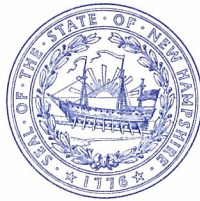


THE STATE OF NEW HAMPSHIRE



PUBLIC UTILITIES COMMISSION

21 S. Fruit Street, Suite 10
Concord, N.H. 03301-2429

CHAIRMAN
Thomas B. Getz

COMMISSIONERS
Clifton C. Below
Amy L. Ignatius

EXECUTIVE DIRECTOR
AND SECRETARY
Debra A. Howland

Tel. (603) 271-2431

FAX (603) 271-3878

TDD Access: Relay NH
1-800-735-2964

Website:
www.puc.nh.gov

December 21, 2011

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 S. Fruit St., Suite 10
Concord, New Hampshire 03301



Re: DW 11-238, Aquarion Water Company of New Hampshire, Inc.
Water Infrastructure and Conservation Adjustment (WICA)
2012 WICA Surcharge and 2012-14 Projects
Recommendation for Approval

Dear Ms. Howland:

On October 27, 2011, Aquarion Water Company of New Hampshire, Inc. (Aquarion) filed its petition for approval of its 2012 WICA surcharge and its proposed 2012-14 capital projects under its WICA tariff provision. The Commission approved the WICA as a pilot program in Order No. 25,019 (September 25, 2009) in docket DW 08-098, Aquarion's last rate case. In November of 2009, Aquarion filed its first proposed list of capital projects for 2010-12 in Docket No. DW 09-211. By Order No. 25,065 (January 15, 2010), the Commission approved Aquarion's WICA budget for 2010 and, on a preliminary basis, Aquarion's schedule of proposed 2011 projects.

In November of 2010, Aquarion filed a request for recovery of its completed 2010 projects and a proposed list of capital projects for 2011-13 in Docket No. DW 10-293. By Order No. 25,186 (December 22, 2010), the Commission approved Aquarion's WICA surcharge for 2011 in the amount of 1.5715 percent. The Commission also approved Aquarion's 2011 projects totaling \$988,012 and, on a preliminary basis, Aquarion's schedule of proposed 2012 projects.

Aquarion's petition in the instant proceeding requests approval of a surcharge to customer bills of 3.7276 percent to reflect continued recovery of its 2010 capital projects as well as recovery of \$939,492 in new 2011 WICA capital spending. These completed 2011 projects include water main replacement on Atlantic Avenue costing \$698,937, replacement of customer meters costing \$135,298, and replacement of services, hydrants,

valves and production meters costing \$105,258. Detailed documentation of these costs was provided to Staff for review. Including return, depreciation expense, and taxes, Aquarion seeks new revenues of \$128,442 in addition to those approved in DW 10-293, for total WICA revenues of \$222,056. Recovery of these revenues would require a surcharge of 3.7276% to customer bills. Aquarion's petition also requests approval of its proposed capital spending for WICA projects in the amount of \$970,960 for 2012. As with its 2011 WICA spending, the majority of this investment is dedicated to the replacement of water main. Aquarion's proposed 2013 capital projects total \$1,021,600, presented at this time for preliminary approval. These various projections and requests in the company's filing were revised slightly during the course of the proceeding as a result of discovery responses, as explained below.

Upon receipt of Aquarion's filing and in accordance with the procedure approved by the Commission in Order No. 25,019, Staff contacted the parties to DW 08-098 including the Office of the Consumer Advocate (OCA), and the Towns of Hampton, North Hampton, and Rye to establish a timeframe to review the filing and submit recommendations to the Commission¹. The OCA indicated that it was unlikely to participate. The Town of Hampton indicated it would be participating, and no response was received from North Hampton or Rye. On November 30, 2011 Staff filed a proposed procedural schedule, which was approved by secretarial letter issued December 7. Staff propounded data requests to Aquarion on November 18, and Aquarion provided its responses on November 30. Those responses are attached to this letter. Staff, Aquarion, and the Town of Hampton met in a technical session on December 7 to review the filing and the discovery materials. Based on these discussions, Staff and Aquarion provide the following recommendation. The Town of Hampton filed its own separate recommendation on December 20.

Staff and Aquarion recommend that the Commission approve a WICA surcharge of 3.7269% to customer bills, for service rendered on and after January 1, 2012. This surcharge is designed to recover \$222,019 in revenues on an annual basis resulting from the completion of WICA eligible projects costing \$1,657,478, the latter number comprised of 2010 projects approved in DW 10-293 and \$939,256 of 2011 projects in the current request. This recommended surcharge is marginally lower than Aquarion proposed in its filing as a result of properly reflecting customer meter replacement costs (response to Staff 1-5). This recommended surcharge would increase the bill of a typical residential customer using 67,000 gallons of water per year by about \$18.15 annually, or \$10.51 over the surcharge approved in DW 10-293. The \$10.51 increase amounts to about \$0.88 per month. Staff and Aquarion state that all of the capital projects forming the basis of this surcharge are prudent, used and useful in service to Aquarion's customers.

¹ Order No. 25,019 approved a settlement entered into between Aquarion, Staff, OCA, and North Hampton. That settlement provides that Aquarion shall make an annual WICA filing with the Commission, with a copy to OCA, of proposed eligible projects no later than November 1 of each year, along with its request for a WICA surcharge. The surcharge is to become effective on the later of January 1 or 60 days from the date of the filing. Notice of the filing shall be given to the towns in which the company provides service.

Staff and the Aquarion also recommend that the Commission approve a 2012 WICA construction budget in the amount of \$973,350. This budget, as well as budget projections for subsequent years, was revised slightly to properly incorporate the cost of production meters (response to Staff 1-8). The 2012 budget consists of \$616,000 in water main replacement, \$231,250 in customer meter replacement, \$80,600 in services, \$32,700 in hydrants, \$10,800 for valves and \$2,000 for production meter replacement. Completion of these proposed projects would result in a 2013 cumulative WICA surcharge of 5.8224% (response to Staff 1-10), which would reflect recovery of 2010, 2011 and 2012 WICA projects. A typical residential customer using 67,000 gallons of water annually would see a surcharge of \$28.35 annually, or about \$2.36 per month. Staff and Aquarion also recommend the Commission approve Aquarion's schedule of proposed projects for 2013 on a preliminary basis in the amount of \$1,022,590. While the cumulative surcharge resulting from the 2013 budget, estimated at 8.0663%, would exceed the overall 7.5% WICA surcharge allowed between rate case filings (see Attachment C to Settlement Agreement approved by Order 25,019 in DW 08-098), Aquarion has indicated it plans to file a rate case in 2012. Thus, the WICA surcharge would be reset to zero at that time. Also in accordance with the terms of the Settlement Agreement approved in DW 08-098, the WICA pilot program itself will be subject to review at the time of the next rate filing.

Aquarion has taken steps to inform its customers of the WICA surcharges by including information in customer bills and on the company's website. According to the terms of the tariff, Aquarion will notify its customers of the change in its WICA surcharge by including appropriate information on the first bill customers receive following any Commission approved change in the WICA. Before sending such notice, Aquarion will consult with the Commission's Consumer Affairs Division.

In closing, Staff and Aquarion recommend the Commission approve a WICA surcharge in the amount of 3.7269% on customer bills, for service rendered on and after January 1, 2012. Staff and Aquarion further recommend Commission approval of Aquarion's 2012 WICA construction budget, and approval of Aquarion's 2013 WICA budget on a preliminary basis, as detailed above. Staff and Aquarion recommend the issuance of an order *nisi*. If there are any questions regarding this, please let me know.

Sincerely,



Mark A. Naylor
Director, Gas & Water Division

Attachments:

Discovery responses

cc: Service List

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-1

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding p. 4, line 20 through p. 5, line 2; was the contract awarded to the lowest bidder? If not, please explain.

RESPONSE: The bidder originally selected by the Company for the main project on Atlantic Avenue was the lowest bidder, but that bidder was unable to post the required bond. As a result, the Company subsequently awarded the project to the next lowest bidder.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-2

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding p. 4, line 22, does the company agree the baseline from last year's estimate should be 1,420 feet of main, not 1,620, as revised in the response to Staff 1-8 in DW 10-293?

RESPONSE: Yes.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-3

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding p. 5, line 5, does the company agree the baseline from last year's estimate should be 979 meters, not 894, as revised in the response to Staff 1-5 in DW 10-293?

RESPONSE: Yes. My testimony regarding the 894 meters was based on the original Attachment CM-1 from DW 10-293 instead of the final revised version the Company submitted in response to Staff 1-5 in DW 10-293.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-4

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding p. 6, lines 18-19, please explain why the anticipated date for completing the conversion to radio read meters remains 2013, as proposed in McMorran testimony in DW 10-293, p. 7, lines 1-2 (“late 2012 or early 2013”), when the number of meter replacements has significantly increased for 2011 and subsequent years. Did the goal in DW 10-293 not include conversion of seasonal meters?

