

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	DW 16-xxx																
2	PENNICHUCK WATER WORKS, INC.																
3	SUMMARY SCHEDULE OF WICA INVESTMENTS																
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015																
5	and PROJECTED CONSTRUCTION YEARS 2016- 2018																
6																	
7																	
8	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)									
9																	
10																	
11	2013 ¹																
12	Actual Investment (DW 13-358)											Depreciation Expense					
13																	
14		Gross	Cost of	Book Cost	Retirement	Net	Depreciation	Depreciation									
15		Investment	Removal	(2) - (3)		Investment	Rate ⁷	Expense									
16						(4) - (5)		(6) x (7)									
17	Mains	\$ 1,563,037	\$ (156,234)	\$ 1,406,803	\$ (14,422)	\$ 1,392,381	1.60%	\$ 22,278									
18	Contingency	-	-	-	-	-	1.60%	-									
19	Paving	28,395	(2,839)	25,556	-	25,556	1.57%	401									
20	Hydrants	59,164	(5,063)	54,101	(2,293)	51,808	2.24%	1,160									
21	Services	241,199	(22,980)	218,219	(6,924)	211,295	2.34%	4,944									
22	Valves	69,084	(6,908)	62,176	(2,174)	60,002	1.60%	960									
23	Total	\$ 1,960,879	\$ (194,024)	\$ 1,766,855	\$ (25,813)	\$ 1,741,042		\$ 29,744									
24																	
25																	
26																	
27																	
28	2014 ²																
29	Actual Investment (DW 15-043)											Depreciation Expense					
30																	
31		Gross	Cost of	Book Cost	Retirement	Net	Depreciation	Depreciation									
32		Investment	Removal ⁸	(2) - (3)		Investment	Rate ⁷	Expense									
33						(4) - (5)		(6) x (7)									
34	Mains	\$ 2,744,191	(273,203)	\$ 2,470,988	\$ -	\$ 2,470,988	1.60%	\$ 39,536									
35	Contingency	-	-	-	-	-	1.60%	-									
36	Paving	-	-	-	-	-	1.57%	-									
37	Hydrants	35,249	(3,525)	31,724	(215)	31,509	2.24%	706									
38	Services	82,444	(8,244)	74,200	(1)	74,199	2.34%	1,736									
39	Valves	10,031	(1,003)	9,028	(538)	8,490	1.60%	136									
40	Total	\$ 2,871,915	\$ (285,975)	\$ 2,585,940	\$ (754)	\$ 2,585,186		\$ 42,114									
41																	
42																	
43																	
44																	
45	2015 ³																
46	Actual Investment											Depreciation Expense					
47																	
48		Gross	Cost of	Book Cost	Retirement	Net	Depreciation	Depreciation									
49		Investment	Removal ⁸	(2) - (3)		Investment	Rate ⁷	Expense									
50						(4) - (5)		(6) x (7)									
51	Mains	\$ 3,089,415	\$ (308,941)	\$ 2,780,473	\$ 38,121	\$ 2,818,594	1.60%	\$ 45,098									
52	Contingency	-	-	\$ -	-	-	1.60%	\$ -									
53	Paving	44,436	(4,444)	\$ 39,993	-	39,993	1.57%	\$ 628									
54	Hydrants	76,976	(7,698)	\$ 69,278	9,516	78,795	2.24%	\$ 1,765									
55	Services	76,496	(7,650)	\$ 68,846	2,627	71,473	2.34%	\$ 1,672									
56	Valves	10,558	(1,056)	\$ 9,502	2,995	12,497	1.60%	\$ 200									
57	Total	\$ 3,297,881	\$ (329,788)	\$ 2,968,093	\$ 53,259	\$ 3,021,352		\$ 49,363									
58																	
59																	
60																	

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	DW 16-xxx																
2	PENNICHUCK WATER WORKS, INC.																
3	SUMMARY SCHEDULE OF WICA INVESTMENTS																
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015																
5	and PROJECTED CONSTRUCTION YEARS 2016- 2018																
6																	
7																	
8		(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)	
9																	
61																	
62		2016 ⁴		Projected Investment									Depreciation Expense				
63																	
64																	
65				Gross		Cost of						Net		Depreciation		Depreciation	
66				Investment		Removal ⁸		Book Cost		Retirement		Investment		Rate ⁷		Expense	
67								(2) - (3)				(4) - (5)				(6) x (7)	
68		Mains		\$ 4,188,000		\$ (418,800)		\$ 3,769,200		\$ -		\$ 3,769,200		1.60%		\$ 60,307	
69		Contingency		418,800		(41,880)		376,920		-		376,920		1.60%		6,031	
70		Paving		292,330		(29,233)		263,097		-		263,097		1.57%		4,131	
71		Hydrants		40,752		(4,075)		36,677		-		36,677		2.24%		822	
72		Services		64,077		(6,408)		57,669		-		57,669		2.34%		1,349	
73		Valves		14,784		(1,478)		13,306		-		13,306		1.60%		213	
74		Total		<u>\$ 5,018,743</u>		<u>\$ (501,874)</u>		<u>\$ 4,516,869</u>		<u>\$ -</u>		<u>\$ 4,516,869</u>				<u>\$ 72,852</u>	
75																	
76																	
77																	
78																	
79		2017 ⁵		Projected Investment									Depreciation Expense				
80																	
81																	
82				Gross		Cost of						Net		Depreciation		Depreciation	
83				Investment		Removal ⁸		Book Cost		Retirement		Investment		Rate ⁷		Expense	
84								(2) - (3)				(4) - (5)				(6) x (7)	
85		Mains		\$ 4,493,000		\$ (449,300)		\$ 4,043,700		\$ -		\$ 4,043,700		1.60%		\$ 64,699	
86		Contingency		449,300		(44,930)		404,370		-		404,370		1.60%		6,470	
87		Paving		250,000		(25,000)		225,000		-		225,000		1.57%		3,533	
88		Hydrants		40,752		(4,075)		36,677		-		36,677		2.24%		822	
89		Services		64,077		(6,408)		57,669		-		57,669		2.34%		1,349	
90		Valves		14,784		(1,478)		13,306		-		13,306		1.60%		213	
91		Total		<u>\$ 5,311,913</u>		<u>\$ (531,191)</u>		<u>\$ 4,780,722</u>		<u>\$ -</u>		<u>\$ 4,780,722</u>				<u>\$ 77,086</u>	
92																	
93																	
94																	
95																	
96		2018 ⁶		Projected Investment									Depreciation Expense				
97																	
98																	
99				Gross		Cost of						Net		Depreciation		Depreciation	
100				Investment		Removal ⁸		Book Cost		Retirement		Investment		Rate ⁷		Expense	
101								(2) - (3)				(4) - (5)				(6) x (7)	
102		Mains		\$ 5,490,000		\$ (549,000)		\$ 4,941,000		\$ -		\$ 4,941,000		1.60%		\$ 79,056	
103		Contingency		549,000		(54,900)		494,100		-		494,100		1.60%		7,906	
104		Paving		250,000		(25,000)		225,000		-		225,000		1.57%		3,533	
105		Hydrants		40,752		(4,075)		36,677		-		36,677		2.24%		822	
106		Services		64,077		(6,408)		57,669		-		57,669		2.34%		1,349	
107		Valves		14,784		(1,478)		13,306		-		13,306		1.60%		213	
108		Total		<u>\$ 6,408,613</u>		<u>\$ (640,861)</u>		<u>\$ 5,767,752</u>		<u>\$ -</u>		<u>\$ 5,767,752</u>				<u>\$ 92,878</u>	
109																	
110																	
111																	
112		Notes:															
113		¹ Based on PWW's WICA Filing in DW 13-358.															
114		² Based on PWW's WICA Filing in DW 15-043.															
115		³ Based on Attachment B, Page 1 of 4.															
116		⁴ Based on Attachment B, Page 2 of 4.															
117		⁵ Based on Attachment B, Page 3 of 4.															
118		⁶ Based on Attachment B, Page 4 of 4.															
119		⁷ The Depreciation Rates are based on the depreciation study approved in DW 06-073.															
120		⁸ The Cost of Removal for 2014 Mains is from Page 4 of the Final Audit Report in DW 15-043 dated 3/19/15. All other Cost of Removal															
121		amounts in 2014 - 2018 are based upon 10.00% of the Gross Investment.															

