Aquarion Water Company of New Hampshire
2017 Annual WICA Surcharge Filing

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE

Line						Schedule Ref.	
1							
2	Total Investment through 09/30/2016					TD-1, Pg 3 Col 6b Ln 41	$ 3,001,753
3							
4	Accumulated Depreciation					TD-1, Pg 3 Col 8a Ln 41	(68,868)
5							
6	Net Investment					Ln 2 + Ln 4	$ 2,932,885
7							
8	Allowed Return on Rate Base					TD-1, Pg 2 Col 10	7.49%
9							
10	Allowed Return on Investment					Ln 6 x Ln 8	$ 219,673
11							
12	Income Tax on Equity Component						
13							
14		(a)	(b)	(c)	(d)		
15		Weighted	Tax	Pre tax	Tax Gross Up		
16		Cost	Multiplier	Cost	Col (c) - Col (a)		
17							
18	Debt	3.58%	1.00	3.58%	0.00%		
19	Equity	3.91%	1.68	6.57%	2.66%		
20							
21		7.49%		10.15%	2.66%		
22							
23	Total Eligible Investment (Line 6 above)				$ 2,932,885		
24							
25							
26	Income Tax Expense					Ln 21 Col D X Ln 23	78,015
27							
28	Depreciation Expense					TD-1, Pg 3 Col 8 Ln 41	36,209
29							
30	Property Tax Expense					TD-1, Pg 3 Col 10 Ln 41	62,814
31							
32	Adjustment: Annual Revenues Allowed					Lines 10 + 26 + 28 + 30	$ 396,712
33							
34							
35	Base Revenues on which Adjustment will be applied						
36	Revenues allowed DW 12-085						$ 7,129,043
37	Misc. Charges not subject to WICA						(189,059)
38							$ 6,939,984
39							
40	Surcharge Percent (Line 32 divided by Line 38)						5.72%

Aquarion Water Company of New Hampshire

2017 Annual WICA Surcharge Filing

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT

COMPLETED PROJECTS

		1	2	3	4	5	6	7	8	9	10	11	12 = ((4-5) x 10) + 7 + 8 + 9
Line	Project Name or Class Category	Estimated Completion Date**	Actual Completion Date	Estimated Project Cost**	Actual Project Cost	Accumulated Depreciation	Project Cost minus Accumulated Depreciation	Depreciation Expense	Property Tax Expense	Income Tax Expense	Rate of Return	Annual Retail Revenues	WICA Adjustment Dollars
1													
2	**Project Surcharge Approved in DW 13-314**												
3	Production Meters	30-Sep-13	30-Sep-13	$ 18,030	$ 16,466	$ 1,710	$ 14,756	$ 488	$ 309	$ 393	7.49%	$ 7,129,043	2,295
4	Main Replacements	30-Sep-13	30-Sep-13	$ -	$ 689,856	$ 28,188	$ 661,668	$ 8,054	$ 15,397	$ 17,600	7.49%	$ 7,129,043	90,610
5	Hydrants*	30-Sep-13	30-Sep-13	$ 32,700	$ 8,147	$ 610	$ 7,538	$ 174	$ 175	$ 201	7.49%	$ 7,129,043	1,115
6	Services*	30-Sep-13	30-Sep-13	$ 80,600	$ 14,414	$ 882	$ 13,532	$ 252	$ 297	$ 360	7.49%	$ 7,129,043	1,923
7	Valves*	30-Sep-13	30-Sep-13	$ 10,800	$ 5,167	$ 904	$ 4,263	$ 258	$ 95	$ 113	7.49%	$ 7,129,043	786
8				$ 142,130	$ 734,050	$ 32,294	$ 701,757	$ 9,227	$ 16,273	$ 18,667			96,728
9													
10	**Project Surcharge Approved in DW 14-300**												
11	Production Meters	30-Sep-14	30-Sep-14	$ 1,600	$ 3,044	$ 306	$ 2,738	$ 122	$ 64	$ 73	7.49%	$ 7,129,043	464
12	Main Replacements	30-Sep-14	30-Sep-14	$ 937,968	$ 593,603	$ 17,509	$ 576,093	$ 7,004	$ 13,406	$ 15,324	7.49%	$ 7,129,043	78,883
13				$ 939,568	$ 596,646	$ 17,815	$ 578,831	$ 7,126	$ 13,469	$ 15,397			79,347
14													
15	**Project Surcharge Approved in DW 15-476**												
16	Main Replacements	30-Sep-15	30-Sep-15	$ 741,465	$ 741,465	$ 13,247	$ 728,217	$ 8,831	$ 16,946	$ 19,371	7.49%	$ 7,129,043	99,691
17				$ 741,465	$ 741,465	$ 13,247	$ 728,217	$ 8,831	$ 16,946	$ 19,371			99,691
18													
19	**Project Surcharge Approved in DW 13-314**												
20	Main Replacements	30-Sep-16	30-Sep-16	$ 766,000	$ 893,465	$ 5,300	$ 888,165	$ 10,600	$ 15,501	$ 23,625	7.49%	$ 7,129,043	116,250
21	Hydrants*	30-Sep-16	30-Sep-16	$ 12,000	$ 3,618	$ 35	$ 3,584	$ 69	$ 61	$ 95	7.49%	$ 7,129,043	494
22	Services*	30-Sep-16	30-Sep-16	$ 29,000	$ 31,936	$ 164	$ 31,772	$ 327	$ 555	$ 845	7.49%	$ 7,129,043	4,106
23	Valves*	30-Sep-16	30-Sep-16	$ 5,000	$ 573	$ 14	$ 559	$ 29	$ 10	$ 15	7.49%	$ 7,129,043	95
24				$ 812,000	$ 929,592	$ 5,513	$ 924,079	$ 11,025	$ 16,126	$ 24,581			120,945
25													
26	**TOTALS**			$ 2,635,163	$ 3,001,753	$ 68,868	$ 2,932,885	$ 36,209	$ 62,814	$ 78,015			$ 396,712
27													
28	* Emergency Replacement												
29	* * Per Docket Filing DW 14-300												