RESPONSE: To clarify my testimony regarding the Company's conversion to radio read meters, all meters are expected to be replaced with radio read meters by early 2013.

The Company's estimates in DW 10-293 included conversion of seasonal meters to radio read meters. The Company decided to keep 2013 as the anticipated date for completing the conversion to radio read meters because not all customers are cooperative with the meter replacement program, and it is quite likely that a small number of non-radio meters may still be in service as of January 1, 2013.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Requested Received: November 18, 2010 Date of Response: November 30, 2011
Request No.: Staff 1-5 Witness: Carl McMorran

REQUEST: Regarding Attachment CM-1, page 3 of 9, please indicate why the cost of meter replacements does not increase with meter size.

RESPONSE: The cost of meter replacement does increase as the meter size increases. The table in Attachment CM-1 was improperly sorted while being copied from SAP records, and the meter replacement costs included in that table were not properly reflected. Please refer to Staff 1-5 Attachment 1, which provides an updated table reflecting the proper meter replacement costs. Please see Staff 1-5 Attachment 2, which provides an updated Attachment TD-1 with the proper meter replacement costs. The updated meter replacement costs are also reflected in Staff 1-8 Attachment 1 and Staff 1-10 Attachment 1.

Aquarion Water Company of New Hampshire

November 30, 2010

WICA Customer Meter Replacements

Account 334

A	B	C	D	G	H
COMPLETED PROJECTS					
	METER SIZE	ACTUAL NUMBER	COST / METER	PROJECT COST	COMPLETION DATE
2011					
	5/8-inch	969	\$ 126.09	\$ 122,180.09	9/30/2011
	1-inch	35	\$ 168.56	\$ 5,899.52	9/30/2011
	1.5-inch	9	\$ 262.03	\$ 2,358.23	9/30/2011
	2-inch	15	\$ 308.22	\$ 4,623.28	9/30/2011
			2011 TOTAL	\$ 135,061.12	
PROPOSED PROJECTS					
	METER SIZE	ESTIMATED NUMBER	ESTIMATED COST / METER	ESTIMATED PROJECT COST (Based on 2011 \$)	ESTIMATED COMPLETION DATE
2012					
	5/8-inch	1,634	\$ 127	\$ 207,520	9/30/2012
	1-inch	70	\$ 169	\$ 11,830	9/30/2012
	1.5-inch	10	\$ 263	\$ 2,630	9/30/2012
	2-inch	30	\$ 309	\$ 9,270	9/30/2012
			2012 TOTAL	\$ 231,250	
2013					
	5/8-inch	827	\$ 127	\$ 105,010	9/30/2013
	1-inch	30	\$ 169	\$ 5,070	9/30/2013
	1.5-inch	5	\$ 263	\$ 1,320	9/30/2013
	2-inch	10	\$ 309	\$ 3,090	9/30/2013
			2013 TOTAL	\$ 114,490	
2014					
	5/8-inch	706	\$ 127	\$ 89,600	9/30/2014
	1-inch	3	\$ 169	\$ 510	9/30/2014
	1.5-inch	3	\$ 263	\$ 790	9/30/2014
	2-inch	3	\$ 309	\$ 930	9/30/2014
			2014 TOTAL	\$ 91,830	
			2012 - 2014 TOTAL	\$ 437,570	

COMMENTS

**Aquarion Water Company of New Hampshire
2011 Annual WICA Surcharge Filing**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE**

Line					Schedule Ref.	
1						
2	Total Investment through 09/30/2011				TD-1, Pg 3 Col 6 Ln 13	\$ 1,657,478
3						
4	Allowed Return on Rate Base				TD-1, Pg 2 Col 8	<u>7.72%</u>
5						
6	Allowed Return on Investment				Ln 17	\$ 127,957
7						
8	Income Tax on Equity Component					
9						
10		(a)	(b)	(c)	(d)	
11		Weighted	Tax	Pre tax	Tax Gross Up	
12		Cost	Multiplier	Cost	Col (c) - Col (a)	
13						
14	Debt	3.64%	1.00	3.64%	0.00%	
15	Equity	<u>4.08%</u>	1.68	<u>6.85%</u>	<u>2.77%</u>	
16						
17		7.72%		10.49%	2.77%	
18						
19	Total Eligible Investment (Line 2 above)					\$ 1,657,478
20						
21	Income Tax Expense				Ln 16 Col D X Ln 18	45,912
22						
23	Depreciation Expense				TD-1, Pg 3 Col 8 Ln 13	23,458
24						
25	Property Tax Expense				TD 1, Pg 3 Col 10 Ln 13	24,692
26						
27	Adjustment: Annual Revenues Allowed				Lines 6 through 25	<u>\$ 222,019</u>
28						
29						
30	Base Revenues on which Adjustment will be applied					
31	Revenues allowed DW 08-098					\$ 6,094,612
32	Misc. Charges not subject to WICA					<u>(137,480)</u>
33						<u>\$ 5,957,132</u>
34						
35	Surcharge Percent (Line 27 divided by Line 33)					3.7269%
36						

Aquarion Water Company of New Hampshire
2011 Annual WICA Surcharge Filing

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT
COMPLETED PROJECTS

Line	Project Name or Class Category **	1 Estimated Completion Date**	2 Actual Completion Date	3 Estimated Project Cost**	4 Actual Project Cost	5 Depreciation Expense	6 Property Tax Expense	7 Income Tax Expense	8 Rate of Return	9 Annual Retail Revenues	10 = (4 x 8) + 5 + 6 + 7 WICA Adjustment Dollars
1											
2	<u>Project Surcharge Approved in DW 10-293</u>										
3	Production Meters	30-Sep-10	30-Sep-10	*	\$ 1,414	\$ 62	\$ 33	\$ 39	7.72%	\$ 6,094,612	\$ 243
4	Atlantic Avenue- Mill Road to Woodland Road	30-Sep-10	30-Sep-10	\$ 588,000	\$ 570,697	\$ 6,765	\$ 10,852	\$ 15,808	7.72%	\$ 6,094,612	77,483
5	Customer Meters	30-Sep-10	30-Sep-10	\$ 125,000	\$ 104,061	\$ 1,251	\$ 640	\$ 2,882	7.72%	\$ 6,094,612	12,807
6	Hydrants	30-Sep-10	30-Sep-10	\$ 20,000	\$ 11,774	\$ 188	\$ 133	\$ 326	7.72%	\$ 6,094,612	1,556
7	Services	30-Sep-10	30-Sep-10	\$ 20,000	\$ 15,797	\$ 243	\$ 267	\$ 438	7.72%	\$ 6,094,612	2,167
8	Valves	30-Sep-10	30-Sep-10	\$ 5,000	\$ 14,480	\$ 724	\$ 284	\$ 401	7.72%	\$ 6,094,612	2,527
9											
10	<u>Project Surcharge Proposed Herein</u>										
11	Production Meters	30-Sep-11	30-Sep-11	\$ 8,000	\$ 6,690	\$ 294	\$ 103	\$ 185	7.72%	\$ 6,094,612	1,098
12	Atlantic Avenue- House 106 to Woodland Road	30-Sep-11	30-Sep-11	\$ 789,519	\$ 698,937	\$ 8,139	\$ 9,793	\$ 19,361	7.72%	\$ 6,094,612	91,250
13	Customer Meters	30-Sep-11	30-Sep-11	\$ 125,000	\$ 135,061	\$ 3,346	\$ 1,293	\$ 3,741	7.72%	\$ 6,094,612	18,807
14	Hydrants	30-Sep-11	30-Sep-11	\$ 20,000	\$ 32,133	\$ 611	\$ 366	\$ 890	7.72%	\$ 6,094,612	4,347
15	Services	30-Sep-11	30-Sep-11	\$ 27,000	\$ 43,986	\$ 713	\$ 584	\$ 1,218	7.72%	\$ 6,094,612	5,911
16	Valves	30-Sep-11	30-Sep-11	\$ 5,000	\$ 22,449	\$ 1,122	\$ 345	\$ 622	7.72%	\$ 6,094,612	3,822
17											
18											
19											
20											
21											
22											
23											
	TOTALS				\$1,732,519	\$ 1,657,478	\$ 23,458	\$ 24,692	\$ 45,912		\$ 222,019

* Emergency Replacement

** Per Docket Filing DW 10-293

**Aquarion Water Company of New Hampshire
2011 Annual WICA Surcharge Filing**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE**