	A	B	C	D	E	F	G	H	I
1	DW 16-xxx								
2	PENNICHUCK WATER WORKS, INC.								
3	PROJECTED CALCULATION OF 2016 WICA SURCHARGE								
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015								
5									
6									
7									
8									
9	Actual								
10									
11	Plant in Service:	2013	2014	2015	Total				
12	Gross Plant Investment (Att A; Sch 1; Col (2))	\$ 1,960,879	\$ 2,871,915	\$ 3,297,881	\$ 8,130,675				
13	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(809,788)				
14	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	26,692				
15	Net Plant Investment	1,741,042	2,585,186	3,021,352	7,347,580				
16									
17	Accumulated Depreciation:								
18	Depreciation Expense ¹ (Att A; Sch 1; Col (8)):								
19	2013 Net Plant Investment	14,872	29,744	29,744	74,360				
20	2014 Net Plant Investment	-	21,057	42,114	63,171				
21	2015 Net Plant Investment	-	-	24,681	24,681				
22	Total Depreciation Expense	14,872	50,801	96,539	162,212				
23	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(809,788)				
24	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	26,692				
25	Net Accumulated Depreciation	(204,965)	(235,928)	(179,989)	(620,883)				
26									
27	Net Plant in Service	\$ 1,946,007	\$ 2,821,114	\$ 3,201,342	\$ 7,968,463				
28	Pre-tax Rate of Return ²					x	6.17%		
29	Return on Investment					\$	491,518		
30									
31	Property Tax Expense ³	@	\$28.59	per \$1,000	227,818				
32									
33	Annual Depreciation Expense (Att A; Sch 1; Col (8)):								
34	2013 Net Plant Investment					29,744			
35	2014 Net Plant Investment					42,114			
36	2015 Net Plant Investment					49,363			
37	Total Annual Depreciation Expense					121,221			
38									
39	2016 Cumulative Revenue Requirement					\$ 840,557			
40	Less: 2015 Cumulative Revenue Requirement ⁴					(500,198)			
41	2016 Revenue Requirement					\$ 340,358			
42									
43	Water Revenues per DW 13-130 ⁵					\$ 27,689,214			
44									
45									
46	2016 Revenue Surcharge %					1.23%			
47	2016 Cumulative Revenue Surcharge %					3.04%			
48									
49									
50	Customer Impact:								
51	5/8 Inch Meter Monthly Charge					\$ 20.34			
52	Volumetric Charge					\$ 3.30			
53	Average Single Family Residential Usage (CCF)					7.88			
54	Average Monthly Usage Charge					\$ 26.00			
55	Total Average Monthly Charge					\$ 46.34			
56									
57	Average Monthly \$ Impact per Customer of 2016 Surcharge					\$ 0.57			
58	Average Monthly \$ Impact per Customer of 2016 Cumulative Surcharge					\$ 1.41			
59									

	A	B	C	D	E	F	G	H	I																
1	DW 16-xxx																								
2	PENNICHUCK WATER WORKS, INC.																								
3	PROJECTED CALCULATION OF 2016 WICA SURCHARGE																								
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015																								
5																									
6																									
7																									
60	Notes:																								
61	¹ The half-year convention for depreciation expense is employed whereby one-half of the annual depreciation																								
62	expense is recorded in the first and last year of an asset's service life.																								
63	² Calculation of Pre-Tax Rate of Return (Based on PWW's Rate Filing in DW 13-130)																								
64	<table><tr><td></td><td>Weighted Cost</td><td>Tax Multiplier</td><td>Pre Tax Cost</td></tr><tr><td>65 Debt</td><td>5.59%</td><td>1.000</td><td>5.59%</td></tr><tr><td>66 Equity</td><td>0.35%</td><td>1.656</td><td>0.58%</td></tr><tr><td>67</td><td>5.94%</td><td></td><td>6.17%</td></tr></table>										Weighted Cost	Tax Multiplier	Pre Tax Cost	65 Debt	5.59%	1.000	5.59%	66 Equity	0.35%	1.656	0.58%	67	5.94%		6.17%
	Weighted Cost	Tax Multiplier	Pre Tax Cost																						
65 Debt	5.59%	1.000	5.59%																						
66 Equity	0.35%	1.656	0.58%																						
67	5.94%		6.17%																						
68	³ City of Nashua 2015 Mill Rate of \$21.99 and State Utility Property Tax Rate of \$6.60.																								
69	⁴ Attachment A; Schedule 2a																								
70	⁵ Base rate revenue requirement approved in DW 13-130 by Commission Order No. 25,693 (7/15/14).																								

	A	B	C	D	E	F	G	H	I	J	K
1	DW 16-xxx										
2	PENNICHUCK WATER WORKS, INC.										
3	PROJECTED CALCULATION OF 2017 WICA SURCHARGE										
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015										
5	and PROJECTED CONSTRUCTION YEAR 2016										
6											
7											
8											
9											
10											
11	Plant in Service:										
12	Gross Plant Investment (Att A; Sch 1; Col (2))	\$	1,960,879	\$	2,871,915	\$	3,297,881	\$	5,018,743	\$	13,149,418
13	Less: Cost of Removal (Att A; Sch 1; Col (3))		(194,024)		(285,975)		(329,788)		(501,874)		(1,311,662)
14	Less: Plant Retirements (Att A; Sch 1; Col (5))		(25,813)		(754)		53,259		-		26,692
15	Net Plant Investment		1,741,042		2,585,186		3,021,352		4,516,869		11,864,449
16											
17	Accumulated Depreciation:										
18	Depreciation Expense ¹ (Att A; Sch 1; Col (8)):										
19	2013 Net Plant Investment		14,872		29,744		29,744		29,744		104,104
20	2014 Net Plant Investment		-		21,057		42,114		42,114		105,284
21	2015 Net Plant Investment		-		-		24,681		49,363		74,044
22	2016 Net Plant Investment		-		-		-		36,426		36,426
23	Total Depreciation Expense		14,872		50,801		96,539		157,647		319,859
24	Less: Cost of Removal (Att A; Sch 1; Col (3))		(194,024)		(285,975)		(329,788)		(501,874)		(1,311,662)
25	Less: Plant Retirements (Att A; Sch 1; Col (5))		(25,813)		(754)		53,259		-		26,692
26	Net Accumulated Depreciation		(204,965)		(235,928)		(179,989)		(344,228)		(965,110)
27											
28	Net Plant in Service	\$	1,946,007	\$	2,821,114	\$	3,201,342	\$	4,861,096	\$	12,829,559
29	Pre-tax Rate of Return ²									x	6.17%
30	Return on Investment										\$ 791,365
31											
32	Property Tax Expense ³	@	\$28.59	per	\$1,000						366,797
33											
34	Annual Depreciation Expense (Att A; Sch 1; Col (8)):										
35	2013 Net Plant Investment										29,744
36	2014 Net Plant Investment										42,114
37	2015 Net Plant Investment										49,363
38	2016 Net Plant Investment										72,852
39	Total Annual Depreciation Expense										194,073
40											
41	2017 Cumulative Revenue Requirement										\$ 1,352,235
42	Less: 2016 Cumulative Revenue Requirement ⁴										(840,557)
43	2017 Revenue Requirement										\$ 511,678
44											
45	Water Revenues per DW 13-130 ⁵										\$ 27,689,214
46											
47											
48	2017 Revenue Surcharge %										1.85%
49	2017 Cumulative Revenue Surcharge %										4.88%
50											
51											
52	Customer Impact:										
53	5/8 Inch Meter Monthly Charge										\$ 20.34
54	Volumetric Charge										\$ 3.30
55	Average Single Family Residential Usage (CCF)										7.88
56	Average Monthly Usage Charge										\$ 26.00
57	Total Average Monthly Charge										\$ 46.34
58											
59	Average Monthly \$ Impact per Customer of 2017 Surcharge										\$ 0.86
60	Average Monthly \$ Impact per Customer of 2017 Cumulative Surcharge										\$ 2.26
61											