Aquarion Water Company of New Hampshire
2017 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	6a Total Capital Costs	6b Eligible Capital Costs	7a Total Retirements	7b Eligible Retirements	8 = (6b - 7b) x 2 Depreciation Expense	8a = 8 x 50% Accumulated Depreciation	9 Mil Rates Town	9 Mil Rates State	9 Mil Rates Total	10 = (((6b-8a)/1000) x 12) Prop. Tax Expense
1																	
2	**Project Surcharge Approved in DW 13-314**																
3																	
4	Production Meters	Rye	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 3,432	$ 3,432	$ 3,033	$ 3,033	$ 18	$ 61	8.44	6.60	15.04	$ 51
5	Production Meters	North Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 4,511	$ 4,511	$ 2,331	$ 2,331	$ 96	$ 336	15.01	6.60	21.61	$ 90
6	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 8,522	$ 8,522	$ -	$ -	$ 375	$ 1,312	16.67	6.60	23.27	$ 168
7	Church Street-Highland Avenue to Williams Street	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 133,335	$ 133,335	$ 6,243	$ 6,243	$ 1,525	$ 5,338	16.67	6.60	23.27	$ 2,978
8	Auburn Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 206,750	$ 206,750	$ 10,346	$ 10,346	$ 2,357	$ 8,249	16.67	6.60	23.27	$ 4,619
9	Auburn Avenue Extension	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 85,554	$ 85,554	$ 359	$ 359	$ 1,022	$ 3,578	16.67	6.60	23.27	$ 1,908
10	Perkins Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 264,216	$ 264,216	$ 1,760	$ 1,760	$ 3,149	$ 11,023	16.67	6.60	23.27	$ 5,892
11	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2013	10/31/2013	$ 22,839	$ 8,147	$ 2,498	$ 891	$ 174	$ 610	16.67	6.60	23.27	$ 175
12	Services*	Hampton	345	1.85%	Services	9/30/2013	10/31/2013	$ 33,941	$ 12,108	$ 1,994	$ 711	$ 211	$ 738	16.67	6.60	23.27	$ 265
13	Services*	Rye	345	1.85%	Services	9/30/2013	10/31/2013	$ 6,464	$ 2,306	$ 230	$ 82	$ 41	$ 144	8.44	6.60	15.04	$ 33
14	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 6,351	$ 2,265	$ -	$ -	$ 113	$ 396	16.67	6.60	23.27	$ 43
15	Valves*	North Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 8,133	$ 2,901	$ -	$ -	$ 145	$ 508	15.01	6.60	21.61	$ 52
16								$ 784,050	$ 734,050	$ 28,794	$ 25,757	$ 9,227	$ 32,294				$ 16,273
17	**Project Surcharge Approved in DW 14-300**																
18																	
19	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2014	10/31/2014	$ 3,044	$ 3,044	$ 264	$ 264	$ 122	$ 306	16.67	6.60	23.27	$ 64
20	Well 9 Transmission Main	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 57,506	$ 57,506	$ 3,160	$ 3,160	$ 652	$ 1,630	16.67	6.60	23.27	$ 1,300
21	Ocean Boulevard- Dumas Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 536,096	$ 536,096	$ 6,801	$ 6,801	$ 6,352	$ 15,879	16.67	6.60	23.27	$ 12,105
22								$ 596,646	$ 596,646	$ 10,225	$ 10,225	$ 7,126	$ 17,815				$ 13,469
23	**Project Surcharge Approved in DW 15-476**																
24																	
25	Great Boars Head - Cliff Circle to Ocean Blvd	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$169,733	$ 169,733	$551	$ 551	$ 2,030	$ 3,045	16.67	6.60	23.27	$ 3,879
26	Kings Hwy - 11th, 13th, 14th & 15th St	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$385,374	$ 385,374	$2,324	$ 2,324	$ 4,597	$ 6,895	16.67	6.60	23.27	$ 8,807
27	Ross Avenue	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$186,358	$ 186,358	$2,637	$ 2,637	$ 2,205	$ 3,307	16.67	6.60	23.27	$ 4,260
28								$ 741,465	$ 741,465	$ 5,512	$ 5,512	$ 8,831	$ 13,247				$ 16,946
29	**Project Surcharge Proposed Herein**																
30																	
31	Lafayette Road - Park Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$556,619	$ 556,619	$ 7,561	$ 7,561	$ 6,589	$ 3,294	16.67	6.60	23.27	$ 9,657
32	Manchester St: off Ashworth Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$187,725	$ 187,725	$ 1,810	$ 1,810	$ 2,231	$ 1,115	16.67	6.60	23.27	$ 3,257
33	Sunsurf Ave: off Cliff Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$149,120	$ 149,120	$ 739	$ 739	$ 1,781	$ 890	16.67	6.60	23.27	$ 2,587
34	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$5,486	$ 2,301	$ 708	$ 297	$ 48	$ 24	16.67	6.60	23.27	$ 40
35	Hydrants*	North Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$3,140	$ 1,317	$ 1,036	$ 435	$ 21	$ 11	15.01	6.60	21.61	$ 21
36	Services*	Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$71,364	$ 29,935	$ 31,998	$ 13,422	$ 305	$ 153	16.67	6.60	23.27	$ 520
37	Services*	North Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$4,770	$ 2,001	$ 1,997	$ 838	$ 22	$ 11	16.67	6.60	23.27	$ 35
38	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2016	10/31/2016	$1,367	$ 573	$ -	$ -	$ 29	$ 14	16.67	6.60	23.27	$ 10
39								$ 979,592	$ 929,592	$ 45,850	$ 25,102	$ 11,025	$ 5,513				$ 16,126
40																	
41							TOTALS	$ 3,101,753	$ 3,001,753	$ 90,381	$ 66,596	$ 36,209	$ 68,868				$ 62,814
42									to TD-1, Pg 1, Ln 2			to TD-1, Pg 1, Ln 28	to TD-1, Pg 1, Ln 4				to TD-1, Pg 1, Ln 30

***Total capital costs are reduced by $50,000 proportionately per Order No. 25,539. Retirements are also proportionately reduced.**
**** Type of Project (designations will be given for various types of projects)**

NHPUC No. 1 – Water ~~Eighth~~ Ninth Revised Page 16
Aquarion Water Company of New HampshireSuperseding ~~Seventh~~ Eighth Revised Page 16

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT

In addition to the net charges provided for in this Tariff, a Water Infrastructure and Conservation Adjustment ("WICA") surcharge of ~~3.99~~5.72% will apply to all bills with services rendered on or after January 1, 201~~6~~7.

I. General Description

Purpose: To recover the fixed costs (depreciation, property taxes and pre-tax return) of certain Commission-approved non-revenue producing system improvement projects completed and placed in service and to be recorded in the individual accounts, as noted below, between base rate cases. In addition, WICA provides the Company with the resources to accelerate asset replacement for infrastructure for the purpose of improving or protecting water quality and the reliability of service and to comply with evolving regulatory requirements imposed by the Safe Drinking Water Act.

Eligible Property: The WICA-eligible property will consist of the following:

Services over and above an annual; $50,000 threshold (account 333) and hydrants (account 335) installed as in-kind (i.e., same size) replacements for customers;

mains and valves (account 331) installed as replacements for existing facilities that have either reached the end of their useful life, are worn out or are in deteriorated condition,

main cleaning and re-lining projects and relocations that are non-reimbursable (account 331);

replacement of production meters (account 304); and

replacement of pressure reducing valves (accounts 309, 331);

II. Computation of the WICA

Calculation: The initial charge, effective January 1, 2011, will be calculated to recover the fixed costs of eligible plant additions that have not previously been reflected in the Company's rate base and will have been placed in service between January 1, 2010 and September 30, 2010. Thereafter, the WICA will be updated on an annual basis to reflect eligible plant additions placed in service during the twelve month period ending three months prior to the effective date of each WICA update (the "Project Year"). Thus, changes in the WICA rate will occur as follows:

Issued: January 1, 2017~~6~~ Issued by:_________________________
Donald Morrissey

Effective: January 1, 2017~~6~~ Title: Chief Financial Officer_________
As authorized by~~in~~ O~~o~~rder No. _________~~25,857~~ in Docket No. DW 16-____~~Case DW 15-476~~

Effective Date Of WICA Change	Date To Which WICA Eligible Plant Additions Reflected
January 1, 2XXX+1	September 30, 2XXX

The fixed costs of eligible infrastructure system improvement projects will consist of depreciation, property taxes and pre-tax return, calculated as follows:

Depreciation: The depreciation expense will be calculated by applying the depreciation rates employed in the Company's last base rate case for the plant accounts to the original cost of WICA-eligible property minus the corresponding retirement unit recorded.

Property Taxes: The property tax expense will reflect an estimate of the tax expense for such projects based on the property tax rate in effect for each town at the end of the most recent Project Year completed (the "tax rate"), and shall be applied to the cumulative Project Year ending net book value of all eligible WICA projects included from the first Project Year thru the end of the most recent Project Year..