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2 Depreciation Expense	9 Mil Rates Town State Total	10 = (((6-7)/1000) x 9) Prop. Tax Expense**	
1	<u>Project Surcharge Approved in DW 10-293</u>													
2	Production Meters		Stratham	328	4.40%	Other Pumping Equipment	9/30/2010	11/1/2010	\$ 1,414	\$ -	\$ 62	16.48 8.80 23.08	\$33	
3	Atlantic Avenue- Mill Road to Woodland Road		North Hampton	343	1.20%	Main Replacement	9/30/2010	11/1/2010	\$ 570,897	\$ 8,941	\$ 6,765	12.65 6.60 19.25	\$10,852	
4	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 12,139	\$ 8,298	\$ 146	12.65 6.60 19.25	\$74	
5	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 78,508	\$ 52,287	\$ 920	13.88 6.60 20.48	\$496	
6	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$ 15,415	\$ 10,535	\$ 185	7.66 6.60 14.26	\$70	
7	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 2,466	\$ 1,850	\$ 12	12.65 6.60 19.25	\$10	
8	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 3,626	\$ 558	\$ 74	13.88 6.60 20.48	\$63	
9	Hydrants		Rye	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$ 5,682	\$ 1,444	\$ 102	7.66 6.60 14.26	\$80	
10	Services		North Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$ 2,188	\$ 535	\$ 31	12.65 6.60 19.25	\$32	
11	Services		Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$ 13,611	\$ 2,138	\$ 212	13.88 6.60 20.48	\$235	
12	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ 12,436	\$ -	\$ 622	13.88 6.60 20.48	\$255	
13	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$ 2,044	\$ -	\$ 102	7.66 6.60 14.26	\$29	
14														
15	<u>Project Surcharge Proposed Herein</u>													
16														
17	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2011	11/1/2011	\$ 6,690	\$ -	\$ 294	13.88 6.60 20.48	\$103	
18	Atlantic Avenue- House 108 to Woodland Road		North Hampton	343	1.20%	Main Replacement	9/30/2011	11/1/2011	\$ 698,837	\$ 20,650	\$ 8,139	12.65 6.60 19.25	\$9,793	
19	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 18,681	\$ 8,560	\$ 481	12.65 6.60 19.25	\$175	
20	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 100,663	\$ 35,005	\$ 2,495	13.88 6.60 20.48	\$1,009	
21	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$ 15,717	\$ 5,462	\$ 390	7.66 6.60 14.26	\$110	
22	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 4,207	\$ 561	\$ 88	12.65 6.60 19.25	\$53	
23	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 22,891	\$ 5,776	\$ 411	13.88 6.60 20.48	\$283	
24	Hydrants		Rye	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$ 5,035	\$ 349	\$ 112	7.66 6.60 14.26	\$50	
25	Services		North Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$ 10,046	\$ 1,637	\$ 158	12.65 6.60 19.25	\$121	
26	Services		Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$ 33,940	\$ 3,820	\$ 557	13.88 6.60 20.48	\$463	
27	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$ 22,449	\$ -	\$ 1,122	13.88 6.60 20.48	\$345	
28														
TOTALS									\$1,657,478	\$ 164,502	\$23,458			\$24,692
									to TD-1, Pg 1, Ln 2		to TD-1, Pg 1, Ln 23			to TD-1, Pg 1, Ln 25

* Type of Project (designations will be given for various types of projects)

**Property Tax Expense is for twelve months under the DW-10-293 surcharge portion and nine months for the 2011 proposed surcharge projects.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-6

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding Attachment CM-1, page 5 of 9, please indicate why the estimated per-unit cost of emergency/reactive service line replacements for years 2012 through 2014 is slightly less than that of scheduled replacements (\$3,650 v. \$3,800).

RESPONSE: The projected cost for emergency/reactive replacements and the projected cost for scheduled replacements are each based on the actual average cost for each respective type of replacements from 2010 and 2011, and emergency/reactive replacements have historically cost slightly less than scheduled replacements.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

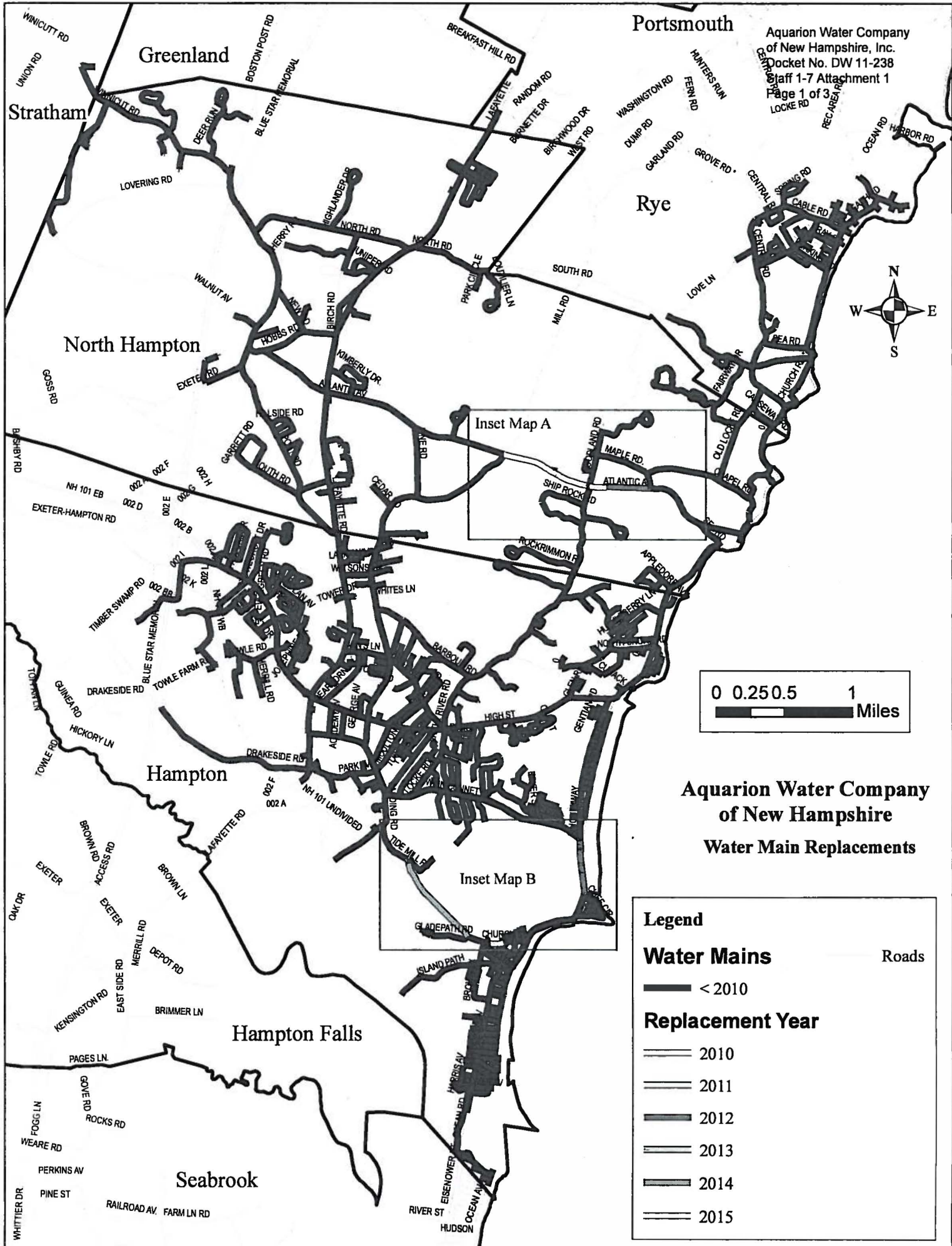
Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-7

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Has an updated 8 ½ x 11 or other map been prepared showing the various water main improvements completed to date and/or proposed through 2014 under the WICA program? If so, please provide a copy.

RESPONSE: Please see Staff 1-7 Attachment 1.



**Aquarion Water Company
 of New Hampshire
 Water Main Replacements**

Legend

Water Mains Roads

Replacement Year

- 2010
- 2011
- 2012
- 2013
- 2014
- 2015

**Aquarion Water Company
of New Hampshire
Water Main Replacements
Inset Map A**

Aquarion Water Company
of New Hampshire, Inc.
Docket No. DW 11-238
Staff 1-7 Attachment 1
Page 2 of 3

