2,000	0
1932	6,218	275	(300)		6,192	(26)	76.5	153.00	2,000	0
1933	6,192				6,192		75.5	151.00	2,000	0
1934	6,192	569			6,761	569	74.5	149.00	2,000	520
1935	6,761	426	(66)		7,111	350	73.5	147.00	2,000	333
1936	7,111	535			7,646	535	72.5	145.00	2,000	494
1937	7,646	122			7,768	122	71.5	143.00	2,000	112
1938	7,768	2,198			9,965	2,198	70.5	141.00	2,000	2010
1939	9,965	4,365			12,654	4,365	69.5	139.00	2,000	2448
1940	12,654	1,822	(66)		14,454	1,822	68.5	137.00	2,000	2448
1941	13,983	261			14,244	261	67.5	135.00	2,000	235
1942	14,244	37	(84)		14,197	(47)	66.5	133.00	2,000	42
1943	14,197	27			14,197		65.5	131.00	2,000	0
1944	14,197	37			14,224	27	64.5	129.00	2,000	24
1945	14,224	284			14,509	284	63.5	127.00	2,000	0
1946	14,509	1,269			15,778	1,269	61.5	125.00	2,000	250
1947	15,778	1,675			16,453	1,675	60.5	123.00	2,000	1110
1948	16,129	500			16,627	500	59.5	121.00	2,000	1110
1949	16,627	2,661			19,035	2,408	58.5	119.00	2,000	434
1950	19,035	123	(253)		19,101	66	57.5	117.00	2,000	2067
1951	19,101	1,237	(94)		19,723	621	56.5	115.00	2,000	56
1952	19,723	1,316	(49)		20,910	1,188	55.5	113.00	2,000	524
1953	20,910	3,706			24,616	3,706	54.5	111.00	2,000	998
1954	24,616	696			25,313	696	53.5	109.00	2,000	3091
1955	25,313	3,453	(81)		31,152	4,839	52.5	107.00	2,000	576
1956	31,152	4,651	(177)		35,724	4,574	51.5	105.00	2,000	484
1957	35,724	1,715	(177)		37,071	1,346	50.5	103.00	2,000	3854
1958	38,334	1,524	(161)		39,434	1,363	49.5	101.00	2,000	1239
1959	39,434	1,522	(205)		39,247	813	48.5	99.00	2,000	1088
1960	39,247	1,522			40,769	1,522	47.5	97.00	2,000	643
1961	40,769	4,600	(444)		44,925	4,156	46.5	95.00	2,000	1191
1962	44,925	3,938	(400)		48,814	3,889	45.5	93.00	2,000	3215
1963	48,814	3,395	(740)		51,869	3,054	44.5	91.00	2,000	2974
1964	51,869	2,674	(620)		54,863	2,994	43.5	89.00	2,000	2186
1965	54,863	3,910	(690)		57,604	3,301	42.5	87.00	2,000	1785
1966	57,604	4,481	(166)		61,889	4,284	41.5	85.00	2,000	2438
1967	61,889	2,420	(684)		63,625	1,736	40.5	83.00	2,000	3108
1968	63,625	5,829	(828)		68,625	5,000	39.5	81.00	2,000	3516
1969	68,625	4,012	(247)		72,391	3,765	38.5	79.00	2,000	2604
1970	72,391	1,079	(197)		73,313	922	37.5	77.00	2,000	627
1971	73,313	5,998	(426)		78,886	5,572	36.5	75.00	2,000	3815
1972	78,886	3,625	(1,150)		81,351	2,465	35.5	73.00	2,000	3515
1973	81,351	2,773	(1,150)		84,174	2,823	34.5	71.00	2,000	2430
1974	84,174	7,449	(1,044)		91,279	6,405	33.5	69.00	2,000	1740
1975	91,279	1,228	(648)		91,562	683	32.5	67.00	2,000	4011
1976	91,562	2,953	(469)		94,446	2,884	31.5	65.00	2,000	418
1977	94,446	12,890	(263)		107,073	12,627	30.5	63.00	2,000	1483
1978	107,073	21,970	(1,138)		127,905	20,832	29.5	61.00	2,000	7343
1979	127,905	17,506	(640)		145,271	17,366	28.5	59.00	2,000	11785
1980	145,271	12,746	(719)		157,268	12,000	27.5	57.00	2,000	9400
1981	157,268	27,746	(1,514)		183,500	26,232	26.5	55.00	2,000	12423
1982	183,500	26,228	(1,318)		202,761	24,910	25.5	53.00	2,000	13615
1983	202,761	10,369			213,130	10,369	24.5	51.00	2,000	9884
1984	213,130	14,191	(1,393)		225,930	12,790	23.5	49.00	2,000	5647
1985	225,930	22,870	(321)		248,531	22,601	22.5	47.00	2,000	10016
1986	248,531	27,679	(659)		274,551	26,020	21.5	45.00	2,000	11525
1987	274,551	47,110	(1,893)		319,768	45,217	20.5	43.00	2,000	18395
1988	319,768	47,110	(791)		364,371	44,603	19.5	41.00	2,000	9449
1989	364,371	25,162	(1,514)		387,021	22,650	18.5	39.00	2,000	9449
1990	387,021	4,827	(743)		396,095	3,313	17.5	37.00	2,000	1155
1991	396,095	12,757	(58)		408,852	12,757	16.5	35.00	2,000	3954
1992	408,852	9,197	(1,413)		418,539	9,686	15.5	33.00	2,000	4250
1993	418,539	11,362	(454)		429,448	10,908	14.5	31.00	2,000	2176
1994	429,448	5,244	(1,360)		433,332	3,884	13.5	29.00	2,000	2942
1995	433,332	10,924	(901)		443,356	10,023	12.5	27.00	2,000	970
1996	443,356	26,167			469,523	26,167	11.5	25.00	2,000	2304
1997	469,523	26,167			495,690	26,167	10.5	23.00	2,000	1509
1998	495,690	18,106	(1,549)		513,796	18,106	9.5	21.00	2,000	1509
1999	513,796	39,817	(669)		553,934	40,137	8.5	19.00	2,000	2743
2000	553,934	4,783			561,350	7,315	7.5	17.00	2,000	1735
2001	561,350	12,860			574,210	12,860	6.5	15.00	2,000	5172
2002	574,210	2,777			581,350	7,140	5.5	13.00	2,000	527
2003	581,350	2,777			584,150	2,800	4.5	11.00	2,000	527
2004	584,150	2,777			586,927	2,777	3.5	9.00	2,000	1156
2005	586,927	26,311	(12,554)		597,515	10,588	2.5	7.00	2,000	989
2006	597,515	26,311	(3,029)		597,515	0	1.5	5.00	2,000	528
2007	597,515				597,515	0	0.5	3.00	2,000	756
2008	597,515				597,515	0	0.5	1.00	2,000	0
		640,697	(47,890)		13,551,884	632,797		11,856		241,327

Net Salvage Adjustment: 2,371  
 Annual Depreciation: 14,227  
 Composite Annual Accrual Rate, Percent: 2.40%

Net Salvage Adjustment: -  
 Annual Depreciation: 4,935  
 Accrued Depreciation: 16,532  
 Composite Annual Accrual Rate, Percent: 5.00%

Year	Net Salvage	Annual Depreciation	Accrued Depreciation	Amnt.
2002	-	4,935	4,935	16,532
2003	-	4,935	9,870	1820
2004	-	4,935	14,805	8028
2005	-	4,935	19,740	72
2006	-	4,935	24,675	2472
2007	-	4,935	29,610	1691
2008	-	4,935	34,545	0

Account Number: 349  
 Avg. Service Life: 20 Years  
 Net Salvage Percent: 0%  
 Calculated Annual and Accrued Depreciation  
 Aquarion Water Company of New Hampshire  
 TRANSMISSION & DISTRIBUTION PLANT OTHER T & D PLANT

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 390 GENERAL PLANT STRUCTURES & IMPROVEMENTS  
 Iowa Curve Type: R1  
 Avg. Service Life: 35 Years  
 Net Salvage Percent: -10%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avgt. Age	Rate	Amount	Ratio	Amt.	
1915	-	200			200	200	93.5	267.14	2.86%	6	1.0000	200	
1916	200				200	-	92.5	264.29	2.86%	-	1.0000	0	
1917	200				200	-	91.5	261.43	2.86%	-	1.0000	0	
1918	200				200	-	90.5	258.57	2.86%	-	1.0000	0	
1919	200				200	-	89.5	255.71	2.86%	-	1.0000	0	
1920	200				200	-	88.5	252.86	2.86%	-	1.0000	0	
1921	200				200	-	87.5	250.00	2.86%	-	1.0000	0	
1922	200				200	-	86.5	247.14	2.86%	-	1.0000	0	
1923	200				200	-	85.5	244.29	2.86%	-	1.0000	0	
1924	200				200	-	84.5	241.43	2.86%	-	1.0000	0	
1925	200				200	-	83.5	238.57	2.86%	-	1.0000	0	
1926	200				200	-	82.5	235.71	2.86%	-	1.0000	0	
1927	200				200	-	81.5	232.86	2.86%	-	1.0000	0	
1928	200				200	-	80.5	230.00	2.86%	-	1.0000	0	
1929	200				200	-	79.5	227.14	2.86%	-	1.0000	0	
1930	200				200	-	78.5	224.29	2.86%	-	1.0000	0	
1931	200				200	-	77.5	221.43	2.86%	-	1.0000	0	
1932	200				200	-	76.5	218.57	2.86%	-	1.0000	0	
1933	200				200	-	75.5	215.71	2.86%	-	1.0000	0	
1934	200				200	-	74.5	212.86	2.86%	-	1.0000	0	
1935	200				200	-	73.5	210.00	2.86%	-	1.0000	0	
1936	200				200	-	72.5	207.14	2.86%	-	1.0000	0	
1937	200				200	-	71.5	204.29	2.86%	-	1.0000	0	
1938	200				200	-	70.5	201.43	2.86%	-	1.0000	0	
1939	200				200	-	69.5	198.57	2.86%	-	0.9896	0	
1940	200				200	-	68.5	195.71	2.86%	-	0.9801	0	
1941	200				200	-	67.5	192.86	2.86%	-	0.9701	0	
1942	200				200	-	66.5	190.00	2.86%	-	0.9634	0	
1943	200				200	-	65.5	187.14	2.86%	-	0.9533	0	
1944	200				200	-	64.5	184.29	2.86%	-	0.9435	0	
1945	200				200	-	63.5	181.43	2.86%	-	0.9342	0	
1946	200				200	-	62.5	178.57	2.86%	-	0.9252	0	
1947	200				200	-	61.5	175.71	2.86%	-	0.9163	0	
1948	200				200	-	60.5	172.86	2.86%	-	0.9074	0	
1949	200				200	-	59.5	170.00	2.86%	-	0.9014	0	
1950	200				200	-	58.5	167.14	2.86%	-	0.8924	0	
1951	200				200	-	57.5	164.29	2.86%	-	0.8831	0	
1952	200	170			370	170	56.5	161.43	2.86%	5	0.8737	149	
1953	370	385			755	385	55.5	158.57	2.86%	11	0.8641	333	
1954	755				755	-	54.5	155.71	2.86%	-	0.8543	0	
1955	755				755	-	53.5	152.86	2.86%	-	0.8443	0	
1956	755				755	-	52.5	150.00	2.86%	-	0.8376	0	
1957	755		(385)		370	(385)	51.5	147.14	2.86%	(11)	0.8272	-318	
1958	370				370	-	50.5	144.29	2.86%	-	0.8166	0	
1959	370				370	-	49.5	141.43	2.86%	-	0.8058	0	
1960	370				370	-	48.5	138.57	2.86%	-	0.7948	0	
1961	370	11,214			11,584	11,214	47.5	135.71	2.86%	320	0.7835	8786	
1962	11,584	3,007			14,590	3,007	46.5	132.86	2.86%	86	0.7720	2321	
1963	14,590	4,438	(50)		18,979	4,388	45.5	130.00	2.86%	125	0.7642	3354	
1964	18,979	170	26		19,174	195	44.5	127.14	2.86%	6	0.7523	147	
1965	19,174	126			19,301	126	43.5	124.29	2.86%	4	0.7401	94	
1966	19,301				19,301	-	42.5	121.43	2.86%	-	0.7276	0	
1967	19,301				19,301	-	41.5	118.57	2.86%	-	0.7149	0	
1968	19,301	7,234	(385)		26,150	6,849	40.5	115.71	2.86%	196	0.7019	4807	
1969	26,150	309	(329)		26,130	(20)	39.5	112.86	2.86%	(1)	0.6887	-14	
1970	26,130				26,130	-	38.5	110.00	2.86%	-	0.6797	0	
1971	26,130				26,130	-	37.5	107.14	2.86%	-	0.6659	0	
1972	26,130				26,130	-	36.5	104.29	2.86%	-	0.6519	0	
1973	26,130	110			26,240	110	35.5	101.43	2.86%	3	0.6376	70	
1974	26,240				26,240	-	34.5	98.57	2.86%	-	0.6230	0	
1975	26,240				26,240	-	33.5	95.71	2.86%	-	0.6080	0	
1976	26,240				26,240	-	32.5	92.86	2.86%	-	0.5928	0	
1977	26,240				26,240	-	31.5	90.00	2.86%	-	0.5824	0	
1978	26,240				26,240	-	30.5	87.14	2.86%	-	0.5667	0	
1979	26,240	935	(167)		27,008	768	29.5	84.29	2.86%	22	0.5506	423	
1980	27,008	24,180			51,188	24,180	28.5	81.43	2.86%	691	0.5342	12917	
1981	51,188				51,188	-	27.5	78.57	2.86%	-	0.5174	0	
1982	51,188				51,188	-	26.5	75.71	2.86%	-	0.5004	0	
1983	51,188	9,087			60,275	9,087	25.5	72.86	2.86%	260	0.4831	4390	
1984	60,275	27,584	(935)		86,924	26,649	24.5	70.00	2.86%	761	0.4714	12562	
1985	86,924	760			87,704	780	23.5	67.14	2.86%	22	0.4535	354	
1986	87,704	36,934	(1,103)		123,535	35,831	22.5	64.29	2.86%	1,024	0.4354	15601	
1987	123,535	111,347	37		234,919	111,384	21.5	61.43	2.86%	3,182	0.4170	46447	
1988	234,919	34,415	5,754		275,088	40,169	20.5	58.57	2.86%	1,148	0.3983	15999	
1989	275,088				275,088	-	19.5	55.71	2.86%	-	0.3794	0	
1990	275,088		23,820		298,908	23,820	18.5	52.86	2.86%	681	0.3602	8580	
1991	298,908		(780)		298,128	(780)	17.5	50.00	2.86%	(22)	0.3473	-271	
1992	298,128	12,595	(51,613)		259,110	(39,018)	16.5	47.14	2.86%	(1,115)	0.3278	-12790	
1993	259,110		(803)		258,307	(803)	15.5	44.29	2.86%	(23)	0.3080	-247	
1994	258,307				258,307	-	14.5	41.43	2.86%	-	0.2881	0	
1995	258,307				258,307	-	13.5	38.57	2.86%	-	0.2680	0	
1996	258,307	4,000			262,307	4,000	12.5	35.71	2.86%	114	0.2477	991	
1997	262,307			780	263,087	780	11.5	32.86	2.86%	22	0.2273	177	
1998	263,087				263,087	-	10.5	30.00	2.86%	-	0.2136	0	
1999	263,087				263,087	-	9.5	27.14	2.86%	-	0.1930	0	
2000	263,087	93,097	(991)	(25,351)	329,842	66,755	8.5	24.29	2.86%	1,907	0.1722	11495	
2001	329,842	6,863			336,705	6,863	7.5	21.43	2.86%	196	0.1513	1038	
2002	336,705	99,386			436,091	99,386	6.5	18.57	2.86%	2,840	0.1302	12940	
2003	436,091	32,290			468,381	32,290	5.5	15.71	2.86%	923	0.1090	3520	
2004	468,381	5,316			473,697	5,316	4.5	12.86	2.86%	152	0.0876	466	
2005	473,697	109,284			582,981	109,284	3.5	10.00	2.86%	3,122	0.0732	8000	
2006	582,981	7,827			590,808	7,827	2.5	7.14	2.86%	224	0.0515	403	
2007	590,808				590,808	-	1.5	4.29	2.86%	-	0.0295	0	
2008	590,808				590,808	-	0.5	1.43	2.86%	-	0.0074	0	
	-	643,283	(27,904)		8,829,460	590,808				16,880		162,922	

Net Salvage Adjustment: 1,688  
 Annual Depreciation: 18,568  
 Accrued Depreciation: 179,214

Composite Annual Accrual Rate, Percent: 3.14%



Aquarion Water Company of New Hampshire

Account Number: 391H Computer Hardware & Software  
 Iowa Curve Type: SQ  
 Avg. Service Life: 5 Years  
 Net Salvage Percent: 0%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1984	(100)	9,055	(1)	-	8,954	9,054	24.5	490.00	20.00%	1,811	1.0000	9054	
1985	8,954	5,527	(6,317)	-	8,164	(790)	23.5	470.00	20.00%	(158)	1.0000	-790	
1986	8,164	3,948	390	-	12,501	4,338	22.5	450.00	20.00%	868	1.0000	4338	
1987	12,501	117,310	-	-	129,812	117,310	21.5	430.00	20.00%	23,462	1.0000	117310	
1988	129,812	8,359	(533)	-	137,638	7,826	20.5	410.00	20.00%	1,565	1.0000	7826	
1989	137,638	7,839	(360)	-	145,117	7,479	19.5	390.00	20.00%	1,496	1.0000	7479	
1990	145,117	15,674	(1,192)	-	159,598	14,482	18.5	370.00	20.00%	2,896	1.0000	14482	
1991	159,598	1,115	1,925	-	162,638	3,040	17.5	350.00	20.00%	608	1.0000	3040	
1992	162,638	3,402	4,191	-	170,232	7,594	16.5	330.00	20.00%	1,519	1.0000	7594	
1993	170,232	18,021	(13,833)	-	174,420	4,188	15.5	310.00	20.00%	838	1.0000	4188	
1994	174,420	4,322	1,413	-	180,154	5,735	14.5	290.00	20.00%	1,147	1.0000	5735	
1995	180,154	12,750	(21,196)	-	171,708	(8,446)	13.5	270.00	20.00%	(1,689)	1.0000	-8446	
1996	171,708	8,061	(22,200)	-	157,570	(14,139)	12.5	250.00	20.00%	(2,828)	1.0000	-14139	
1997	157,570	8,686	(71,448)	2,282	97,090	(60,480)	11.5	230.00	20.00%	(12,096)	1.0000	-60480	
1998	97,090	78,767	7,495	-	183,351	86,262	10.5	210.00	20.00%	17,252	1.0000	86262	
1999	183,351	111,256	-	-	294,607	111,256	9.5	190.00	20.00%	22,251	1.0000	111256	
2000	294,607	9,765	(24,534)	-	279,838	(14,769)	8.5	170.00	20.00%	(2,954)	1.0000	-14769	
2001	279,838	45,726	(250)	-	325,314	45,476	7.5	150.00	20.00%	9,095	1.0000	45476	
2002	325,314	34,382	(173,527)	-	186,169	(139,145)	6.5	130.00	20.00%	(27,829)	1.0000	-139145	
2003	186,169	357,180	(32,323)	-	511,026	324,857	5.5	110.00	20.00%	64,971	1.0000	324857	
2004	511,026	15,727	-	-	526,753	15,727	4.5	90.00	20.00%	3,145	0.8950	14076	
2005	526,753	40,547	-	-	567,300	40,547	3.5	70.00	20.00%	8,109	0.6950	28160	
2006	567,300	8,726	-	-	576,026	8,726	2.5	50.00	20.00%	1,745	0.4950	4319	
2007	576,026	14,239	-	-	590,265	14,239	1.5	30.00	20.00%	2,848	0.2950	4201	
2008	590,265	-	(21,705)	-	568,560	(21,705)	0.5	10.00	20.00%	(4,341)	0.0950	-2062	
	-	940,850	(374,572)	-	6,362,662	568,560				113,712		559,740	

Net Salvage Adjustment: -  
 Annual Depreciation: 113,712  
 Accrued Depreciation: 559,740  
 Composite Annual Accrual Rate, Percent: 20.00%



**Aquarion Water Company of New Hampshire**  
 Calculated Annual and Accrued Depreciation

Account Number:  
 Iowa Curve Type:  
 Avg. Service Life:  
 Net Salvage Percent:

393      GENERAL PLANT STORES EQUIPMENT  
 SQ      Years  
 20  
 0%

Year	Beg Bal	Add	Ret	Add/Trans	End Bal	Net Change	Age	Percent of		Accrued Depreciation	
								Avg. Age	Annual Depreciation Rate		
1958	-	185	-	-	185	185	50.5	5.00%	9	1,0000	165
1959	-	185	-	-	185	-	49.5	5.00%	-	1,0000	0
1960	-	185	-	-	185	-	48.5	5.00%	-	1,0000	0
1961	-	185	-	-	185	-	47.5	5.00%	-	1,0000	0
1962	-	185	-	-	185	-	46.5	5.00%	-	1,0000	0
1963	-	185	-	-	185	-	45.5	5.00%	-	1,0000	0
1964	-	185	-	-	185	-	44.5	5.00%	-	1,0000	0
1965	-	185	-	-	185	-	43.5	5.00%	-	1,0000	0
1966	-	185	-	-	185	-	42.5	5.00%	-	1,0000	0
1967	-	185	-	-	185	-	41.5	5.00%	-	1,0000	0
1968	-	185	-	-	185	-	40.5	5.00%	-	1,0000	0
1969	-	185	159	-	185	159	39.5	5.00%	8	1,0000	159
1970	-	344	-	-	344	-	38.5	5.00%	-	1,0000	0
1971	-	344	-	-	344	-	37.5	5.00%	-	1,0000	0
1972	-	344	-	-	344	-	36.5	5.00%	-	1,0000	0
1973	-	344	-	-	344	-	35.5	5.00%	-	1,0000	0
1974	-	344	-	-	344	-	34.5	5.00%	-	1,0000	0
1975	-	344	-	-	344	-	33.5	5.00%	-	1,0000	0
1976	-	344	-	-	344	-	32.5	5.00%	-	1,0000	0
1977	-	344	-	-	344	-	31.5	5.00%	-	1,0000	0
1978	-	344	-	-	344	-	30.5	5.00%	-	1,0000	0
1979	-	344	-	-	344	-	29.5	5.00%	-	1,0000	0
1980	-	344	-	-	344	-	28.5	5.00%	-	1,0000	0
1981	-	344	-	-	344	-	27.5	5.00%	-	1,0000	0
1982	-	344	-	-	344	-	26.5	5.00%	-	1,0000	0
1983	-	344	-	-	344	-	25.5	5.00%	-	1,0000	0
1984	-	344	-	-	344	-	24.5	5.00%	-	1,0000	0
1985	-	344	-	-	344	-	23.5	5.00%	-	1,0000	0
1986	-	344	-	-	344	-	22.5	5.00%	-	1,0000	0
1987	-	344	-	-	344	-	21.5	5.00%	-	1,0000	0
1988	-	344	2,094	-	2,438	2,094	20.5	5.00%	105	1,0000	2094
1989	-	2,438	-	-	2,438	-	19.5	5.00%	-	0,9650	0
1990	-	2,438	-	-	2,438	-	18.5	5.00%	-	0,9150	0
1991	-	2,438	-	-	2,438	-	17.5	5.00%	-	0,8550	0
1992	-	2,438	-	-	2,438	-	16.5	5.00%	-	0,8150	0
1993	-	2,438	-	-	2,438	-	15.5	5.00%	-	0,7650	0
1994	-	2,438	-	-	2,438	-	14.5	5.00%	-	0,7150	0
1995	-	2,438	-	-	2,438	-	13.5	5.00%	-	0,6650	0
1996	-	2,438	-	-	2,438	-	12.5	5.00%	-	0,6150	0
1997	-	2,438	-	-	2,438	-	11.5	5.00%	-	0,5550	0
1998	-	2,438	-	-	2,438	-	10.5	5.00%	-	0,5150	0
1999	-	2,438	-	-	2,438	-	9.5	5.00%	-	0,4650	0
2000	-	2,438	-	-	2,438	-	8.5	5.00%	-	0,4150	0
2001	-	2,438	-	-	2,438	-	7.5	5.00%	-	0,3650	0
2002	-	2,438	-	-	2,438	-	6.5	5.00%	-	0,3150	0
2003	-	2,438	-	-	2,438	-	5.5	5.00%	-	0,2650	0
2004	-	2,438	-	-	2,438	-	4.5	5.00%	-	0,2150	0
2005	-	2,438	-	-	2,438	-	3.5	5.00%	-	0,1650	0
2006	-	2,438	15,454	-	17,892	15,454	2.5	5.00%	773	0,1150	1777
2007	-	17,892	-	-	17,892	-	1.5	5.00%	-	0,0650	0
2008	-	17,892	-	-	17,892	-	0.5	5.00%	-	0,0150	0
	-	17,733	159	-	106,119	17,892			895		4,215

Net Salvage Adjustment: 895  
 Annual Depreciation: 895  
 Composite Annual Accrual Rate, Percent: 5.00%  
 Accrued Depreciation: 4,215

**Aquation Water Company of New Hampshire**  
 Calculated Annual and Accrued Depreciation

Account Number:  
 Iowa Curve Type:  
 Avg. Service Life:  
 Net Salvage Percent:

394  
 SQ  
 20  
 0%

GENERAL PLANT TOOLS, SHOP & GARAGE EQUIPMENT  
 Years

Year	Req Bal	Add	Ret	Add/Trans	End Bal	Net Change	Age	Percent of		Accrued Depreciation		
								Avg. Age	Annual Depreciation Rate			
1982	-	1,599			1,599	1,599	48.5	232.50	5.00%	80	1,000	1,599
1983	1,599				1,599		48.5	227.50	5.00%	-	1,000	0
1984	1,599	67	(194)		1,472	(126)	44.5	222.50	5.00%	(6)	1,000	-128
1985	1,472	781	(30)		2,223	751	43.5	217.50	5.00%	38	1,000	751
1986	2,223		(500)		1,722	(500)	42.5	212.50	5.00%	(25)	1,000	-500
1987	1,722				1,722		41.5	207.50	5.00%	-	1,000	0
1988	1,722				1,722		40.5	202.50	5.00%	-	1,000	0
1989	1,722	331	1,443		3,486	1,774	39.5	197.50	5.00%	89	1,000	1,774
1990	3,486	578	(689)		3,506	10	38.5	192.50	5.00%	1	1,000	10
1991	3,506		13,322		16,828	13,322	37.5	187.50	5.00%	666	1,000	13,322
1992	16,828	775	(589)		17,014	185	36.5	182.50	5.00%	9	1,000	185
1993	17,014	1,836	(1,238)		17,612	598	35.5	177.50	5.00%	30	1,000	598
1994	17,612		(695)		16,917	(695)	34.5	172.50	5.00%	(35)	1,000	-695
1995	16,917	401	(270)		17,318	401	33.5	167.50	5.00%	20	1,000	401
1996	17,318	811	(401)		17,889	541	32.5	162.50	5.00%	27	1,000	541
1997	17,889	638	(401)		18,096	237	31.5	157.50	5.00%	12	1,000	237
1998	18,096		(4,455)		14,096	(4,455)	30.5	152.50	5.00%	-	1,000	0
1999	14,096	11,189	(615)		24,830	6,734	29.5	147.50	5.00%	337	1,000	6,734
2000	24,830	2,662	(615)		26,877	2,047	28.5	142.50	5.00%	102	1,000	2,047
2001	26,877	2,101	(137)		28,978	2,101	27.5	137.50	5.00%	105	1,000	2,101
2002	28,978		(1,233)		28,978	-	26.5	132.50	5.00%	-	1,000	0
2003	28,978	6,375	(589)		34,120	5,142	25.5	127.50	5.00%	257	1,000	5,142
2004	34,120	979	(137)		33,994	(726)	24.5	122.50	5.00%	(36)	1,000	-726
2005	33,994	2,092			34,373	979	23.5	117.50	5.00%	49	1,000	979
2006	34,373	2,092			36,465	2,092	22.5	112.50	5.00%	105	1,000	2,092
2007	36,465	1,192	506		37,657	1,192	21.5	107.50	5.00%	60	1,000	1,192
2008	37,657	967	(900)		39,130	1,473	20.5	102.50	5.00%	74	1,000	1,473
1989	39,130	2,450			40,680	1,550	19.5	97.50	5.00%	78	0.9650	1,496
1990	40,680	5,657	(900)		46,337	5,657	18.5	92.50	5.00%	283	0.9150	5,176
1991	46,337	6,780	(157)		53,117	6,780	17.5	87.50	5.00%	339	0.8850	5,797
1992	53,117	1,646	(700)		54,606	1,489	16.5	82.50	5.00%	74	0.8150	1,214
1993	54,606	3,111			57,017	2,411	15.5	77.50	5.00%	121	0.7650	1,844
1994	57,017	6,097			63,114	6,097	14.5	72.50	5.00%	305	0.7150	4,359
1995	63,114	5,001			68,115	5,001	13.5	67.50	5.00%	250	0.6650	3,326
1996	68,115	2,487			70,602	2,487	12.5	62.50	5.00%	124	0.6150	1,530
1997	70,602	2,896			73,498	2,896	11.5	57.50	5.00%	145	0.5550	1,607
1998	73,498				73,498	-	10.5	52.50	5.00%	-	0.5150	0
1999	73,498	7,252			80,750	7,252	9.5	47.50	5.00%	363	0.4650	3,372
2000	80,750	238			80,988	238	8.5	42.50	5.00%	12	0.4150	99
2001	80,988				80,988	-	7.5	37.50	5.00%	-	0.3650	0
2002	80,988				80,988	-	6.5	32.50	5.00%	-	0.3150	0
2003	80,988	37,339			118,327	37,339	5.5	27.50	5.00%	1,867	0.2650	9,895
2004	118,327				118,327	-	4.5	22.50	5.00%	-	0.2150	0
2005	118,327	24,494			142,821	24,494	3.5	17.50	5.00%	1,225	0.1650	4,042
2006	142,821				142,821	-	2.5	12.50	5.00%	-	0.1150	0
2007	142,821				142,821	-	1.5	7.50	5.00%	-	0.0650	0
2008	142,821				142,771	(50)	0.5	2.50	5.00%	(3)	0.0150	-1
		140,232	2,589		2,215,780	142,771				7,139		82,885

Net Salvage Adjustment: 7,139  
 Annual Depreciation: 82,885  
 Accrued Depreciation: 82,885

Composite Annual Accrual Rate, Percent: 5.00%

**Aquation Water Company of New Hampshire**  
 Calculated Annual and Accrued Depreciation

Account Number:  
 Iowa Curve Type:  
 Avg. Service Life:  
 Net Salvage Percent:

395  
 SQ  
 15  
 0%

GENERAL PLANT LABORATORY EQUIPMENT

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation - Accrued Depreciation				
								Avg. Age	Rate	Amount	Ratio	Amt.
1964	-	1,443	-	-	1,443	1,443	44.5	290.00	6.67%	96	1.0000	1443
1965	-	1,443	-	-	1,443	-	43.5	290.00	6.67%	-	1.0000	0
1966	-	1,443	-	-	1,443	-	42.5	283.33	6.67%	-	1.0000	0
1967	-	1,443	-	-	1,443	-	41.5	276.67	6.67%	-	1.0000	0
1968	-	1,443	-	-	1,443	-	40.5	270.00	6.67%	-	1.0000	0
1969	-	1,443	-	-	1,443	-	39.5	263.33	6.67%	(96)	1.0000	-1443
1970	-	-	-	-	-	-	38.5	256.67	6.67%	-	1.0000	0
1971	-	-	-	-	-	-	37.5	250.00	6.67%	-	1.0000	0
1972	-	-	-	-	-	-	36.5	243.33	6.67%	-	1.0000	0
1973	-	-	-	-	-	-	35.5	236.67	6.67%	-	1.0000	0
1974	-	-	-	-	-	-	34.5	230.00	6.67%	-	1.0000	0
1975	-	-	-	-	-	-	33.5	223.33	6.67%	-	1.0000	0
1976	-	-	-	-	-	-	32.5	216.67	6.67%	-	1.0000	0
1977	-	-	-	-	-	-	31.5	210.00	6.67%	-	1.0000	0
1978	-	-	-	-	-	-	30.5	203.33	6.67%	-	1.0000	0
1979	-	-	-	-	-	-	29.5	196.67	6.67%	-	1.0000	0
1980	-	-	-	-	-	-	28.5	190.00	6.67%	-	1.0000	0
1981	-	-	-	-	-	-	27.5	183.33	6.67%	-	1.0000	0
1982	-	-	-	-	-	-	26.5	176.67	6.67%	-	1.0000	0
1983	-	-	-	-	-	-	25.5	170.00	6.67%	-	1.0000	0
1984	-	-	-	-	-	-	24.5	163.33	6.67%	-	1.0000	0
1985	-	-	-	-	-	-	23.5	156.67	6.67%	-	1.0000	0
1986	-	11,387	-	-	11,387	11,387	22.5	150.00	6.67%	759	1.0000	11387
1987	-	17	-	-	17	17	21.5	143.33	6.67%	1	1.0000	17
1988	-	1,707	-	-	1,707	1,707	20.5	136.67	6.67%	114	1.0000	1707
1989	-	13,111	-	-	13,111	13,111	19.5	130.00	6.67%	48	1.0000	0
1990	-	713	-	-	713	713	18.5	123.33	6.67%	48	1.0000	713
1991	-	13,824	-	-	13,824	13,824	17.5	116.67	6.67%	-	1.0000	0
1992	-	591	-	-	591	591	16.5	110.00	6.67%	39	1.0000	591
1993	-	14,415	-	-	14,415	14,415	15.5	103.33	6.67%	-	1.0000	0
1994	-	14,415	-	-	14,415	14,415	14.5	96.67	6.67%	-	0.9950	0
1995	-	2,531	-	-	2,531	2,531	13.5	90.00	6.67%	189	0.8950	2285
1996	-	16,946	-	-	16,946	16,946	12.5	83.33	6.67%	(223)	0.8250	-2760
1997	-	2,437	-	-	2,437	2,437	11.5	76.67	6.67%	162	0.7550	1840
1998	-	763	-	-	763	763	10.5	70.00	6.67%	51	0.6950	530
1999	-	16,801	-	-	16,801	16,801	9.5	63.33	6.67%	-	0.6250	0
2000	-	16,801	-	-	16,801	16,801	8.5	56.67	6.67%	-	0.5550	0
2001	-	236	-	-	236	236	7.5	50.00	6.67%	16	0.4950	117
2002	-	17,037	-	-	17,037	17,037	6.5	43.33	6.67%	-	0.4250	0
2003	-	4,905	-	(1,951)	2,954	2,954	5.5	36.67	6.67%	197	0.3550	1049
2004	-	19,991	-	-	19,991	19,991	4.5	30.00	6.67%	-	0.2950	0
2005	-	8,075	-	-	8,075	8,075	3.5	23.33	6.67%	538	0.2250	1817
2006	-	28,066	-	-	28,066	28,066	2.5	16.67	6.67%	-	0.1550	0
2007	-	28,066	-	-	28,066	28,066	1.5	10.00	6.67%	-	0.0950	0
2008	-	28,066	-	-4159	23,907	23,907	0.5	3.33	6.67%	(277)	0.0250	-104
						34,805						19,169
						(10,898)						

Net Salvage Adjustment: -  
 Annual Depreciation: 1,594  
 Accrued Depreciation: 19,169  
 Composite Annual Accrual Rate, Percent: 6.67%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 396 GENERAL PLANT POWER OPERATED EQUIPMENT  
Iowa Curve Type: R3  
Avg. Service Life: 15 Years  
Net Salvage Percent: 0%

Year	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1915	-	200			200	200	93.5	623.33	6.67%	13	1.0000	200	
1916	200				200		92.5	616.67	6.67%	-	1.0000	0	
1917	200	741			941	741	91.5	610.00	6.67%	49	1.0000	741	
1918	941				941		90.5	603.33	6.67%	-	1.0000	0	
1919	941	565	(100)		1,406	465	89.5	596.67	6.67%	31	1.0000	465	
1920	1,406	17	(165)		1,258	(148)	88.5	590.00	6.67%	(10)	1.0000	-148	
1921	1,258	989	(250)		1,997	739	87.5	583.33	6.67%	49	1.0000	739	
1922	1,997	1,019	(1,124)		1,892	(105)	86.5	576.67	6.67%	(7)	1.0000	-105	
1923	1,892	1,074			2,966	1,074	85.5	570.00	6.67%	72	1.0000	1,074	
1924	2,966	386			3,352	386	84.5	563.33	6.67%	26	1.0000	386	
1925	3,352	18			3,370	18	83.5	556.67	6.67%	1	1.0000	18	
1926	3,370	1,270	(813)		3,827	457	82.5	550.00	6.67%	30	1.0000	457	
1927	3,827	174			4,001	174	81.5	543.33	6.67%	12	1.0000	174	
1928	4,001				4,001		80.5	536.67	6.67%	-	1.0000	0	
1929	4,001	574	(490)		4,085	84	79.5	530.00	6.67%	6	1.0000	84	
1930	4,085	40			4,125	40	78.5	523.33	6.67%	3	1.0000	40	
1931	4,125				4,125		77.5	516.67	6.67%	-	1.0000	0	
1932	4,125		(643)		3,483	(643)	76.5	510.00	6.67%	(43)	1.0000	-643	
1933	3,483				3,483		75.5	503.33	6.67%	-	1.0000	0	
1934	3,483		(738)		2,745	(738)	74.5	496.67	6.67%	(49)	1.0000	-738	
1935	2,745	74			2,819	74	73.5	490.00	6.67%	5	1.0000	74	
1936	2,819	64			2,883	64	72.5	483.33	6.67%	4	1.0000	64	
1937	2,883	256	(15)		3,125	241	71.5	476.67	6.67%	16	1.0000	241	
1938	3,125				3,125		70.5	470.00	6.67%	-	1.0000	0	
1939	3,125	127	(74)		3,177	53	69.5	463.33	6.67%	4	1.0000	53	
1940	3,177	187			3,365	187	68.5	456.67	6.67%	12	1.0000	187	
1941	3,365	508			3,872	508	67.5	450.00	6.67%	34	1.0000	508	
1942	3,872	10		(629)	3,254	(619)	66.5	443.33	6.67%	(41)	1.0000	-619	
1943	3,254				3,254		65.5	436.67	6.67%	-	1.0000	0	
1944	3,254				3,254		64.5	430.00	6.67%	-	1.0000	0	
1945	3,254	1,688			4,941	1,688	63.5	423.33	6.67%	113	1.0000	1,688	
1946	4,941	126			5,067	126	62.5	416.67	6.67%	8	1.0000	126	
1947	5,067	589	(705)		4,950	(117)	61.5	410.00	6.67%	(8)	1.0000	-117	
1948	4,950	150			5,100	150	60.5	403.33	6.67%	10	1.0000	150	
1949	5,100	254			5,354	254	59.5	396.67	6.67%	17	1.0000	254	
1950	5,354	188			5,542	188	58.5	390.00	6.67%	13	1.0000	188	
1951	5,542				5,542		57.5	383.33	6.67%	-	1.0000	0	
1952	5,542	41			5,583	41	56.5	376.67	6.67%	3	1.0000	41	
1953	5,583	123	(524)		5,182	(401)	55.5	370.00	6.67%	(27)	1.0000	-401	
1954	5,182	29			5,211	29	54.5	363.33	6.67%	2	1.0000	29	
1955	5,211	477	(148)		5,541	329	53.5	356.67	6.67%	22	1.0000	329	
1956	5,541	2,002	(169)		7,374	1,833	52.5	350.00	6.67%	122	1.0000	1,833	
1957	7,374	1,535	(67)		8,843	1,468	51.5	343.33	6.67%	98	1.0000	1,468	
1958	8,843	370	(217)		8,996	153	50.5	336.67	6.67%	10	1.0000	153	
1959	8,996	5,009	(1,151)		12,854	3,858	49.5	330.00	6.67%	257	1.0000	3,858	
1960	12,854	1,042	(1,063)		12,833	(21)	48.5	323.33	6.67%	(1)	1.0000	-21	
1961	12,833	424	(29)		13,229	396	47.5	316.67	6.67%	26	1.0000	396	
1962	13,229	510	(150)		13,588	360	46.5	310.00	6.67%	24	1.0000	360	
1963	13,588	829	(75)		14,343	754	45.5	303.33	6.67%	50	1.0000	754	
1964	14,343	1,079	(153)		15,268	925	44.5	296.67	6.67%	62	1.0000	925	
1965	15,268				15,268		43.5	290.00	6.67%	-	1.0000	0	
1966	15,268	1,257	380		16,905	1,637	42.5	283.33	6.67%	109	1.0000	1,637	
1967	16,905	550	(429)		17,026	121	41.5	276.67	6.67%	8	1.0000	121	
1968	17,026	106			17,131	106	40.5	270.00	6.67%	7	1.0000	106	
1969	17,131	406	(2,697)		14,840	(2,291)	39.5	263.33	6.67%	(153)	1.0000	-2,291	
1970	14,840	1,315	(701)		15,454	614	38.5	256.67	6.67%	41	1.0000	614	
1971	15,454	595	(14,844)		1,205	(14,249)	37.5	250.00	6.67%	(950)	1.0000	-14,249	
1972	1,205				1,205		36.5	243.33	6.67%	-	1.0000	0	
1973	1,205		(695)		510	(695)	35.5	236.67	6.67%	(46)	1.0000	-695	
1974	510		695		1,205	695	34.5	230.00	6.67%	46	1.0000	695	
1975	1,205				1,205		33.5	223.33	6.67%	-	1.0000	0	
1976	1,205				1,205		32.5	216.67	6.67%	-	1.0000	0	
1977	1,205				1,205		31.5	210.00	6.67%	-	1.0000	0	
1978	1,205				1,205		30.5	203.33	6.67%	-	1.0000	0	
1979	1,205				1,205		29.5	196.67	6.67%	-	1.0000	0	
1980	1,205	3,834	(1,315)		3,724	2,519	28.5	190.00	6.67%	168	1.0000	2,519	
1981	3,724				3,724		27.5	183.33	6.67%	-	1.0000	0	
1982	3,724				3,724		26.5	176.67	6.67%	-	1.0000	0	
1983	3,724				3,724		25.5	170.00	6.67%	-	1.0000	0	
1984	3,724		(595)		3,129	(595)	24.5	163.33	6.67%	(40)	0.9875	-588	
1985	3,129				3,129		23.5	156.67	6.67%	-	0.9875	0	
1986	3,129		(557)		2,572	(557)	22.5	150.00	6.67%	(37)	0.9541	-531	
1987	2,572				2,572		21.5	143.33	6.67%	-	0.9352	0	
1988	2,572				2,572		20.5	136.67	6.67%	-	0.9182	0	
1989	2,572				2,572		19.5	130.00	6.67%	-	0.9026	0	
1990	2,572			400	2,972	400	18.5	123.33	6.67%	27	0.8833	353	
1991	2,972	1,993			4,965	1,993	17.5	116.67	6.67%	133	0.8518	1,698	
1992	4,965	5,982	157		11,104	6,139	16.5	110.00	6.67%	409	0.8405	5,160	
1993	11,104				11,104		15.5	103.33	6.67%	-	0.8119	0	
1994	11,104				11,104		14.5	96.67	6.67%	-	0.7787	0	
1995	11,104				11,104		13.5	90.00	6.67%	-	0.7465	0	
1996	11,104				11,104		12.5	83.33	6.67%	-	0.7049	0	
1997	11,104				11,104		11.5	76.67	6.67%	-	0.6593	0	
1998	11,104				11,104		10.5	70.00	6.67%	-	0.6174	0	
1999	11,104				11,104		9.5	63.33	6.67%	-	0.5656	0	
2000	11,104				11,104		8.5	56.67	6.67%	-	0.5110	0	
2001	11,104				11,104		7.5	50.00	6.67%	-	0.4621	0	
2002	11,104				11,104		6.5	43.33	6.67%	-	0.4028	0	
2003	11,104	115,228			126,332	115,228	5.5	36.67	6.67%	7,682	0.3413	39,327	
2004	126,332	20,401			146,733	20,401	4.5	30.00	6.67%	1,360	0.2871	5,857	
2005	146,733	12,614			159,347	12,614	3.5	23.33	6.67%	841	0.2221	2,802	
2006	159,347				159,347		2.5	16.67	6.67%	-	0.1557	0	
2007	159,347	3,600			162,947	3,600	1.5	10.00	6.67%	240	0.0978	352	
2008	162,947				162,947		0.5	3.33	6.67%	-	0.0295	0	
	-	192,639	(29,464)		1,435,802	162,947				10,863		58,154	