Pre-tax return: The pre-tax return will be calculated using the state and federal income tax rates. The cost of equity and debt will be the rates approved in the Company's last base rate case, DW 08-098, or a subsequent docket.

WICA Surcharge Amount: The charge will be expressed as a percentage carried to two decimal places and will be applied to the effective portion of the total amount billed to each customer under the Company's otherwise applicable rates and charges.

Formula: The formula for calculation of the WICA surcharge is as follows:

$$\text{WICA} = \frac{(\text{ISI} \times \text{PTRR}) + \text{Dep} + \text{PT}}{\text{BRWR}}$$

Where:

ISI= the original cost to the Company of eligible infrastructure system improvement projects, less accumulated depreciation.

PTRR= the pre-tax return rate applicable to eligible infrastructure system improvement projects.

Dep= annual depreciation expense related to eligible infrastructure system improvement projects.

PT= annual property taxes related to eligible infrastructure system improvement projects.

BRWR= base retail water revenues as approved by the Commission in the Company's last rate proceeding, DW 08-098, or a subsequent docket.

Annual updates: Supporting data for each annual update will be filed with the Commission and the Office of Consumer Advocate sixty (60) days prior to the effective date of the update. The Company shall also provide notice to the Towns.

III. Safeguards

Cap: The amount of the WICA applied between general rate case filings shall not exceed seven and one-half percent (7.5%) of the Company's annual retail water revenues as approved in its most recent rate filing, and shall not exceed five percent (5%) of such revenues for any twelve-month period.

Project Changes: If, after the Company has received Commission approval for Year 1 projects, because of changed circumstances or significant new information the Company plans to undertake projects in Year 1 that were not included on the list of approved WICA projects for that year or it has decided not to proceed with one or more projects that were included on the Commission-approved list, it shall promptly notify the Commission and all parties to the proceeding in which the list of WICA projects was approved that the Company plans to add to or delete projects and the reason for the proposed changes, in accordance with the following schedule. The Company will submit updates for approved WICA projects for subsequent project years, based upon information known on a project year-to-date basis, from the beginning of the project year through the following effective dates, on the associated reporting dates:

Issued: January 1, 201~~6~~7 Issued by:________________________
Donald Morrissey

Effective: January 1, 201~~6~~7 Title: Chief Financial Officer________

As authorized by~~in~~ O~~o~~rder No. XX,XXX~~25,857~~ in Case DW 16~~5~~-XXX~~476~~

<u>Effective Date</u>	<u>Reporting Date</u>
December 31	January 15
March 31	April 15
June 30	July 15
September 30	October 15

Audits: The WICA will be subject to audit prior to the determination by the Commission.

New Base Rates: The WICA charge will be reset at zero as of the effective date of new base rates that provide for prospective recovery of the annual costs that had theretofore been recovered under the WICA. Thereafter, only the fixed costs of new eligible plant additions, that have not previously been reflected in the Company's rate base, would be reflected in the annual updates of the WICA.

Customer Notice: Customers shall be notified of changes in the WICA by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing. Before sending, the Company will review the notice with the Commission's Consumer Affairs division.

Issued: January 1, 201~~6~~7 | Issued by:_________________________
Donald Morrissey

Effective: January 1, 201~~6~~7 | Title: Chief Financial Officer________

As authorized by~~in~~ O~~o~~rder No. XX,XXX~~25,857~~ in Case DW 16~~5~~-XXX~~476~~

Aquarion Water Company of New Hampshire
2018 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE

Line						Schedule Ref.	
1							
2	Total Investment through 09/30/2018					2018 3 Col 6b Ln 39	$ 3,525,253
3							
4	Accumulated Depreciation					2018 3 Col 8a Ln 39	(108,226)
5							
6	Net Investment					Ln 2 + Ln 4	$ 3,417,028
7							
8	Allowed Return on Rate Base					2018 2 Col 10	7.49%
9							
10	Allowed Return on Investment					Ln 6 x Ln 8	$ 255,935
11							
12	Income Tax on Equity Component						
13							
14		(a)	(b)	(c)	(d)		
15		Weighted	Tax	Pre tax	Tax Gross Up		
16		Cost	Multiplier	Cost	Col (c) - Col (a)		
17							
18	Debt	3.58%	1.00	3.58%	0.00%		
19	Equity	3.91%	1.68	6.57%	2.66%		
20							
21		7.49%		10.15%	2.66%		
22							
23	Total Eligible Investment (Line 6 above)				$ 3,417,028		
24							
25							
26	Income Tax Expense					Ln 21 Col D X Ln 23	90,893
27							
28	Depreciation Expense					2018 3 Col 8 Ln 39	42,505
29							
30	Property Tax Expense					2018 3 Col 10 Ln 39	76,429
31							
32	Adjustment: Annual Revenues Allowed					Lines 10 + 26 + 28 + 30	$ 465,763
33							
34							
35	Base Revenues on which Adjustment will be applied						
36	Revenues allowed DW 12-085						$ 7,129,043
37	Misc. Charges not subject to WICA						(189,059)
38							$ 6,939,984
39							
40	Surcharge Percent (Line 32 divided by Line 38)						6.71%

Aquarion Water Company of New Hampshire
2018 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT
COMPLETED PROJECTS

		1	2	3	4	5	6	7	8	9	10	11	12 = ((4-5) x 10) + 7 + 8 + 9
Line	Project Name or Class Category	Estimated Completion Date**	Actual Completion Date	Estimated Project Cost**	Actual Project Cost	Accumulated Depreciation	Project Cost minus Accumulated Depreciation	Depreciation Expense	Property Tax Expense	Income Tax Expense	Rate of Return	Annual Retail Revenues	WICA Adjustment Dollars
1													
2	**2013 Projects**												
3	Production Meters	30-Sep-13	30-Sep-13	$ 18,030	$ 16,466	$ 2,198	$ 14,268	$ 488	$ 298	$ 380	7.49%	$ 7,129,043	2,234
4	Main Replacements	30-Sep-13	30-Sep-13	$ -	$ 689,856	$ 36,242	$ 653,614	$ 8,054	$ 15,210	$ 17,386	7.49%	$ 7,129,043	89,605
5	Hydrants*	30-Sep-13	30-Sep-13	$ 32,700	$ 8,147	$ 784	$ 7,364	$ 174	$ 171	$ 196	7.49%	$ 7,129,043	1,093
6	Services*	30-Sep-13	30-Sep-13	$ 80,600	$ 14,414	$ 1,134	$ 13,280	$ 252	$ 292	$ 353	7.49%	$ 7,129,043	1,891
7	Valves*	30-Sep-13	30-Sep-13	$ 10,800	$ 5,167	$ 1,163	$ 4,004	$ 258	$ 89	$ 107	7.49%	$ 7,129,043	754
8				$ 142,130	$ 734,050	$ 41,520	$ 692,530	$ 9,227	$ 16,060	$ 18,421			95,578
9													
10	**2014 Projects**												
11	Production Meters	30-Sep-14	30-Sep-14	$ 1,600	$ 3,044	$ 428	$ 2,616	$ 122	$ 61	$ 70	7.49%	$ 7,129,043	449
12	Main Replacements	30-Sep-14	30-Sep-14	$ 937,968	$ 593,603	$ 24,513	$ 569,090	$ 7,004	$ 13,243	$ 15,138	7.49%	$ 7,129,043	78,009
13				$ 939,568	$ 596,646	$ 24,941	$ 571,705	$ 7,126	$ 13,304	$ 15,207			78,458
14													
15	**2015 Projects**												
16	Main Replacements	30-Sep-15	30-Sep-15	$ 741,465	$ 741,465	$ 22,079	$ 719,386	$ 8,831	$ 16,740	$ 19,136	7.49%	$ 7,129,043	98,589
17				$ 741,465	$ 741,465	$ 22,079	$ 719,386	$ 8,831	$ 16,740	$ 19,136			98,589
18													
19	**2016 Projects**												
20	Main Replacements	30-Sep-16	30-Sep-16	$ 766,000	$ 893,465	$ 15,900	$ 877,564	$ 10,600	$ 20,421	$ 23,343	7.49%	$ 7,129,043	120,094
21	Hydrants*	30-Sep-16	30-Sep-16	$ 12,000	$ 3,618	$ 104	$ 3,514	$ 69	$ 80	$ 93	7.49%	$ 7,129,043	506
22	Services*	30-Sep-16	30-Sep-16	$ 29,000	$ 31,936	$ 491	$ 31,445	$ 327	$ 732	$ 836	7.49%	$ 7,129,043	4,250
23	Valves*	30-Sep-16	30-Sep-16	$ 5,000	$ 573	$ 43	$ 530	$ 29	$ 12	$ 14	7.49%	$ 7,129,043	95
24				$ 812,000	$ 929,592	$ 16,538	$ 913,054	$ 11,025	$ 21,245	$ 24,287			124,945
25													
26	**2017 Projects**												
27	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 70	$ 3,430	$ 141	$ 60	$ 91	7.49%	$ 7,129,043	549
28	Main Replacements	30-Sep-17	30-Sep-17	$ 520,000	$ 520,000	$ 3,078	$ 516,922	$ 6,155	$ 9,022	$ 13,750	7.49%	$ 7,129,043	67,644
29				527,000	523,500	3,148	520,352	6,296	9,081	13,841			68,193
30													
31	**TOTALS**			$ 3,162,163	$ 3,525,253	$ 108,226	$ 3,417,028	$ 42,505	$ 76,429	$ 90,893			$ 465,763