Legend

Water Mains

Roads

— < 2010

Replacement Year

== 2010

== 2011

== 2012

== 2013

== 2014

== 2015



North Hampton

MILL RD

WOODLAND RD

MAPLE RD

RIVER RD

COTTIN FARM LN

CHAPPEL RD

WIDE RD

SHIP ROCK RD



**Aquarion Water Company
of New Hampshire
Water Main Replacements
Inset Map B**

Legend

Water Mains

— < 2010

Replacement Year

— 2010

— 2011

— 2012

— 2013

— 2014

— 2015

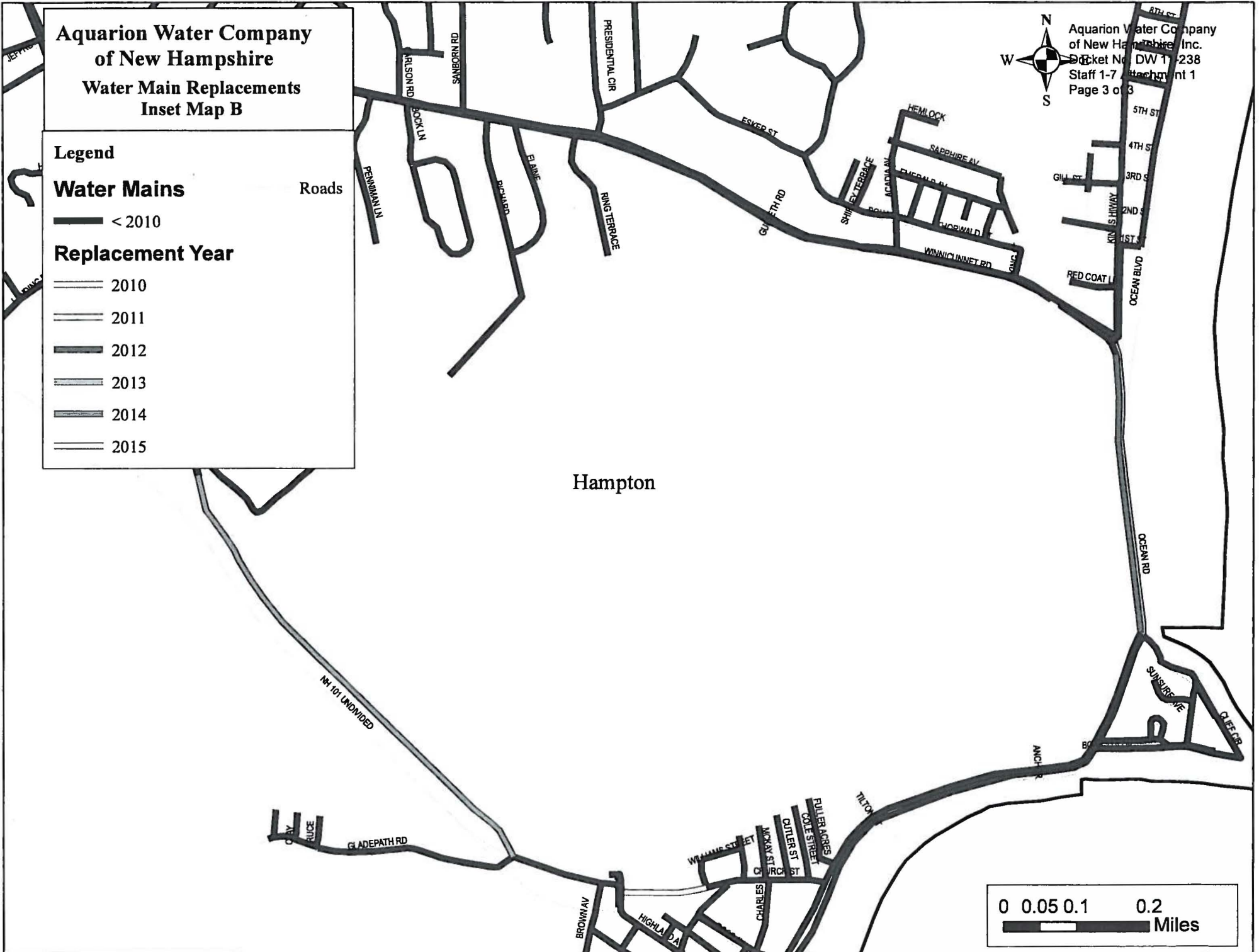
Roads

Hampton



Aquarion Water Company
of New Hampshire, Inc.
Docket No. DW 17-238
Staff 1-7 Attachment 1
Page 3 of 3

0 0.05 0.1 0.2
Miles



AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-8

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding Attachment CM-1, Page 2 of 9: It appears that the Annual Totals for 2012, 2013, 2014 and Project Totals do not include the cost of Production Meters (\$2,000 for 2012, 2013 and 2014; \$12,690 for Project Totals). Please explain and / or revise.

RESPONSE: The Company has corrected the formulas for the Annual Totals to include the cost of Production Meters, and the updated Annual Totals are shown in Staff 1-8 Attachment 1.

Aquarion Water Company of New Hampshire
Water Conservation and Infrastructure Adjustment Project Summary

November 30, 2011

	2011 Actual	Carried forward	2012	2013	2014	Project Totals
1 CUSTOMER METERS	\$ 135,061.12		\$ 231,250	\$ 114,490	\$ 91,830	\$ 572,631
2 HYDRANTS	\$ 32,133.00		\$ 32,700	\$ 32,700	\$ 32,700	\$ 130,233
3 SERVICES	\$ 43,986.24		\$ 80,600	\$ 80,600	\$ 80,600	\$ 285,786
MAIN REPLACEMENTS						
4 Atlantic Avenue - House 106 to Woodland Road continuing on to H539	\$ 698,936.67 ^(a)		\$ -	\$ -	\$ -	\$ 698,937
5 Atlantic Avenue - H539 to Maple Road	\$ -	\$ 42,500.00 ^(b)	\$ 532,000	\$ -	\$ -	\$ 574,500
6 Ocean Boulevard - Dumas Avenue to Winnacunnet Road	\$ -		\$ 74,000	\$ 675,000	\$ -	\$ 749,000
7 Rt 101 - Glade Path to Tide Mill Road	\$ -		\$ 10,000 ^(c)	\$ 107,000	\$ 900,000	\$ 1,017,000
8 Church Street - Highland Avenue to William Street	\$ -	\$ 24,300.00 ^(d)	\$ -	\$ -	\$ 10,000	\$ 34,300
9 CONTROL VALVES	\$ -		\$ -	\$ -	\$ -	\$ -
10 VALVES	\$ 22,449.10		\$ 10,800	\$ 10,800	\$ 10,800	\$ 54,849
11 PRODUCTION METERS	\$ 6,689.54 ^(e)		\$ 2,000	\$ 2,000	\$ 2,000	\$ 12,690
ANNUAL TOTALS	\$ 939,255.67	\$ 66,800.00	\$ 973,350	\$ 1,022,590	\$ 1,127,930	\$ 4,129,926

All numbers are estimates

- (a) total includes design and bid costs in 2009, 2010 and 2011
- (b) total includes design and bid costs in 2009, 2010 and 2011, which will be included in 2012 WICA filing.
- (c) Alternatives analysis
- (d) Designed in 2010. Estimated construction costs = \$395,000, currently scheduled for after 2014.
- (e) \$4,935 in 2010 carried forward into 2011 (project put into service in last quarter of 2010)

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-9

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding Attachment CM-1, Page 6 of 9: The Total Estimated Cost for "Rt 101-Glade Path to Tide Mill Road" is blank. Please explain and / or revise.

RESPONSE: The Company has corrected the formula for the Route 101-Glade Path main project in Attachment CM-1, and the Total Estimated Cost is included in Staff 1-9 Attachment 1.

Aquarion Water Company of New Hampshire

November 30, 2011

WICA Main Replacement Projects

Account 331

PROJECT NAME	Town	LENGTH (FEET)	PIPE DIAMETER (INCHES)	TOTAL ESTIMATED COST	Actual 2009	Actual 2010	Actual 2011	Carryover 2009-2011	Projected 2012	Projected 2013	Projected 2014	Comments	PRIORITIZATION FACTORS
Atlantic Avenue - House 106 to Woodland Road continuing on to H539	North Hampton	2,460	8	\$ 698,937	\$ 39,983.57	\$ 14,368.72	\$ 644,584.38						High rank in main break history, pipe age / useful life, material integrity, hydraulic capacity and water quality issues
Atlantic Avenue - H539 to Maple Road	North Hampton	1,700	8	\$ 574,500				\$ 42,500	\$ 532,000			Third phase of 6,400-ft project between Mill Road and Maple Road	High rank in main break history, pipe age / useful life, material integrity, hydraulic capacity and water quality issues
Ocean Boulevard - Dumas Avenue to Wamacumnet Road	Hampton	2,100	12	\$ 749,000					\$ 74,000	\$ 675,000			Frequent main breaks. This main must be renewed so it can support flows to the beach while the Rt 101 main is being replaced.
Rt 101 - Glade Path to Tide Mill Road	Hampton	3,200	12	\$ 1,017,000					\$ 10,000	\$ 107,000	\$ 900,000		Deteriorated pipe with leaks that crosses a salt marsh
Church Street - Highland Avenue to William Street	Hampton	700	12	\$ 24,300		\$ 14,300					\$ 10,000	This project has been designed, but has dropped down the priority list in favor of Ocean Boulevard and Rt 101.	Main break history, pipe age / useful life, material integrity and critical system component
TOTALS				\$ 3,063,737	\$ 39,983.57	\$ 28,668.72	\$ 644,584.38	\$ 42,500	\$ 616,000	\$ 782,000	\$ 910,000		

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-10

Date of Response: November 30, 2011
Witness: Troy Dixon

REQUEST: Please provide calculations showing the current projected WICA surcharges anticipated for 2012, 2013 and 2014.