	A	B	C	D	E	F	G	H	I	J	K																
1	DW 16-xxx																										
2	PENNICHUCK WATER WORKS, INC.																										
3	PROJECTED CALCULATION OF 2017 WICA SURCHARGE																										
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015																										
5	and PROJECTED CONSTRUCTION YEAR 2016																										
6																											
7																											
62	Notes:																										
63	¹ The half-year convention for depreciation expense is employed whereby one-half of the annual depreciation																										
64	expense is recorded in the first and last year of an asset's service life.																										
65	² Calculation of Pre-Tax Rate of Return (Based on PWW's Rate Filing in DW 13-130)																										
66	<table><tr><td></td><td>Weighted Cost</td><td>Tax Multiplier</td><td>Pre Tax Cost</td></tr><tr><td>67 Debt</td><td>5.59%</td><td>1.000</td><td>5.59%</td></tr><tr><td>68 Equity</td><td>0.35%</td><td>1.656</td><td>0.58%</td></tr><tr><td>69</td><td>5.94%</td><td></td><td>6.17%</td></tr></table>												Weighted Cost	Tax Multiplier	Pre Tax Cost	67 Debt	5.59%	1.000	5.59%	68 Equity	0.35%	1.656	0.58%	69	5.94%		6.17%
	Weighted Cost	Tax Multiplier	Pre Tax Cost																								
67 Debt	5.59%	1.000	5.59%																								
68 Equity	0.35%	1.656	0.58%																								
69	5.94%		6.17%																								
70	³ City of Nashua 2015 Mill Rate of \$21.99 and State Utility Property Tax Rate of \$6.60.																										
71	⁴ Attachment A; Schedule 2b																										
72	⁵ Base rate revenue requirement approved in DW 13-130 by Commission Order No. 25,693 (7/15/14).																										

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	DW 16-xxx												
2	PENNICHUCK WATER WORKS, INC.												
3	PROJECTED CALCULATION OF 2018 WICA SURCHARGE												
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015												
5	and PROJECTED CONSTRUCTION YEARS 2016 - 2017												
6													
7													
8													
9													
10													
11	Plant Investment:	Actual			Projected								
12		2013	2014	2015	2016	2017	Total						
12	Gross Plant Investment (Att A; Sch 1; Col (2))	\$ 1,960,879	\$ 2,871,915	\$ 3,297,881	\$ 5,018,743	\$ 5,311,913	\$ 18,461,331						
13	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(501,874)	(531,191)	(1,842,853)						
14	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	-	-	26,692						
15	Net Plant Investment	1,741,042	2,585,186	3,021,352	4,516,869	4,780,722	16,645,170						
16													
17	Accumulated Depreciation:												
18	Depreciation Expense ¹ (Att A; Sch 1; Col (8)):												
19	2013 Net Plant Investment	14,872	29,744	29,744	29,744	29,744	133,849						
20	2014 Net Plant Investment	-	21,057	42,114	42,114	42,114	147,398						
21	2015 Net Plant Investment	-	-	24,681	49,363	49,363	123,407						
22	2016 Net Plant Investment	-	-	-	36,426	72,852	109,279						
23	2017 Net Plant Investment	-	-	-	-	38,543	38,543						
24	Total Depreciation Expense	14,872	50,801	96,539	157,647	232,616	552,475						
25	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(501,874)	(531,191)	(1,842,853)						
26	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	-	-	26,692						
27	Net Accumulated Depreciation	(204,965)	(235,928)	(179,989)	(344,227)	(298,575)	(1,263,686)						
28													
29	Net Plant in Service	\$ 1,946,007	\$ 2,821,114	\$ 3,201,342	\$ 4,861,096	\$ 5,079,297	\$ 17,908,856						
30	Pre-tax Rate of Return ²												
31	Return on Investment	x 6.17%											
32		\$ 1,104,671											
33	Property Tax Expense ³	@	\$28.59 per \$1,000					512,014					
34													
35	Annual Depreciation Expense (Att A; Sch 1; Col (8)):												
36	2013 Net Plant Investment	29,744											
37	2014 Net Plant Investment	42,114											
38	2015 Net Plant Investment	49,363											
39	2016 Net Plant Investment	72,852											
40	2017 Net Plant Investment	77,086											
41	Total Annual Depreciation Expense	271,159											
42													
43	2018 Cumulative Revenue Requirement	\$ 1,887,843											
44	Less: 2017 Cumulative Revenue Requirement ⁴	(1,352,235)											
45	2018 Revenue Requirement	\$ 535,608											
46													
47	Water Revenues per DW 13-130 ⁵	\$ 27,689,214											
48													
49													
50	2018 Revenue Surcharge %	1.93%											
51	2018 Cumulative Revenue Surcharge %	6.82%											
52													
53													
54	Customer Impact:												
55	5/8 Inch Meter Monthly Charge	\$ 20.34											
56	Volumetric Charge	\$ 3.30											
57	Average Single Family Residential Usage (CCF)	7.88											
58	Average Monthly Usage Charge	\$ 26.00											
59	Total Average Monthly Charge	\$ 46.34											
60													
61	Average Monthly \$ Impact per Customer of 2018 Surcharge	\$ 0.90											
62	Average Monthly \$ Impact per Customer of 2018 Cumulative Surcharge	\$ 3.16											
63													

	A	B	C	D	E	F	G	H	I	J	K	L	M																
1	DW 16-xxx																												
2	PENNICHUCK WATER WORKS, INC.																												
3	PROJECTED CALCULATION OF 2018 WICA SURCHARGE																												
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015																												
5	and PROJECTED CONSTRUCTION YEARS 2016 - 2017																												
6																													
7																													
64	Notes:																												
65	¹ The half-year convention for depreciation expense is employed whereby one-half of the annual depreciation																												
66	expense is recorded in the first and last year of an asset's service life.																												
67	² Calculation of Pre-Tax Rate of Return (Based on PWW's Rate Filing in DW 13-130)																												
68	<table><tr><td></td><td>Weighted Cost</td><td>Tax Multiplier</td><td>Pre Tax Cost</td></tr><tr><td>69 Debt</td><td>5.59%</td><td>1.000</td><td>5.59%</td></tr><tr><td>70 Equity</td><td>0.35%</td><td>1.656</td><td>0.58%</td></tr><tr><td>71</td><td>5.94%</td><td></td><td>6.17%</td></tr></table>														Weighted Cost	Tax Multiplier	Pre Tax Cost	69 Debt	5.59%	1.000	5.59%	70 Equity	0.35%	1.656	0.58%	71	5.94%		6.17%
	Weighted Cost	Tax Multiplier	Pre Tax Cost																										
69 Debt	5.59%	1.000	5.59%																										
70 Equity	0.35%	1.656	0.58%																										
71	5.94%		6.17%																										
72	³ City of Nashua 2015 Mill Rate of \$21.99 and State Utility Property Tax Rate of \$6.60.																												
73	⁴ Attachment A; Schedule 2c																												
74	⁵ Base rate revenue requirement approved in DW 13-130 by Commission Order No. 25,693 (7/15/14).																												