* Emergency Replacement
* * Per Docket Filing DW 14-300

Aquarion Water Company of New Hampshire
2018 Annual WICA Surcharge Filing (2016 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	6a Total Capital Costs	6b Eligible Capital Costs	7a Total Retirements	7b Eligible Retirements	8 = (6b - 7b) x 2 Depreciation Expense	8a = 8 x 50% Accumulated Depreciation	9 Mil Rates Town	State	Total	10 = (((6b-8a)/1000) x 12) Prop. Tax Expense
	2013 Projects																
1	Production Meters	Rye	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 3,432	$ 3,432	$ 3,033	$ 3,033	$ 18	$ 79	8.44	6.60	15.04	$ 50
2	Production Meters	North Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 4,511	$ 4,511	$ 2,331	$ 2,331	$ 96	$ 432	15.01	6.60	21.61	$ 88
3	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 8,522	$ 8,522	$ -	$ -	$ 375	$ 1,687	16.67	6.60	23.27	$ 159
4	Church Street-Highland Avenue to Williams Street	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 133,335	$ 133,335	$ 6,243	$ 6,243	$ 1,525	$ 6,863	16.67	6.60	23.27	$ 2,943
5	Auburn Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 206,750	$ 206,750	$ 10,346	$ 10,346	$ 2,357	$ 10,606	16.67	6.60	23.27	$ 4,564
6	Auburn Avenue Extension	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 85,554	$ 85,554	$ 359	$ 359	$ 1,022	$ 4,601	16.67	6.60	23.27	$ 1,884
7	Perkins Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 264,216	$ 264,216	$ 1,760	$ 1,760	$ 3,149	$ 14,173	16.67	6.60	23.27	$ 5,819
8	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2013	10/31/2013	$ 22,839	$ 8,147	$ 2,498	$ 891	$ 174	$ 784	16.67	6.60	23.27	$ 171
9	Services*	Hampton	345	1.85%	Services	9/30/2013	10/31/2013	$ 33,941	$ 12,108	$ 1,994	$ 711	$ 211	$ 949	16.67	6.60	23.27	$ 260
10	Services*	Rye	345	1.85%	Services	9/30/2013	10/31/2013	$ 6,464	$ 2,306	$ 230	$ 82	$ 41	$ 185	8.44	6.60	15.04	$ 32
11	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 6,351	$ 2,265	$ -	$ -	$ 113	$ 510	16.67	6.60	23.27	$ 41
12	Valves*	North Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 8,133	$ 2,901	$ -	$ -	$ 145	$ 653	15.01	6.60	21.61	$ 49
13								$ 784,050	$ 734,050	$ 28,794	$ 25,757	$ 9,227	$ 41,520				$ 16,060
14	**2014 Projects**																
15	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2014	10/31/2014	$ 3,044	$ 3,044	$ 264	$ 264	$ 122	$ 428	16.67	6.60	23.27	$ 61
16	Well 9 Transmission Main	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 57,506	$ 57,506	$ 3,160	$ 3,160	$ 652	$ 2,283	16.67	6.60	23.27	$ 1,285
17	Ocean Boulevard- Dumas Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 536,096	$ 536,096	$ 6,801	$ 6,801	$ 6,352	$ 22,230	16.67	6.60	23.27	$ 11,958
18								$ 596,646	$ 596,646	$ 10,225	$ 10,225	$ 7,126	$ 24,941				$ 13,304
19	**2015 Projects**																
20	Great Boars Head - Cliff Circle to Ocean Blvd	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$169,733	$ 169,733	$551	$ 551	$ 2,030	$ 5,075	16.67	6.60	23.27	$ 3,832
21	Kings Hwy - 11th, 13th, 14th & 15th St	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$385,374	$ 385,374	$2,324	$ 2,324	$ 4,597	$ 11,491	16.67	6.60	23.27	$ 8,700
22	Ross Avenue	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$186,358	$ 186,358	$2,637	$ 2,637	$ 2,205	$ 5,512	16.67	6.60	23.27	$ 4,208
23								$ 741,465	$ 741,465	$ 5,512	$ 5,512	$ 8,831	$ 22,079				$ 16,740
24	**2016 Projects**																
25	Lafayette Road - Park Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$556,619	$ 556,619	$ 7,561	$ 7,561	$ 6,589	$ 9,883	16.67	6.60	23.27	$ 12,723
26	Manchester St: off Ashworth Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$187,725	$ 187,725	$ 1,810	$ 1,810	$ 2,231	$ 3,346	16.67	6.60	23.27	$ 4,290
27	Sunsurf Ave: off Cliff Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$149,120	$ 149,120	$ 739	$ 739	$ 1,781	$ 2,671	16.67	6.60	23.27	$ 3,408
28	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$5,486	$ 2,301	$ 708	$ 297	$ 48	$ 72	16.67	6.60	23.27	$ 52
29	Hydrants*	North Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$3,140	$ 1,317	$ 1,036	$ 435	$ 21	$ 32	15.01	6.60	21.61	$ 28
30	Services*	Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$71,364	$ 29,935	$ 31,998	$ 13,422	$ 305	$ 458	16.67	6.60	23.27	$ 686
31	Services*	North Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$4,770	$ 2,001	$ 1,997	$ 838	$ 22	$ 32	16.67	6.60	23.27	$ 46
32	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2016	10/31/2016	$1,367	$ 573	$ -	$ -	$ 29	$ 43	16.67	6.60	23.27	$ 12
33								$ 979,592	$ 929,592	$ 45,850	$ 25,102	$ 11,025	$ 16,538				$ 21,245
34	**2017 Projects**																
35	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 70	16.67	6.60	23.27	$ 60
36	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$520,000	$ 520,000	$ 7,064	$ 7,064	$ 6,155	$ 3,078	16.67	6.60	23.27	$ 9,022
37								$ 523,500	$ 523,500	$ 7,367	$ 7,367	$ 6,296	$ 3,148				$ 9,081
38																	
39							**TOTALS**	$ 3,625,253	$ 3,525,253	$ 97,748	$ 73,963	$ 42,505	$ 108,226				$ 76,429
40									to TD-1,			to TD-1,	to TD-1,				to TD-1,
41	***Total capital costs are reduced by $50,000 proportionately per Order No. 25,539. Retirements are also proportionately reduced.**								Pg 1, Ln 2			Pg 1, Ln 28	Pg 1, Ln 4				Pg 1, Ln 30
42	**** Type of Project (designations will be given for various types of projects)**																
43																	
44																	
45																	
46																	