Net Salvage Adjustment: -  
Annual Depreciation: 10,863  
Accrued Depreciation: 58,154

Composite Annual Accrual Rate, Percent: 6.67%

**Aquarion Water Company of New Hampshire**  
**Calculated Annual and Accrued Depreciation**

Account Number: 397 GENERAL PLANT COMMUNICATIONS EQUIPMENT  
 IOWA Curve Type: SQ  
 Avg. Service Life: 10 Years  
 Net Salvage Percent: 0%

	Beg Bal	Add	Ret	Adi/Trans	End Bal	Net Change	Age	Percent of Annual Depreciation		Accrued Depreciation		
								Avg. Age	Rate	Amount	Ratio	Amt.
1965	-	4,444			4,444	4,444	43.5	435.00	10.00%	444	1.0000	4444
1966	4,444				4,444	-	42.5	425.00	10.00%	-	1.0000	0
1967	4,444	948			5,391	948	41.5	415.00	10.00%	95	1.0000	948
1968	5,391	1,028			6,420	1,028	40.5	405.00	10.00%	103	1.0000	1028
1969	6,420				6,420	-	39.5	395.00	10.00%	-	1.0000	0
1970	6,420				6,420	-	38.5	385.00	10.00%	-	1.0000	0
1971	6,420				6,420	-	37.5	375.00	10.00%	-	1.0000	0
1972	6,420				6,420	-	36.5	365.00	10.00%	-	1.0000	0
1973	6,420				6,420	-	35.5	355.00	10.00%	-	1.0000	0
1974	6,420				6,420	-	34.5	345.00	10.00%	-	1.0000	0
1975	6,420				6,420	-	33.5	335.00	10.00%	-	1.0000	0
1976	6,420				6,420	-	32.5	325.00	10.00%	-	1.0000	0
1977	6,420				6,420	-	31.5	315.00	10.00%	-	1.0000	0
1978	6,420	1,200	(1,028)		6,592	172	30.5	305.00	10.00%	17	1.0000	172
1979	6,592				6,592	-	29.5	295.00	10.00%	-	1.0000	0
1980	6,592				6,592	-	28.5	285.00	10.00%	-	1.0000	0
1981	6,592				6,592	-	27.5	275.00	10.00%	-	1.0000	0
1982	6,592				6,592	-	26.5	265.00	10.00%	-	1.0000	0
1983	6,592				6,592	-	25.5	255.00	10.00%	-	1.0000	0
1984	6,592				6,592	-	24.5	245.00	10.00%	-	1.0000	0
1985	6,592				6,592	-	23.5	235.00	10.00%	-	1.0000	0
1986	6,592				6,592	-	22.5	225.00	10.00%	-	1.0000	0
1987	6,592	3,613			10,205	3,613	21.5	215.00	10.00%	361	1.0000	3613
1988	10,205	3,793			13,998	3,793	20.5	205.00	10.00%	379	1.0000	3793
1989	13,998	3,350	(4,614)		12,734	(1,264)	19.5	195.00	10.00%	(126)	1.0000	-1264
1990	12,734	2,924	(2,368)		13,290	556	18.5	185.00	10.00%	56	1.0000	556
1991	13,290	30,996	(13,290)		30,996	17,706	17.5	175.00	10.00%	1,771	1.0000	17706
1992	30,996				30,996	-	16.5	165.00	10.00%	-	1.0000	0
1993	30,996	197,522			228,518	197,522	15.5	155.00	10.00%	19,752	1.0000	197522
1994	228,518	1,907			230,425	1,907	14.5	145.00	10.00%	191	1.0000	1907
1995	230,425				230,425	-	13.5	135.00	10.00%	-	1.0000	0
1996	230,425	11,224			241,649	11,224	12.5	125.00	10.00%	1,122	1.0000	11224
1997	241,649				241,649	-	11.5	115.00	10.00%	-	1.0000	0
1998	241,649	9,796	(21,980)		229,465	(12,184)	10.5	105.00	10.00%	(1,218)	1.0000	-12184
1999	229,465	3,870			233,335	3,870	9.5	95.00	10.00%	387	0.9450	3657
2000	233,335	962			234,297	962	8.5	85.00	10.00%	96	0.8550	823
2001	234,297	4,093			238,390	4,093	7.5	75.00	10.00%	409	0.7450	3049
2002	238,390				238,390	-	6.5	65.00	10.00%	-	0.5450	0
2003	238,390	35,938	(2,000)		272,328	33,938	5.5	55.00	10.00%	3,394	0.5450	18496
2004	272,328	1,422			273,750	1,422	4.5	45.00	10.00%	142	0.4450	633
2005	273,750	13,256			287,006	13,256	3.5	35.00	10.00%	1,326	0.3550	4706
2006	287,006				287,006	-	2.5	25.00	10.00%	-	0.2450	0
2007	287,006				287,006	-	1.5	15.00	10.00%	-	0.1450	0
2008	287,006		-399.98		286,606	(400)	0.5	5.00	10.00%	(40)	0.0450	-18
	-	332,286	(45,680)		4,290,253	286,606				28,661		260,810

Net Salvage Adjustment: -  
 Annual Depreciation: 28,661  
 Accrued Depreciation: 260,810

Composite Annual Accrual Rate, Percent: 10.00%

**Aquarion Water Company of New Hampshire**  
Calculated Annual and Accrued Depreciation

Account Number: 398 MISCELLANEOUS EQUIPMENT  
 Iowa Curve Type: SQ  
 Avg. Service Life: 15 Years  
 Net Salvage Percent: 0%

	Beg Bal	Add	Ret	Adj/Trans	End Bal	Net Change	Age	Percent of		Annual Depreciation		Accrued Depreciation	
								Avg. Age	Rate	Amount	Ratio	Amt.	
1971	-		200		200	200	37.5	250.00	6.67%	13	1.0000	200	
1972	200				200	-	36.5	243.33	6.67%	-	1.0000	0	
1973	200				200	-	35.5	236.67	6.67%	-	1.0000	0	
1974	200				200	-	34.5	230.00	6.67%	-	1.0000	0	
1975	200				200	-	33.5	223.33	6.67%	-	1.0000	0	
1976	200				200	-	32.5	216.67	6.67%	-	1.0000	0	
1977	200				200	-	31.5	210.00	6.67%	-	1.0000	0	
1978	200				200	-	30.5	203.33	6.67%	-	1.0000	0	
1979	200				200	-	29.5	196.67	6.67%	-	1.0000	0	
1980	200				200	-	28.5	190.00	6.67%	-	1.0000	0	
1981	200				200	-	27.5	183.33	6.67%	-	1.0000	0	
1982	200				200	-	26.5	176.67	6.67%	-	1.0000	0	
1983	200				200	-	25.5	170.00	6.67%	-	1.0000	0	
1984	200				200	-	24.5	163.33	6.67%	-	1.0000	0	
1985	200				200	-	23.5	156.67	6.67%	-	1.0000	0	
1986	200	279			479	279	22.5	150.00	6.67%	19	1.0000	279	
1987	479				479	-	21.5	143.33	6.67%	-	1.0000	0	
1988	479				479	-	20.5	136.67	6.67%	-	1.0000	0	
1989	479				479	-	19.5	130.00	6.67%	-	1.0000	0	
1990	479				479	-	18.5	123.33	6.67%	-	1.0000	0	
1991	479	792			1,271	792	17.5	116.67	6.67%	53	1.0000	792	
1992	1,271	588			1,859	588	16.5	110.00	6.67%	39	1.0000	588	
1993	1,859				1,859	-	15.5	103.33	6.67%	-	1.0000	0	
1994	1,859				1,859	-	14.5	96.67	6.67%	-	0.9550	0	
1995	1,859	1,075			2,934	1,075	13.5	90.00	6.67%	72	0.8950	962	
1996	2,934				2,934	-	12.5	83.33	6.67%	-	0.8250	0	
1997	2,934				2,934	-	11.5	76.67	6.67%	-	0.7550	0	
1998	2,934	380			3,314	380	10.5	70.00	6.67%	25	0.6950	264	
1999	3,314				3,314	-	9.5	63.33	6.67%	-	0.6250	0	
2000	3,314	6,959			10,273	6,959	8.5	56.67	6.67%	464	0.5550	3862	
2001	10,273	1,429			11,702	1,429	7.5	50.00	6.67%	95	0.4950	707	
2002	11,702				11,702	-	6.5	43.33	6.67%	-	0.4250	0	
2003	11,702	14,713			26,415	14,713	5.5	36.67	6.67%	981	0.3550	5223	
2004	26,415	4,298			30,713	4,298	4.5	30.00	6.67%	287	0.2950	1268	
2005	30,713	2,840			33,553	2,840	3.5	23.33	6.67%	189	0.2250	639	
2006	33,553				33,553	-	2.5	16.67	6.67%	-	0.1550	0	
2007	33,553				33,553	-	1.5	10.00	6.67%	-	0.0950	0	
2008	33,553		(6,773)		26,780	(6,773)	0.5	3.33	6.67%	(452)	0.0250	-169	
	-	33,750	(6,971)		246,692	26,780				1,785		14,615	

Net Salvage Adjustment: -  
 Annual Depreciation: 1,785  
 Accrued Depreciation: 14,615  
 Composite Annual Accrual Rate, Percent: 6.67%

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Aquarion Water Company of New Hampshire  
Case No. DW 08-098

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46		
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50		
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52		
53	1W	DEPRECIATION EXPENSE
54		
55	1X	PAYROLL TAXES
56		
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58		
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60		
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62		
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**COMPUTATION OF REVENUE DEFICIENCY**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
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Page 1 of 1

Line No.		Actual Test Year	Required Increase	Pro Forma
1				
2	1 Rate Base	\$ 18,122,458		\$ 19,895,425
3				
4	2 Rate of Return	<u>6.64%</u>		<u>8.16%</u>
5				
6	3 Income Required [L1 x L2]	<u>\$ 1,203,016</u>	<u>\$ 420,451</u>	\$ 1,623,467
7				
8	4 Adjusted net Operating Income at Present Rates			<u>995,369</u>
9				
10				
11	5 Deficiency			<u>\$ 628,098</u>
12				
13	6 Tax Effect*			<u>59.48%</u>
14				
15	7 Revenue Deficiency [L5 / L6]			<u>\$ 1,056,070</u>
16				
17	8 Revenues at Present Rates			<u>\$ 5,009,914</u>
18				
19	9 Proposed Revenue Increase [L7 / L8]			<u>21.08%</u>

\*Requested return of equity of 10.23%. A one percent change in requested equity return is equal to approximately \$140K in revenues calculated as follows:

Rate base	\$ 19,895,425
Change in Equity (1% x 41.79%)	<u>0.4179%</u>
Change in Operating Income	\$ 83,143
Conversion Factor	<u>1.68</u>
Change in revenue requested	<u>\$ 139,795</u>

**STATEMENT OF NET INCOME**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
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Line No.	Account Description	12 Mos. 3/31/2006	12 Mos. 3/31/2007	12 Mos. 3/31/2008	Pro Forma Adjustments	Supp. Sched.	Pro Forma 3/31/2008	Proposed Increase	Proposed 3/31/2008
1									
2	Operating Revenues:								
3	Revenues - Water	\$ 4,134,956	\$ 4,749,095	\$ 5,072,757	\$ (165,147)	A	\$ 4,907,610	\$ 1,056,070	\$ 5,963,681
4	Revenues - Other	72,637	80,252	71,117	31,187	A	102,304		102,304
5	Net Operating Revenues	\$ 4,207,593	\$ 4,829,347	\$ 5,143,874	\$ (133,960)		\$ 5,009,914	\$ 1,056,070	\$ 6,065,984
6									
7	Operating Expenses								
8	Source of Supply	\$ 36,961	\$ 49,590	\$ 42,460	\$ 2,075	B	\$ 44,535		\$ 44,535
9	Pumping	254,967	310,824	309,609	18,190	B	327,799		327,799
10	Treatment	118,692	108,471	107,030	24,273	B	131,303		131,303
11	Transmission & Distribution	391,140	542,947	445,901	36,331	B	482,232		482,232
12	Customer Accounting	149,824	170,119	174,464	7,461	B	181,925		181,925
13	Administrative & General	995,707	1,283,383	1,293,135	115,535	B	1,408,670		1,408,670
14		\$ 1,947,291	\$ 2,465,334	\$ 2,372,599	\$ 203,865		\$ 2,576,464	\$ -	\$ 2,576,464
15									
16	Depreciation	\$ 761,067	\$ 801,947	\$ 823,706	\$ 114,916	W	\$ 938,622		\$ 938,622
17	Taxes Other	364,376	379,556	368,901	4,084	X,Y	372,985		372,985
18		\$ 1,125,443	\$ 1,181,503	\$ 1,192,607	\$ 119,000		\$ 1,311,607		\$ 1,311,607
19									
20	Total Operating expenses	\$ 3,072,734	\$ 3,646,837	\$ 3,565,206	\$ 322,865		\$ 3,888,071	\$ -	\$ 3,888,071
21									
22	Operating Income	\$ 1,134,859	\$ 1,182,510	\$ 1,578,668	\$ (456,825)		\$ 1,121,843	\$ 1,056,070	\$ 2,177,913
23									
24	Other income & Expense	(61,704)	(54,067)	(69,486)	14,974	B	(54,512)		(54,512)
25	AFUDC	(70,826)	(23,564)	-			-		-
26									
27	PBIT	\$ 1,267,389	\$ 1,260,141	\$ 1,648,154	\$ (471,799)		\$ 1,176,355	\$ 1,056,070	\$ 2,232,425
28									
29	Interest Expense	\$ 590,526	\$ 685,303	\$ 707,510	\$ 58,498	Z	\$ 766,008		\$ 766,008
30	Current Income Tax - State	72,000	34,000	88,000	(45,075)	AA	42,925	89,766	132,691
31	Current Income Tax - Federal	272,000	120,000	370,249	(219,077)	BB	151,172	338,207	489,379
32	Deferred Income Tax - State	(17,440)	15,560	(7,440)			(7,440)		(7,440)
33	Deferred Income Tax - Federal	(56,092)	64,948	(11,122)			(11,122)		(11,122)
34									
35	Net Income	\$ 406,395	\$ 340,330	\$ 500,957	\$ (266,146)		\$ 234,811	\$ 628,098	\$ 862,909
36									
37	Utility Operating Income	\$ 958,761	\$ 1,013,165	\$ 1,203,016	\$ (207,647)		\$ 995,369	\$ 628,098	\$ 1,623,467
38	(see page 2 for calculation)								
39									
40									

**STATEMENT OF UTILITY OPERATING INCOME**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1  
Page 2 of 3

Line No.	Account Description	12 Mos. 3/31/2006	12 Mos. 3/31/2007	12 Mos. 3/31/2008	Pro Forma Adjustments	Supp. Sched.	Pro Forma 3/31/2008	Proposed Increase	Proposed 3/31/2008
1									
2	Operating Revenues:								
3	Revenues - Water	\$ 4,134,956	\$ 4,749,095	\$ 5,072,757	\$ (165,147)	A	\$ 4,907,610	\$ 1,056,070	\$ 5,963,681
4	Revenues - Other	72,637	80,252	71,117	31,187	A	102,304		102,304
5	Net Operating Revenues	\$ 4,207,593	\$ 4,829,347	\$ 5,143,874	\$ (133,960)		\$ 5,009,914	\$ 1,056,070	\$ 6,065,984
6									
7	Operating Expenses								
8	Source of Supply	\$ 36,961	\$ 49,590	\$ 42,460	\$ 2,075	B	\$ 44,535		\$ 44,535
9	Pumping	254,967	310,824	309,609	18,190	B	327,799		327,799
10	Treatment	118,692	108,471	107,030	24,273	B	131,303		131,303
11	Transmission & Distribution	391,140	542,947	445,901	36,331	B	482,232		482,232
12	Customer Accounting	149,824	170,119	174,464	7,461	B	181,925		181,925
13	Administrative & General	995,707	1,283,383	1,293,135	115,535	B	1,408,670		1,408,670
14		\$ 1,947,291	\$ 2,465,334	\$ 2,372,599	\$ 203,865		\$ 2,576,464	\$ -	\$ 2,576,464
15									
16	Depreciation	\$ 761,067	\$ 801,947	\$ 823,706	\$ 114,916	W	\$ 938,622		\$ 938,622
17	Taxes Other	364,376	379,556	368,901	4,084	X,Y	372,985		372,985
18		\$ 1,125,443	\$ 1,181,503	\$ 1,192,607	\$ 119,000		\$ 1,311,607		\$ 1,311,607
19									
20	Total Operating expenses	\$ 3,072,734	\$ 3,646,837	\$ 3,565,206	\$ 322,865		\$ 3,888,071	\$ -	\$ 3,888,071
21									
22	Operating Income	\$ 1,134,859	\$ 1,182,510	\$ 1,578,668	\$ (456,825)		\$ 1,121,843	\$ 1,056,070	\$ 2,177,913
23									
24	Other income & Expense	(68,369)	(56,667)	(60,321)	14,974	B	(45,347)	-	(45,347)
25									
26									
27	PBIT	\$ 1,203,228	\$ 1,239,177	\$ 1,638,989	\$ (471,799)		\$ 1,167,190	\$ 1,056,070	\$ 2,223,260
28									
29	Current Income Tax - State	\$ 72,000	\$ 34,000	\$ 88,000	\$ (45,075)	AA	\$ 42,925	\$ 89,766	\$ 132,691
30	Current Income Tax - Federal	272,000	120,000	370,249	(219,077)	BB	151,172	338,207	489,379
31	Deferred Income Tax - State	(17,440)	15,560	(7,440)			(7,440)		(7,440)
32	Deferred Income Tax - Federal	(56,092)	64,948	(11,122)			(11,122)		(11,122)
33	Income Tax Allocated to Non-Utility Inc/Exp	(26,001)	(8,496)	(3,714)	-		(3,714)	-	(3,714)
34									
35	Utility Operating Income	\$ 958,761	\$ 1,013,165	\$ 1,203,016	\$ (207,647)		\$ 995,369	\$ 628,098	\$ 1,623,467
36									
37									
38									
39									
40									

QUARTERLY CONSUMPTION & CUSTOMERS FOR TEST YEAR

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1  
Page 3 of 3

Line No.		Q2 2007	Q3 2007	Q4 2007	Q1 2008
1					
2	<u>Consumption (KG)</u>				
3					
4	Residential	89,686	159,848	149,036	81,594
5	Commercial	41,978	58,296	52,353	37,909
6	Industrial	1,524	1,331	698	939
7	Public Authority	1,989	2,000	5,139	2,031
8					
9	Total	<u>135,177</u>	<u>221,475</u>	<u>207,226</u>	<u>122,473</u>
10					
11					
12					
13					
14	<u>Customers</u>				
15					
16	Residential	7,790	7,813	7,794	7,843
17	Commercial	623	625	633	631
18	Industrial	2	2	2	2
19	Public Authority	60	60	58	60
20					
21	Total	<u>8,475</u>	<u>8,500</u>	<u>8,487</u>	<u>8,536</u>
22					
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PRO FORMA REVENUES AT PRESENT & PROPOSED RATES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1A  
Page 1 of 2

Line No.	Per Books Year Ended 3/31/2008	Pro Forma at Present Rates		Pro Forma at Proposed Rates		
		Adjustment	Total	Adjustment	Total	
1						
2	Metered Sales to General Customers					
3	Quarterly and Monthly Billing					
4	Residential	\$2,837,035	(\$67,113)	\$2,769,922	\$562,632	\$3,332,555
5	Commercial	933,427	(35,462)	897,965	219,956	1,117,921
6	Industrial	19,163	(153)	19,010	4,075	23,085
7	Other Public Authority	51,475	(4,459)	47,015	10,995	58,010
8						
9	Seasonal Billing					
10	Residential	238,011	(10,837)	227,173	48,334	275,508
11	Commercial	91,645	(1,357)	90,288	19,219	109,507
12	Public Authority	30,683	(490)	30,193	6,428	36,620
13						
14	Total Metered Sales	<u>\$4,201,438</u>	<u>(\$119,873)</u>	<u>\$4,081,565</u>	<u>\$871,640</u>	<u>\$4,953,205</u>
15						
16	Private Fire (Unmetered Sales)	\$234,985	(\$11,518)	\$223,467	\$47,611	\$271,078
17	Public Fire	636,333	(33,756)	602,578	128,384	730,961
18						
19	Total Water Revenue	<u>\$5,072,757</u>	<u>(\$165,147)</u>	<u>\$4,907,610</u>	<u>\$1,047,634</u>	<u>\$5,955,245</u>
20						
21	Other Water Revenues					
22	Late Payment Fees	\$39,909	(\$1,299)	\$38,610	\$8,226	\$46,836
23	Antenna Rental Income	31,616	16,093	47,709	-	47,709
24	Miscellaneous Operating Revenue	(410)	16,395	15,985	-	15,985
25						
26	Total Other Water Revenues	<u>\$71,115</u>	<u>\$31,188</u>	<u>\$102,304</u>	<u>\$8,226</u>	<u>\$110,530</u>
27						
28	Total Operating Revenue	<u>\$5,143,872</u>	<u>(\$133,958)</u>	<u>\$5,009,914</u>	<u>\$1,055,860</u>	<u>\$6,065,774</u>
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**PRO FORMA REVENUES AT PRESENT & PROPOSED RATES - ADJUSTMENT DETAIL**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1A  
Page 2 of 2