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	DW 16-xxx														
2	PENNICHUCK WATER WORKS, INC.														
3	PROJECTED CALCULATION OF 2019 WICA SURCHARGE														
4	FOR COMPLETED CONSTRUCTION YEARS 2013 - 2015														
5	and PROJECTED CONSTRUCTION YEARS 2016 - 2018														
6															
7															
8															
9															
10															
11	Plant Investment:	Actual			Projected										
12		2013	2014	2015	2016	2017	2018	Total							
12	Gross Plant Investment (Att A; Sch 1; Col (2))	\$ 1,960,879	\$ 2,871,915	\$ 3,297,881	\$ 5,018,743	\$ 5,311,913	\$ 6,408,613	\$ 24,869,944							
13	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(501,874)	(531,191)	(640,861)	(2,483,714)							
14	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	-	-	-	26,692							
15	Net Plant Investment	1,741,042	2,585,186	3,021,352	4,516,869	4,780,722	5,767,752	22,412,922							
16															
17	Accumulated Depreciation:														
18	Depreciation Expense ¹ (Att A; Sch 1; Col (8)):														
19	2013 Net Plant Investment	14,872	29,744	29,744	29,744	29,744	29,744	163,593							
20	2014 Net Plant Investment	-	21,057	42,114	42,114	42,114	42,114	189,512							
21	2015 Net Plant Investment	-	-	24,681	49,363	49,363	49,363	172,770							
22	2016 Net Plant Investment	-	-	-	36,426	72,852	72,852	182,131							
23	2017 Net Plant Investment	-	-	-	-	38,543	77,086	115,628							
24	2018 Net Plant Investment	-	-	-	-	-	46,439	46,439							
25	Total Depreciation Expense	14,872	50,801	96,539	157,647	232,616	271,159	823,634							
26	Less: Cost of Removal (Att A; Sch 1; Col (3))	(194,024)	(285,975)	(329,788)	(501,874)	(531,191)	(640,861)	(2,483,714)							
27	Less: Plant Retirements (Att A; Sch 1; Col (5))	(25,813)	(754)	53,259	-	-	-	26,692							
28	Net Accumulated Depreciation	(204,965)	(235,928)	(179,989)	(344,227)	(298,575)	(369,703)	(1,633,388)							
29															
30	Net Plant in Service	\$ 1,946,007	\$ 2,821,114	\$ 3,201,342	\$ 4,861,096	\$ 5,079,297	\$ 6,137,454	\$ 24,046,310							
31	Pre-tax Rate of Return ²														
32	Return on Investment	x 6.17%													
33		\$ 1,483,247													
34	Property Tax Expense ³	@	\$28.59 per \$1,000												687,484
35															
36	Annual Depreciation Expense (Att A; Sch 1; Col (8)):														
37	2013 Net Plant Investment	29,744													
38	2014 Net Plant Investment	42,114													
39	2015 Net Plant Investment	49,363													
40	2016 Net Plant Investment	72,852													
41	2017 Net Plant Investment	77,086													
42	2018 Net Plant Investment	92,878													
43	Total Annual Depreciation Expense	271,159													
44															
45	2018 Cumulative Revenue Requirement	\$ 2,441,889													
46	Less: 2017 Cumulative Revenue Requirement ⁴	(1,887,843)													
47	2018 Revenue Requirement	\$ 554,046													
48															
49	Water Revenues per DW 13-130 ⁵	\$ 27,689,214													
50															
51															
52	2018 Revenue Surcharge %	2.00%													
53	2018 Cumulative Revenue Surcharge %	8.82%													
54															
55															
56	Customer Impact:														
57	5/8 Inch Meter Monthly Charge	\$ 20.34													
58	Volumetric Charge	\$ 3.30													
59	Average Single Family Residential Usage (CCF)	7.88													
60	Average Monthly Usage Charge	\$ 26.00													
61	Total Average Monthly Charge	\$ 46.34													
62															
63	Average Monthly \$ Impact per Customer of 2018 Surcharge	\$ 0.93													
64	Average Monthly \$ Impact per Customer of 2018 Cumulative Surcharge	\$ 4.09													
65															
66	Notes:														
67	¹ The half-year convention for depreciation expense is employed whereby one-half of the annual depreciation														
68	expense is recorded in the first and last year of an asset's service life.														
69	² Calculation of Pre-Tax Rate of Return (Based on PWW's Rate Filing in DW 13-130)														
70		Weighted Cost	Tax Multiplier	Pre Tax Cost											
71	Debt	5.59%	1.000	5.59%											
72	Equity	0.35%	1.656	0.58%											
73		5.94%		6.17%											
74	³ City of Nashua 2015 Mill Rate of \$21.99 and State Utility Property Tax Rate of \$6.60.														
75	⁴ Attachment A; Schedule 2c														
76	⁵ Base rate revenue requirement approved in DW 13-130 by Commission Order No. 25,693 (7/15/14).														

	A	B	C	D	E	F	G	H	I	J	K
1	DW 16-xxx										
2	PENNICHUCK WATER WORKS, INC.										
3	SUMMARY OF WICA SURCHARGE CALCULATIONS										
4	FOR APPROVED 2015 WICA SURCHARGE, PROPOSED 2016 WICA SURCHARGE										
5	and PROJECTED 2017 - 2018 WICA SURCHARGES										
6											
7											
8			Actual		Actual				Projected		
9											
10			2014		2015		2016		2017		2018
11											
12	SUMMARY OF CALCULATIONS (Att A; Sch's 2):										
13											
14	Annual Revenue Requirement		\$ 181,151		\$ 319,047		\$ 340,358		\$ 511,678		\$ 535,608
15	Cumulative Revenue Requirement		\$ 181,151		\$ 500,198		\$ 840,557		\$ 1,352,235		\$ 1,887,843
16											
17											
18	Annual Revenue Surcharge %		0.67%		1.15%		1.23%		1.85%		1.93%
19	Cumulative Revenue Surcharge %		0.67%		1.81%		3.04%		4.88%		6.82%
20											
21											
22	Annual Average Monthly \$ Impact per Customer		\$ 0.31		\$ 0.53		\$ 0.57		\$ 0.86		\$ 0.90
23	Cumulative Average Monthly \$ Impact per Customer		\$ 0.31		\$ 0.84		\$ 1.41		\$ 2.26		\$ 3.16
24											
25											
26											
27	PER MOST RECENT APPROVED RATE FILING DW15-043										
28											
29	Annual Revenue Requirement		\$ 181,151		\$ 319,047		\$ 529,073		\$ 543,192		\$ 444,906
30	Cumulative Revenue Requirement		\$ 181,151		\$ 500,198		\$ 1,029,270		\$ 1,572,463		\$ 2,017,369
31											
32											
33	Annual Revenue Surcharge %		0.67%		1.15%		1.91%		1.96%		1.61%
34	Cumulative Revenue Surcharge %		0.67%		1.81%		3.72%		5.68%		7.29%
35											
36											
37	Annual Average Monthly \$ Impact per Customer		\$ 0.31		\$ 0.53		\$ 0.89		\$ 0.91		\$ 0.74
38	Cumulative Average Monthly \$ Impact per Customer		\$ 0.31		\$ 0.84		\$ 1.72		\$ 2.63		\$ 3.38