Aquarion Water Company of New Hampshire
2019 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE

Line						Schedule Ref.	
1							
2	Total Investment through 09/30/2019					2019 3 Col 6b Ln 44	$ 4,028,753
3							
4	Accumulated Depreciation					2019 3 Col 8a Ln 44	(153,761)
5							
6	Net Investment					Ln 2 + Ln 4	$ 3,874,993
7							
8	Allowed Return on Rate Base					2019 2 Col 10	7.49%
9							
10	Allowed Return on Investment					Ln 6 x Ln 8	$ 290,237
11							
12	Income Tax on Equity Component						
13							
14		(a)	(b)	(c)	(d)		
15		Weighted	Tax	Pre tax	Tax Gross Up		
16		Cost	Multiplier	Cost	Col (c) - Col (a)		
17							
18	Debt	3.58%	1.00	3.58%	0.00%		
19	Equity	3.91%	1.68	6.57%	2.66%		
20							
21		7.49%		10.15%	2.66%		
22							
23	Total Eligible Investment (Line 6 above)				$ 3,874,993		
24							
25							
26	Income Tax Expense					Ln 21 Col D X Ln 23	103,075
27							
28	Depreciation Expense					2019 3 Col 8 Ln 44	48,564
29							
30	Property Tax Expense					2019 3 Col 10 Ln 44	87,203
31							
32	Adjustment: Annual Revenues Allowed					Lines 10 + 26 + 28 + 30	$ 529,079
33							
34							
35	Base Revenues on which Adjustment will be applied						
36	Revenues allowed DW 12-085						$ 7,129,043
37	Misc. Charges not subject to WICA						(189,059)
38							$ 6,939,984
39							
40	Surcharge Percent (Line 32 divided by Line 38)						7.62%

Aquarion Water Company of New Hampshire

2019 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE & CONSERVATION ADJUSTMENT

COMPLETED PROJECTS

		1	2	3	4	5	6	7	8	9	10	11	12 = ((4-5) x 10) + 7 + 8 + 9
Line	Project Name or Class Category	Estimated Completion Date**	Actual Completion Date	Estimated Project Cost**	Actual Project Cost	Accumulated Depreciation	Project Cost minus Accumulated Depreciation	Depreciation Expense	Property Tax Expense	Income Tax Expense	Rate of Return	Annual Retail Revenues	WICA Adjustment Dollars
1													
2	**2013 Projects**												
3	Production Meters	30-Sep-13	30-Sep-13	$ 18,030	$ 16,466	$ 2,687	$ 13,779	$ 488	$ 287	$ 367	7.49%	$ 7,129,043	2,174
4	Main Replacements	30-Sep-13	30-Sep-13	$ -	$ 689,856	$ 44,296	$ 645,560	$ 8,054	$ 15,022	$ 17,172	7.49%	$ 7,129,043	88,600
5	Hydrants*	30-Sep-13	30-Sep-13	$ 32,700	$ 8,147	$ 958	$ 7,189	$ 174	$ 167	$ 191	7.49%	$ 7,129,043	1,071
6	Services*	30-Sep-13	30-Sep-13	$ 80,600	$ 14,414	$ 1,386	$ 13,028	$ 252	$ 286	$ 347	7.49%	$ 7,129,043	1,860
7	Valves*	30-Sep-13	30-Sep-13	$ 10,800	$ 5,167	$ 1,421	$ 3,746	$ 258	$ 84	$ 100	7.49%	$ 7,129,043	722
8				$ 142,130	$ 734,050	$ 50,747	$ 683,303	$ 9,227	$ 15,846	$ 18,176			94,428
9													
10	**2014 Projects**												
11	Production Meters	30-Sep-14	30-Sep-14	$ 1,600	$ 3,044	$ 551	$ 2,493	$ 122	$ 58	$ 66	7.49%	$ 7,129,043	433
12	Main Replacements	30-Sep-14	30-Sep-14	$ 937,968	$ 593,603	$ 31,517	$ 562,086	$ 7,004	$ 13,080	$ 14,951	7.49%	$ 7,129,043	77,135
13				$ 939,568	$ 596,646	$ 32,067	$ 564,579	$ 7,126	$ 13,138	$ 15,018			77,569
14													
15	**2015 Projects**												
16	Main Replacements	30-Sep-15	30-Sep-15	$ 741,465	$ 741,465	$ 30,910	$ 710,555	$ 8,831	$ 16,535	$ 18,901	7.49%	$ 7,129,043	97,487
17				$ 741,465	$ 741,465	$ 30,910	$ 710,555	$ 8,831	$ 16,535	$ 18,901			97,487
18													
19	**2016 Projects**												
20	Main Replacements	30-Sep-16	30-Sep-16	$ 766,000	$ 893,465	$ 26,501	$ 866,964	$ 10,600	$ 20,174	$ 23,061	7.49%	$ 7,129,043	118,771
21	Hydrants*	30-Sep-16	30-Sep-16	$ 12,000	$ 3,618	$ 173	$ 3,445	$ 69	$ 78	$ 92	7.49%	$ 7,129,043	497
22	Services*	30-Sep-16	30-Sep-16	$ 29,000	$ 31,936	$ 818	$ 31,118	$ 327	$ 724	$ 828	7.49%	$ 7,129,043	4,210
23	Valves*	30-Sep-16	30-Sep-16	$ 5,000	$ 573	$ 72	$ 502	$ 29	$ 12	$ 13	7.49%	$ 7,129,043	91
24				$ 812,000	$ 929,592	$ 27,563	$ 902,029	$ 11,025	$ 20,988	$ 23,994			123,569
25													
26	**2017 Projects**												
27	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 211	$ 3,289	$ 141	$ 77	$ 87	7.49%	$ 7,129,043	551
28	Main Replacements	30-Sep-17	30-Sep-17	$ 520,000	$ 520,000	$ 9,233	$ 510,767	$ 6,155	$ 11,886	$ 13,586	7.49%	$ 7,129,043	69,884
29				527,000	523,500	9,444	514,056	6,296	11,962	13,674			70,435
30													
31	**2017 Projects**												
32	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 70	$ 3,430	$ 141	$ 60	$ 91	7.49%	$ 7,129,043	549
33	Main Replacements	30-Sep-17	30-Sep-17	$ 500,000	$ 500,000	$ 2,959	$ 497,041	$ 5,918	$ 8,675	$ 13,221	7.49%	$ 7,129,043	65,043
34				507,000	503,500	3,030	500,470	6,059	8,734	13,313			65,591
35													
36	**TOTALS**			$3,669,163	$ 4,028,753	$ 153,761	$ 3,874,993	$ 48,564	$ 87,203	$ 103,075			$ 529,079