Line No.		Unbilled Elimination	Surcharge Eliminations	MISC	Total Adjustments
1					
2	Metered Sales to General Customers				
3	Quarterly and Monthly Billing				
4	Residential	\$ 22,084 (1)	\$ (77,212) (2)	\$ (11,985) (3)	\$ (67,113)
5	Commercial	(12,950) (1)	(21,282) (2)	(1,230) (3)	(35,462)
6	Industrial	146 (1)	(299) (2)	-	(153)
7	Other Public Authority	(2,951) (1)	(1,178) (2)	(330) (3)	(4,459)
8					
9	Seasonal Billing				
10	Residential		(10,837) (2)	-	(10,837)
11	Commercial		(1,357) (2)	-	(1,357)
12	Public Authority		(490) (2)	-	(490)
13					
14	Total Metered Sales	<u>\$ 6,329</u>	<u>\$ (112,657)</u>	<u>\$ (13,545)</u>	<u>(\$119,873)</u>
15					
16	Private Fire (Unmetered Sales)		(7,719) (2)	\$ (3,798) (4)	\$ (11,518)
17	Public Fire		(29,914) (2)	(3,841) (4)	(33,756)
18					
19	Total Water Revenue	<u>\$ 6,329</u>	<u>\$ (150,290)</u>	<u>\$ (21,185)</u>	<u>\$ (165,147)</u>
20					
21	Other Water Revenues				
22	Late Payment Fees			\$ (1,299) (5)	\$ (1,299)
23	Antenna Rental Income			16,093 (6)	16,093
24	Miscellaneous Operating Revenue (1)			16,395 (7)	16,395
25					
26	Total Other Water Revenues	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 31,188</u>	<u>\$ 31,188</u>
27					
28	Total Operating Revenue	<u>\$ 6,329</u>	<u>\$ (150,290)</u>	<u>\$ 10,003</u>	<u>\$ (133,958)</u>
29					
30					
31	(1)	Eliminates impact of net change between beginning and ending unbilled revenues.			
32	(2)	Eliminates impact of rate case expense and temporary rate recoupment surcharges expiring at October 2007.			
33	(3)	Removes seasonal connection fees out of respective revenue classes and into miscellaneous revenues.			
34	(4)	Adjust to Counts at 03/31/08.			
35	(5)	Adjusts late payment fees for changes to pro forma revenues.			
36	(6)	Adjusts for updated contract pricing and new Antenna lease.			
37	(7)	Reflects adjustment for miscellaneous charges booked to other accounts during test year.			
38					
39					
40					

**SUMMARY OF PRO FORMA ADJUSTMENTS TO O&M EXPENSE**

Aquarion Water Company of New Hampshire of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1B  
Page 1 of 1

Line No.	Adjustment Title	Detail on Schedule	Source of Supply	Pumping	Treatment	Transmission & Distribution	Customer Accounting	Administrative & General	Other Income	Total Amount
1										
2	Salaries and Wages	C	\$ 2,075	\$ 19,243	\$ 7,470	\$ 35,803	\$ 7,461	\$ (8,606)	\$ -	\$ 63,446
3										
4	Employee Welfare Expenses	D						36,534		36,534
5										
6	Employee Bonus Program	E						4,143	0	4,143
7										
8	Post Retirement Medical (FAS106)	F						(24,627)		(24,627)
9										
10	Pension Expense	G						(2,578)		(2,578)
11										
12	Amortization of Depreciation Study	H						8,333		8,333
13										
14	Chemical Costs	I			3,883					3,883
15										
16	Purchased Power - Electric	J		(2,962)						(2,962)
17										
18	Miscellaneous/Non-Recurring Items	K			12,920	(2,680)		(33,578)	10,693	(12,645)
19										
20	Building Lease	L						3,733		3,733
21										
22	Corporate Insurance	M						15,583		15,583
23										
24	Audit Fees	N						10,780		10,780
25										
26	Customer Billing	O						(4,400)		(4,400)
27										
28	Purchased Power - Oil & Gas	P		1,909						1,909
29										
30	CIAC Amortization	Q							4,282	4,282
31										
32	Tank Painting Amortization	R				3,208				3,208
33										
34	Shared Facility Costs	S						(5,981)		(5,981)
35										
36	Management Allocation	T						(11,489)		(11,489)
37										
38	Shared Customer Service Costs	U						(24,642)		(24,642)
39										
40	Shared Technology Costs	V						152,328		152,328
41										
42										
Total Proforma Adjustments at present Rates			\$ 2,075	\$ 18,190	\$ 24,273	\$ 36,331	\$ 7,461	\$ 115,535	\$ 14,974	\$ 218,839

SALARIES & WAGES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1C  
Page 1 of 1

Line No.	SUMMARY	ACCOUNT DISTRIBUTION								
		Source of Supply	Pumping	Treatment	Transmission & Distribution	Customer Accounting	Administrative & General	Other Income	Other Cos/ Capital	Total
1										
2		<b>Basic Wages</b>								
3	<b>AWC of New Hampshire Employees</b>									
4	Officer Wages	\$ 68,160								
5	Exempt - Non Union (2 F/T employees)	136,995								
6	Non- Exempt Non-Union Wages (1 F/T, 2 P/T employees)	71,188								
7	Union Employees (8 employees w/salaries effective 12/1/2007)	373,922								
8	Wage increase effective 12/01/2008 per Union Contract (3%) plus one emp. 6 month step increase)	12,211								
9	Base Wages	\$662,476								
10	Standby, OT, Shift Differential wages incurred during test year	28,603								
11	Wage Increase applied to Standby, OT, Shift Differential ( 3%)	858								
12	Pro Forma Wages	\$691,937	\$ 10,131	\$ 94,583	\$ 36,597	\$ 175,977	\$ 36,668	\$ 232,116	\$ 105,866	\$ 691,938
13	Percent Charged to Expense	84.7% <sup>1</sup>								
14	Pro Forma Wages Charged to Expense	586,071								
15										
16	Test Year Gross Wages	610,069	8,070	75,340	29,151	140,174	29,207	243,760	84,368	610,070
17		86.2%								
18	Test Year Wages charged to Expense	525,703								
19	Pro Forma Adjustment	\$ 60,368 (A)	\$ 2,061	\$ 19,243	\$ 7,446	\$ 35,803	\$ 7,461	\$ (11,644)		\$ 60,370
20										
21										
22										
23	<b>Svc Co.: Test Year Wages to AWC-NH</b>									
24										
25										
26	Service Company Test Year Wages	\$ 127,970	\$ 455		\$ 812			\$ 101,266	\$ 25,437	\$ 127,970
27	Service Company Test Year Wages Charged to Expense	\$ 102,533								
28										
29										
30	Adjustment to Svc.Co. Wages to reflect April 1, 2008 Pay Increase (3%)	\$ 3,076 (B)	\$ 14		\$ 24			\$ 3,038		\$ 3,076
31										
32										
33										
34										
35	Total Pro Forma Wage Adjustment	\$ 63,444 (A + B)	\$ 2,075	\$ 19,243	\$ 7,470	\$ 35,803	\$ 7,461	\$ (8,606)		\$ 63,446
36										
37										

<sup>1</sup> Calculation found in Standard Filing Requirements, Response 28.

**EMPLOYEE WELFARE**

Aquarion Water Company of New Hampshire  
 Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
 Schedule No. 1D  
 Page 1 of 1

Line No.		Pro Forma	Test Year	Adjustment
1				
2	<b><u>Employee Medical Costs</u></b>			
3	Harvard Pilgrim Medical - (\$12,140.16 per mo. for 11 F/T employees * 12 mo.)	\$ 145,682		
4	CIGNA Medical - (\$10,814 per yr for 1 employee * 37.5% allocation factor)	4,055		
5	CIGNA - Prescription	21,780		
6	CIGNA - Dental	9,659		
7	Employee Contribution (\$933.13 per month *12 months)	(11,198)		
8	Total Medical Cost	\$ 169,978	\$ 124,782	
9	% to Expense	84.7% <sup>1</sup>	86.2%	
10	Total medical Expense	\$ 143,971	\$ 107,526	\$ 36,445
11				
12	<b><u>401K</u></b>			
13	401K Costs	\$ 14,519	\$ 14,266	
14	% to Expense	84.7% <sup>1</sup>	86.2%	
15	401K Expense	\$ 12,298	\$ 12,293	\$ 4
16				
17	<b><u>Auto Allowance</u></b>			
18	Auto Allowance	\$ 4,800	\$ 1,569	
19	% to Expense	84.7% <sup>1</sup>	86.2%	
20	Auto Allowance Expense	\$ 4,066	\$ 1,352	\$ 2,714
21				
22	<b><u>Life Insurance</u></b>			
23	2X Base Wages Eligible for Life Insurance	\$ 1,324,953		
24	Cost of \$.145 per \$1,000 of wages X 12 months	0.002		
25	Life Insurance Cost	\$ 2,305	\$ 5,120	
26	% to Expense	84.7% <sup>1</sup>	86.2%	
27	Life Insurance Expense	\$ 1,952	\$ 4,412	\$ (2,460)
28				
29	<b><u>Long Term Disability</u></b>			
30	Wages Eligible for Long Term Disability	\$ 662,477		
31	Cost of \$.29 per \$100 of wages	0.003		
32	Long Term Disability	\$ 1,921	\$ 2,085	
33	% to Expense	84.7% <sup>1</sup>	86.2%	
34	Long Term Disability Expense	\$ 1,627	\$ 1,797	\$ (170)
35				
36	<b>Total Pro Forma Employee Welfare Adjustment</b>			<b>\$ 36,534</b>
37				
38				
39	<sup>1</sup> Calculation found in Standard Filing Requirements, Response 28.			
40				

**Employee Bonus Program**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1E  
Page 1 of 1

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Line No.			
1			
2	Officer	\$	13,632
3	Exempt - Non-Union		2,850
4	Non-Exempt - Non-Union		<u>2,328</u>
5			
6		\$	18,810
7	Percent to Expense		<u>84.7%</u>
8			
9	Pro forma Bonus	\$	15,932
10			
11	Test Year Bonus Charged to Expense		11,789
12			
13	Total Pro Forma Bonus Adjustment	\$	<u>4,143</u>
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FAS 106 - POST RETIREMENT HEALTHCARE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1F  
Page 1 of 1

Line No.		Pro Forma	Test Year	Adjustment
1				
2				
3				
4	FAS 106 Cost	132,000	158,326	
5				
6	% to Expense	<u>84.7%</u> <sup>1</sup>	<u>86.2%</u>	
7				
8	FAS106 Expense	<u>\$ 111,804</u>	<u>\$ 136,431</u>	<u>\$ (24,627)</u>
9				
10				
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15				
16	<sup>1</sup> Calculation found in Standard Filing Requirements, Response 28.			
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**PENSION EXPENSE**

Aquarion Water Company of New Hampshire  
 Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
 Schedule No. 1G  
 Page 1 of 1

Line No.		Pro Forma	Test Year	Adjustment
1				
2				
3	FAS 87 Cost	\$ 21,400	\$ 24,026	
4				
5	% to Expense	<u>84.70%</u> <sup>1</sup>	<u>86.2%</u>	
6				
7	FAS 87 Expense	<u>\$ 18,126</u>	<u>\$ 20,703</u>	<u>\$ (2,578)</u>
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23	<sup>1</sup> Calculation found in Standard Filing Requirements, Response 28.			
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**AMORTIZATION OF DEPRECIATION STUDY**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1H  
Page 1 of 1

Line No.	Description	Amount	Amortization Period (years)	Pro Forma Expense
1				
2	Pro Forma Expenses:			
3	Depreciation Study	\$ 50,000	6	\$ 8,333
4				
5	Subtotal	<u>\$ 50,000</u>		<u>\$ 8,333</u>
6				
7	Test Year			-
8				
9	Pro Forma Adjustment			<u>\$ 8,333</u>
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**CHEMICALS EXPENSE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 11  
Page 1 of 1

Line No.	Chemical	Units	Current Invoiced Price	Test Yr Qty	Pro Forma Qty	Pro Forma Expense
1						
2						
3	Sodium Hypochlorite	bulk/gallon	\$ 2.1000	3,964	3,964	\$ 8,324
4	Sodium Hexametaphosphate	pound	0.6500	8,813	8,813	5,728
5	Potassium Hydroxide	bulk/gallon	1.9700	10,210	10,210	20,114
6	Potassium Hydroxide	drums/pounds	0.3000	13,015	13,015	3,905
7					Pro Forma Expense	<u>\$ 38,071</u>
8						
9					Test year Expense	\$ 34,188
10						
11					Pro Forma Expense	<u>\$ 3,883</u>
12						
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PURCHASED POWER - ELECTRIC

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1J  
Page 1 of 1

Line No.												Total Pro Forma Adjustments	Pro Forma PSNH Expense
1													
2	A) To reflect increased costs from PSNH per PUC orders 24,768, 24,814 & 24,871.												
3													
4													
5	Test Year	04/07 to 06/07			07/07 to 12/07			01/08 to 03/08			Total Pro Forma Adjustments	Pro Forma PSNH Expense	
6	Bills @	KWH Rate			KWH Rate			KWH Rate					
7	Old Rates	KW Usage	\$0.0859 to \$0.0957	Adjustment	KW Usage	\$0.0783 to \$0.0957	Adjustment	KW Usage	\$0.0882 to \$0.0957	Adjustment			
8													
9	A	B	C	D (B x C)	E	F	G (E x F)	H	I	J (H x I)	K (D + G + J)	L (A + K)	
10													
11	Public Service of New Hampshire												
12	Booster #2	\$ 8,794.57	18,420	\$ 0.0098	\$ 180.52	29,679	\$ 0.0174	\$ 516.41	16,754	\$ 0.0075	\$ 125.66	\$ 822.59	\$ 9,617.16
13	Lovering Rd	22,046.27	39,100	0.0098	383.18	87,200	0.0174	1,517.28	42,900	0.0075	321.75	2,222.21	24,268.48
14	Willow Ave	958.62	1,980	0.0098	19.40	1,480	0.0174	25.75	2,410	0.0075	18.08	63.23	1,021.85
15	Maple Rd	1,107.78	2,410	0.0098	23.62	1,610	0.0174	28.01	3,100	0.0075	23.25	74.88	1,182.66
16	Well #13A	4,113.76	5,940	0.0098	58.21	2,800	0.0174	48.72	5,980	0.0075	44.85	151.78	4,265.54
17	Crenshaw Well #10	13,635.25	24,264	0.0098	237.79	70,341	0.0174	1,223.93	11,226	0.0075	84.20	1,545.92	15,181.17
18	Well #12	14,846.97	35,924	0.0098	352.06	65,889	0.0174	1,146.47	23,438	0.0075	175.79	1,674.31	16,521.28
19	Well #14	6,413.23	6,700	0.0098	65.66	19,200	0.0174	334.08	17,020	0.0075	127.65	527.39	6,940.62
20		\$ 71,916.45	134,738		\$ 1,320.43	278,199		\$ 4,840.66	122,828		\$ 921.21	\$ 7,082.31	\$ 78,998.76
21													
22													
23	B) No Material Impact on Expenses for Unitil Electric												
24													
25	Pro Forma Unitil Expense (Equivalent to 12 monthly bills)												\$ 127,289.51
26													
27													
28	Total Pro Forma Expense												\$ 206,288.27
29													
30	Total Power Expense per Books												209,250.39
31													
32	Total Pro Forma Adjustment												\$ (2,962.13)
33													
34													
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36													
37													
38													
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MISCELLANEOUS/NON-RECURRING ITEMS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1K  
Page 1 of 1

Line No.		
1		
2		<u>Test Year Amount</u>
3		
4	Elimination Test Year Rate Case Expense Amortization	\$ (33,578)
5	Test Year Leak Detection Services Invoiced in April 08	12,920
6	Eliminate Non Jobbing Revenues	11,348
7	Eliminate misc budget accrual	(2,680)
8	Eliminate non test year ADP invoices	(655)
9		
10		
11	Adjustment for Non-Recurring Items	<u>\$ (12,645)</u>
12		
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BUILDING LEASE EXPENSE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1L  
Page 1 of 1

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Line No.			
1			
2			
3	Proforma Costs at Present Rates	\$	36,592
4			
5	Test Year Expense		32,859
6			
7			
8	Proforma Adjustment	<u>\$</u>	<u>3,733</u>
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**CORPORATE INSURANCE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1M  
Page 1 of 1

Line No.	Policy Name	Allocation Methodology	Pro Forma Expense
1			
2	Property	Insured Property	\$ 1,775
3	Fiduciary Liability	Employee Count	1,048
4	Business Travel	Employee Count	41
5	Director's and Officer's Liability	Revenues	3,274
8	Domestic CGL	Per policy	24,875
10	Excess Liability	Production	9,150
11	Administrative Fee	Combined policies	6,173
12	Subtotal		<u>\$ 46,336</u>
13			
15			
16	Worker's Compensation	Per policy	\$ 18,348
17	Percent to Expense		84.70% <sup>1</sup>
18	Adjusted Subtotal		<u>\$ 15,541</u>
19			
20			
21			
22	Automotive	Per policy	<u>\$ 11,220</u>
23			
24			
25	Total Pro Forma Insurance Expense		<u>\$ 73,097</u>
26			
27	Test Year Expense		57,514
28			
29	Pro Forma Insurance Adjustment		<u>\$ 15,583</u>
30			
31			
32	<sup>1</sup> Calculation found in Standard Filing Requirements, Response 28.		
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AUDIT FEES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1N  
Page 1 of 1

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Line No.		
1		
2	Proforma Audit Fees	\$ 44,108
3		
4	Test Year Expense	33,328
5		
6	Proforma Adjustment	<u>\$ 10,780</u>
7		
8		
9		
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CUSTOMER BILLING

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 10  
Page 1 of 1

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Line No.			
1			
2	Proforma Customer Billing	\$	37,078
3			
4	Test Year Expense		41,478
5			
6	Proforma Adjustment	<u>\$</u>	<u>(4,400)</u>
7			
8			
9			
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PURCHASED POWER - OIL & GAS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1P  
Page 1 of 1

Line No.			
1			
2			
3	<u>Northern Utility Gas</u>		
4			
5	Test Year Bills Adjusted for Current Rates	\$	2,862
6	Test Year Actual Expense per GL		3,116
7			
8	Pro Forma Gas Adjustment	<u>\$</u>	<u>(254)</u>
9			
10			
11	<u>Amerigas Propane</u>		
12			
13	Test Year Bills Adjusted for Current Rates	\$	4,598
14	Test Year Actual Expense per GL		2,866
15			
16	Pro Forma Propane Adjustment	<u>\$</u>	<u>1,732</u>
17			
18			
19	<u>Lamprey Bros. Fuel Oil</u>		
20			
21	Test Year Bills Adjusted for Current Rates	\$	2,988
22	Test Year Actual Expense per GL		2,557
23			
24	Pro Forma Fuel Oil Adjustment	<u>\$</u>	<u>432</u>
25			
26			
27	Total Pro Forma Adjustment	<u>\$</u>	<u>1,909</u>
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**CIAC AMORTIZATION**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1Q  
Page 1 of 1

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Line No.		
1		
2	CIAC Balance @ 3/31/08	\$ (2,684,435)
3		
4	Amortization Rate	1.20%
5		
6	Pro Forma CIAC Amortization	<u>\$ (32,213)</u>
7		
8	Test Year CIAC Amortization	(36,495)
9		
10	Pro Forma Adjustment	<u>\$ 4,282</u>
11		
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**TANK PAINTING AMORTIZATION**

Aquarion Water Company of New Hampshire  
 Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
 Schedule No. 1R  
 Page 1 of 1

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Line No.			
1			
2			
3	<u>Annual Tank Painting Amortization</u>		
4	Exeter Road	\$ 22,871	
5	Glade Path	32,300	
6	Jenness Beach	<u>3,208</u>	
7		<u>\$ 58,380</u>	
8			
9	Test Year Expense	55,171	
10			
11	Pro Forma Adjustment	<u>\$ 3,208</u>	
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**SHARED FACILITY COSTS**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1S  
Page 1 of 1

Line No.	Description	Lindley St. Operations Center	Main St. Corporate Office	Monroe Tpke Customer Service/IT	
1					
2	<b>A</b>				
3	<u>Calculation of Hourly Rate for CT Employees in Respective Buildings</u>				
4	Annualized labor for building employees	\$ 5,580,424	\$ 1,152,907	\$ 4,273,205	
5	Annual hours for employees	175,760	23,920	160,160	
6	Average Hourly Wage Rate	\$ 31.75	\$ 48.20	\$ 26.68	
7					
8	<b>B</b>				
9	<u>Calculation of Hourly Building overhead Cost</u>				
10	<u>Cost Pool (AWC-CT books)</u>				
11	Depreciation	\$ 148,642	\$ 41,067	\$ 94,586	
12	Property Taxes	73,260	29,781	42,775	
13	Return on Investment	351,746	152,092	323,103	
14	Operation & maintenance Expenses	440,509	73,001	424,604	
15	Total Annual Costs	\$ 1,014,157	\$ 295,941	\$ 885,068	
16	Assumed Hours from Above	175,760	23,920	160,160	
17	Total Hourly Building Cost	\$ 5.77	\$ 12.37	\$ 5.53	
18					
19	<b>C = B / A</b>				
20	<u>Calculation of Building Overhead %</u>				
21	Total Hourly Building Cost	\$ 5.77	\$ 12.37	\$ 5.53	
22	Average Hourly Wage Rate	31.75	48.20	26.68	
23	Overhead %	18.17%	25.67%	20.71%	
24					
25	<b>D</b>				
26	<u>Calculation of Allocated cost</u>				
27	CT Building Employee Direct Labor Charged to AWC-NH	\$ 58,280	\$ 21,229	\$ 335	
28	Allocated Customer Service Labor (see Schedule 1V)*			34,736	
29	Allocated IT Labor (see Schedule 1W)**			26,546	
30	Labor Pool	\$ 58,280	\$ 21,229	\$ 61,617	
31	Overhead %	18.17%	25.67%	20.71%	
32	Building Overhead to Allocate to AWC-NH	\$ 10,592	\$ 5,449	\$ 12,762	\$ 28,803
33	Test Year Allocation				34,784
34	Pro Forma Adjustment				\$ (5,981)

\*On Schedule 1U, line 7.

\*\*On Schedule 1V, line 6 multiplied by Line 15.