11 of 14

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	Pennichuck Water Works, Inc.																				Attachment B Page 2 of 4
2	Proposed 2016 WICA Water Main Projects																				
3	1/11/2016																				
4																					
5																					
6	PIPE SEGEMENT OR PROJECT NAME	CITY/TOWN	MATERIAL	LENGTH (FEET)	EXISTING PIPE DIAMETER (INCHES)	PROPOSED NEW PIPE DIAMETER (INCHES)	ESTIMATED COST	PIPE INSTALLATION DATE	PIPE AGE USEFUL LIFE	FULLY DEPREC	BREAK HISTORY	KEY CUSTOMERS	WATER QUALITY	FIRE PROTECTION FLOWS ²	Work coordination with Gas, Sewer or Storm Drain Replacement ^{4,5,6}	Subtotal prior to Geographical Area Points	Geographic Points	TOTAL	Funding Source	Included in 2015-2017 WICA projects filed in January 2015	
7	Fossa Ave Int with Main St	NASHUA	CAST IRON UNLINED	68	6	8	\$ 65,000	1928	70	YES				2	P	8	3	11	12/2014 Bond	Yes - 2016	
8	Buchanan St Int with Main St	NASHUA	CAST IRON UNLINED	45	8	8	\$ 65,000	1934	70	YES				1	P	7	3	10		Yes - 2016	
9	Lincoln Ave Int with Main St	NASHUA	CAST IRON UNLINED	36	6	8	\$ 65,000	1889	70	YES				2	P	8	3	11		Yes - 2016	
10	Russell Ave Int with Main St	NASHUA	CAST IRON UNLINED	18	6	8	\$ 65,000	1906	70	YES				2	P	8	3	11		Yes - 2016	
11	Taylor St Int with Main St	NASHUA	CAST IRON UNLINED	26	6	12	\$ 65,000	1906	70	YES				2	P	8	3	11		Yes - 2016	
12	Faxon St Int with Main St	NASHUA	CAST IRON UNLINED	15	6	6	\$ 65,000	1906	70	YES				2	P	8	3	11		Yes - 2016	
13	Allds St Int with Main St	NASHUA	CAST IRON UNLINED	60	16	16	\$ 90,000	1962	70	YES		3			P	9	3	12		Yes - 2015	
14	Allds St Int with Main St (W. Allds)	NASHUA	CAST IRON UNLINED	50	2	6	\$ 15,000	1930	70	YES		3		2	P	11	3	14		No	
15	Field St Int with Main St	NASHUA	CAST IRON UNLINED	42	6	6	\$ 65,000	1922	70	YES				2	P	8	3	11		No	
16	Revere St Int with Main St	NASHUA	CAST IRON UNLINED	38	6	6	\$ 65,000	1921	70	YES				2	P	8	3	11		Yes - 2016	
17	Pratt St Int with Main St	NASHUA	CAST IRON UNLINED	33	6	12	\$ 90,000	1908	70	YES				2	P	8	3	11		Yes - 2016	
18	Fowell St Int with Main St	NASHUA	CAST IRON UNLINED	37	6	6	\$ 65,000	1919	70	YES				2	P	8	3	11		Yes - 2016	
19	Stevens St Int with Main St	NASHUA	CAST IRON UNLINED	15	6	6	\$ 58,000	1930	70	YES				2	P	8	3	11		Yes - 2016	
20	Tolles Street (Canal to Whitney)	NASHUA	CAST IRON UNLINED	470	6	8	\$ 146,000	1888	70	YES		1		1	S & P	11	3	14	12/2014 Bond	No	
21	Temple Street (Armory to Commercial St.)	NASHUA	CAST IRON UNLINED	300	8	8	\$ 93,000	1888	70	YES		1			S & G & P	11	3	14		Yes - 2016	
22	Water Street	NASHUA	CAST IRON UNLINED	755	6	0	\$ 58,000	1888	70	YES		1	2	7		10	3	13		No	
23	Chapman St (Lund to end)	NASHUA	CAST IRON UNLINED	130	1 1/4	4	\$ 34,000	1948	70	YES			3		P	9	0	9		No	
24	McKean St (Arlington to #31 McKean)	NASHUA	CAST IRON UNLINED	970	6	8	\$ 127,000	1888	70	YES		1		1	P	8	3	11	SRF	Yes - 2017	
25	Amherst Street	NASHUA	CAST IRON UNLINED	3150	6	12	\$ 1,071,000	1892-1912	70	YES		1		2	P	9	3	12		No	
26	Terrace Street	NASHUA	CAST IRON UNLINED	280	4 & 2	4	\$ 73,000	1924, 1946	70	YES			1		P	7	3	10		No	
27	Bruce Street	NASHUA	CAST IRON UNLINED	260	6	6	\$ 72,000	1909-1926	70	YES			1	1	P	8	3	11		No	
28	Berkshire Street	NASHUA	CAST IRON UNLINED	575	6	6	\$ 158,000	1913-1915	70	YES			1	1	P	8	3	11	12/2014 Bond	No	
29	Worcester Street (Scripture to Shedd's)	NASHUA	CAST IRON UNLINED	399	6	8	\$ 143,000	1888 - 1924	70	YES		1		2	S & G & P	13	3	16		Yes - 2017	
30	Scripture Street (Temple to Worcester)	NASHUA	CEMENT LINED STEEL	458	6	8	\$ 143,000	1924	70	YES				2	S & G & P	12	3	15		Yes - 2017	
31	Shedd's Avenue (Scripture to Worcester)	NASHUA	CEMENT LINED STEEL	291	2	4	\$ 100,000	1940	40	YES	2	1	1		S & G & P	14	3	17		Yes - 2017	
32	Hoyts Ln (Scripture to Shedd's)	NASHUA	CAST IRON UNLINED	400	4	4	\$ 57,000	1922	70	YES					S & G & P	10	2	12		No	
33	Gorman Ave (Temple to Hoyts)	NASHUA	CEMENT LINED STEEL	113	1 1/2	4	\$ 100,000	1940	40	YES			1		S & G & P	11	2	13	12/2014 Bond	No	
34	Gilman Street	NASHUA	CAST IRON UNLINED	1460	6 & 8	8	\$ 453,000	1909-1924	70	YES				1	P	7	2	9		No	
35	Bridle Path	NASHUA	CAST IRON UNLINED	330	6 & 1 1/4	6 & 4	\$ 89,000	1930	70	YES				1	P	7	2	9		No	
36	Chestnut Street (Kinsley to W. Ottarson)	NASHUA	CAST IRON UNLINED	585	6 & 4	12	\$ 199,000	1887-1931	70	YES		1		3	P	10	3	13		No	
37	Hughey St (Hutchison to Warsaw)	NASHUA	CAST IRON UNLINED	755	6	8	\$ 234,000	1924-1946	70	YES				1	P	7	2	9		No	
38	Total LF -			12164	Total -			\$ 4,188,000													
39					Paving from 2015 projects -			\$ 292,330													
40	Valve Replacements ³ -			7	@	\$ 2,112	=	\$ 14,784													
41	Service Replacements ³ -			31	@	\$ 2,067	=	\$ 64,077													
42	Hydrant Replacements ³ -			9	@	\$ 4,528	=	\$ 40,752													
43					Planning Contingency ⁵ -			\$ 418,800													
44					Total Estimated WICA \$\$ in 2016 -			\$ 5,018,743													
45																					
46	1. Material Integrity - Rating of 1 point for each break in the last 20 years.																				
47	2. ISO Fire Ratings - A rating of 1 for each 500 gpm that the flow in the watermain is less than the ISO required rating.																				
48	3. Number of Service, Valve and hydrant replacments is the average of the past 5 years. The average cost for each replacement types is the average cost for 2014																				
49	4. PWW must complete replacement of its mains when the City replaces its sewer mains.																				
50	5. The City operates on a Fiscal year basis between July 1 and June 30 of the following Calendar year.																				
51	6. Work Coordination Legend - P - Project in street affected by City Paving Program, G - Project in street where Gas Company master plan calls for gas main replacement, S - Project in street where sewer and/or storm drain replacement is occurring.																				
52	7. Projects that are highlighted in same color are located in the same geographical area. If there is no highlighting the projects are not located in proximity to any other planned WICA projects																				
53	8. S&G&P - Water replacement related to sewer and gas replacement with 1/3 cost sharing of pavement, must move water due to conflict with sewer - 10 points																				
54	S&P - Water replacement related to sewer replacement with 1/2 cost sharing of pavement, must move water due to conflict with sewer - 9 points																				
55	G&P - Water replacement related to gas replacement and City Street paving with 1/3 cost sharing of pavement. Water does not have to be moved, no conflict with gas - 8 points																				
56	P - City paving street over water main. 1/2 cost sharing of pavement. Reduced risk of damage of new pavement by break of old water main if not replaced with paving project - 6 points																				
57	G - Water replacement related to gas replacement with 1/2 cost sharing of pavement. Water does not have to be moved, no conflict with gas - 5 points																				