RESPONSE: Staff 1-10 Attachment 1 provides the Company's anticipated WICA surcharge calculations for 2012, 2013 and 2014. These surcharge calculations are based on Attachment TD-1 (as updated in response to Staff 1-5) and the Project Summary provided in Attachment CM-1. The calculations make several assumptions as follows:

1. Meters, services, hydrants and valves are assigned to towns based on the proportion of 2010's and 2011's additions (for property tax purposes).
2. Mil rates are assumed to be unchanged.
3. Retirement amounts are based on the proportion of 2010 and 2011 retirements to 2010 and 2011 additions in each category (for property tax and depreciation purposes).
4. No rate case is taken into consideration. A rate case at any time would reset the surcharge percentage, as well as alter the rate of return and base revenue figures used in the calculations.
5. Property tax amounts are limited to 9 months in the first year of recovery and adjusted to a full 12 months thereafter.

**Aquarion Water Company of New Hampshire
2012 Annual WICA Surcharge Filing (2011 Estimate)**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE**

Line		<u>Schedule Ref.</u>	
1			
2	Total Investment through 09/30/2012	TD-1, Pg 3 Col 6 Ln 13	\$ 2,588,939
3			
4	Allowed Return on Rate Base	TD-1, Pg 2 Col 8	<u>7.72%</u>
5			
6	Allowed Return on Investment	Ln 2 X Ln 4	\$ 199,866
7			
8	Income Tax on Equity Component		
9			
10			
11			
12			
13			
14	Debt		
15	Equity		
16			
17			
18	Total Eligible Investment (Line 2 above)		\$ 2,588,939
19			
20	Income Tax Expense	Ln 16 Col D X Ln 18	71,714
21			
22	Depreciation Expense	TD-1, Pg 3 Col 8 Ln 13	35,615
23			
24	Property Tax Expense	TD 1, Pg 3 Col 10 Ln 13	39,655
25			
26	Adjustment: Annual Revenues Allowed	Lines 6 through 25	<u>\$ 346,850</u>
27			
28	Base Revenues on which Adjustment will be applied		
29			
30	Revenues allowed DW 08-098		\$ 6,094,612
31	Misc. Charges not subject to WICA		<u>(137,480)</u>
32			<u>\$ 5,957,132</u>
33			
34	Surcharge Percent (Line 28 divided by Line 36)		5.8224%
35			

Aquarion Water Company of New Hampshire
2012 Annual WCA Surcharge Filing (2011 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2 Depreciation Expense	9 Mil Rates Town State Total	10 = (((6-7)/1000) x 9/12)'9 Prop. Tax Expense**
2010 Projects													
1	Production Meters		Stratham	328	4.40%	Other Pumping	9/30/2010	11/1/2010	\$1,414	\$0	\$62	18.48 6.80 23.08	\$33
2	Atlantic Avenue- Mill Road to House 106		North Hampton	343	1.20%	Main Replacement	9/30/2010	11/1/2010	\$570,897	\$8,941	\$8,765	12.65 6.80 19.25	\$10,852
3	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$12,138	\$8,286	\$146	12.65 6.80 19.25	\$74
4	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$78,508	\$52,287	\$920	13.88 6.80 20.48	\$498
5	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$15,415	\$10,535	\$185	7.88 6.80 14.28	\$70
6	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$2,466	\$1,950	\$12	12.65 6.80 19.25	\$10
7	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$3,828	\$556	\$74	13.88 6.80 20.48	\$63
8	Hydrants		Rye	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$5,882	\$1,444	\$102	7.88 6.80 14.28	\$80
9	Services		North Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$2,188	\$535	\$31	12.65 6.80 19.25	\$32
10	Services		Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$13,811	\$2,138	\$212	13.88 6.80 20.48	\$235
11	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$12,438	\$0	\$822	13.88 6.80 20.48	\$255
12	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$2,044	\$0	\$102	7.88 6.80 14.28	\$28
13									\$718,223	\$84,882	\$9,233		\$12,208
2011 Projects													
14	Production Meters		Hampton	328	4.40%	Other Pumping	9/30/2011	11/1/2011	\$8,680	\$0	\$294	13.88 6.80 20.48	\$137
15	Atlantic Avenue - House 106 to Woodland Rd		North Hampton	343	1.20%	Main Replacement	9/30/2011	11/1/2011	\$888,837	\$20,850	\$8,139	12.65 6.80 19.25	\$13,057
16	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$18,881	\$8,580	\$481	12.65 6.80 19.25	\$233
17	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$100,863	\$35,005	\$2,485	13.88 6.80 20.48	\$1,345
18	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$15,717	\$5,482	\$390	7.88 6.80 14.28	\$148
19	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$4,207	\$581	\$88	12.65 6.80 19.25	\$70
20	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$22,891	\$5,778	\$411	13.88 6.80 20.48	\$351
21	Hydrants		Rye	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$5,035	\$349	\$112	7.88 6.80 14.28	\$87
22	Services		North Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$10,048	\$1,637	\$158	12.65 6.80 19.25	\$182
23	Services		Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$33,840	\$3,820	\$557	13.88 6.80 20.48	\$617
24	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$22,448	\$0	\$1,122	13.88 6.80 20.48	\$480
25									\$938,258	\$78,820	\$14,225		\$18,844
2012 Projects													
26	Production Meters		Hampton	328	4.40%	Other Pumping	9/30/2012	11/1/2012	\$2,000	\$0	\$88	13.88 6.80 20.48	\$31
27	Atlantic Avenue - H539 to Maple Road		North Hampton	343	1.20%	Main Replacement	9/30/2012	11/1/2012	\$574,500	\$12,485	\$8,744	12.65 6.80 19.25	\$8,114
28	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$29,755	\$14,343	\$588	12.65 6.80 19.25	\$223
29	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$171,048	\$124,708	\$1,781	13.88 6.80 20.48	\$712
30	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$30,056	\$15,444	\$555	7.88 6.80 14.28	\$158
31	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$4,870	\$1,870	\$74	12.65 6.80 19.25	\$45
32	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$19,749	\$4,716	\$381	13.88 6.80 20.48	\$231
33	Hydrants		Rye	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$7,881	\$1,335	\$160	7.88 6.80 14.28	\$71
34	Services		North Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$18,491	\$2,828	\$251	12.65 6.80 19.25	\$198
35	Services		Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$64,108	\$8,033	\$1,037	13.88 6.80 20.48	\$881
36	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$10,202	\$0	\$510	13.88 6.80 20.48	\$157
37	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$588	\$0	\$30	7.88 6.80 14.28	\$8
38									\$931,480	\$185,882	\$12,157		\$10,802
39									\$2,588,939	\$350,383	\$35,815		\$38,655
40									TOTALS				
41									to TD-1 Pg 1, Ln 2	to TD-1 Pg 1, Ln 22		to TD-1 Pg 1, Ln 24	
42	* Type of Project (designations will be given for various types of projects)												
43	**Property Tax Expense is for a nine month period for 2012 projects since rates will be in effect in January 2013. Previous years reflect an annual amount.												
44													

**Aquarion Water Company of New Hampshire
2013 Annual WICA Surcharge Filing (2011 Estimate)**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE**

Line		<u>Schedule Ref.</u>	
1			
2	Total Investment through 09/30/2013	TD-1, Pg 3 Col 6 Ln 13	\$ 3,579,539
3			
4	Allowed Return on Rate Base	TD-1, Pg 2 Col 8	<u>7.72%</u>
5			
6	Allowed Return on Investment	Ln 2 X Ln 4	\$ 276,340
7			
8	Income Tax on Equity Component		
9			
10			
11			
12			
13			
14	Debt		
15	Equity		
16			
17			
18	Total Eligible Investment (Line 2 above)		\$ 3,579,539
19			
20	Income Tax Expense	Ln 16 Col D X Ln 18	99,153
21			
22	Depreciation Expense	TD-1, Pg 3 Col 8 Ln 13	48,371
23			
24	Property Tax Expense	TD 1, Pg 3 Col 10 Ln 13	56,654
25			
26	Adjustment: Annual Revenues Allowed	Lines 6 through 25	<u>\$ 480,518</u>
27			
28			
29	Base Revenues on which Adjustment will be applied		
30	Revenues allowed DW 08-098		\$ 6,094,612
31	Misc. Charges not subject to WICA		<u>(137,480)</u>
32			<u>\$ 5,957,132</u>
33			
34	Surcharge Percent (Line 28 divided by Line 36)		8.0663%
35			

Aquarion Water Company of New Hampshire
2013 Annual WICA Surcharge Filing (2011 Estimate)