**MANAGEMENT ALLOCATION**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1T  
Page 1 of 2

Line No.		Test Year	Pro Forma Adjustment	Pro Forma	
1					
2	Corporate Costs				
3					
4	MUI Management Fee	\$ 958,885	\$ (62,218)	\$ 896,667	
5	Auditing & Consulting	111,655	(3,855)	107,800	
6	Legal	40,701	-	40,701	
7	Employee Wages and Benefits	281,840	(32,228)	249,613	
8	Bank Fees	149,770	-	149,770	
9	Building Overhead	23,103	(11,505)	11,598	
10	Other	(12,155)	12,397	242	
11					
12	Total	<u>\$ 1,553,799</u>	<u>\$ (97,408)</u>	<u>\$ 1,456,391</u>	
13					
14	Allocation Based on Massachusetts Formula			4.18%	(see page 2 of 2)
15					
16	<u>AWC-NH Share of Costs</u>				
17					
18	MUI Management Fee			\$ 37,494	
19	Auditing & Consulting			4,508	
20	Legal			1,702	
21	Employee Wages and Benefits			10,437	
22	Bank Fees			6,263	
23	Building Overhead			485	
24	Other			10	
25					
26	Total Pro Forma Expense			\$ 60,898	
27	Test Year Expense			72,387	
28					
29	Pro Forma Cost Reduction			<u>\$ (11,489)</u>	
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**MANAGEMENT ALLOCATION**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1T  
Page 2 of 2

Line No.	Mass Formula - 2008				
1					
2	<b>Gross Revenues</b>				
3		<u>2007 Act</u>			
4	CT	\$ 115,956		84.8%	
5	MA	12,277		9.0%	
6	NH	5,214		3.8%	
7	Utility	\$ 133,447		97.5%	
8	NonUtility	3,364		2.5%	
9	Total	\$ 136,811		100.0%	
10					
11	<b>Average Gross Plant</b>				
12		<u>12/31/2006</u>	<u>12/31/2007</u>	<u>Average</u>	
13	CT	\$ 841,597	\$ 878,604	\$ 860,101	87.8%
14	MA	86,554	89,174	87,864	9.0%
15	NH	30,243	32,598	31,421	3.2%
16	Utility	\$ 958,394	\$ 1,000,376	\$ 979,385	100.0%
17	NonUtility	443	443	443	0.0%
18	Total	\$ 958,837	\$ 1,000,819	\$ 979,828	100.0%
19					
20	<b>Gross Payroll</b>				
21		<u>2007 Act</u>			
22	CT	\$ 18,104		87.9%	
23	MA	1,573		7.6%	
24	NH	590		2.9%	
25	Utility	\$ 20,267		98.4%	
26	NonUtility	326		1.6%	
27	Total	\$ 20,593		100.0%	
28					
29	<b>Weightings</b>				
30		<u>Revenue</u>	<u>Plant</u>	<u>Payroll</u>	<u>Average</u>
31	Utility	97.5%	100.0%	98.4%	98.64%
32	Non Utility	2.5%	0.0%	1.6%	1.36%
33					
34	<b>Customers</b>				
35		<u>2007</u>	<u>Cust %</u>	<u>Util %</u>	<u>Alloc. Amt.</u>
36	CT	179,594	86.8%	98.64%	85.63%
37	MA	18,514	8.9%	98.64%	8.83%
38	NH	8,770	4.24%	98.64%	4.18%
39		206,878			
40					

**SHARED CUSTOMER SERVICE COSTS**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1U  
Page 1 of 1

Line  
No.

1		
2		
3	AWC-CT Shared Customer Service/Collections Labor	\$ 1,604,067
4		
5	% to AWC-NH	<u>2.17%</u>
6		
7	Shared costs to AWC-NH	\$ 34,736
8		
9	Test Year Costs	59,378
10		
11	Pro Forma Adjustment	<u>\$ (24,642)</u>
12		
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30		

AWC Customers-12/31/2007		
AWC-MA	18,514	9.14%
AWC-NH <sup>1</sup>	4,385	2.17%
AWC-CT	<u>179,594</u>	<u>88.69%</u>
<b>Total AWC</b>	<b>202,493</b>	<b>100.00%</b>

<sup>1</sup>AWC-NH incoming customer service calls are placed directly to the NH office. As such the customer service labor by CT employees on behalf of NH customers is limited. Therefore the customer count for AWC-NH in the above allocation formula is reduced to 50%.

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**SHARED TECHNOLOGY COSTS**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1V  
Page 1 of 1

Line No.			
1			
2			
3	SAP-Return on Investment Allocated per CT Docket 07-05-19	\$	1,704,915
4	SAP-Depreciation Allocated per CT Docket 07-05-19		1,613,489
5	906204 IT - SAP Software Maintenance		1,015,142
6	906001 IT Labor		626,197
7	906203 IT - SAP License Fees		455,052
8	906002 IT Outside Services		279,409
9	906202 IT - Software Maint		46,929
10	906201 IT - Hardware Maint		82,714
11	906XXX IT - Miscellaneous Expenses		<u>129,426</u>
12			
13	Total Annual Costs	\$	5,953,272
14			
15	AWC-NH % Share of Costs		<u>4.24%</u>
16			
17	AWC-NH % Share of Costs	\$	252,372
18			
19	Test year Expense		100,044
20			
21	Pro Forma Adjustment	\$	<u>152,328</u>
22			
23			

AWC Customers-12/31/2007		
AWC-MA	18,514	8.95%
AWC-NH <sup>1</sup>	8,770	4.24%
AWC-CT	<u>179,594</u>	<u>86.81%</u>
<b>Total AWC</b>	<b>206,878</b>	<b>100.00%</b>

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DEPRECIATION EXPENSE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1W  
Page 1 of 1

Line No.	Description	NH PUC ACCT	Test Year Plant	Retirements and Transfers	Pro Forma Additions	Pro Forma Utility Plant	Present Annual Rate	Depreciation Amount	Proposed Annual Rate	Pro Forma Depreciation Amount
1										
2	Organization	101301	\$ 17,700			\$ 17,700	0.00%	-	0.00%	-
3	Miscellaneous Intangible Plan	101303	20,727			20,727	5.00%	\$ 1,036	3.33%	691
4	Source Land and Land Rights	101310	460,591			460,591	0.00%	-	0.00%	-
5	Source Structures and Improvements	101311	611,459			611,459	1.60%	9,783	2.75%	16,815
6	Collecting and Impounding Reservoirs	101312	-			-	0.00%	-	0.00%	-
7	Wells and Springs	101314	2,775,032			2,775,032	1.45%	40,238	3.67%	101,751
8	Supply Mains	101316	182,935			182,935	1.36%	2,488	1.20%	2,195
9	Other Water Source Plant	101317	1,499,100			1,499,100	1.33%	19,938	5.00%	74,955
10	Pumping Land and Land Rights	101320	709			709	0.00%	-	0.00%	-
11	Pumping Structures and Improvements	101321	1,275,322			1,275,322	2.47%	31,500	2.75%	35,071
12	Electric Pumping Equipment	101325	880,695			880,695	4.28%	37,694	3.43%	30,195
13	Diesel Pumping Equipment	101326	32,297			32,297	5.00%	1,615	3.67%	1,184
14	Other Pumping Equipment	101328	34,764			34,764	4.08%	1,418	4.40%	1,530
15	Treatment Structures and Improvements	101331	176,164			176,164	2.47%	4,351	2.75%	4,845
16	Treatment Equipment	101332	282,411			282,411	6.56%	18,526	3.67%	10,355
17	T&D Land and Land Rights	101340	154,202			154,202	0.00%	-	0.00%	-
18	T&D Structures and Improvements	101341	289,440			289,440	2.04%	5,905	2.75%	7,960
19	Distribution Reservoirs and Standpipes	101342	1,272,926			1,272,926	2.04%	25,968	2.00%	25,459
20	Transmission and Distribution Main Services	101343	13,946,093			13,946,093	1.36%	189,667	1.20%	167,353
21	Services	101345	4,464,538			4,464,538	2.00%	89,291	1.84%	81,991
22	Meters	101346	740,054			740,054	5.94%	43,959	3.80%	28,122
23	Meter Installations	101347	243,519			243,519	1.54%	3,750	3.80%	9,254
24	Hydrants	101348	592,797			592,797	2.27%	13,456	2.40%	14,227
25	Other T&D Plant	101349	98,704			98,704	1.33%	1,313	5.00%	4,935
26	General Structures and Improvements	101390	590,808			590,808	2.99%	17,665	3.14%	18,568
27	Office Furniture and Equipment	101391	80,398			80,398	3.09%	2,484	7.69%	6,184
28	Computer Equipment - Hardware	101391H	522,662			522,662	12.65%	66,117	20.00%	104,532
29	Computer Equipment - Software	101391S	45,897			45,897	12.65%	5,806	20.00%	9,179
30	Transportation Equipment	101392	292,784			292,784	10.00%	29,278	11.25%	32,938
31	Stores Equipment	101393	17,891			17,891	2.87%	513	5.00%	895
32	Tools, Shop, and Garage Equipment	101394	142,771			142,771	3.46%	4,940	5.00%	7,139
33	Laboratory Equipment	101395	23,907			23,907	6.67%	1,595	6.67%	1,594
34	Power Operated Equipment	101396	162,947			162,947	4.73%	7,707	6.67%	10,863
35	Communications Equipment	101397	286,606			286,606	10.00%	28,661	10.00%	28,661
36	Miscellaneous Equipment	101398	26,780			26,780	6.28%	1,682	6.67%	1,785
37										
38			\$ 32,245,628	-	-	\$ 32,245,628		\$ 708,345	Subtotal	\$ 841,226
39										
40										
41										
42										Pro Forma Expense \$ 841,226
43										Reserve deficiency amortization 97,396
44										Total \$ 938,622
45										Test Year Expense 823,706
46										Pro Forma Adjustment \$ 114,916

**PAYROLL TAXES**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1X  
Page 1 of 1

Line No.		Pro Forma	Test Year	Adjustment
1				
2	<b><u>FICA</u></b>			
3	Proposed Wages	\$ 691,938		
4	Add Bonus	18,810		
5				
6	Medicare Tax Base	\$ 710,748		
7	Wages over limit	43,542		
8	Social Security Tax Base	\$ 667,206		
9				
10	Social Security Rate	6.20%	\$ 41,367	
11	Medicare Rate	1.45%	10,306	
12	Pro Forma FICA Expense		<u>\$ 51,673</u>	
13				
14	<b><u>Federal Unemployment</u></b>			
15	Employees	13		
16	Tax base	7,000		
17	Rate	0.80%	\$ 728	
18				
19	Employee	1		
20	Tax base	7,000		
21	Rate	0.80%		
22	Percent allocated to AWC NH	0.375	21	
23			<u>\$ 749</u>	
24	<b><u>State Unemployment</u></b>			
25	Employees	13		
26	Tax base	8,000		
27	Rate	0.10%	\$ 104	
28				
29	Employee	1		
30	Tax base	14,000		
31	Rate	2.87%		
32	Percent allocated to AWC NH	0.375	151	
33			<u>\$ 255</u>	
34				
35	Total Payroll Taxes	\$ 52,677		
36	% to Expense	84.7%		
37	Payroll Tax Expense	<u>\$ 44,617</u>	<u>\$ 37,553</u>	<u>\$ 7,064</u>
38				
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PROPERTY TAX EXPENSE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1Y  
Page 1 of 1

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Line No.			
1			
2			
3	<u>Most Recent Property Tax Bills</u>		
4			
5	Hampton	\$	79,844
6	North Hampton		110,726
7	Rye		15,829
8	Stratham		30,378
9	State of NH		77,953
10		\$	<u>314,730</u>
11			
12	Test Year Expense		317,710
13			
14	Pro Forma Adjustment	\$	<u>(2,981)</u>
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INTEREST EXPENSE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1Z  
Page 1 of 1

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Line No.		
1		
2		
3	<u>Interest Expense</u>	
4	Long Term-Sched 4D	\$ 614,948
5	Intercompany - Sched 4E	151,060
6	Total Pro Forma Interest Expense	<u>\$ 766,008</u>
7		
8	Interest Expense per Test Year	707,510
9		
10	Pro Forma Adjustment	<u>\$ 58,498</u>
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**STATE INCOME TAXES**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1AA  
Page 1 of 1

Line No.		<u>3/31/2008</u>	<u>Adi</u>	<u>Pro Forma</u>	<u>Increase</u>	<u>Proposed</u>
1						
2	Revenue	\$ 5,143,874	\$ (133,960)	\$ 5,009,914	\$ 1,056,070	\$ 6,065,984
3						
4	O&M Expense	\$ 2,372,599	\$ 203,865	\$ 2,576,464	\$ -	\$ 2,576,464
5	Depreciation	823,706	114,916	938,622	-	938,622
6	Other Taxes	368,901	4,084	372,985	-	372,985
7	Interest Expense	707,510	58,498	766,008	-	766,008
8	Net Other Income	(69,486)	14,974	(54,512)	-	(54,512)
9		\$ 4,203,230	\$ 396,338	\$ 4,599,568	\$ -	\$ 4,599,568
10						
11	Pre-Tax Income	940,644	(530,298)	410,346	1,056,070	1,466,416
12						
13	Flowthrough Differences	2,332	-	2,332	-	2,332
14						
15	Taxable Income	\$ 942,976	\$ (530,298)	\$ 412,678	\$ 1,056,070	\$ 1,468,748
16						
17	State Tax Expense (8.5%)	\$ 80,153	\$ (45,075)	\$ 35,078	\$ 89,766	\$ 124,844
18						
19	Tie to Books	407		407		407
20	Net Tax Per Books	\$ 80,560	\$ (45,075)	\$ 35,485	\$ 89,766	\$ 125,251
21						
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FEDERAL INCOME TAXES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 1BB  
Page 1 of 1

Line No.		3/31/2008	Adj	Pro Forma	Increase	Proposed
1						
2						
3						
4						
5	State Taxable Income	\$ 942,976	\$ (530,298)	\$ 412,678	\$ 1,056,070	\$ 1,468,748
6						
7	Less NH Tax Expense	(80,560)	45,075	(35,485)	(89,766)	(125,251)
8						
9	Taxable FIT Income	\$ 862,416	\$ (485,223)	\$ 377,193	\$ 966,304	\$ 1,343,498
10						
11	Tax @ 35%	301,846	(169,828)	132,018	338,207	470,224
12	Adjustment Related to 2006 Return	49,249	(49,249)	-		-
13	American Water-Regulatory Asset	9,878		9,878		9,878
14	Tie To Books	(1,846)		(1,846)		(1,846)
15						
16		\$ 359,127	\$ (219,077)	\$ 140,050	\$ 338,207	\$ 478,257
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COMPARATIVE BALANCE SHEET - 13 MONTHS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2A  
Page 1 of 1

Line No.	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average	
1															
2	<b>ASSETS AND OTHER DEBITS</b>														
3															
4	<u>Property, Plant &amp; Equipment</u>														
5	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 31,106,254	\$ 31,141,701	\$ 31,141,701	\$ 32,250,407	\$ 30,167,541	
6	Utility Plant	815,776	927,659	1,155,945	1,248,866	1,337,355	1,479,945	1,832,282	2,330,861	2,780,020	1,492,004	1,507,537	1,598,350	549,218	1,531,110
7	Work in Progress	(7,724,717)	(7,794,274)	(7,863,831)	(7,933,388)	(8,002,945)	(8,072,502)	(8,142,059)	(8,211,616)	(8,281,173)	(8,252,536)	(8,329,212)	(8,401,629)	(8,423,156)	(8,113,258)
8	Accumulated Depreciation	22,796,429	22,838,754	22,997,484	23,020,848	23,039,779	23,112,812	23,395,593	23,824,614	24,204,216	24,345,721	24,320,026	24,338,421	24,376,469	23,585,393
9	Net Utility Plant	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	96,642	
10	Non-Utility Property & Equipment	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	(96,642)	
11	Less: Reserve for Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	Net non-Utility Plant	-	-	-	-	-	-	-	-	-	-	-	-	-	
13															
14	<u>Current and Accrued Assets:</u>														
15	Cash	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	Accounts Receivable	383,427	267,726	203,573	541,927	324,606	554,557	630,192	389,594	394,341	426,908	344,811	276,341	318,930	392,146
17	Miscellaneous Receivables	-	-	-	-	-	-	-	-	37,644	37,644	37,644	37,644	37,644	10,980
18	Reserve for Uncollectibles	(39,142)	(39,620)	(40,193)	(36,902)	(36,860)	(37,351)	(37,356)	(37,884)	(35,875)	(53,011)	(52,497)	(52,331)	(55,078)	(42,429)
19	Receivables from Associated Companies	-	47,671	-	38,753	-	-	-	7,574	-	-	-	-	-	7,833
20	Accrued Revenues	351,826	501,131	778,440	463,642	846,367	566,686	430,577	439,120	447,574	370,653	370,972	405,613	357,126	497,938
21	Materials & supplies, at cost	158,155	161,209	166,019	242,537	220,260	236,277	241,413	162,788	138,139	109,011	96,520	102,000	99,823	167,097
22	Prepayments	177,705	154,843	114,487	228,636	214,433	185,230	187,396	158,075	171,140	203,538	183,733	161,798	160,038	177,682
23	Total Current Assets	1,031,971	1,092,960	1,222,326	1,478,592	1,568,807	1,505,398	1,452,222	1,119,266	1,115,318	1,094,744	981,183	931,065	918,483	1,211,426
24															
25	<u>Deferred Debits:</u>														
26	Unamortized Debt Discount and Expense	215,105	214,394	213,682	212,970	212,259	211,547	210,836	210,124	209,412	208,701	207,989	206,477	205,765	210,669
27	Unfunded Deferred Taxes	568,331	568,331	568,331	568,331	568,331	568,331	568,331	568,331	568,331	553,821	553,821	553,821	553,821	564,099
28	Other Deferred Debits	790,068	778,881	767,695	756,508	745,321	734,134	722,666	717,024	711,383	559,339	553,698	548,056	542,415	688,412
29	Total Deferred Debits	1,573,505	1,561,606	1,549,708	1,537,809	1,525,911	1,514,012	1,501,832	1,495,479	1,489,126	1,321,861	1,314,708	1,308,354	1,302,002	1,463,180
30															
31															
32	TOTAL ASSETS AND OTHER DEBITS	\$ 25,401,904	\$ 25,493,320	\$ 25,769,518	\$ 26,037,249	\$ 26,134,497	\$ 26,132,222	\$ 26,349,647	\$ 26,439,360	\$ 26,808,661	\$ 26,762,326	\$ 26,615,917	\$ 26,577,840	\$ 26,596,954	\$ 26,259,999
33															
34	<b>LIABILITIES AND OTHER CREDITS</b>														
35															
36	<u>Stockholder's Equity</u>														
37	Preferred Stock	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	\$ (2,800)	
38	Common Stock	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	(2,187,075)	
39	Paid in Capital	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	(3,558,190)	
40	Contributed Capital	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	(480,250)	
41	Retained Earnings	(1,937,778)	(1,963,174)	(2,095,503)	(2,037,925)	(2,072,279)	(2,165,538)	(2,242,852)	(2,202,964)	(2,285,421)	(2,287,938)	(2,093,341)	(2,053,658)	(2,030,563)	(2,123,730)
42	Total Stockholder's Equity	(8,166,093)	(8,191,489)	(8,323,819)	(8,266,240)	(8,300,594)	(8,393,853)	(8,471,167)	(8,431,279)	(8,513,736)	(8,516,253)	(8,321,656)	(8,281,973)	(8,258,878)	(8,352,045)
43															
44	<u>Long-term Debt - Bonds</u>														
45		(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	(8,900,000)	
46															
47	<u>Notes Payable</u>														
48	To Associated Companies	(1,300,000)	(1,500,000)	(1,500,000)	(2,100,000)	(1,800,000)	(1,800,000)	(1,700,000)	(1,600,000)	(1,500,000)	(1,900,000)	(2,200,000)	(2,400,000)	(2,600,000)	(1,829,167)
49	Total Notes Payable	(1,300,000)	(1,500,000)	(1,500,000)	(2,100,000)	(1,800,000)	(1,800,000)	(1,700,000)	(1,600,000)	(1,500,000)	(1,900,000)	(2,200,000)	(2,400,000)	(2,600,000)	(1,829,167)
50															
51	<u>Current and Accrued Liabilities:</u>														
52	Accounts Payable & Accrued Liabilities	(1,578,030)	(1,375,307)	(1,467,001)	(1,256,179)	(1,569,331)	(1,603,210)	(1,802,537)	(1,979,397)	(2,312,458)	(1,955,545)	(1,657,004)	(1,602,033)	(1,449,861)	(1,674,496)
53	Dividends Payable	(1,180)	(1,152)	(1,166)	(1,180)	(1,152)	(1,166)	(1,180)	(1,152)	(1,166)	(1,180)	(1,152)	(1,166)	(1,180)	(1,166)
54	Accrued Bond Interest	(138,165)	(187,973)	(237,780)	(171,938)	(221,745)	(88,358)	(138,165)	(187,973)	(237,780)	(171,938)	(221,745)	(88,358)	(138,165)	(174,327)
55	Accrued State Income Taxes	-	-	(5,391)	(10,391)	(13,391)	(20,391)	(14,391)	(20,391)	(27,391)	(54,391)	(51,391)	-	-	(22,659)
56	Total Current Liabilities	(1,717,375)	(1,564,432)	(1,711,339)	(1,439,688)	(1,805,620)	(1,713,125)	(1,956,273)	(2,188,913)	(2,578,795)	(2,183,054)	(1,934,292)	(1,742,948)	(1,589,205)	(1,872,647)
57															
58	<u>Deferred Credits</u>														
59	Deferred Taxes	(2,898,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,908,988)	(2,858,916)	(2,858,916)	(2,854,916)	(2,853,916)	(2,892,925)
60	Customer Advances for Construction	(11,385)	(11,385)	(11,385)	(11,385)	(11,385)	(11,385)	(11,385)	(11,385)	(2,000)	(2,000)	(2,000)	(2,000)	(7,865)	
61	Total Deferred Credits	(2,898,372)	(2,920,373)	(2,920,372)	(2,920,373)	(2,920,372)	(2,920,372)	(2,920,372)	(2,920,372)	(2,910,988)	(2,860,916)	(2,860,916)	(2,856,916)	(2,855,916)	(2,900,791)
62															
63	<u>Contributions in Aid of Construction</u>														
64		(2,420,064)	(2,417,026)	(2,413,987)	(2,410,949)	(2,407,911)	(2,404,872)	(2,401,834)	(2,398,796)	(2,405,142)	(2,402,103)	(2,399,053)	(2,396,003)	(2,392,953)	(2,405,349)
65															
66	TOTAL LIABILITIES AND OTHER CREDITS	\$ (25,401,904)	\$ (25,493,320)	\$ (25,769,517)	\$ (26,037,249)	\$ (26,134,497)	\$ (26,132,222)	\$ (26,349,647)	\$ (26,439,360)	\$ (26,808,661)	\$ (26,762,326)	\$ (26,615,917)	\$ (26,577,840)	\$ (26,596,954)	\$ (26,259,999)