58	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
59																					
60																					
61	Pennichuck Water Works, Inc.																				
62	Proposed 2017 WICA Water Main Projects																				
63	1/11/2016																				
	Attachment B Page 3 of 4																				
64	PIPE SEGEMENT OR PROJECT NAME	CITY/TOWN	MATERIAL	LENGTH (FEET)	PIPE DIAMETER (INCHES)	PROPOSED NEW PIPE DIAMETER (INCHES)	ESTIMATED COST	AGE OF PPE	PIPE AGE USEFUL LIFE	FULLY DEPREC	BREAK HISTORY	KEY CUSTOMERS	WATER QUALITY	FIRE PROTECTION FLOWS ²	Work coordination with Gas, Sewer or Storm Drain Replacement ^{4,6,8}	Subtotal prior to Geographical Area Points	Geographic Points	TOTAL	Funding Source	Included In 2015-2017 WICA projects filed in January 2015	
65	Bridge St (Amory to E St)	NASHUA	CAST IRON UNLINED	1300	8	12	\$ 442,000	187-1898	70	YES		1		2	P & G	11	3	14	To Be Determined Combination of future Bond and future SRF Funding	No	
66	Sanders St (Bridge to end)	NASHUA	CAST IRON UNLINED	526	8	0	\$ 30,000	1942	70	YES		1			P & G	9	3	12		No	
67	D St (Bridge to E. Hollis)	NASHUA	CAST IRON UNLINED	500	4	6	\$ 138,000	1898	70	YES				2	P & G	10	2	12		No	
68	E St (Bridge to E. Hollis)	NASHUA	CAST IRON UNLINED	375	8	12	\$ 128,000	1906	70	YES		3		2	P & G	13	3	16		No	
69	Hobbs Ave (E. Hollis to Crown)	NASHUA	CAST IRON UNLINED	485	8	12	\$ 165,000	1906	70	YES				2	P & G	10	2	12		No	
70	Chase St (E. Hollis to Crown)	NASHUA	CAST IRON UNLINED	416	6	6	\$ 114,000	1902	70	YES					P & G	8	2	10		No	
71	Crown St (Denton to Arlington)	NASHUA	CAST IRON UNLINED	220	6	12	\$ 75,000	1901-1908	70	YES		1		3	P & G	12	3	15		No	
72	Brook Street (Ash to Fulton)	NASHUA	CAST IRON UNLINED	1141	6	8	\$ 182,000	1887-1924	70	YES		1		3			4	2		6	Yes - 2015
73	Chestnut Street (w. Otterson to Nevada)	NASHUA	CAST IRON UNLINED	515	6 & 4	12	\$ 375,000	1887	70	YES				3			3	2		5	No
74	Lake Street (Pine St. easterly)	NASHUA	CAST IRON UNLINED	154	6	12	\$ 52,000	1888	70	YES	2			4			6	2		8	Yes - 2015
75	Verona Street (Sarasota to Manatee)	NASHUA	CAST IRON UNLINED	698	6	8	\$ 335,000	1913 - 1915	70	YES		1		2			3	3		6	Yes - 2016
76	Sarasota Avenue (Pine to Verona)	NASHUA	CAST IRON UNLINED	250	6	8	\$ 100,000	1926-1949	70	YES		1		2			3	3		6	Yes - 2016
77	Hamilton Street (Lake to Brook)	NASHUA	CAST IRON UNLINED	411	6	6	\$ 113,000	1909-1941	70	YES		1		1			2	3		5	Yes - 2015
78	Burritt Street (Lake to Brook)	NASHUA	CAST IRON UNLINED	424	6	6	\$ 117,000	1887-1921	70	YES		1		3			4	3		7	Yes - 2015
79	Burritt Street (Brook St. southerly)	NASHUA	CAST IRON UNLINED	182	4	4	\$ 107,000	1941	40	YES							-	2		2	Yes - 2015
80	Ash Street (Lake to Lovell)	NASHUA	CAST IRON UNLINED	517	6	6	\$ 130,000	1892	70	YES				1			1	2		3	Yes - 2015
81	Fossa Avenue (Main to end)	NASHUA	CAST IRON UNLINED	282	6	8	\$ 125,000	1928	70	YES				4			4	3		7	Yes - 2016
82	Stevens Street (Main to Lawndale)	NASHUA	CAST IRON UNLINED	980	6 & 4	6	\$ 270,000	1896 - 1946	70	YES		1		2			3	3		6	Yes - 2016
83	Faxon Avenue (Faxon St. to end)	NASHUA	CEMENT LINED STEEL	195	2	4	\$ 34,000	1940	40	YES	1						1	2		3	Yes - 2016
84	Nutt Street (Faxon to Lincoln)	NASHUA	CAST IRON UNLINED	420	4	6	\$ 87,000	1890	40	YES	1			1			2	2		4	Yes - 2016
85	Buchanan Street (Main to Nutt)	NASHUA	CAST IRON UNLINED	590	6	8	\$ 78,000	1908	70	YES				1			1	2		3	Yes - 2016
86	Lincoln Avenue (Main to Fifield)	NASHUA	CAST IRON UNLINED	833	6	8	\$ 133,000	1889 - 1912	70	YES	2			2			4	2	6	Yes - 2016	
87	Russell Street (Main to Fifield)	NASHUA	CAST IRON UNLINED	948	6	8	\$ 167,000	1906 - 1913	40	YES				1			1	2	3	Yes - 2016	
88	Circle Avenue (Nutt to end)	NASHUA	CEMENT LINED STEEL	164	2	4	\$ 27,000	1930	40	YES							-	2	2	Yes - 2016	
89	Taylor Street (Main to Lynn)	NASHUA	CAST IRON UNLINED	1629	6 & 8	12	\$ 340,000	1892 - 1940	70	YES		3		2			5	3	8	Yes - 2016	
90	Highland St (Fairmount to Auburn)	NASHUA	CAST IRON UNLINED	620	6 & 4	6	\$ 171,000	1892-1932	70	YES				1	G		6	0	6	No	
91	Auburn St (Amherst to Charles)	NASHUA	CAST IRON UNLINED	1225	4 & 8	8	\$ 349,000	1887	70	YES				2	G		7	0	7	No	
92	Beard St (Fletcher to Auburn)	NASHUA	CAST IRON UNLINED	350	8	8	\$ 109,000	1940	70	YES					G		5	0	5	No	
93																					
94																					
95																					
96																					
97																					
98																					
99																					
100																					
101																					
102	1. Material Integrity - Rating of 1 point for each break in the last 20 years.																				
103	2. ISO Fire Ratings - A rating of 1 for each 500 gpm that the flow in the watermain is less than the ISO required rating.																				
104	3. Number of Service, Valve and hydrant replacments is the average of the past 5 years. The average cost for each replacement types is the average cost for 2014																				
105	4. PWW must complete replacement of its mains when the City replaces its sewer mains.																				
106	5. The City operates on a Fiscal year basis between July 1 and June 30 of the following Calendar year. A contingency of 10% is carried to account for this.																				
107	6. Work Coordination Legend - P - Project in street affected by City Paving Program, G - Project in street where Gas Company master plan calls for gas main replacement, S - Project in street where sewer and/or storm drain replacement is occurring.																				
108	7. Projects that are highlighted in same color are located in the same geographical area. If there is no highlighting the projects are not located in proximity to any other planned WICA projects																				
109	8. S&G&P - Water replacement related to sewer and gas replacement with 1/3 cost sharing of pavement, must move water due to conflict with sewer - 10 points																				
110	S&P - Water replacement related to sewer replacement with 1/2 cost sharing of pavement, must move water due to conflict with sewer - 9 points																				
111	G&P - Water replacement related to gas replacement and City Street paving with 1/3 cost sharing of pavement. Water does not have to be moved, no conflict with gas - 8 points																				
112	P - City paving street over water main. 1/2 cost sharing of pavement. Reduced risk of damage of new pavement by break of old water main if not replaced with paving project - 5 points																				
113	G - Water replacement related to gas replacement with 1/2 cost sharing of pavement. Water does not have to be moved, no conflict with gas - 5 points																				