* Emergency Replacement

* * Per Docket Filing DW 14-300

Aquarion Water Company of New Hampshire
2019 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
ELIGIBLE PROJECTS PLACED IN SERVICE

Line	Description of Project		1 PUC Acct	2 Depr Rate	3 Type of Project**	4 Date in Service	5 Date of 1st Filing	6a Total Capital Costs	6b Eligible Capital Costs	7a Total Retirements	7b Eligible Retirements	8 = (6b - 7b) x 2 Depreciation Expense	8a = 8 x 50% Accumulated Depreciation	9 Mil Rates Town	State	Total	10 = (((6b-8a)/1000) x 12) Prop. Tax Expense
	Street	Town															
	2013 Projects																
1	Production Meters	Rye	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 3,432	$ 3,432	$ 3,033	$ 3,033	$ 18	$ 97	8.44	6.60	15.04	$ 50
2	Production Meters	North Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 4,511	$ 4,511	$ 2,331	$ 2,331	$ 96	$ 528	15.01	6.60	21.61	$ 86
3	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 8,522	$ 8,522	$ -	$ -	$ 375	$ 2,062	16.67	6.60	23.27	$ 150
4	Church Street-Highland Avenue to Williams Street	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 133,335	$ 133,335	$ 6,243	$ 6,243	$ 1,525	$ 8,388	16.67	6.60	23.27	$ 2,908
5	Auburn Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 206,750	$ 206,750	$ 10,346	$ 10,346	$ 2,357	$ 12,963	16.67	6.60	23.27	$ 4,509
6	Auburn Avenue Extension	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 85,554	$ 85,554	$ 359	$ 359	$ 1,022	$ 5,623	16.67	6.60	23.27	$ 1,860
7	Perkins Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 264,216	$ 264,216	$ 1,760	$ 1,760	$ 3,149	$ 17,322	16.67	6.60	23.27	$ 5,745
8	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2013	10/31/2013	$ 22,839	$ 8,147	$ 2,498	$ 891	$ 174	$ 958	16.67	6.60	23.27	$ 167
9	Services*	Hampton	345	1.85%	Services	9/30/2013	10/31/2013	$ 33,941	$ 12,108	$ 1,994	$ 711	$ 211	$ 1,160	16.67	6.60	23.27	$ 255
10	Services*	Rye	345	1.85%	Services	9/30/2013	10/31/2013	$ 6,464	$ 2,306	$ 230	$ 82	$ 41	$ 226	8.44	6.60	15.04	$ 31
11	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 6,351	$ 2,265	$ -	$ -	$ 113	$ 623	16.67	6.60	23.27	$ 38
12	Valves*	North Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 8,133	$ 2,901	$ -	$ -	$ 145	$ 798	15.01	6.60	21.61	$ 45
13								$ 784,050	$ 734,050	$ 28,794	$ 25,757	$ 9,227	$ 50,747				$ 15,846
14	**2014 Projects**																
15	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2014	10/31/2014	$ 3,044	$ 3,044	$ 264	$ 264	$ 122	$ 551	16.67	6.60	23.27	$ 58
16	Well 9 Transmission Main	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 57,506	$ 57,506	$ 3,160	$ 3,160	$ 652	$ 2,935	16.67	6.60	23.27	$ 1,270
17	Ocean Boulevard- Dumas Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 536,096	$ 536,096	$ 6,801	$ 6,801	$ 6,352	$ 28,582	16.67	6.60	23.27	$ 11,810
18								$ 596,646	$ 596,646	$ 10,225	$ 10,225	$ 7,126	$ 32,067				$ 13,138
19	**2015 Projects**																
20	Great Boars Head - Cliff Circle to Ocean Blvd	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$169,733	$ 169,733	$551	$ 551	$ 2,030	$ 7,106	16.67	6.60	23.27	$ 3,784
21	Kings Hwy - 11th, 13th, 14th & 15th St	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$385,374	$ 385,374	$2,324	$ 2,324	$ 4,597	$ 16,088	16.67	6.60	23.27	$ 8,593
22	Ross Avenue	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$186,358	$ 186,358	$2,637	$ 2,637	$ 2,205	$ 7,716	16.67	6.60	23.27	$ 4,157
23								$ 741,465	$ 741,465	$ 5,512	$ 5,512	$ 8,831	$ 30,910				$ 16,535
24	**2016 Projects**																
25	Lafayette Road - Park Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$556,619	$ 556,619	$ 7,561	$ 7,561	$ 6,589	$ 16,472	16.67	6.60	23.27	$ 12,569
26	Manchester St: off Ashworth Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$187,725	$ 187,725	$ 1,810	$ 1,810	$ 2,231	$ 5,577	16.67	6.60	23.27	$ 4,239
27	Sunsurf Ave: off Cliff Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$149,120	$ 149,120	$ 739	$ 739	$ 1,781	$ 4,451	16.67	6.60	23.27	$ 3,366
28	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$5,486	$ 2,301	$ 708	$ 297	$ 48	$ 120	16.67	6.60	23.27	$ 51
29	Hydrants*	North Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$3,140	$ 1,317	$ 1,036	$ 435	$ 21	$ 53	15.01	6.60	21.61	$ 27
30	Services*	Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$71,364	$ 29,935	$ 31,998	$ 13,422	$ 305	$ 764	16.67	6.60	23.27	$ 679
31	Services*	North Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$4,770	$ 2,001	$ 1,997	$ 838	$ 22	$ 54	16.67	6.60	23.27	$ 45
32	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2016	10/31/2016	$1,367	$ 573	$ -	$ -	$ 29	$ 72	16.67	6.60	23.27	$ 12
33								$ 979,592	$ 929,592	$ 45,850	$ 25,102	$ 11,025	$ 27,563				$ 20,988
34	**2017 Projects**																
35	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 211	16.67	6.60	23.27	$ 77
36	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$520,000	$ 520,000	$ 7,064	$ 7,064	$ 6,155	$ 9,233	16.67	6.60	23.27	$ 11,886
37								$ 523,500	$ 523,500	$ 7,367	$ 7,367	$ 6,296	$ 9,444				$ 11,962
38																	
39	**2018 Projects**																
40	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 70	16.67	6.60	23.27	$ 60
41	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$500,000	$ 500,000	$ 6,792	$ 6,792	$ 5,918	$ 2,959	16.67	6.60	23.27	$ 8,675
42								$ 503,500	$ 503,500	$ 7,095	$ 7,095	$ 6,059	$ 3,030				$ 8,734
43																	
44							**TOTALS**	$ 4,128,753	$ 4,028,753	$ 104,844	$ 81,058	$ 48,564	$ 153,761				$ 87,203
45									to TD-1,			to TD-1,	to TD-1,				to TD-1,
46	***Total capital costs are reduced by $50,000 proportionately per Order No. 25,539. Retirements are also proportionately reduced.**								Pg 1, Ln 2			Pg 1, Ln 28	Pg 1, Ln 4				Pg 1, Ln 30