UTILITY PLANT

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2B  
Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<u>Utility Plant</u>														
4	101301 Organization	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700
5	101303 Miscellaneous Intangible Plant	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727
6	101310 Source Land and Land Rights	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591
7	101311 Source Structures and Improvements	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741
8	101312 Collecting & Impounding Reservoirs	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862
9	101314 Wells and Springs	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,421,102	2,458,872	2,458,872	2,775,032
10	101316 Supply Mains	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935
11	101317 Other Water Source Plant	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,499,100	1,499,100	1,499,100	1,499,100	1,499,100
12	101320 Pumping Land and Land Rights	709	709	709	709	709	709	709	709	709	709	709	709	709	709
13	101321 Pumping Structures and Improvements	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322
14	101325 Electric Pumping Equipment	861,733	861,733	861,733	861,733	861,733	861,733	861,733	861,733	861,733	861,733	883,320	883,320	883,320	880,695
15	101326 Diesel Pumping Equipment	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297
16	101328 Other Pumping Equipment	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764
17	101331 Treatment Structures and Improvements	136,401	136,401	136,401	136,401	136,401	136,401	136,401	136,401	136,401	136,401	176,164	176,164	176,164	176,164
18	101332 Treatment Equipment	280,746	280,746	280,746	280,746	280,746	280,746	280,746	280,746	280,746	284,939	284,939	284,939	284,939	284,939
19	101340 T&D Land and Land Rights	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202
20	101341 T&D Structures and Improvements	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414
21	101342 Distribution Reservoirs and Standpipes	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,272,926
22	101343 Transmission and Distribution Mains	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	13,148,845	13,146,522	13,146,522	13,946,093
23	101345 Services	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,464,491	4,464,491	4,464,491	4,464,538
24	101346 Meters	634,042	634,042	634,042	634,042	634,042	634,042	634,042	634,042	634,042	634,042	740,054	740,054	740,054	740,054
25	101347 Meter Installations	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519
26	101348 Hydrants	567,515	567,515	567,515	567,515	567,515	567,515	567,515	567,515	567,515	567,515	592,797	592,797	592,797	592,797
27	101349 Other T&D Plant	72,685	72,685	72,685	72,685	72,685	72,685	72,685	72,685	72,685	72,685	98,704	98,704	98,704	98,704
28	101390 General Structures and Improvements	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808
29	101391 Office Furniture and Equipment	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398
30	101391H Computer Equipment - Hardware	535,723	535,723	535,723	535,723	535,723	535,723	535,723	535,723	535,723	535,723	544,367	544,367	544,367	544,367
31	101391S Computer Equipment - Software	40,302	40,302	40,302	40,302	40,302	40,302	40,302	40,302	40,302	40,302	45,897	45,897	45,897	45,897
32	101392 Transportation Equipment	269,359	269,359	269,359	269,359	269,359	269,359	269,359	269,359	269,359	269,359	292,784	292,784	292,784	292,784
33	101393 Stores Equipment	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891
34	101394 Tools, Shop, and Garage Equipment	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821
35	101395 Laboratory Equipment	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066
36	101396 Power Operated Equipment	159,347	159,347	159,347	159,347	159,347	159,347	159,347	159,347	159,347	159,347	162,947	162,947	162,947	162,947
37	101397 Communications Equipment	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006
38	101398 Miscellaneous Equipment	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552
39		4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779	4,779
40	105000 Property Held for Future Use														
		\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 29,705,369	\$ 31,106,254	\$31,141,701	\$31,141,701	\$ 32,250,406	\$ 30,229,876

PROPERTY HELD FOR FUTURE USE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2C  
Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<u>Property Held for Future Use</u>														
4	105000 Property Held for Future Use	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779
5		\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779	\$ 4,779
6															
7															
8	Represents expenditures incurred in 1997 toward the development of an additional source of supply and storage tank.														
9															
10															
11															
12															
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**ACCUMULATED DEPRECIATION**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2D  
Page 1 of 1

Line No.	Account Number	Account Description	December-05	December-06	December-07	March-08
1						
2		<b>Source of Supply &amp; Pumping Plant</b>				
3	304	Structures & Improvements	327,840	349,264	395,215	399,038
4	305	Collecting & Impounding Reservoirs	-	-	-	-
5	307	Wells & Springs	389,753	413,699	453,580	465,652
6	309	Supply Mains	51,163	54,941	58,719	59,704
7	311	Other Water Source Plant	25,898	41,843	61,102	66,427
8	310	Other Power Production Equipment	-	-	-	-
9	310	Electric Pumping Equipment	422,524	467,753	513,670	515,790
10	310	Diesel Pumping Equipment	18,054	20,055	22,056	22,582
11	310	Hydraulic Pumping Equipment	-	-	-	-
12	310	Other Pumping Equipment	21,408	23,338	25,267	25,773
13		<b>Water Treatment Plant</b>				
14	304	Structures & Improvements	21,910	25,279	29,139	30,299
15	320	Water Treatment Equipment - New	150,543	170,926	191,448	195,265
16		<b>Transmission &amp; Distribution Plant</b>				
17	303	T & D Easements	6,924	7,039	7,153	7,181
18	303	T & D Rights of Way	5,099	5,273	5,448	5,492
19	304	Structures & Improvements	115,390	124,787	134,331	136,815
20	330	Distribution Reservoirs & Standpipes	581,926	622,138	662,350	672,993
21	331	Transmission & Distribution Mains	2,276,979	2,395,666	2,624,136	2,687,999
22	333	Services	1,161,328	1,269,756	1,370,504	1,400,931
23	334	Meters	304,706	304,355	281,073	293,720
24	334	Meter Installation	6,047	11,297	16,548	17,923
25	335	Hydrants	196,331	201,025	215,653	220,362
26	339	Other T & D Plant	1,382	2,207	3,347	3,697
27		<b>General Plant</b>				
28	304	Structures & Improvements	77,277	94,825	112,490	117,199
29	340	Office Furniture & Equipment	4,797	8,120	11,442	12,314
30	340	Computer Equipment	293,554	368,856	445,610	443,827
31	340	Computer Equipment				
32	341	Transportation Equipment, Cars	85,451	112,400	140,521	148,330
33	342	Stores Equipment	1,442	1,768	1,872	2,018
34	343	Tools, Shop & Garage Equipment	54,282	60,387	66,935	68,542
35	344	Laboratory Equipment	16,219	18,390	20,562	16,903
36	345	Power Operated Equipment	23,768	31,483	39,284	41,384
37	346	Communications Equipment	262,837	295,480	328,123	329,642
38	347	Miscellaneous Equipment	10,658	12,808	14,958	15,352
39						
40			<u>6,915,490</u>	<u>7,515,158</u>	<u>8,252,536</u>	<u>8,423,154</u>

<u>Individual Retirements over \$5,000</u>	
1) Little River Rd - Main	\$22,148
2) Well #6	\$30,044
3) Well #14 Pump Replacement	\$9,240
4) Hampton Beach Main Repl.	\$73,854

MATERIALS & SUPPLIES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2E  
Page 1 of 1

Line No.	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average	
1															
2	MATERIALS & SUPPLIES - MONTHLY														
3															
4	154000 - SUPPLIES INVENTORY	\$ 139,955	\$ 143,008	\$ 147,818	\$ 224,336	\$ 196,420	\$ 212,437	\$ 217,573	\$ 159,448	\$ 149,761	\$ 128,600	\$ 117,311	\$ 125,655	\$ 126,656	162,973
5	154001- CHEMICALS	-	-	-	-	-	-	-	(20,500)	(11,622)	-	-	-	-	(2,677)
6	154002- SUPPLIES INVENTORY	-	-	-	-	-	-	-	-	-	(19,590)	(20,791)	(23,655)	(26,834)	(6,454)
7	390154- INVENTORY MIGRATION ACCOUNT	18,201	18,201	18,201	18,201	23,840	23,840	23,840	23,840	-	-	-	-	-	13,255
8															
9		\$ 158,155	\$ 161,209	\$ 166,019	\$ 242,537	\$ 220,260	\$ 236,277	\$ 241,413	\$ 162,788	\$ 138,139	\$ 108,011	\$ 96,520	\$ 102,000	\$ 99,823	167,097
10															
11															
12															
13		March-08	March-07	March-06	13 Mo. Avg										
14															
15	MATERIALS & SUPPLIES - YEARLY														
16															
17	154000 - SUPPLIES INVENTORY	\$ 126,656	\$ 139,955	\$ 115,424	\$ 162,973										
18	154001- CHEMICALS	-	-	4,084	(2,677)										
19	154002- SUPPLIES INVENTORY	(26,834)	-	-	(6,454)										
20	390154- INVENTORY MIGRATION ACCOUNT	-	18,201	-	13,255										
21															
22		\$ 99,823	\$ 158,155	\$ 119,509	\$ 167,097										
23															

\* March of 2006 Account 154001 Pipe- Cast Iron, Duclie has become Account 154000 Supplies Inventory  
Account 154018 Chemicals has become Account 154001 Chemicals

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DEFERRED TAXES

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2F  
Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<u>Deferred Taxes</u>														
4															
5	186901 UNFUND DEFERRED ASSET - FAS 109	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472
6	186950 Regulatory Asset - Recov Income Tax	986,988	986,988	986,988	986,988	986,988	986,988	986,988	986,988	986,988	962,579	962,579	962,579	962,579	979,869
7	186951 Regulatory Asset - Other	148	148	148	148	148	148	148	148	148	148	148	148	148	148
8	186952 Liab for Excess Def IT	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(248,885)	(248,885)	(248,885)	(248,885)	(253,178)
9	186953 Deficit Def Income Tax	23,053	23,053	23,053	23,053	23,053	23,053	23,053	23,053	23,053	22,505	22,505	22,505	22,505	22,893
10	186954 Liab for Excess DIT - State	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(71,895)	(71,895)	(71,895)	(71,895)	(72,915)
11	186955 Liab for 3% ITC	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,676)	(5,676)	(5,676)	(5,676)	(5,838)
12	186956 Liab for 4% ITC	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(2,837)	(2,837)	(2,837)	(2,837)	(2,957)
13	186957 Liab for 10% ITC	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(102,590)	(102,590)	(102,590)	(102,590)	(104,386)
14		\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 568,331	\$ 553,821	\$ 553,821	\$ 553,821	\$ 553,821	\$ 564,099
15															
16															
17	282001 Deferred Income Taxes - ACRS Deprec.	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)	\$ (465,630)
18	283004 Deferred Taxes - FAS 109	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)
19	283005 Deferred Taxes - Accelerated Deprec.	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)
20	283009 Current Year Deferred Provision	(2,000)	(24,000)	(24,000)	(24,000)	(24,000)	(24,000)	(24,000)	(24,000)	(24,000)	20,000	20,000	20,000	25,000	(9,708)
21	283015 Deferred Taxes - "A" Reserves	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697
22	283016 Deferred ITC	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(230,478)	(230,478)	(230,478)	(230,478)	(234,779)
23		\$ (2,896,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,908,988)	\$ (2,858,916)	\$ (2,858,916)	\$ (2,854,916)	\$ (2,853,916)	\$ (2,892,925)
24															
25															
26	<b>Total Deferred Taxes</b>	<b>\$ (2,318,657)</b>	<b>\$ (2,340,657)</b>	<b>\$ (2,305,095)</b>	<b>\$ (2,305,095)</b>	<b>\$ (2,301,095)</b>	<b>\$ (2,300,095)</b>	<b>\$ (2,328,826)</b>							
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DEFERRED DEBITS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08

Schedule No. 2G

Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<u>Deferred Expenses (net of amortization)</u>														
4	186015 Deferred Program Maintenance Costs	\$ 361,250	\$ 356,653	\$ 352,055	\$ 347,457	\$ 342,860	\$ 338,262	\$ 333,665	\$ 329,067	\$ 324,469	\$ 319,872	\$ 315,274	\$ 310,677	\$ 306,079	\$ 333,665
5	186023 Deferred Additional Security Costs	50,055	49,608	49,162	48,715	48,268	47,821	47,374	46,927	46,480	46,033	45,586	45,139	44,692	47,374
6	186032 Deferred Rate Case- AW Cos	60,637	54,675	48,713	42,751	36,789	30,827	24,583	24,167	23,750	23,333	22,917	22,500	22,083	33,030
7	186036 Deferred Water Restriction Costs	20,191	20,010	19,830	19,650	19,470	19,289	19,109	18,929	18,749	18,568	18,388	18,208	18,027	19,109
8	186042 FAS 158 Net (Gain) Loss	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	58,565	(26,711)	(26,711)	(26,711)	(26,711)	33,693
9	186043 FAS 158 Prior Service Costs	34,154	34,154	34,154	34,154	34,154	34,154	34,154	34,154	34,154	15,701	15,701	15,701	15,701	28,772
10	186044 FAS 158 Transition Obligation	205,216	205,216	205,216	205,216	205,216	205,216	205,216	205,216	205,216	162,543	162,543	162,543	162,543	192,770
11		<u>\$ 790,068</u>	<u>\$ 778,881</u>	<u>\$ 767,695</u>	<u>\$ 756,508</u>	<u>\$ 745,322</u>	<u>\$ 734,134</u>	<u>\$ 722,666</u>	<u>\$ 717,024</u>	<u>\$ 711,383</u>	<u>\$ 559,339</u>	<u>\$ 553,698</u>	<u>\$ 548,057</u>	<u>\$ 542,415</u>	<u>\$ 688,412</u>
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CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 2H  
Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<u>Contributions in Aid of Construction (CIAC)</u>														
4															
5	271000 Expired Customer Advances	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,684,435)
6	272000 Amort Contrib. in Aid of Construction	260,852	263,890	266,928	269,967	273,005	276,043	279,082	282,120	285,159	288,197	291,247	294,297	297,347	279,086
7		<u>\$ (2,420,064)</u>	<u>\$ (2,417,026)</u>	<u>\$ (2,413,988)</u>	<u>\$ (2,410,949)</u>	<u>\$ (2,407,911)</u>	<u>\$ (2,404,872)</u>	<u>\$ (2,401,834)</u>	<u>\$ (2,398,796)</u>	<u>\$ (2,405,142)</u>	<u>\$ (2,402,103)</u>	<u>\$ (2,399,053)</u>	<u>\$ (2,396,003)</u>	<u>\$ (2,392,953)</u>	<u>\$ (2,405,349)</u>
8															
9															
10															
11															
12	Hampton Balance at Acquisition	\$ 1,802,893													
13															
14	<u>Aquarion Activity</u>														
15	William Woods	14,123													
16	Hampton Meadows	133,047													
17	Ridgemont Realty, LLC	18,281													
18	Parkway Development	4,712													
19	14 Lafayette Road Realty	10,201													
20	Abenaqui Meadows	58,231													
21	Asset Title Holding Co, LLC	42,700													
22	DPG Development	6,157													
23	Exeter Oak Realty	14,889													
24	Green & Co.	3,046													
25	Love Lane Realty, LLC	28,980													
26	Majestic Pine LLC	43,480													
27	Meadow Pond Ext.	4,197													
28	Park Ave.	4,000													
29	Richard Fucci	9,908													
30	Robert McDermatt	16,977													
31	Tracy Emerick	6,544													
32	Winterberry	115,138													
33	Pre-acquisition adjustment	7,054													
34	The Seacoast LLC	28,656													
35	Platinum Fence	11,000													
36	North Hampton Properties	295,703													
37	Pilot Construction	5,256													
38	Village @ Hampton Center	4,129													
39	Current Balance @ 03/31/08	<u>\$ 2,690,300</u>													
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**RATE BASE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 3  
Page 1 of 1

Line No.	Description	3/31/2008	3/31/2007	3/31/2006	13 Month Average	Pro Forma Adjustments <sup>1</sup>	Pro Forma	Reference
1								
2								
3	Plant in Service	\$ 32,245,628	\$ 29,700,590	\$ 27,530,667	\$ 30,162,763	\$ 2,082,865	\$ 32,245,628	3A
4								
5	Accumulated Depreciation	(8,423,156)	(7,724,717)	(7,050,480)	(8,113,258)	(309,898)	(8,423,156)	3B
6								
7	Net Plant in Service	<u>\$ 23,822,472</u>	<u>\$ 21,975,874</u>	<u>\$ 20,480,187</u>	<u>\$ 22,049,504</u>	<u>\$ 1,772,967</u>	<u>\$ 23,822,472</u>	
8								
9								
10	Add:							
11	Materials & Supplies	99,823	158,155	119,509	167,097		167,097	3B
12	Prepayments	14,864	(4,912)	24,546	16,743		16,743	3B
13	Deferred Expenses (net of amortization)	390,881	492,133	531,473	433,178		433,178	3B
14	Working Capital Allowance	190,568	198,016	156,407	197,976		197,976	3D
15								
16	Total Additions	<u>696,135</u>	<u>843,393</u>	<u>831,935</u>	<u>814,994</u>	<u>-</u>	<u>814,994</u>	
17								
18								
19	Less:							
20	Customer Advances	(2,000)	(11,385)	(381,695)	(7,866)		(7,866)	3C
21	Contributions in Aid of Constructions	(2,392,953)	(2,420,064)	(2,080,859)	(2,405,349)		(2,405,349)	3C
22	Reserve for Deferred Taxes	(2,300,095)	(2,318,657)	(2,238,149)	(2,328,826)		(2,328,826)	3C
23								
24	Total Deductions	<u>(4,695,048)</u>	<u>(4,750,106)</u>	<u>(4,700,703)</u>	<u>(4,742,041)</u>	<u>-</u>	<u>(4,742,041)</u>	
25								
26								
27	Total Rate Base	<u>\$ 19,823,559</u>	<u>\$ 18,069,161</u>	<u>\$ 16,611,418</u>	<u>\$ 18,122,458</u>	<u>\$ 1,772,967</u>	<u>\$ 19,895,425</u>	
28								
29	Utility Operating Income <sup>2</sup>	\$ 1,203,016	\$ 971,891	\$ 716,066	\$ 1,203,016		\$ 1,203,016	Sch 1
30								
31	Return on Rate Base (RORB)	6.07%	5.38%	4.31%	6.64%		6.05%	
32								
33								
34	1) Pro Forma Adjustment adjusts 13 month average of Plant in Service to 3/31/2008 levels.							
35	2) Utility operating income is a rolling 12 month figure.							
36								
37								
38								
39								
40								

UTILITY PLANT IN SERVICE

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 3A  
Page 1 of 1

Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<b>Plant in Service</b>														
4	101301 Organization	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700	\$ 17,700
5	101303 Miscellaneous Intangible Plant	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727	20,727
6	101310 Source Land and Land Rights	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591	460,591
7	101311 Source Structures and Improvements	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	559,741	611,459	611,459	611,459	611,459	574,825
8	101312 Collecting & Impounding Reservoirs	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	27,862	-	-	-	-	19,736
9	101314 Wells and Springs	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,338,050	2,421,102	2,458,872	2,458,872	2,775,032	2,383,316
10	101316 Supply Mains	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935	182,935
11	101317 Other Water Source Plant	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,079,534	1,499,100	1,499,100	1,499,100	1,499,100	1,201,908
12	101320 Pumping Land and Land Rights	709	709	709	709	709	709	709	709	709	709	709	709	709	709
13	101321 Pumping Structures and Improvements	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322	1,275,322
14	101325 Electric Pumping Equipment	861,733	861,733	861,733	861,733	861,733	861,733	861,733	861,733	861,733	883,320	883,320	883,320	880,695	867,920
15	101326 Diesel Pumping Equipment	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297	32,297
16	101328 Other Pumping Equipment	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764	34,764
17	101331 Treatment Structures and Improvements	136,401	136,401	136,401	136,401	136,401	136,401	136,401	136,401	136,401	176,164	176,164	176,164	176,164	147,999
18	101332 Treatment Equipment	280,746	280,746	280,746	280,746	280,746	280,746	280,746	280,746	280,746	284,939	284,939	284,939	282,411	281,864
19	101340 T&D Land and Land Rights	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202	154,202
20	101341 T&D Structures and Improvements	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,414	289,440	289,440	289,440	289,440	289,422
21	101342 Distribution Reservoirs and Standpipes	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,241,759	1,243,057
22	101343 Transmission and Distribution Mains	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	12,697,344	13,148,845	13,146,522	13,146,522	13,946,093	12,861,864
23	101345 Services	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,305,726	4,464,491	4,464,491	4,464,491	4,464,538	4,352,034
24	101346 Meters	634,042	634,042	634,042	634,042	634,042	634,042	634,042	634,042	634,042	740,054	740,054	740,054	740,054	664,962
25	101347 Meter Installations	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519	243,519
26	101348 Hydrants	567,515	567,515	567,515	567,515	567,515	567,515	567,515	567,515	567,515	592,797	592,797	592,797	592,797	574,889
27	101349 Other T&D Plant	72,685	72,685	72,685	72,685	72,685	72,685	72,685	72,685	72,685	98,704	98,704	98,704	98,704	80,273
28	101390 General Structures and Improvements	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808	590,808
29	101391 Office Furniture and Equipment	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398	80,398
30	101391H Computer Equipment - Hardware	535,723	535,723	535,723	535,723	535,723	535,723	535,723	535,723	535,723	544,367	544,367	544,367	522,662	537,339
31	101391S Computer Equipment - Software	40,302	40,302	40,302	40,302	40,302	40,302	40,302	40,302	40,302	45,897	45,897	45,897	45,897	41,934
32	101392 Transportation Equipment	269,359	269,359	269,359	269,359	269,359	269,359	269,359	269,359	269,359	292,784	292,784	292,784	292,784	276,191
33	101393 Stores Equipment	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891	17,891
34	101394 Tools, Shop, and Garage Equipment	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,821	142,771	142,819
35	101395 Laboratory Equipment	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	28,066	27,893
36	101396 Power Operated Equipment	159,347	159,347	159,347	159,347	159,347	159,347	159,347	159,347	159,347	162,947	162,947	162,947	162,947	160,397
37	101397 Communications Equipment	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	287,006	286,990
38	101398 Miscellaneous Equipment	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	33,552	26,780	33,269
39															
40		\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 29,700,590	\$ 31,101,475	\$ 31,136,922	\$ 31,136,922	\$ 32,245,628	\$ 30,162,763