14 of 14

ATTACHMENT C



25 MANCHESTER STREET, PO BOX 1947

MERRIMACK, NH 03054-1947

(603) 882-5191

FAX (603) 913-2362

WWW.PENNICHUCK.COM



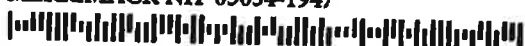
3 1 *****AUTO**5-DIGIT 03054 1454

PENNICHUCK

C/O TARA KING

PO BOX 1947

MERRIMACK NH 03054-1947



Pennichuck (PWW) will be filing a 3 year capital expenditure plan for proposed 2016-2018 WICA related projects with the New Hampshire Public Utilities Commission (PUC) on February 1, 2016. As part of the 2016 WICA filing PWW will be requesting an increase in its' WICA surcharge, that, if approved by the PUC, will go into effect on customer bills issued after June 1, 2016. The requested increase in the surcharge for the 2015 WICA projects would result in the average single family residential bill increasing by approximately \$0.61 per month. The \$0.61 per month increase would be in addition to the current \$0.84 per month WICA surcharge (for the average single family residential bill) that was approved by the PUC in Order No. 25,784 on April 30, 2015.

If you have any questions or concerns related to Pennichuck's upcoming WICA filing please contact Pennichuck Customer Service at 800-553-5191 or the PUC at 800-852-3793.

For more information regarding Pennichuck's WICA program please visit to Pennichuck's website at www.pennichuck.com.

25 Manchester Street PO Box 1947 Merrimack, NH 03054-1947

603/882-5191, 800/553-5191
Fax 603/913-2362

ATTACHMENT D

www.pennichuck.com

customer-service@pennichuck.com

FOR SERVICE AT						ROUTE NUMBER	ACCOUNT NUMBER
31 WILL ST	NASHUA NH			Pennichuck Water		0204	100022296-29656
METER NUMBER	FROM	TO	DAYS	PREVIOUS READING	PRESENT READING	CONSUMPTION	NEXT READ DATE
53441721	12/07	01/11	35	39	47	8	02/08/16

Note Please go to www.pennichuck.com/CCR-A0.pdf to view your 2015 annual water quality report and learn more about your drinking water. This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2015 Annual Water Quality Report mailed to your home, please call our customer service department at 800-553-5191.

Previous Balance	68.49
Payment Since Last Bill	0.00
Adjustment Since Last Bill	-68.49
Balance Before Current Charges	0.00

New Charges - ACTUAL READ

PWW WATER CONSUMPTION 8 CCF @ 3.30	26.40
PWW MTHLY MTR 1"	47.16
PWW RATE CASE EXPENSE 2014	0.32
WICA	1.33

Current Charges 75.21

New Balance 75.21

CURRENT CHARGES ARE DUE BY 02/15/2016

ONLINE PAYMENT IS NOW AVAILABLE AT WWW.PENNICHUCK.COMFOR HOUSEHOLD HAZARDOUS WASTE COLLECTIONS DAYS IN YOUR TOWN PLEASE VISIT OUR WEBSITE AT WWW.PENNICHUCK.COM/HAZARDOUS-WASTE.PHP

****WICA**** - This bill contains a 1.81% Water Infrastructure and Conservation Adjustment (WICA) charge. For further information please refer to the back of your bill.

The 2015 Annual Water Quality Report is now available on-line at www.pennichuck.com/CCR-A0.pdf

PLEASE DETACH HERE
AND RETURN LOWER
PORTION WITH YOUR
PAYMENT.

ACCOUNT NUMBER	DIVISION	ROUTE NUMBER	BILL DATE	DUE DATE	TOTAL DUE
100022296-29656	NASHUA	0204	01/21/2016	02/15/2016	75.21



PENNICHUCK

PLEASE DO NOT FOLD OR STAPLE

25 Manchester Street PO Box 1947 Merrimack, NH 03054-1947

ACCOUNT NUMBER	DIVISION	BILL DATE	PAY ON OR BEFORE	TOTAL DUE
100022296-29656	NASHUA	01/21/2016	02/15/2016	75.21
				AMOUNT ENCLOSED

FOR SERVICE AT: 31 WILL ST

☐ The 2015 Annual Water Report is available electronically at the url indicated above however, if you would prefer a paper copy mailed to your home, please check this box.

PLEASE CHECK HERE IF YOU ARE
ENROLLING IN DIRECT PAYMENT
AND FILL OUT APPLICATION ON
OTHER SIDE



17 21*****AUTO**3-DIGIT 030 6135

PENNICHUCK WATER WORKS

TARA KING

25 MANCHESTER ST

PO BOX 1947

MERRIMACK, NH 03054-1947

100022296000029656

00007521

PLEASE CROSS OUT INCORRECT INFORMATION AND WRITE IN ANY CHANGES TO ADDRESS OR NAME ABOVE

NHPUC NO. 6 Water
PENNICHUCK WATER WORKS, INC.

Second Revised Page 48

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 3.041-81% will apply to all bills issued on or after June 1, 20165.

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 (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 pressure reducing valves (accounts 309, 331);

II. Computation of the WICA

Calculation: The charge effective for all bills issued on or after June 1, 20165, will be calculated to recover the fixed costs of eligible plant additions not previously reflected in the Company's rate base and placed in service between January 1, 2013 and December 31, 20154. Thereafter, the WICA will be updated on an annual basis to reflect eligible plant additions placed in service during the prior calendar year. Thus, changes in the WICA rate will occur as follows:

Issued: June 1, 20165

Effective: June 1, 20165

Issued by: _____

Name: Donald L. Ware

Title: Chief Operating Officer

Effective Date
of WICA Change

Date To Which WICA Eligible
Plant Additions Reflected

June 1

December 31

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, and giving consideration for any applicable cost of removal on a project by project basis.

Property Taxes: For the first year that a WICA for any particular project is in effect, the property tax expense will reflect an estimate of the tax expense for such projects based on the tax rate then in effect times the year ending net book value of the eligible WICA infrastructure improvement projects. If such property taxes will be due for only a portion of the calendar year, then the WICA for the first year shall reflect only the property taxes projected to be paid. For the second and subsequent years that a WICA for those projects is in effect, the WICA shall be determined using the property tax rate in effect at the end of the most recent year completed (the "tax rate"), and shall be applied to the cumulative year ending net book value of all eligible WICA projects included from the first year thru the end of the current 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 13-130, 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.