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT
COMPLETED PROJECTS

Line	Project Name or Class Category **	1	2	3	4	5	6	7	8	9	10 = (4 x 8) + 5 + 6 + 7
		Estimated Completion Date**	Actual Completion Date	Estimated Project Cost**	Actual Project Cost	Depreciation Expense	Property Tax Expense	Income Tax Expense	Rate of Return	Annual Retail Revenues	WICA Adjustment Dollars
2010 Projects											
1	Production Meters	30-Sep-10	30-Sep-10	*	\$ 1,414	\$ 62	\$ 33	\$ 39	7.72%	\$ 6,094,612	\$ 243
2	Atlantic Avenue- Mill Road to House 106	30-Sep-10	30-Sep-10	\$ 588,000	570,697	6,765	10,852	15,808	7.72%	\$ 6,094,612	77,483
3	Customer Meters	30-Sep-10	30-Sep-10	125,000	104,061	1,251	640	2,882	7.72%	\$ 6,094,612	12,807
4	Hydrants	30-Sep-10	30-Sep-10	20,000	11,774	188	133	326	7.72%	\$ 6,094,612	1,556
5	Services	30-Sep-10	30-Sep-10	20,000	15,797	243	267	438	7.72%	\$ 6,094,612	2,167
6	Valves	30-Sep-10	30-Sep-10	5,000	14,480	724	284	401	7.72%	\$ 6,094,612	2,527
7				\$ 758,000	\$ 718,223	\$ 9,233	\$ 12,208	\$ 19,895			\$ 96,783
2011 Projects											
8	Production Meters	30-Sep-11	30-Sep-11	\$ 8,000	\$ 6,690	\$ 294	\$ 137	\$ 185	7.72%	\$ 6,094,612	\$ 1,133
9	Atlantic Avenue - House 106 to Woodland Rd	30-Sep-11	30-Sep-11	789,519	698,937	8,139	13,057	19,361	7.72%	\$ 6,094,612	94,515
10	Customer Meters	30-Sep-11	30-Sep-11	125,000	135,061	3,348	1,724	3,741	7.72%	\$ 6,094,612	19,238
11	Hydrants	30-Sep-11	30-Sep-11	20,000	32,133	611	488	890	7.72%	\$ 6,094,612	4,469
12	Services	30-Sep-11	30-Sep-11	27,000	43,986	713	779	1,218	7.72%	\$ 6,094,612	6,106
13	Valves	30-Sep-11	30-Sep-11	5,000	22,449	1,122	460	622	7.72%	\$ 6,094,612	3,937
14				\$ 974,519	\$ 939,256	\$ 14,225	\$ 16,644	\$ 26,017			\$ 129,397
2012 Projects											
15	Production Meters	30-Sep-12	30-Sep-12	\$ 2,000	\$ 2,000	\$ 88	\$ 41	\$ 55	7.72%	\$ 6,094,612	\$ 339
16	Atlantic Avenue - H539 to Maple Road	30-Sep-12	30-Sep-12	574,500	574,500	6,744	10,819	15,914	7.72%	\$ 6,094,612	77,828
17	Customer Meters	30-Sep-12	30-Sep-12	230,860	230,860	2,902	1,454	6,395	7.72%	\$ 6,094,612	28,573
18	Hydrants	30-Sep-12	30-Sep-12	32,700	32,700	595	462	906	7.72%	\$ 6,094,612	4,488
19	Services	30-Sep-12	30-Sep-12	80,600	80,600	1,288	1,410	2,233	7.72%	\$ 6,094,612	11,152
20	Valves	30-Sep-12	30-Sep-12	10,800	10,800	540	217	299	7.72%	\$ 6,094,612	1,890
21				\$ 931,460	\$ 931,460	\$ 12,157	\$ 14,403	\$ 25,801			\$ 124,270
2013 Projects											
22	Production Meters	30-Sep-13	30-Sep-13	\$ 2,000	\$ 2,000	\$ 88	\$ 31	\$ 55	7.72%	\$ 6,094,612	\$ 329
23	Ocean Blvd - Dumas Ave to Winnacunnet Rd	30-Sep-13	30-Sep-13	749,000	749,000	8,793	11,255	20,747	7.72%	\$ 6,094,612	98,618
24	Customer Meters	30-Sep-13	30-Sep-13	115,500	115,500	1,452	546	3,199	7.72%	\$ 6,094,612	14,114
25	Hydrants	30-Sep-13	30-Sep-13	32,700	32,700	595	347	906	7.72%	\$ 6,094,612	4,372
26	Services	30-Sep-13	30-Sep-13	80,600	80,600	1,288	1,057	2,233	7.72%	\$ 6,094,612	10,800
27	Valves	30-Sep-13	30-Sep-13	10,800	10,800	540	163	299	7.72%	\$ 6,094,612	1,836
28				\$ 990,600	\$ 990,600	\$ 12,756	\$ 13,398	\$ 27,440			\$ 130,068
29				\$ 3,654,579	\$ 3,579,539	\$ 48,371	\$ 56,654	\$ 99,153			\$ 480,518

**Aquarion Water Company of New Hampshire
2013 Annual WCA Surcharge Filing (2011 Estimate)**

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE**

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date In Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2 Depreciation Expense	9 M/Rates			10 = (((6-7)/1000) x 9/12)'9 Prop. Tax Expense**
												Town	State	Total	
2010 Projects															
1	Production Meters		Stratham	328	4.40%	Other Pumping Equipment	9/30/2010	11/1/2010	\$1,414	\$0	\$62	16.48	6.60	23.08	\$33
2	Atlantic Avenue- Mill Road to House 106		North Hampton	343	1.20%	Main Replacement	9/30/2010	11/1/2010	\$570,697	\$6,941	\$6,785	12.65	6.60	19.25	\$10,852
3	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$12,139	\$8,296	\$148	12.65	6.60	19.25	\$74
4	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$76,508	\$52,287	\$920	13.88	6.60	20.48	\$489
5	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$15,415	\$10,535	\$185	7.66	6.60	14.26	\$70
6	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$2,466	\$1,950	\$12	12.65	6.60	19.25	\$10
7	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$3,628	\$556	\$74	13.88	6.60	20.48	\$63
8	Hydrants		Rye	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$5,682	\$1,444	\$102	7.66	6.60	14.26	\$60
9	Services		North Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$2,186	\$535	\$31	12.65	6.60	19.25	\$32
10	Services		Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$13,611	\$2,138	\$212	13.88	6.60	20.48	\$235
11	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$12,438	\$0	\$822	13.88	6.60	20.48	\$255
12	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$2,044	\$0	\$102	7.66	6.60	14.26	\$28
13									\$718,223	\$84,682	\$9,233				\$12,208
2011 Projects															
14	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2011	11/1/2011	\$6,690	\$0	\$294	13.88	6.60	20.48	\$137
15	Atlantic Avenue - House 106 to Woodland Rd		North Hampton	343	1.20%	Main Replacement	9/30/2011	11/1/2011	\$698,937	\$20,850	\$6,136	12.65	6.60	19.25	\$13,057
16	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$18,681	\$6,560	\$461	12.65	6.60	19.25	\$233
17	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$100,663	\$35,005	\$2,495	13.88	6.60	20.48	\$1,345
18	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$15,717	\$5,462	\$390	7.66	6.60	14.26	\$146
19	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$4,207	\$561	\$88	12.65	6.60	19.25	\$70
20	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$22,891	\$5,778	\$411	13.88	6.60	20.48	\$351
21	Hydrants		Rye	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$5,035	\$349	\$112	7.66	6.60	14.26	\$67
22	Services		North Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$10,046	\$1,637	\$156	12.65	6.60	19.25	\$162
23	Services		Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$33,940	\$3,820	\$557	13.88	6.60	20.48	\$617
24	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$22,449	\$0	\$1,122	13.88	6.60	20.48	\$460
25									\$939,256	\$79,820	\$14,225				\$16,944
2012 Projects															
26	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2012	11/1/2012	\$2,000	\$0	\$89	13.88	6.60	20.48	\$41
27	Atlantic Avenue - H538 to Maple Road		North Hampton	343	1.20%	Main Replacement	9/30/2012	11/1/2012	\$574,500	\$12,485	\$6,744	12.65	6.60	19.25	\$10,819
28	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$29,755	\$14,343	\$598	12.65	6.60	19.25	\$297
29	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$171,049	\$124,708	\$1,781	13.88	6.60	20.48	\$949
30	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$30,056	\$15,444	\$555	7.66	6.60	14.26	\$208
31	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$4,970	\$1,870	\$74	12.65	6.60	19.25	\$60
32	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$19,749	\$4,716	\$361	13.88	6.60	20.48	\$308
33	Hydrants		Rye	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$7,981	\$1,335	\$180	7.66	6.60	14.26	\$95
34	Services		North Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$18,491	\$2,928	\$251	12.65	6.60	19.25	\$261
35	Services		Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$64,109	\$8,033	\$1,037	13.88	6.60	20.48	\$1,148
36	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$10,202	\$0	\$510	13.88	6.60	20.48	\$209
37	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$598	\$0	\$30	7.66	6.60	14.26	\$8
38									\$931,480	\$185,862	\$12,157				\$14,403