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

Aquarion Water Company of New Hampshire

2020 Annual WICA Surcharge Filing (2016 Estimate)

WATER INFRASTRUCTURE AND CONSERVATION ADJUSTMENT
CALCULATION OF SURCHARGE

Line						Schedule Ref.	
1							
2	Total Investment through 09/30/2020					2020 3 Col 6b Ln 49	$ 5,102,253
3							
4	Accumulated Depreciation					2020 3 Col 8a Ln 49	(208,728)
5							
6	Net Investment					Ln 2 + Ln 4	$ 4,893,525
7							
8	Allowed Return on Rate Base					2020 2 Col 10	7.49%
9							
10	Allowed Return on Investment					Ln 6 x Ln 8	$ 366,525
11							
12	Income Tax on Equity Component						
13							
14		(a)	(b)	(c)	(d)		
15		Weighted	Tax	Pre tax	Tax Gross Up		
16		Cost	Multiplier	Cost	Col (c) - Col (a)		
17							
18	Debt	3.58%	1.00	3.58%	0.00%		
19	Equity	3.91%	1.68	6.57%	2.66%		
20							
21		7.49%		10.15%	2.66%		
22							
23	Total Eligible Investment (Line 6 above)				$ 4,893,525		
24							
25							
26	Income Tax Expense					Ln 21 Col D X Ln 23	130,168
27							
28	Depreciation Expense					2020 3 Col 8 Ln 49	61,371
29							
30	Property Tax Expense					2020 3 Col 10 Ln 49	107,609
31							
32	Adjustment: Annual Revenues Allowed					Lines 10 + 26 + 28 + 30	$ 665,672
33							
34							
35	Base Revenues on which Adjustment will be applied						
36	Revenues allowed DW 12-085						$ 7,129,043
37	Misc. Charges not subject to WICA						(189,059)
38							$ 6,939,984
39							
40	Surcharge Percent (Line 32 divided by Line 38)						9.59%

Aquarion Water Company of New Hampshire

2020 Annual WICA Surcharge Filing (2016 Estimate)

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 Accumulated Depreciation	6 Project Cost minus Accumulated Depreciation	7 Depreciation Expense	8 Property Tax Expense	9 Income Tax Expense	10 Rate of Return	11 Annual Retail Revenues	12 = ((4-5) x 10) + 7 + 8 + 9 WICA Adjustment Dollars
1													
2	**2013 Projects**												
3	Production Meters	30-Sep-13	30-Sep-13	$ 18,030	$ 16,466	$ 3,175	$ 13,291	$ 488	$ 276	$ 354	7.49%	$ 7,129,043	2,113
4	Main Replacements	30-Sep-13	30-Sep-13	$ -	$ 689,856	$ 52,350	$ 637,507	$ 8,054	$ 14,835	$ 16,958	7.49%	$ 7,129,043	87,595
5	Hydrants*	30-Sep-13	30-Sep-13	$ 32,700	$ 8,147	$ 1,132	$ 7,015	$ 174	$ 163	$ 187	7.49%	$ 7,129,043	1,049
6	Services*	30-Sep-13	30-Sep-13	$ 80,600	$ 14,414	$ 1,638	$ 12,776	$ 252	$ 281	$ 340	7.49%	$ 7,129,043	1,829
7	Valves*	30-Sep-13	30-Sep-13	$ 10,800	$ 5,167	$ 1,679	$ 3,488	$ 258	$ 78	$ 93	7.49%	$ 7,129,043	690
8				$ 142,130	$ 734,050	$ 59,974	$ 674,076	$ 9,227	$ 15,632	$ 17,930			93,277
9													
10	**2014 Projects**												
11	Production Meters	30-Sep-14	30-Sep-14	$ 1,600	$ 3,044	$ 673	$ 2,371	$ 122	$ 55	$ 63	7.49%	$ 7,129,043	418
12	Main Replacements	30-Sep-14	30-Sep-14	$ 937,968	$ 593,603	$ 38,520	$ 555,082	$ 7,004	$ 12,917	$ 14,765	7.49%	$ 7,129,043	76,261
13				$ 939,568	$ 596,646	$ 39,193	$ 557,453	$ 7,126	$ 12,972	$ 14,828			76,679
14													
15	**2015 Projects**												
16	Main Replacements	30-Sep-15	30-Sep-15	$ 741,465	$ 741,465	$ 39,741	$ 701,723	$ 8,831	$ 16,329	$ 18,666	7.49%	$ 7,129,043	96,385
17				$ 741,465	$ 741,465	$ 39,741	$ 701,723	$ 8,831	$ 16,329	$ 18,666			96,385
18													
19	**2016 Projects**												
20	Main Replacements	30-Sep-16	30-Sep-16	$ 766,000	$ 893,465	$ 37,101	$ 856,364	$ 10,600	$ 19,928	$ 22,779	7.49%	$ 7,129,043	117,449
21	Hydrants*	30-Sep-16	30-Sep-16	$ 12,000	$ 3,618	$ 242	$ 3,376	$ 69	$ 76	$ 90	7.49%	$ 7,129,043	488
22	Services*	30-Sep-16	30-Sep-16	$ 29,000	$ 31,936	$ 1,145	$ 30,791	$ 327	$ 717	$ 819	7.49%	$ 7,129,043	4,169
23	Valves*	30-Sep-16	30-Sep-16	$ 5,000	$ 573	$ 100	$ 473	$ 29	$ 11	$ 13	7.49%	$ 7,129,043	88
24				$ 812,000	$ 929,592	$ 38,588	$ 891,004	$ 11,025	$ 20,732	$ 23,701			122,194
25													
26	**2017 Projects**												
27	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 352	$ 3,148	$ 141	$ 73	$ 84	7.49%	$ 7,129,043	533
28	Main Replacements	30-Sep-17	30-Sep-17	$ 520,000	$ 520,000	$ 15,388	$ 504,612	$ 6,155	$ 11,742	$ 13,423	7.49%	$ 7,129,043	69,116
29				527,000	523,500	15,740	507,760	6,296	11,816	13,506			69,649
30													
31	**2018 Projects**												
32	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 211	$ 3,289	$ 141	$ 77	$ 87	7.49%	$ 7,129,043	551
33	Main Replacements	30-Sep-17	30-Sep-17	$ 500,000	$ 500,000	$ 8,878	$ 491,122	$ 5,918	$ 11,428	$ 13,064	7.49%	$ 7,129,043	67,196
34				507,000	503,500	9,089	494,411	6,059	11,505	13,151			67,747
35													
36	**2019 Projects**												
37	Production Meters	30-Sep-17	30-Sep-17	$ 7,000	$ 3,500	$ 70	$ 3,430	$ 141	$ 60	$ 91	7.49%	$ 7,129,043	549
38	Main Replacements	30-Sep-17	30-Sep-17	$1,070,000	$ 1,070,000	$ 6,333	$ 1,063,667	$ 12,666	$ 18,564	$ 28,294	7.49%	$ 7,129,043	139,191
39				1,077,000	1,073,500	6,403	1,067,097	12,806	18,624	28,385			139,740
40													
41	**TOTALS**			$4,746,163	$ 5,102,253	$ 208,728	$ 4,893,525	$ 61,371	$ 107,609	$ 130,168			$ 665,672