Issued: June 1, 201~~6~~₅
Effective: June 1, 201~~6~~₅

Issued by: _____
Name: Donald L. Ware
Title: Chief Operating Officer

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 10-091, or a subsequent docket.

Annual updates: Supporting data for each annual update will be filed with the Commission and the Office of Consumer Advocate no later than January 31.

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 two percent (2%) of such revenues for any twelve-month period.

Issued: June 1, 2016~~5~~

Effective: June 1, 2016~~5~~

Issued by: _____

Name: Donald L. Ware

Title: Chief Operating Officer

PENNICHUCK WATER WORKS, INC

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: At least thirty (30) days in advance of a WICA filing, the Company will notify Customers of the filing by including an explanatory bill insert with the bills. Before sending, the Company will review the notice with the Commission's Consumer Affairs division. Customers shall also be notified of changes in the WICA by including appropriate information with the first bill they receive following any change.

Notice of Project Substitution: 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 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 that year, based upon information known on a year-to-date basis, from the beginning of the year through the following effective dates, on the associated reporting dates:

Effective Date

March 31
June 30
September 30
November 30

Reporting Date

April 15
July 15
October 15
December 15

Issued: June 1, 201~~6~~5
Effective: June 1, 201~~6~~5

Issued by: _____
Name: Donald L. Ware
Title: Chief Operating Officer

Attachment F

Pennichuck Water Works, Inc.
Proposed 2015 WICA Water Main Projects
IN WICA DW 15-043

PIPE SEGMENT OR PROJECT NAME	CITY/TOWN	MATERIAL	LENGTH (FEET)	EXISTING PIPE DIAMETER (INCHES)	PROPOSED NEW PIPE DIAMETER (INCHES)	ESTIMATED COST	PIPE INSTALLATION DATE	PIPE AGE USEFUL LIFE	FULLY DEPREC	BREAK HISTORY	KEY CUSTOMERS	WATER QUALITY	FIRE PROTECTION FLOWS ²	Work coordination with Sewer or Storm Drain Replacement	Subtotal prior to Geographical Area Points	Geographic Points	TOTAL
Chestnut Street (Lake to Lovell)	NASHUA	CAST IRON UNLINED	735	6	12	\$ 314,000	1918-1924	70	YES	1	1		5	5	12	3	15
Chestnut Street (Lovell to End)	NASHUA	CAST IRON UNLINED	263	6	12	\$ 105,000	1918-1925	70	YES	0			5	5	10	3	13
Lovell Street (Chestnut to Ash)	NASHUA	CAST IRON UNLINED	420	6	12	\$ 185,000	1892-1898	70	YES	1	5	1	4		11	3	14
Lovell Street (Ash to Pine)	NASHUA	CAST IRON UNLINED	750	4	8	\$ 269,000	1924-1934	40	YES	0	5		4		9	3	12
Lovell Street (Easterly of Chestnut to end)	NASHUA	GAVANIZED STEEL	187	1-1/4	4	\$ 48,000	1955	40	YES	0					0	3	3
Foundry Street	AMHERST	TRANSITE	1,465	6	8	\$ 209,000	1950	40	YES	0				5	5	2	7
Manchester Road (Bridge Crossing)	AMHERST	TRANSITE	300	6	12	\$ 176,000	1950	40	YES	0				5	5	2	7
School Street	AMHERST	TRANSITE	240	4	6	\$ 40,000	1950	40	YES	0				5	5	2	7
Miami Street (Intervale to Tampa)	NASHUA	GAVANIZED STEEL	427	2	8	\$ 148,000	1927	40	YES	1		1	4	5	6	2	8
Brook Street (Ash to Fulton)	NASHUA	CAST IRON UNLINED	1,141	6	8	\$ 397,000	1887-1924	70	YES	0	1		3		4	2	6
Hamilton Street (Lake to Brook)	NASHUA	CAST IRON UNLINED	411	6	6	\$ 130,000	1909-1941	70	YES	0	1				1	2	3
Burrit Street (Lake to Brook)	NASHUA	CAST IRON UNLINED	424	6	6	\$ 155,000	1887-1921	70	YES	0	1		3		4	2	6
Burrit Street (Brook St. southerly)	NASHUA	CAST IRON UNLINED	182	4	4	\$ 43,000	1941	40	YES	0					0	2	2
Ash Street (Lake to Lovell)	NASHUA	CAST IRON UNLINED	517	6	6	\$ 166,000	1892	70	YES	0					0	3	3
Ash Street (Lovell to End)	NASHUA	CAST IRON UNLINED	190	4 & 1-1/2	4	\$ 62,000	1921	40	YES	0					0	3	3
Lake Street (Pine St. easterly)	NASHUA	CAST IRON UNLINED	154	6	12	\$ 113,000	1888	70	YES	2			4		6	2	8
Mulberry Street	NASHUA	CAST IRON UNLINED	50	8	8	\$ 46,500	1932	70	YES	0				5	5		5
Ninth Street	NASHUA	GAVANIZED STEEL	627	2	4	\$ 102,000	1952-1957	40	YES	0				5	5		5
Temple Street	NASHUA	CAST IRON UNLINED	1,030	10	12	\$ 278,100	1908	70	YES	0				5	5		5
Fairmount Street	NASHUA	CAST IRON UNLINED	215	6	4	\$ 57,000	1887	70	YES	0					5		5
Rochette Avenue (Chestnut easterly)	NASHUA	CEMENT LINED STEEL	163	2	4	\$ 46,000	1952-1956	40	YES	1	1				2		2
Marquis Avenue (Lovell southerly)	NASHUA	CEMENT LINED STEEL	125	1-1/2	4	\$ 39,000	1945	40	YES	1	1				2	2	4
Alds Street (Main to Harbor), parallels 12" A-C below	NASHUA	CAST IRON UNLINED	1,722	8	Abandon	\$ 123,000	1931	70	YES	3	1				4	3	7
Alds Street (Main to Harbor, exclusive of bridge crossing)	NASHUA	TRANSITE	962	12	16	\$ 324,000	1961	85	NO	1	1				2	3	5
Alds Street - Salmon Brook Crossing	NASHUA	TRANSITE	760	12	16	\$ 425,000	1961	85	NO	0	1				1	3	4
Harbor Avenue (Allis northerly)	NASHUA	CAST IRON UNLINED	480	6	12	\$ 229,000	1888	70	YES	1	1				2	2	4
Coburn Woods	NASHUA	POLYBUTYLENE	700	2	4	\$ 274,000	1969	60	NO	31							
Total LF -			14,640	Total -		\$ 4,503,600											
Paving from 2014 projects -						\$ 77,522											
Valve Replacements ³ -			8	@	\$ 4,571	\$ 36,569											
Service Replacements ³ -			29	@	\$ 2,944	\$ 85,388											
Hydrant Replacements ³ -			5	@	\$ 5,562	\$ 27,808											
Planning Contingency ⁴ -						\$ 450,360											
Total Estimated WICA \$ in 2015 -						\$ 5,181,247											

\$ 573,500

1. Material Integrity - Rating of 1 point for each break in the last 20 years.

2. ISO Fire Ratings - A rating of 1 for each 500 gpm that the flow in the watermain is less than the ISO required rating.

3. Number of Service, Valve and hydrant replacements is the average of the past 5 years. The average cost for each replacement types is the average cost for 2014

4. The City plans to add to its FY14 projects with projected FY15 projects

The City operates on a fiscal year basis between July 1 and June 30 of the following calendar year.

PWW must complete replacement of its mains when the City replaces its sewer mains.
A contingency of 10% is carried to account for this.