Aquarion Water Company of New Hampshire
2013 Annual WICA Surcharge Filing (2011 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2 Depreciation Expense	9 MI Rates			10 = (((6-7)/1000) x 9/12)*9 Prop. Tax Expense**
												Town	State	Total	
2013 Projects															
39	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2013	11/1/2013	\$2,000	\$0	\$88	13.88	6.60	20.48	\$31
40	Ocean Blvd - Dumas Ave to Winnacunnet Rd		Hampton	343	1.20%	Main Replacement	9/30/2013	11/1/2013	\$749,000	\$16,277	\$8,793	13.88	6.60	20.48	\$11,255
41	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$14,887	\$7,178	\$293	12.65	6.60	19.25	\$111
42	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$85,578	\$62,392	\$881	13.88	6.60	20.48	\$358
43	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$15,037	\$7,727	\$278	7.66	6.60	14.26	\$78
44	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$4,970	\$1,870	\$74	12.65	6.60	19.25	\$45
45	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$19,749	\$4,716	\$361	13.88	6.60	20.48	\$231
46	Hydrants		Rye	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$7,981	\$1,335	\$160	7.66	6.60	14.26	\$71
47	Services		North Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$16,491	\$2,828	\$251	12.65	6.60	19.25	\$198
48	Services		Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$64,109	\$8,033	\$1,037	13.88	6.60	20.48	\$861
49	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$10,202	\$0	\$510	13.88	6.60	20.48	\$157
50	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$598	\$0	\$30	7.66	6.60	14.26	\$8
51									\$990,800	\$112,453	\$12,756				\$13,398
52									\$3,579,539	\$462,816	\$48,371				\$56,654
53									to TD-1,		to TD-1,		to TD-1,		
54									Pg 1, Ln 2		Pg 1, Ln 22		Pg 1, Ln 24		

55 * Type of Project (designations will be given for various types of projects)
56 **Property Tax Expense is for a nine month period for 2013 projects since rates will be in effect in January 2014. Previous years reflect an annualized amount.
57

Aquarion Water Company of New Hampshire
2014 Annual WICA Surcharge Filing (2011 Estimate)

**WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE**

Line		<u>Schedule Ref.</u>	
1			
2	Total Investment through 09/30/2014	TD-1, Pg 3 Col 6 Ln 13	\$ 4,817,589
3			
4	Allowed Return on Rate Base	TD-1, Pg 2 Col 8	<u>7.72%</u>
5			
6	Allowed Return on Investment	Ln 2 X Ln 4	\$ 371,918
7			
8	Income Tax on Equity Component		
9			
10			
11			
12			
13			
14	Debt		
15	Equity		
16			
17			
18	Total Eligible Investment (Line 2 above)		\$ 4,817,589
19			
20	Income Tax Expense	Ln 16 Col D X Ln 18	133,447
21			
22	Depreciation Expense	TD-1, Pg 3 Col 8 Ln 13	64,014
23			
24	Property Tax Expense	TD 1, Pg 3 Col 10 Ln 13	78,448
25			
26	Adjustment: Annual Revenues Allowed	Lines 6 through 25	<u>\$ 647,827</u>
27			
28			
29	Base Revenues on which Adjustment will be applied		
30	Revenues allowed DW 08-098		\$ 6,094,612
31	Misc. Charges not subject to WICA		<u>(137,480)</u>
32			<u>\$ 5,957,132</u>
33			
34	Surcharge Percent (Line 28 divided by Line 36)		10.8748%
35			

Aquarion Water Company of New Hampshire
2014 Annual WCA Surcharge Filing (2011 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2			9		10 = (((6-7)/1000) x 9/12)*9	
											Depreciation Expense	Town	State	Total	Prop. Tax Expense**		
2010 Projects																	
1	Production Meters		Stratham	328	4.40%	Other Pumping Equipment	9/30/2010	11/1/2010	\$1,414	\$0	\$62	16.48	6.60	23.08			\$33
2	Atlantic Avenue- Mill Road to House 106		North Hampton	343	1.20%	Main Replacement	9/30/2010	11/1/2010	\$570,697	\$6,941	\$6,765	12.65	6.60	19.25			\$10,852
3	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$12,139	\$8,296	\$146	12.65	6.60	19.25			\$74
4	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$76,508	\$52,287	\$920	13.88	6.60	20.48			\$496
5	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2010	11/1/2010	\$15,415	\$10,535	\$185	7.66	6.60	14.26			\$70
6	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$2,466	\$1,950	\$12	12.65	6.60	19.25			\$10
7	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$3,626	\$556	\$74	13.88	6.60	20.48			\$63
8	Hydrants		Rye	348	2.40%	Hydrants	9/30/2010	11/1/2010	\$5,682	\$1,444	\$102	7.66	6.60	14.26			\$60
9	Services		North Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$2,186	\$535	\$31	12.65	6.60	19.25			\$32
10	Services		Hampton	345	1.85%	Services	9/30/2010	11/1/2010	\$13,611	\$2,138	\$212	13.88	6.60	20.48			\$235
11	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$12,436	\$0	\$622	13.88	6.60	20.48			\$255
12	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2010	11/1/2010	\$2,044	\$0	\$102	7.66	6.60	14.26			\$29
13									\$718,223	\$84,682	\$9,233						\$12,208
2011 Projects																	
14	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2011	11/1/2011	\$6,690	\$0	\$294	13.88	6.60	20.48			\$137
15	Atlantic Avenue - House 106 to Woodland Rd		North Hampton	343	1.20%	Main Replacement	9/30/2011	11/1/2011	\$698,937	\$20,650	\$8,139	12.65	6.60	19.25			\$13,057
16	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$18,681	\$6,560	\$461	12.65	6.60	19.25			\$233
17	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$100,663	\$35,005	\$2,495	13.88	6.60	20.48			\$1,345
18	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2011	11/1/2011	\$15,717	\$5,462	\$390	7.66	6.60	14.26			\$146
19	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$4,207	\$561	\$88	12.65	6.60	19.25			\$70
20	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$22,891	\$5,776	\$411	13.88	6.60	20.48			\$351
21	Hydrants		Rye	348	2.40%	Hydrants	9/30/2011	11/1/2011	\$5,035	\$349	\$112	7.66	6.60	14.26			\$67
22	Services		North Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$10,046	\$1,637	\$156	12.65	6.60	19.25			\$162
23	Services		Hampton	345	1.85%	Services	9/30/2011	11/1/2011	\$33,940	\$3,820	\$557	13.88	6.60	20.48			\$617
24	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2011	11/1/2011	\$22,449	\$0	\$1,122	13.88	6.60	20.48			\$460
25									\$939,256	\$79,820	\$14,225						\$16,644
2012 Projects																	
26	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2012	11/1/2012	\$2,000	\$0	\$88	13.88	6.60	20.48			\$41
27	Atlantic Avenue - H539 to Maple Road		North Hampton	343	1.20%	Main Replacement	9/30/2012	11/1/2012	\$574,500	\$12,485	\$8,744	12.65	6.60	19.25			\$10,819
28	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$29,755	\$14,343	\$586	12.65	6.60	19.25			\$297
29	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$171,049	\$124,708	\$1,761	13.88	6.60	20.48			\$949
30	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2012	11/1/2012	\$30,056	\$15,444	\$555	7.66	6.60	14.26			\$208
31	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$4,970	\$1,870	\$74	12.65	6.60	19.25			\$60
32	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$19,749	\$4,716	\$361	13.88	6.60	20.48			\$308
33	Hydrants		Rye	348	2.40%	Hydrants	9/30/2012	11/1/2012	\$7,981	\$1,335	\$160	7.66	6.60	14.26			\$95
34	Services		North Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$16,491	\$2,928	\$251	12.65	6.60	19.25			\$261
35	Services		Hampton	345	1.85%	Services	9/30/2012	11/1/2012	\$64,109	\$8,033	\$1,037	13.88	6.60	20.48			\$1,148
36	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$10,202	\$0	\$510	13.88	6.60	20.48			\$209
37	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2012	11/1/2012	\$598	\$0	\$30	7.66	6.60	14.26			\$9
38									\$931,460	\$185,862	\$12,157						\$14,403