* Emergency Replacement

* * Per Docket Filing DW 14-300

Aquarion Water Company of New Hampshire
2020 Annual WICA Surcharge Filing (2016 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	6a Total Capital Costs	6b Eligible Capital Costs	7a Total Retirements	7b Eligible Retirements	8 = (6b - 7b) x 2 Depreciation Expense	8a = 8 x 50% Accumulated Depreciation	9 Mil Rates Town	State	Total	10 = (((6b-8a)/1000) x 12) Prop. Tax Expense
	2013 Projects																
1	Production Meters	Rye	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 3,432	$ 3,432	$ 3,033	$ 3,033	$ 18	$ 114	8.44	6.60	15.04	$ 50
2	Production Meters	North Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 4,511	$ 4,511	$ 2,331	$ 2,331	$ 96	$ 624	15.01	6.60	21.61	$ 84
3	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2013	10/31/2013	$ 8,522	$ 8,522	$ -	$ -	$ 375	$ 2,437	16.67	6.60	23.27	$ 142
4	Church Street-Highland Avenue to Williams Street	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 133,335	$ 133,335	$ 6,243	$ 6,243	$ 1,525	$ 9,913	16.67	6.60	23.27	$ 2,872
5	Auburn Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 206,750	$ 206,750	$ 10,346	$ 10,346	$ 2,357	$ 15,320	16.67	6.60	23.27	$ 4,455
6	Auburn Avenue Extension	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 85,554	$ 85,554	$ 359	$ 359	$ 1,022	$ 6,645	16.67	6.60	23.27	$ 1,836
7	Perkins Avenue	Hampton	343	1.20%	Main Replacement	9/30/2013	10/31/2013	$ 264,216	$ 264,216	$ 1,760	$ 1,760	$ 3,149	$ 20,472	16.67	6.60	23.27	$ 5,672
8	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2013	10/31/2013	$ 22,839	$ 8,147	$ 2,498	$ 891	$ 174	$ 1,132	16.67	6.60	23.27	$ 163
9	Services*	Hampton	345	1.85%	Services	9/30/2013	10/31/2013	$ 33,941	$ 12,108	$ 1,994	$ 711	$ 211	$ 1,370	16.67	6.60	23.27	$ 250
10	Services*	Rye	345	1.85%	Services	9/30/2013	10/31/2013	$ 6,464	$ 2,306	$ 230	$ 82	$ 41	$ 267	8.44	6.60	15.04	$ 31
11	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 6,351	$ 2,265	$ -	$ -	$ 113	$ 736	16.67	6.60	23.27	$ 36
12	Valves*	North Hampton	349	5.00%	Other T&D Plant	9/30/2013	10/31/2013	$ 8,133	$ 2,901	$ -	$ -	$ 145	$ 943	15.01	6.60	21.61	$ 42
13								$ 784,050	$ 734,050	$ 28,794	$ 25,757	$ 9,227	$ 59,974				$ 15,632
14	**2014 Projects**																
15	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2014	10/31/2014	$ 3,044	$ 3,044	$ 264	$ 264	$ 122	$ 673	16.67	6.60	23.27	$ 55
16	Well 9 Transmission Main	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 57,506	$ 57,506	$ 3,160	$ 3,160	$ 652	$ 3,587	16.67	6.60	23.27	$ 1,255
17	Ocean Boulevard- Dumas Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2014	10/31/2014	$ 536,096	$ 536,096	$ 6,801	$ 6,801	$ 6,352	$ 34,933	16.67	6.60	23.27	$ 11,662
18								$ 596,646	$ 596,646	$ 10,225	$ 10,225	$ 7,126	$ 39,193				$ 12,972
19	**2015 Projects**																
20	Great Boars Head - Cliff Circle to Ocean Blvd	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$169,733	$ 169,733	$551	$ 551	$ 2,030	$ 9,136	16.67	6.60	23.27	$ 3,737
21	Kings Hwy - 11th, 13th, 14th & 15th St	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$385,374	$ 385,374	$2,324	$ 2,324	$ 4,597	$ 20,685	16.67	6.60	23.27	$ 8,486
22	Ross Avenue	Hampton	343	1.20%	Main Replacement	9/30/2015	10/31/2015	$186,358	$ 186,358	$2,637	$ 2,637	$ 2,205	$ 9,921	16.67	6.60	23.27	$ 4,106
23								$ 741,465	$ 741,465	$ 5,512	$ 5,512	$ 8,831	$ 39,741				$ 16,329
24	**2016 Projects**																
25	Lafayette Road - Park Ave to Winnacunnet Rd	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$556,619	$ 556,619	$ 7,561	$ 7,561	$ 6,589	$ 23,060	16.67	6.60	23.27	$ 12,416
26	Manchester St: off Ashworth Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$187,725	$ 187,725	$ 1,810	$ 1,810	$ 2,231	$ 7,808	16.67	6.60	23.27	$ 4,187
27	Sunsurf Ave: off Cliff Ave	Hampton	343	1.20%	Main Replacement	9/30/2016	10/31/2016	$149,120	$ 149,120	$ 739	$ 739	$ 1,781	$ 6,232	16.67	6.60	23.27	$ 3,325
28	Hydrants*	Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$5,486	$ 2,301	$ 708	$ 297	$ 48	$ 168	16.67	6.60	23.27	$ 50
29	Hydrants*	North Hampton	348	2.40%	Hydrants	9/30/2016	10/31/2016	$3,140	$ 1,317	$ 1,036	$ 435	$ 21	$ 74	15.01	6.60	21.61	$ 27
30	Services*	Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$71,364	$ 29,935	$ 31,998	$ 13,422	$ 305	$ 1,069	16.67	6.60	23.27	$ 672
31	Services*	North Hampton	345	1.85%	Services	9/30/2016	10/31/2016	$4,770	$ 2,001	$ 1,997	$ 838	$ 22	$ 75	16.67	6.60	23.27	$ 45
32	Valves*	Hampton	349	5.00%	Other T&D Plant	9/30/2016	10/31/2016	$1,367	$ 573	$ -	$ -	$ 29	$ 100	16.67	6.60	23.27	$ 11
33								$ 979,592	$ 929,592	$ 45,850	$ 25,102	$ 11,025	$ 38,588				$ 20,732
34	**2017 Projects**																
35	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 352	16.67	6.60	23.27	$ 73
36	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$520,000	$ 520,000	$ 7,064	$ 7,064	$ 6,155	$ 15,388	16.67	6.60	23.27	$ 11,742
37								$ 523,500	$ 523,500	$ 7,367	$ 7,367	$ 6,296	$ 15,740				$ 11,816
38																	
39	**2018 Projects**																
40	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 211	16.67	6.60	23.27	$ 77
41	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$500,000	$ 500,000	$ 6,792	$ 6,792	$ 5,918	$ 8,878	16.67	6.60	23.27	$ 11,428
42								$ 503,500	$ 503,500	$ 7,095	$ 7,095	$ 6,059	$ 9,089				$ 11,505
43																	
44	**2019 Projects**																
45	Production Meters	Hampton	328	4.40%	Other Pumping	9/30/2017	10/31/2017	$ 3,500	$ 3,500	$303	$ 303	$ 141	$ 70	16.67	6.60	23.27	$ 60
46	Main Replacements	Hampton	343	1.20%	Main Replacement	9/30/2017	10/31/2017	$1,070,000	$ 1,070,000	$ 14,535	$ 14,535	$ 12,666	$ 6,333	16.67	6.60	23.27	$ 18,564
47								$ 1,073,500	$ 1,073,500	$ 14,838	$ 14,838	$ 12,806	$ 6,403				$ 18,624
48																	
49							**TOTALS**	$ 5,202,253	$ 5,102,253	$ 119,682	$ 95,896	$ 61,371	$ 208,728				$ 107,609
									to TD-1, Pg 1, Ln 2			to TD-1, Pg 1, Ln 28	to TD-1, Pg 1, Ln 4				to TD-1, Pg 1, Ln 30

***Total capital costs are reduced by $50,000 proportionately per Order No. 25,539. Retirements are also proportionately reduced.**
**** Type of Project (designations will be given for various types of projects)**