RATE BASE ADDITIONS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 3B  
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Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	<b>Accumulated Depreciation</b>														
4	111001 ACCUM DEPRECIATION - UTILITY PLANT	\$ (7,724,717)	\$ (7,794,274)	\$ (7,863,831)	\$ (7,933,388)	\$ (8,002,945)	\$ (8,072,502)	\$ (8,142,059)	\$ (8,211,616)	\$ (8,281,173)	\$ (8,337,291)	\$ (8,409,709)	\$ (8,482,125)	\$ (8,548,423)	\$ (8,138,957)
5	111002 ACCUM DEPR (PROCEEDS FROM SALE)	-	-	-	-	-	-	-	-	-	-	(4,259)	(4,259)	(4,259)	(887)
6	111010 ACCUM DEPR (A/D RETIREMENTS)	-	-	-	-	-	-	-	-	-	84,755	84,755	84,755	129,526	26,586
7		<u>\$ (7,724,717)</u>	<u>\$ (7,794,274)</u>	<u>\$ (7,863,831)</u>	<u>\$ (7,933,388)</u>	<u>\$ (8,002,945)</u>	<u>\$ (8,072,502)</u>	<u>\$ (8,142,059)</u>	<u>\$ (8,211,616)</u>	<u>\$ (8,281,173)</u>	<u>\$ (8,252,536)</u>	<u>\$ (8,329,212)</u>	<u>\$ (8,401,629)</u>	<u>\$ (8,423,156)</u>	<u>\$ (8,113,258)</u>
8															
9	Net Utility Plant	<u>\$ 21,975,874</u>	<u>\$ 21,906,317</u>	<u>\$ 21,836,760</u>	<u>\$ 21,767,203</u>	<u>\$ 21,697,646</u>	<u>\$ 21,628,089</u>	<u>\$ 21,558,532</u>	<u>\$ 21,488,975</u>	<u>\$ 21,419,418</u>	<u>\$ 22,848,939</u>	<u>\$ 22,807,710</u>	<u>\$ 22,735,293</u>	<u>\$ 23,822,472</u>	<u>\$ 22,049,504</u>
10															
11	<b>ADD:</b>														
12															
13	<b>Materials &amp; Supplies</b>														
14	154000 SUPPLIES INVENTORY	\$ 139,955	\$ 143,008	\$ 147,818	\$ 224,336	\$ 196,420	\$ 212,437	\$ 217,573	\$ 159,448	\$ 149,761	\$ 128,600	\$ 117,311	\$ 125,655	\$ 126,656	\$ 162,973
15	154001 CHEMICALS	-	-	-	-	-	-	-	(20,500)	(11,622)	-	-	-	-	(2,677)
16	154002 SUPPLIES INVENTORY	-	-	-	-	-	-	-	-	-	(19,590)	(20,791)	(23,655)	(26,834)	(6,454)
17	390154 INVENTORY MIRGRATION ACCOUNT	18,201	18,201	18,201	18,201	23,840	23,840	23,840	23,840	-	-	-	-	-	13,255
18		<u>\$ 158,155</u>	<u>\$ 161,209</u>	<u>\$ 166,019</u>	<u>\$ 242,537</u>	<u>\$ 220,260</u>	<u>\$ 236,277</u>	<u>\$ 241,413</u>	<u>\$ 162,788</u>	<u>\$ 138,139</u>	<u>\$ 109,011</u>	<u>\$ 96,520</u>	<u>\$ 102,000</u>	<u>\$ 99,823</u>	<u>\$ 167,097</u>
19															
20	<b>Prepayments</b>														
21	165000 MISC PREPAYMENTS	\$ (529)	\$ (1,120)	\$ 3,039	\$ 2,424	\$ 16,808	\$ 16,192	\$ 15,577	\$ 14,961	\$ 15,806	\$ 16,281	\$ 15,638	\$ 15,021	\$ 19,518	\$ 11,677
22	165002 PREPAID PROPERTY TAXES	(10,923)	(39,651)	(67,268)	49,913	23,741	(2,430)	(11,229)	(37,401)	(22,648)	45,372	19,797	(5,778)	(31,293)	(5,724)
23	165003 PREPAID INSURANCE	-	-	-	-	-	-	-	-	-	6,379	12,312	15,415	20,251	3,686
24	165004 PREPAID MAINTENANCE CONTRACTS	3,066	7,598	2,385	2,044	1,703	1,363	1,022	681	341	-	4,122	8,919	3,373	2,783
25	165005 PREPAID DPUC ASSESSMENT	2,722	1,814	906	(3)	(911)	(1,820)	9,114	8,088	7,062	6,036	5,010	3,984	2,858	3,510
26	165009 PREPAID D&O INSURANCE	-	-	-	-	-	-	-	-	-	-	(282)	(564)	(646)	(106)
27	165011 PREPAID BOND TRUSTEE FEES	752	585	418	251	84	(83)	1,905	1,738	1,571	1,404	1,237	1,070	903	917
28		<u>\$ (4,912)</u>	<u>\$ (30,774)</u>	<u>\$ (60,520)</u>	<u>\$ 54,629</u>	<u>\$ 41,425</u>	<u>\$ 13,222</u>	<u>\$ 16,389</u>	<u>\$ (11,932)</u>	<u>\$ 2,132</u>	<u>\$ 75,472</u>	<u>\$ 57,834</u>	<u>\$ 38,067</u>	<u>\$ 14,864</u>	<u>\$ 16,743</u>
29															
30	<b>Deferred Expenses (net of amortization)</b>														
31															
32	186015 Deferred Program Maintenance Costs	\$ 361,250	\$ 356,653	\$ 352,055	\$ 347,457	\$ 342,860	\$ 338,262	\$ 333,665	\$ 329,067	\$ 324,469	\$ 319,872	\$ 315,274	\$ 310,677	\$ 306,079	\$ 333,665
33	186023 Deferred Additional Security Costs	50,055	49,608	49,162	48,715	48,268	47,821	47,374	46,927	46,480	46,033	45,586	45,139	44,692	47,374
34	186032 Deferred Rate Case- AW Cos	60,637	54,675	48,713	42,751	36,789	30,827	24,583	24,167	23,750	23,333	22,917	22,500	22,083	33,030
35	186036 Deferred Water Restriction Costs	20,191	20,010	19,830	19,650	19,470	19,289	19,109	18,929	18,749	18,568	18,388	18,208	18,027	19,109
36		<u>\$ 492,133</u>	<u>\$ 480,946</u>	<u>\$ 469,760</u>	<u>\$ 458,573</u>	<u>\$ 447,387</u>	<u>\$ 436,199</u>	<u>\$ 424,731</u>	<u>\$ 413,448</u>	<u>\$ 402,165</u>	<u>\$ 390,881</u>	<u>\$ 379,598</u>	<u>\$ 368,315</u>	<u>\$ 357,032</u>	<u>\$ 433,178</u>
37															
38	<b>Working Capital Allowance</b>	<u>\$ 198,016</u>	<u>\$ 199,239</u>	<u>\$ 200,421</u>	<u>\$ 199,921</u>	<u>\$ 201,692</u>	<u>\$ 201,463</u>	<u>\$ 202,421</u>	<u>\$ 201,629</u>	<u>\$ 199,503</u>	<u>\$ 190,470</u>	<u>\$ 192,255</u>	<u>\$ 192,409</u>	<u>\$ 190,568</u>	<u>\$ 197,976</u>
39															
40	<b>Total Additions to Rate Base</b>	<u>\$ 843,393</u>	<u>\$ 810,620</u>	<u>\$ 775,660</u>	<u>\$ 955,660</u>	<u>\$ 910,765</u>	<u>\$ 887,161</u>	<u>\$ 884,954</u>	<u>\$ 771,574</u>	<u>\$ 753,222</u>	<u>\$ 782,759</u>	<u>\$ 748,774</u>	<u>\$ 728,999</u>	<u>\$ 696,135</u>	<u>\$ 814,994</u>
41															

RATE BASE DEDUCTIONS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 3C  
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Line No.	Description	March-07	April-07	May-07	June-07	July-07	August-07	September-07	October-07	November-07	December-07	January-08	February-08	March-08	13 Month Average
1															
2															
3	DEDUCT:														
4															
5	<u>Customer Advances</u>														
6															
7	252000 Customer Advances - Deposit	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (11,385)	\$ (2,000)	\$ (2,000)	\$ (2,000)	\$ (2,000)	\$ (2,000)	\$ (7,866)
8															
9	<u>Contributions in Aid of Construction (CIAC)</u>														
10															
11	271000 Expired Customer Advances	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,680,916)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,690,300)	\$ (2,684,435)
12	272000 Amort Contrib. in Aid of Construction	260,852	263,890	266,928	269,967	273,005	276,043	279,082	282,120	285,159	288,197	291,247	294,297	297,347	279,086
13		\$ (2,420,064)	\$ (2,417,026)	\$ (2,413,988)	\$ (2,410,949)	\$ (2,407,911)	\$ (2,404,872)	\$ (2,401,834)	\$ (2,398,796)	\$ (2,405,142)	\$ (2,402,103)	\$ (2,399,053)	\$ (2,396,003)	\$ (2,392,953)	\$ (2,405,349)
14															
15	<u>Deferred Taxes</u>														
16															
17	186901 UNFUND DEFERRED ASSET - FAS 109	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472	\$ 472
18	186950 Regulatory Asset - Recov Income Tax	986,988	986,988	986,988	986,988	986,988	986,988	986,988	986,988	986,988	962,579	962,579	962,579	962,579	979,869
19	186951 Regulatory Asset - Other	148	148	148	148	148	148	148	148	148	148	148	148	148	148
20	186952 Liab for Excess Def IT	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(254,945)	(248,885)	(248,885)	(248,885)	(248,885)	(253,178)
21	186953 Deficit Def Income Tax	23,053	23,053	23,053	23,053	23,053	23,053	23,053	23,053	23,053	22,505	22,505	22,505	22,505	22,893
22	186954 Liab for Excess DIT - State	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(73,335)	(71,895)	(71,895)	(71,895)	(71,895)	(72,915)
23	186955 Liab for 3% ITC	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,904)	(5,676)	(5,676)	(5,676)	(5,676)	(5,838)
24	186956 Liab for 4% ITC	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(3,007)	(2,837)	(2,837)	(2,837)	(2,837)	(2,957)
25	186957 Liab for 10% ITC	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(105,139)	(102,590)	(102,590)	(102,590)	(102,590)	(104,395)
26	282001 Deferred Income Taxes - ACRS Deprec.	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)	(465,630)
27	283004 Deferred Taxes - FAS 109	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)	(2,063,941)
28	283005 Deferred Taxes - Accelerated Deprec.	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)	(156,563)
29	283009 Current Year Deferred Provision	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	(2,000)	20,000	20,000	24,000	25,000	(9,708)
30	283015 Deferred Taxes - "A" Reserves	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697	37,697
31	283016 Deferred ITC	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(236,550)	(230,478)	(230,478)	(230,478)	(230,478)	(234,779)
32		\$ (2,318,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,340,657)	\$ (2,305,095)	\$ (2,305,095)	\$ (2,301,095)	\$ (2,300,095)	\$ (2,328,826)
33															
34	Total Deductions from Rate Base	\$ (4,750,106)	\$ (4,769,088)	\$ (4,766,030)	\$ (4,762,991)	\$ (4,759,953)	\$ (4,756,914)	\$ (4,753,876)	\$ (4,750,838)	\$ (4,747,798)	\$ (4,709,198)	\$ (4,706,148)	\$ (4,699,098)	\$ (4,695,048)	\$ (4,742,041)
35															
36	Total Rate Base	\$ 18,069,161	\$ 17,947,869	\$ 17,846,410	\$ 17,959,872	\$ 17,848,458	\$ 17,758,336	\$ 17,689,610	\$ 17,509,711	\$ 17,424,842	\$ 18,922,501	\$ 18,850,337	\$ 18,765,195	\$ 19,823,559	\$ 18,122,458
37															
38															
39															
40															

WORKING CAPITAL

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 3D  
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Line No.	Description	Mar-06	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	13 Mo. Average
1																
2	Monthly O&M Expenses															
3	Apr-05	\$ 159,955														
4	May-05	142,610														
5	Jun-02	126,521														
6	Jul-05	160,442														
7	Aug-05	162,079														
8	Sep-05	208,535														
9	Oct-05	150,354														
10	Nov-05	167,128														
11	Dec-05	133,200														
12	Jan-06	161,513														
13	Feb-06	206,299														
14	Mar-06	168,653														
15	Apr-06	\$ 171,434														
16	May-06	\$ 192,401	\$ 192,401													
17	Jun-06	198,734	198,734	\$ 198,734												
18	Jul-06	193,235	193,235	193,235	\$ 193,235											
19	Aug-06	194,740	194,740	194,740	194,740	\$ 194,740										
20	Sep-06	194,814	194,814	194,814	194,814	194,814	\$ 194,814									
21	Oct-06	208,081	208,081	208,081	208,081	208,081	208,081	\$ 208,081								
22	Nov-06	215,959	215,959	215,959	215,959	215,959	215,959	215,959	\$ 215,959							
23	Dec-06	269,449	269,449	269,449	269,449	269,449	269,449	269,449	269,449	\$ 269,449						
24	Jan-07	159,562	159,562	159,562	159,562	159,562	159,562	159,562	159,562	159,562	\$ 159,562					
25	2/29/2007	232,927	232,927	232,927	232,927	232,927	232,927	232,927	232,927	232,927	232,927	\$ 232,927				
26	Mar-07	234,001	234,001	234,001	234,001	234,001	234,001	234,001	234,001	234,001	234,001	234,001	\$ 234,001			
27	Apr-07		186,650	186,650	186,650	186,650	186,650	186,650	186,650	186,650	186,650	186,650	186,650	\$ 186,650		
28	May-07		207,124	207,124	207,124	207,124	207,124	207,124	207,124	207,124	207,124	207,124	207,124	207,124	\$ 207,124	
29	Jun-07			192,505	192,505	192,505	192,505	192,505	192,505	192,505	192,505	192,505	192,505	192,505	192,505	\$ 192,505
30	Jul-07				215,292	215,292	215,292	215,292	215,292	215,292	215,292	215,292	215,292	215,292	215,292	\$ 215,292
31	Aug-07					191,883	191,883	191,883	191,883	191,883	191,883	191,883	191,883	191,883	191,883	\$ 191,883
32	Sep-07						206,743	206,743	206,743	206,743	206,743	206,743	206,743	206,743	206,743	\$ 206,743
33	Oct-07							198,218	198,218	198,218	198,218	198,218	198,218	198,218	198,218	\$ 198,218
34	Nov-07								189,494	189,494	189,494	189,494	189,494	189,494	189,494	\$ 189,494
35	Dec-07									156,985	156,985	156,985	156,985	156,985	156,985	\$ 156,985
36	Jan-08										181,784	181,784	181,784	181,784	181,784	\$ 181,784
37	Feb-08											234,841	234,841	234,841	234,841	\$ 234,841
38	Mar-08														211,081	\$ 211,081
39																
40	Total O&M	\$ 1,947,289	\$ 2,465,337	\$ 2,480,553	\$ 2,495,276	\$ 2,489,047	\$ 2,511,104	\$ 2,508,247	\$ 2,520,176	\$ 2,510,313	\$ 2,483,848	\$ 2,371,384	\$ 2,393,606	\$ 2,395,520	\$ 2,372,600	\$ 2,464,837
41																
42	Rate <sup>1</sup>	8.03%	8.03%												8.03%	8.03%
43																
44	Working Capita	\$ 156,407	\$ 198,016												\$ 190,568	\$ 197,976
45																
46																
47	1.) Rate based on lag study found in Standard Filing Requirements, response #28.															
48																
49																
50																

**OVERALL RATE OF RETURN**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4  
Page 1 of 1

Line No.	Description	Component Ratio	Component Cost Rate	Weighted Average Cost Rate
1				
2		<i>Capital Structure as of 3/31/2008</i>		
3				
4				
5	Long Term Debt	58.20%	6.66%	3.88%
6				
7	Preferred Stock	0.01%	6.00%	0.00%
8				
9	Common Equity	41.79%	10.23%	4.28%
10				
11	<u>Total</u>	<u>100.00%</u>		<u>8.16%</u>
12				
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**CAPITAL STRUCTURE FOR RATEMAKING PURPOSES**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4A  
Page 1 of 1

Line No.	Description	3/31/2008	Adj	Adj 3/31/2008	Ratio	Component Cost	Weighted Cost
1							
2							
3							
4	Inter-Company Debt	\$ 2,600,000		\$ 2,600,000	13.16%	5.81%	0.77%
5	Long Term Debt	8,900,000		8,900,000	45.04%	6.91%	3.11%
6	Total Debt	\$ 11,500,000		\$ 11,500,000	58.20%	6.66%	3.88%
7							
8							
9	Preferred Stock	\$ 2,800		\$ 2,800	0.01%	6.00%	0.00%
10							
11	Stockholder's Equity:						
12	Common Stock	\$ 2,187,075					
13	Paid in Capital	3,558,190					
14	Contributed Capital	480,250					
15	Retained Earnings	2,030,563					
16	Common Equity	\$ 8,256,078	\$ -	\$ 8,256,078	41.79%	10.23%	4.28%
17							
18							
19							
20	<b>Total Capitalization</b>	<b>\$ 19,758,878</b>	<b>\$ -</b>	<b>\$ 19,758,878</b>	<b>100.00%</b>		<b>8.16%</b>
21							
22							
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### CAPITALIZATION RATIOS

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4C  
Page 1 of 1

Line No.	Description	Pro Forma	31-Mar 2008	31-Dec 2007	31-Dec 2006	31-Dec 2005	31-Dec 2004	31-Dec 2003
1								
2								
3	Inter-Company Debt	13.16%	13.16%	9.84%	9.05%	5.03%	31.55%	39.41%
4								
5	Long Term Debt	45.04%	45.04%	46.08%	47.37%	49.72%	28.58%	28.66%
6								
7	Preferred Stock	0.01%	0.01%	0.01%	0.01%	0.02%	0.02%	0.05%
8								
9	Common Stock	41.79%	41.79%	44.07%	43.57%	45.23%	39.85%	31.88%
10								
11								
12								
13		<u>100.00%</u>						
14								
15								
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**HISTORICAL CAPITAL STRUCTURE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4B  
Page 1 of 1

Line No.	Description	Pro Forma	31-Mar 2008	31-Dec 2007	31-Dec 2006	31-Dec 2005	31-Dec 2004	31-Dec 2003
1								
2								
3	Inter-Company Debt	\$ 2,600,000	\$ 2,600,000	\$ 1,900,000	\$ 1,700,000	\$ 900,000	\$ 5,300,000	\$ 6,600,000
4								
5	Long Term Debt	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	4,800,000	4,800,000
6								
7	Preferred Stock	2,800	2,800	2,800	2,800	2,800	3,000	7,600
8								
9	Common Stock	8,256,078	8,256,078	8,513,450	8,183,710	8,096,658	6,694,805	5,340,260
10								
11								
12								
13		<u>\$ 19,758,878</u>	<u>\$ 19,758,878</u>	<u>\$ 19,316,250</u>	<u>\$ 18,786,510</u>	<u>\$ 17,899,458</u>	<u>\$ 16,797,805</u>	<u>\$ 16,747,860</u>
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**WEIGHTED AVERAGE COST OF LONG TERM DEBT**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4D  
Page 1 of 1

Line No.	Issue	Issuance Date	Face Value	Financing Costs	Net Proceeds Ratio	Amount Outstanding	Coupon Rate	Annual Interest	Cost Rate	Annual Cost	Debt Weighting	Weighted Average Cost Rate
1												
2												
3												
4	GM Bond 7.71% Series (30 yr)	Nov-93	\$ 3,000,000	\$ 55,296	98.2%	\$ 3,000,000	7.71%	\$ 231,300	7.85%	\$ 235,643	33.71%	2.65%
5	6.21% Private Placement (30 yr)	Aug-05	5,900,000	200,891	96.6%	5,900,000	6.21%	366,390	6.43%	379,305	66.29%	4.26%
6												
7												
8												
9						<u>\$ 8,900,000</u>				<u>\$ 614,948</u>		<u>6.91%</u>
10												
11												
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**WEIGHTED AVERAGE COST OF SHORT TERM DEBT**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4E  
Page 1 of 1

Line No.	Issue	Issuance Date	Face Value	Financing Costs	Net Proceeds Ratio	Amount Outstanding	Coupon Rate <sup>1</sup>	Annual Interest	Cost Rate	Annual Cost	Debt Weighting	Weighted Average Cost Rate
1												
2						<i>March 31, 2008 per Books</i>						
3												
4												
5	Intercompany Notes Payable	-ongoing-	\$ 2,600,000	-	100.0%	\$ 2,600,000	5.81%	151,060	5.81%	\$ 151,060	N/A	N/A
6												
7												
8												
9						<u>\$ 2,600,000</u>				<u>\$ 151,060</u>		
10												
11	1. Represents average intercompany borrowing rate charged by Parent											
12												
13												
14												
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**WEIGHTED AVERAGE COST OF PREFERRED STOCK**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 4F  
Page 1 of 1

Line No.	Issue	Issuance Date	Face Value	Financing Costs	Net Proceeds Ratio	Amount Outstanding	Coupon Rate	Annual Interest	Cost Rate	Annual Cost	Debt Weighting	Weighted Average Cost Rate
1												
2												
3												
4	6% Series		\$ 2,800	-	100.0%	\$ 2,800	6.00%	168	6.00%	\$ 168	100.00%	6.00%
5												
6												
7												
8												
9						<u>2,800</u>				<u>\$ 168</u>		<u>6.00%</u>
10												
11												
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**BILL ANALYSIS - TOTAL METERED**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5A  
Page 1 of 1