Aquarion Water Company of New Hampshire
2014 Annual WCA Surcharge Filing (2011 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project	Street	Town	1 PUC Acct	2 Depr Rate	3 Type of Project*	4 Date in Service	5 Date of 1st Filing	6 Eligible Capital Costs	7 Retirements	8 = (6 - 7) x 2 Depreciation Expense	9 Mil Rates Town State Total	10 = (((6-7)/1000) x 9)/12** Prop. Tax Expense**
2013 Projects													
39	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2013	11/1/2013	\$2,000	\$0	\$88	13.88 6.60 20.48	\$41
40	Ocean Blvd - Dumas Ave to Winnacunnet Rd		Hampton	343	1.20%	Main Replacement	9/30/2013	11/1/2013	\$749,000	\$16,277	\$8,793	13.88 6.60 20.48	\$15,006
41	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$14,887	\$7,176	\$293	12.65 6.60 19.25	\$148
42	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$85,576	\$62,392	\$881	13.88 6.60 20.48	\$475
43	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$15,037	\$7,727	\$278	7.66 6.60 14.26	\$104
44	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$4,970	\$1,870	\$74	12.65 6.60 19.25	\$60
45	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$19,749	\$4,716	\$361	13.88 6.60 20.48	\$308
46	Hydrants		Rye	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$7,981	\$1,335	\$160	7.66 6.60 14.26	\$95
47	Services		North Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$16,491	\$2,928	\$251	12.65 6.60 19.25	\$261
48	Services		Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$64,109	\$8,033	\$1,037	13.88 6.60 20.48	\$1,148
49	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$10,202	\$0	\$510	13.88 6.60 20.48	\$209
50	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$598	\$0	\$30	7.66 6.60 14.26	\$9
51									\$980,600	\$112,453	\$12,756		\$17,864
2014 Projects													
52	Production Meters		Hampton	328	4.40%	Other Pumping Equipment	9/30/2013	11/1/2013	\$2,000	\$0	\$88	13.88 6.60 20.48	\$31
53	Rt 1 - Glade Path to Tide Mill Rd		Hampton	343	1.20%	Main Replacement	9/30/2013	11/1/2013	\$1,017,000	\$22,101	\$11,939	13.88 6.60 20.48	\$15,282
54	Customer Meters		North Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$12,238	\$5,899	\$241	12.65 6.60 19.25	\$92
55	Customer Meters		Hampton	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$70,350	\$51,291	\$724	13.88 6.60 20.48	\$293
56	Customer Meters		Rye	346	3.80%	Meter Replacement	9/30/2013	11/1/2013	\$12,362	\$8,352	\$228	7.66 6.60 14.26	\$64
57	Hydrants		North Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$4,970	\$1,870	\$74	12.65 6.60 19.25	\$45
58	Hydrants		Hampton	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$19,749	\$4,716	\$361	13.88 6.60 20.48	\$231
59	Hydrants		Rye	348	2.40%	Hydrants	9/30/2013	11/1/2013	\$7,981	\$1,335	\$160	7.66 6.60 14.26	\$71
60	Services		North Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$16,491	\$2,928	\$251	12.65 6.60 19.25	\$196
61	Services		Hampton	345	1.85%	Services	9/30/2013	11/1/2013	\$64,109	\$8,033	\$1,037	13.88 6.60 20.48	\$851
62	Valves		Hampton	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$10,202	\$0	\$510	13.88 6.60 20.48	\$157
63	Valves		Rye	349	5.00%	Other T&D Plant	9/30/2013	11/1/2013	\$598	\$0	\$30	7.66 6.60 14.26	\$6
64									\$1,238,050	\$104,525	\$15,643		\$17,328
65									\$4,817,589	\$567,341	\$64,014		\$78,448
66									TOTALS				
67									to TD-1, Pg 1, Ln 2	to TD-1, Pg 1, Ln 22		to TD-1, Pg 1, Ln 24	
68	* Type of Project (designations will be given for various types of projects)												
69	**Property Tax Expense is for a nine month period for 2014 projects since rates will be in effect in January 2015. Previous years reflect an annualized amount.												
70													

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-11

Date of Response: November 30, 2011
Witness: Troy Dixon

REQUEST: Regarding Tab TD-1; Page 3; Line 18: Please provide the specific calculation used to derive the \$54,352.90 in design costs included in the 2011 project cost amount.

RESPONSE: The Company incurred an Initial Design Cost in the amount of \$102,478.21 and an Additional Design Cost in the amount of \$24,298.32 for the Atlantic Avenue main replacement project. To recover these costs through the WICA surcharge, the Company allocates these design costs to each of the three phases – Phases I, II and III -- of the project. The design costs are allocated to each phase based on the number of feet of main installed during that phase.

The complete design calls for 6,305 feet of main replacement, of which
(a) 2,145 feet was completed in Phase I by September 2010.
(b) 2,460 feet was completed in Phase II by September 2011.
The final Phase III is estimated to entail 1,700 feet of main replacement.

The \$54,352.90 included in the 2011 project cost amount represents those portions of the Initial Design Cost and Additional Design Cost allocated to Phase II based on the number of feet of main replacement completed in Phase II (2,460 feet). Below is a detailed calculation of the \$54,352.90 amount:

Initial Design Cost	:	\$102,478.21 (A)
Feet for the total multiphase project	:	6,305 (B)
Cost per foot (A/B)	:	\$16.25 (C)
Feet for the current phase	:	<u>2,460 (D)</u>
Design cost (C x D)		\$39,983.57 (E)
Additional Design Cost	:	\$24,298.32 (F)
Current and remaining feet	:	4,160 (2,460+1,700= 4,160)(G)
Cost per foot (F/G)	:	\$5.84 (H)
Feet for the current phase	:	<u>2,460 (I)</u>
Design Cost (H x I)		\$14,368.72 (J)
Total Current Design Cost (E+J):		\$54,352.29

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-12

Date of Response: November 30, 2011
Witness: Carl McMorran

REQUEST: Regarding Tab TD-1; Page 3; Lines 19-21: Please explain the increases in the following individual meter costs taking place from 10/1/10 to 9/30/11:
a) 5/8 x 3/4 Meters from \$116.52 to \$128.74.
b) 1" Meters from \$161.00 to \$172.97.

RESPONSE: The cost of these meters increased in 2011. However, some of the meters purchased in 2010 (at the lower cost) were installed in January and February 2011.

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.
DW 11-238

Aquarion Water Company's Responses to
Staff's Data Requests – Set #1

Date Request Received: November 18, 2010
Request No.: Staff 1-13

Date of Response: November 30, 2011
Witness: Troy Dixon

REQUEST: Please provide the specific calculations along with any appropriate explanations to support the following Overhead charges:
a) Tab TD-1; Page 3; Line 18 - \$53,620.49
b) Tab TD-1; Page 3; Line 27 - \$ 2,457.36

RESPONSE: Please refer to Staff 1-13 Attachment 1 for the calculations for both a & b.

Labor (Benefit/Payroll Tax) Overhead Calculations

A. 2010-2011 Labor Amounts

Job Number	Reference	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
XC230-2010-008	TD-1, Pg 3, Line 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,621.48	\$ 9,421.74	\$ 6,532.34	\$ 4,533.06	\$ 184.08	\$ 51.38	\$ -	\$ 32,344.08
VA230-0000-00100	TD-1, Pg 3, Line 27	\$ 84.63	\$ -	\$ 56.42	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 663.78	\$ 188.20	\$ 1,768.24	\$ 385.56	\$ 3,146.83

B 2010-2011 Benefit Overhead %	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	72.0%	72.0%	72.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%

C 2010-2011 Benefit Amounts (A X B)

Job Number	Reference	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
XC230-2010-008	TD-1, Pg 3, Line 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,135.04	\$ 6,595.22	\$ 4,572.64	\$ 3,173.14	\$ 128.86	\$ 35.97	\$ -	\$ 22,640.86
VA230-0000-00100	TD-1, Pg 3, Line 27	\$ 60.93	\$ -	\$ 40.62	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 464.65	\$ 131.74	\$ 1,237.77	\$ 269.89	\$ 2,205.60

D 2010-2011 Payroll Tax Overhead %	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%

F 2010-2011 Payroll Amounts (A X D)

Job Number	Reference	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
XC230-2010-008	TD-1, Pg 3, Line 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 929.72	\$ 753.74	\$ 522.59	\$ 362.64	\$ 14.73	\$ 4.11	\$ -	\$ 2,587.53
VA230-0000-00100	TD-1, Pg 3, Line 27	\$ 6.77	\$ -	\$ 4.51	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 53.10	\$ 15.06	\$ 141.46	\$ 30.84	\$ 251.75

G 2010-2011 Benefit/Payroll Tax Amounts (C + F)

Job Number	Reference	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
XC230-2010-008	TD-1, Pg 3, Line 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,064.75	\$ 7,348.96	\$ 5,095.23	\$ 3,535.79	\$ 143.58	\$ 40.08	\$ -	\$ 25,228.38
VA230-0000-00100	TD-1, Pg 3, Line 27	\$ 67.70	\$ -	\$ 45.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 517.75	\$ 146.80	\$ 1,379.23	\$ 300.74	\$ 2,457.35 b)

General Overhead Calculation

Project XC230-2010-008 Atlantic Avenue Main Replacement

Construction Component

	Reference	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep*	Total
Labor	TD-1, Pg 3, Line 18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,621.48	\$ 9,421.74	\$ 6,532.34	\$ 4,533.06	\$ 184.08	\$ 51.38	\$ -	\$ 32,344.08
Other Direct Costs		-	-	-	-	-	-	99,969.71	97,231.16	69,621.17	40,626.24	9,324.95	218,724.20	535,497.43
Total Direct Costs		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,621.48	\$ 109,391.45	\$ 103,763.50	\$ 74,154.23	\$ 40,810.32	\$ 9,376.33	\$ 218,724.20	\$ 567,841.51
Overhead Rate					5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	
General Overhead		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 581.07	\$ 5,469.57	\$ 5,188.18	\$ 3,707.71	\$ 2,040.52	\$ 468.82	\$ 10,936.21	\$ 28,392.08

Benefit/Payroll Tax (above) \$ 25,228.38

Total Overhead Atlantic Ave, \$ 53,620.46 a)

*Costs of \$23,440 were recorded subsequent to the system entry for general overhead