Line No.	Class/Description	Pro Forma at Present Rates			Pro Forma at Proposed Rates			Dollar Change	Total Revenue % Change
		Sales (100CF)	Total Revenue	% Revenue to Total	Sales (100CF)	Total Revenue	% Revenue to Total		
1	Quarterly and Monthly Billing:								
2	Residential	616,885	\$ 2,769,922	55.29%	616,885	\$ 3,332,555	54.94%	\$ 562,632	20.31%
3	Commercial	236,680	897,965	17.92%	236,680	1,117,921	18.43%	219,956	24.50%
4	Industrial	6,005	19,010	0.38%	6,005	23,085	0.38%	4,075	21.44%
5	Other Public Authority	9,528	47,015	0.94%	9,528	58,010	0.96%	10,995	23.38%
6	Public Fire		602,578	12.03%		730,961	12.05%	128,384	21.31%
7	Private Fire		223,467	4.46%		271,078	4.47%	47,611	21.31%
8									
9	Seasonal Billing:								
10	Residential	26,158	227,173	4.53%	26,158	275,508	4.54%	48,334	21.28%
11	Commercial	18,239	90,288	1.80%	18,239	109,507	1.81%	19,219	21.29%
12	Public Authority	5,390	30,193	0.60%	5,390	36,620	0.60%	6,428	21.29%
13	Total		\$ 4,907,610	97.96%		\$ 5,955,245	98.18%	\$ 1,047,634	21.35%
14									
15	Pro Forma Other								
16	Late Payment Fee		\$ 38,610	0.77%		\$ 46,836	0.77%	\$ 8,226	21.31%
	Antenna Rental Income		47,709	0.95%		47,709	0.79%	-	0.00%
17	Misc. Operating Revenues		15,985	0.32%		15,985	0.26%	-	0.00%
18			\$ 102,304	2.04%		\$ 110,530	1.82%	\$ 8,226	8.04%
19									
20									
21	Pro Forma Total								
22	Operating Revenues		\$ 5,009,914	100.00%		\$ 6,065,774	100.00%	\$ 1,055,860	21.08%
23									
24									
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**BILL ANALYSIS - RESIDENTIAL**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5B  
Page 1 of 1

Line No.	Class/Description	Customer Meter Billings	Sales (100CF)	Current Rate	Total Revenue	% Revenue To Total	Sales (100CCF)	Proposed Rate	Total Revenue	% Revenue To Total	Dollar Change	Total Revenue % Change
1												
2	Residential:											
3	<b>Minimum Charge:</b>											
4	5/8" Monthly	-		10.46	-	0.00%		12.69	-	0.00%	-	0.00%
5	5/8" Quarterly	26,996.0		31.38	847,134	28.27%		38.07	1,027,738	28.48%	180,603	21.32%
6	3/4" Monthly	-		15.69	-	0.00%		19.03	-	0.00%	-	0.00%
7	3/4" Quarterly	-		47.07	-	0.00%		57.09	-	0.00%	-	0.00%
8	1" Monthly	-		26.15	-	0.00%		31.72	-	0.00%	-	0.00%
9	1" Quarterly	479.0		78.45	37,578	1.25%		95.16	45,582	1.26%	8,004	21.30%
10	1 1/2" Monthly	-		52.32	-	0.00%		63.47	-	0.00%	-	0.00%
11	1 1/2" Quarterly	68.0		156.96	10,673	0.36%		190.41	12,948	0.36%	2,275	21.31%
12	2" Monthly	-		83.71	-	0.00%		101.54	-	0.00%	-	0.00%
13	2" Quarterly	35.0		251.13	8,790	0.29%		304.62	10,662	0.30%	1,872	21.30%
14												
15												
16												
17												
18												
19	<b>Volumetric Charges</b>											
20												
21	<u>Monthly Accounts:</u>											
22	> First 5 CCF		-	3.041	-	0.00%	-	3.447	-	0.00%	-	
23	> Over 5 CCF		-	3.041	-	0.00%	-	3.852	-	0.00%	-	
24	<u>Quarterly Accounts</u>											
25	> First 15 CCF		321,010	3.041	976,191	32.57%	321,010	3.447	1,106,521	30.67%	130,330	13.35%
26	> Over 15 CCF		295,374	3.041	898,232	29.97%	295,374	3.852	1,137,781	31.53%	239,548	26.67%
27												
28												
29	Credits & Adjustments		501		(7,629)	-0.25%	501		(7,629)	-0.21%	-	0.00%
30	Reconcile to Books		-		(1,047)	-0.03%	-		(1,047)	-0.03%	-	0.00%
31												
32												
33	Per Bill Analysis		<u>616,885</u>		<u>2,769,922</u>	<u>92.42%</u>	<u>616,885</u>		<u>3,332,555</u>	<u>92.36%</u>	<u>562,632</u>	<u>20.31%</u>
34												
35	Seasonal Yield (See 5F)		26,158		227,173	7.58%	26,158		275,508	7.64%		
36												
37	Total		<u>643,043</u>		<u>2,997,096</u>	<u>100.00%</u>	<u>643,043</u>		<u>3,608,063</u>	<u>100.00%</u>		
38												
39												
40												

**BILL ANALYSIS COMMERCIAL**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5C  
Page 1 of 1

Line No.	Class/Description	Customer Meter Billings	Pro Forma at Present Rates			Pro Forma at Proposed Rates				Dollar Change	Total Revenue % Change	
			Sales (100CF)	Current Rate	Total Revenue	% Revenue To Total	Sales (100CF)	Proposed Rate	Total Revenue			% Revenue To Total
1												
2	Commercial:											
3	<b>Minimum Charge:</b>											
4	5/8" Monthly	169.0		10.46	1,768	0.18%	12.69	2,145	0.17%	377	21.32%	
5	5/8" Quarterly	1,305.0		31.38	40,951	4.14%	38.07	49,681	4.05%	8,730	21.32%	
6	3/4" Monthly	-		15.69	-	0.00%	19.03	-	0.00%	-	0.00%	
7	3/4" Quarterly	-		47.07	-	0.00%	57.09	-	0.00%	-	0.00%	
8	1" Monthly	184.0		26.15	4,812	0.49%	31.72	5,836	0.48%	1,025	21.30%	
9	1" Quarterly	254.0		78.45	19,926	2.02%	95.16	24,171	1.97%	4,244	21.30%	
10	1 1/2" Mthly	133.0		52.32	6,959	0.70%	63.47	8,442	0.69%	1,483	21.31%	
11	1 1/2" Qtrly	58.0		156.96	9,104	0.92%	190.41	11,044	0.90%	1,940	21.31%	
12	2" Monthly	871.0		83.71	72,911	7.38%	101.54	88,441	7.21%	15,530	21.30%	
13	2" Quarterly	94.0		251.13	23,606	2.39%	304.62	28,634	2.33%	5,028	21.30%	
14												
15												
16												
17												
18												
19	<b>Volumetric Charges</b>											
20												
21	<u>Monthly Accounts:</u>											
22	> First 5 CCF		6,307	3.041	19,180	1.94%	6,307	3,447	21,740	1.77%	2,561	13.35%
23	> Over 5 CCF		143,394	3.041	436,061	44.12%	143,394	3,852	552,354	45.00%	116,293	26.67%
24	<u>Quarterly Accounts</u>											
25	> First 15 CCF		19,197	3.041	58,378	5.91%	19,197	3,447	66,172	5.39%	7,794	13.35%
26	> Over 15 CCF		67,758	3.041	206,052	20.85%	67,758	3,852	261,004	21.26%	54,952	26.67%
27												
28												
29	Credits & Adjustments		24		(1,426)	-0.14%	24		(1,426)	-0.12%	-	0.00%
30	Reconcile to Books		-		(317)	-0.03%	-		(317)	-0.03%	-	0.00%
31												
32												
33	Per Bill Analysis		<u>236,680</u>		<u>897,965</u>	<u>90.86%</u>	<u>236,680</u>		<u>1,117,921</u>	<u>91.08%</u>	<u>219,956</u>	<u>24.50%</u>
34												
35	Seasonal Yield (See 5F)		18,239		90,288	9.14%	18,239		109,507	8.92%		
36												
37	Total		<u>254,919</u>		<u>988,252</u>	<u>100.00%</u>	<u>254,919</u>		<u>1,227,428</u>	<u>100.00%</u>		
38												
39												
40												

**BILL ANALYSIS - INDUSTRIAL**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5D  
Page 1 of 1

Line No.	Class/Description	Customer Meter Billings	Pro Forma at Present Rates			Pro Forma at Proposed Rates				Dollar Change	Total Revenue % Change	
			Sales (100CF)	Current Rate	Total Revenue	% Revenue To Total	Sales (100CF)	Proposed Rate	Total Revenue			% Revenue To Total
1												
2	Industrial:											
3	<b>Minimum Charge:</b>											
4	5/8" Monthly	-		10.46	-	0.00%	12.69	-	0.00%	-	0.00%	
5	5/8" Quarterly	-		31.38	-	0.00%	38.07	-	0.00%	-	0.00%	
6	3/4" Monthly	-		15.69	-	0.00%	19.03	-	0.00%	-	0.00%	
7	3/4" Quarterly	-		47.07	-	0.00%	57.09	-	0.00%	-	0.00%	
8	1" Monthly	11.0		26.15	288	1.51%	31.72	349	1.51%	61	21.30%	
9	1" Quarterly	-		78.45	-	0.00%	95.16	-	0.00%	-	0.00%	
10	1 1/2" Monthly	11.0		52.32	576	3.03%	63.47	698	3.02%	123	21.31%	
11	1 1/2" Quarterly	-		156.96	-	0.00%	190.41	-	0.00%	-	0.00%	
12	2" Monthly	-		83.71	-	0.00%	101.54	-	0.00%	-	0.00%	
13	2" Quarterly	-		251.13	-	0.00%	304.62	-	0.00%	-	0.00%	
14												
15												
16												
17												
18												
19	<b>Volumetric Charges</b>											
20												
21	<u>Monthly Accounts:</u>											
22	> Per CCF		6,005	3,041	18,261	96.06%	6,005	3,689	22,152	95.96%	3,891	21.31%
23												
24	<u>Quarterly Accounts</u>											
25	> Per CCF		-	3,041	-	0.00%	-	3,689	-	0.00%	-	
26												
27												
28												
29	Credits & Adjustments		-	-	-	0.00%	-	-	-	0.00%	-	0.00%
30	Reconcile to Books		-	-	(115)	-0.60%	-	(115)	(115)	-0.50%	-	0.00%
31												
32												
33	Per Bill Analysis		<u>6,005</u>		<u>19,010</u>	<u>100.00%</u>	<u>6,005</u>		<u>23,085</u>	<u>100.00%</u>	<u>4,075</u>	<u>21.44%</u>
34												
35	Seasonal Yield (See 5F)											
36												
37	Total		<u>6,005</u>		<u>19,010</u>	<u>100.00%</u>	<u>6,005</u>		<u>23,085</u>	<u>100.00%</u>		
38												
39												
40												

**BILL ANALYSIS - PUBLIC AUTHORITY**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5E  
Page 1 of 1

Line No.	Class/Description	Customer Meter Billings	Pro Forma at Present Rates			Pro Forma at Proposed Rates				Dollar Change	Total Revenue % Change	
			Sales (100CF)	Current Rate	Total Revenue	% Revenue To Total	Sales (100CF)	Proposed Rate	Total Revenue			% Revenue To Total
1												
2	Other Public Authority											
3	<b>Minimum Charge:</b>											
4	5/8" Monthly	-		10.46	-	0.00%	12.69	-	0.00%	-	0.00%	
5	5/8" Quarterly	65.0		31.38	2,040	2.64%	38.07	2,475	2.61%	435	21.32%	
6	3/4" Monthly	-		15.69	-	0.00%	19.03	-	0.00%	-	0.00%	
7	3/4" Quarterly	-		47.07	-	0.00%	57.09	-	0.00%	-	0.00%	
8	1" Monthly	11.0		26.15	288	0.37%	31.72	349	0.37%	61	21.30%	
9	1" Quarterly	16.0		78.45	1,255	1.63%	95.16	1,523	1.61%	267	21.30%	
10	1 1/2" Monthly	23.0		52.32	1,203	1.56%	63.47	1,460	1.54%	256	21.31%	
11	1 1/2" Quarterly	4.0		156.96	628	0.81%	190.41	762	0.80%	134	21.31%	
12	2" Monthly	139.0		83.71	11,636	15.07%	101.54	14,114	14.91%	2,478	21.30%	
13	2" Quarterly	4.0		251.13	1,005	1.30%	304.62	1,218	1.29%	214	21.30%	
14												
15												
16												
17												
18												
19	<b>Volumetric Charges</b>											
20												
21	<u>Monthly Accounts:</u>											
22	> First 5 CCF		809	3.041	2,460	3.19%	809	3.447	2,789	2.95%	328	13.35%
23	> Over 5 CCF		7,092	3.041	21,567	27.93%	7,092	3.852	27,318	28.87%	5,752	26.67%
24	<u>Quarterly Accounts</u>											
25	> First 15 CCF		624	3.041	1,898	2.46%	624	3.447	2,151	2.27%	253	13.35%
26	> Over 15 CCF		1,005	3.041	3,056	3.96%	1,005	3.852	3,871	4.09%	815	26.67%
27												
28												
29	Credits & Adjustments		(2)		(101)	-0.13%	(2)		(101)	-0.11%	-	0.00%
30	Reconcile to Books		-		81	0.11%	-		81	0.09%	-	0.00%
31												
32												
33	Per Bill Analysis		<u>9,528</u>		<u>47,015</u>	<u>60.89%</u>	<u>9,528</u>		<u>58,010</u>	<u>61.30%</u>	<u>10,995</u>	<u>23.38%</u>
34												
35	Seasonal Yield (See 5F)		5,390		30,193	39.11%	5,390		36,620	38.70%		
36												
37	Total		<u>14,918</u>		<u>77,208</u>	<u>100.00%</u>	<u>14,918</u>		<u>94,630</u>	<u>100.00%</u>		
38												
39												
40												

**BILL ANALYSIS - SEASONAL**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5F  
Page 1 of 1

Line No.	Class/Description	Customer Meter Billings	Pro Forma at Present Rates			Sales (100CF)	Pro Forma at Proposed Rates			Dollar Change	Total Revenue % Change	
			Sales (100CF)	Current Rate	Total Revenue		% Revenue To Total	Proposed Rate	Total Revenue			% Revenue To Total
1	Seasonal Residential:											
2	<b>Minimum Charge:</b>											
3	5/8"	789		156.97	123,849		190.35	150,186	54.51%	26,337	21.27%	
4	3/4"	-		235.38	-		285.45	-	0.00%	-	0.00%	
5	1'	7		392.35	2,746		475.80	3,331	1.21%	584	21.27%	
6	1 1/2"	1		784.74	785		952.05	952	0.35%	167	21.32%	
7	2"	1		1255.69	1,256		1,523.10	1,523	0.55%	267	21.30%	
8	<b>Volumetric Charges</b>											
9	> Per 100 CF		26,158	3.767	98,537	43.38%	26,158	4.569	119,516	43.38%	20,979	21.29%
10	Total Seasonal Residential				227,173			275,508				
11	Bill Correction Adjustments											
12	Total Revenue				227,173	100.00%		275,508	100.00%			
13												
14	Seasonal Commercial											
15	<b>Minimum Charge:</b>											
16	5/8"	54		156.97	8,476	9.39%	190.35	10,279	9.39%	1,803	21.27%	
17	3/4"	-		235.38	-	0.00%	285.45	-	0.00%	-	0.00%	
18	1'	23		392.35	9,024	9.99%	475.80	10,943	9.99%	1,919	21.27%	
19	1 1/2"	2		784.74	1,569	1.74%	952.05	1,904	1.74%	335	21.32%	
20	2"	2		1255.69	2,511	2.78%	1,523.10	3,046	2.78%	535	21.30%	
21	<b>Volumetric Charges</b>											
22	> Per 100 CF		18,239	3.767	68,706	76.10%	18,239	4.569	83,334	76.10%	14,628	21.29%
23	Total Seasonal Commercial				90,288			109,507				
24	Bill Correction Adjustments											
25	Total Revenue				90,288	100.00%		109,507	100.00%			
26												
27	Seasonal Other Public Authority:											
28	<b>Minimum Charge:</b>											
29	5/8"	13		156.97	2,041	6.76%	190.35	2,475	6.76%	434	21.27%	
30	3/4"	-		235.38	-	0.00%	285.45	-	0.00%	-	0.00%	
31	1'	4		392.35	1,569	5.20%	475.80	1,903	5.20%	334	21.27%	
32	1 1/2"	-		784.74	-	0.00%	952.05	-	0.00%	-	0.00%	
33	2"	5		1255.69	6,278	20.79%	1,523.10	7,616	20.80%	1,337	21.30%	
34	<b>Volumetric Charges</b>											
35	> Per 100 CF		5,390	3.767	20,304	67.25%	5,390	4.569	24,627	67.25%	4,323	21.29%
36	Total Seasonal Other Public Authority				30,193			36,620				
37	Bill Correction Adjustments											
38	Total Revenue				30,193	100.00%		36,620	100.00%			
39												
40												

**BILL ANALYSIS - PUBLIC FIRE SERVICE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5G  
Page 1 of 1

Line No.	Location	Number of Hydrants	Pro Forma - Present Rates		Pro Forma Proposed Rates		Dollar Change	Total Revenue % Change
			Annual Rates	Revenue	Annual Rates	Revenue		
1								
2	<b>Public Fire Service</b>							
3								
4	Town of Hampton	268	1,252.76	\$ 335,740	1,519.67	\$ 407,272	\$ 71,532	21.31%
5								
6	Town of North Hampton	147	1,252.76	184,156	1,519.67	223,391	39,236	21.31%
7								
8	Rye Beach Precinct	24	1,252.76	30,066	1,519.67	36,472	6,406	21.31%
9								
10	Jenness Beach Precinct	42	1,252.76	52,616	1,519.67	63,826	11,210	21.31%
11								
12								
13	Total Public Fire	<u>481</u>		<u>\$ 602,578</u>		<u>\$ 730,961</u>	<u>\$ 128,384</u>	<u>21.31%</u>
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**BILL ANALYSIS - PRIVATE FIRE SERVICE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5H  
Page 1 of 1

Line No.	Location	Number of Hydrants	Pro Forma - Present Rates		Pro Forma Proposed Rates		Dollar Change	Total Revenue % Change
			Annual Rates	Revenue	Annual Rates	Revenue		
1								
2	<b>Private Fire Service</b>							
3								
4	3" Inch or less	64	295.73 \$	18,927	358.74 \$	22,959	\$ 4,033	21.31%
5								
6	4" Inch	56	503.89	28,218	611.25	34,230	6,012	21.31%
7								
8	6" Inch	110	1,202.14	132,235	1,458.26	160,409	28,173	21.31%
9								
10	8" Inch	14	2,137.62	29,927	2,593.05	36,303	6,376	21.31%
11								
12	10" Inch	-	3,340.95	-	4,052.76	-	-	0.00%
13								
14	12" Inch	3	4,720.25	14,161	5,725.93	17,178	3,017	21.31%
15								
16	Total Private Fire	<u>247</u>		<u>\$ 223,467</u>		<u>\$ 271,078</u>	<u>\$ 47,611</u>	<u>21.31%</u>
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**BILL ANALYSIS - MISCELLANEOUS REVENUES**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 5I  
Page 1 of 1

Line No.	Location	Test Year			Pro Forma at Present Rates			Pro Forma at Proposed Rates			Dollar Change	Total Revenue % Change
		Qty/ Frequency	Annual Rates	Revenue	Qty/ Frequency	Annual Rates	Revenue	Qty/ Frequency	Annual Rates	Revenue		
1												
2	Miscellaneous Revenues											
3												
4	Frozen Meter	-	Actual Cost	-	-	Actual Cost	1,185	-	Actual Cost	1,185	-	
5												
6	Late Payment		5.00%	39,909		5.00%	38,610		5.00%	46,836	8,226	21.31%
7												
8	Bad Check Penalty	-	15.00	-	23	15.00	345	23	15.00	345	-	0.00%
9												
10	After Hours Callout	-	75.00	-	14	75.00	1,050	14	75.00	1,050	-	0.00%
11												
12	Reconnection Fee	-	15.00	-	921	15.00	13,815	921	15.00	13,815	-	0.00%
13												
14	Antenna Lease - I	1	9,056	9,056	-	-	-	-	-	-	-	0.00%
15												
16	Antenna Lease - II	1	22,560	22,560	1	23,709	23,709	1	23,709	23,709	-	0.00%
17												
18	Antenna Lease - III				1	24,000	24,000	1	24,000	24,000	-	0.00%
19												
20	Misc.			(410)			(410)			(410)	-	0.00%
21												
22												
23				<u>71,115</u>			<u>102,304</u>			<u>110,530</u>	<u>8,226</u>	<u>11.57%</u>
24												
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**REVENUE REQUIREMENT FROM STEP INCREASE**

Aquarion Water Company of New Hampshire  
Case No. DW 08-098

Test Year: Twelve Months Ended 03/31/08  
Schedule No. 6  
Page 1 of 1

Line No.	Account Description	Pro Forma 3/31/2008	Proposed Increase	Proposed 3/31/2008
1				
2	Operating Revenues	-	\$ 222,607	\$ 222,607
3				
4	O&M Expenses			-
5	Depreciation	\$ 27,920		27,920
6	Taxes Other	25,742		25,742
7	Income Taxes	(45,707)	90,211	44,505
8	Total Operating Expense	7,955	90,211	98,167
9				
10	Utility Operating Income	\$ (7,955)	\$ 132,395	\$ 124,440
11				
12				
13	Rate Base Investment	\$ 1,525,000		\$ 1,525,000
14				
15				
16				
17				
18	Return on Rate Base	-0.52%		8.16%
19				
20				
21				
22	<u>Tax Calculation</u>			
23	Income before Income Taxes	\$ (53,662)		\$ 168,945
24	Interest Expense	(59,124)		(59,124)
25	State Taxable Income	(112,786)		109,821
26	State Income Tax	(9,587)		9,335
27				
28	Federal Taxable Income	(103,199)		100,486
29	Federal Income Tax	(36,120)		35,170
30				
31	Total Current Income Taxes	(45,707)		44,505
32				
33	Total Income Taxes	\$ (45,707)		\$ 44,505
34				
35				
36				
37				
38				
39				
40				