

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
d/b/a Liberty Utilities
Docket No. DG 16-XXX
Attachment DBS-1
April 15, 2016**

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Revenue Requirement
April 15, 2016**

Computation of Revenue Requirement	1
Vintage Year Book Depreciation Schedule	2
Municipal Taxes as a Percentage of Net Plant	3
Bill Impacts due to Cast Iron and Bare Steel Replacement Program	4

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Revenue Requirement

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	July 1, 2009 through March 31, 2010								
	Actual FY09	9 Months FY10	Actual FY11	Actual FY12	Actual FY13	Actual FY14	Actual FY15	Actual FY16	Estimate FY17
Incremental Investment									
1 CIBS Program Actual Spend-Mains	1,736,153	4,049,995	3,391,069	1,570,208	2,174,813	2,781,140	3,006,856	\$3,304,532	-
2 CIBS Program Actual Spend-Service	729,463	798,555	668,631	352,005	161,352	370,655	776,086	\$705,984	-
3 CIBS Program Estimated Spend-Mains	-	-	-	-	-	-	-	-	6,571,682
4 CIBS Program Estimated Spend-Service	-	-	-	-	-	-	-	-	1,383,737
5 Base Spending Amount	500,000	482,110	500,000	500,000	500,000	500,000	506,240	514,244	514,244
6 Incremental Amount	1,965,616	4,366,440	3,559,700	1,422,213	1,836,165	2,651,795	3,276,702	3,496,272	7,441,175
7 Cumulative CIBS Program Spend Since July 1, 2009	-	4,366,440	7,926,140	9,348,353	11,184,518	13,836,312	17,113,015	20,609,287	28,050,462
Deferred Tax Calculation									
10 Annual Tax Depreciation	1,031,948	4,366,440	3,559,700	1,422,213	1,836,165	2,651,795	3,276,702	3,496,272	7,441,175
11 Cumulative Tax Depreciation Since July 1, 2009	-	4,366,440	7,926,140	9,348,353	11,184,518	13,836,312	17,113,015	20,609,287	28,050,462
13 Annual Book Depreciation	49,836	98,794	179,335	212,059	249,951	307,352	384,247	464,177	633,969
14 Cumulative Book Depreciation Since July 1, 2009	-	98,794	278,129	490,188	740,138	1,047,490	1,431,737	1,895,914	2,529,883
16 Annual Book/Tax Timer	982,112	4,267,646	3,380,365	1,210,154	1,586,214	2,344,443	2,892,456	3,032,095	6,807,206
17 Cumulative Book/Tax Timer	982,112	4,267,646	7,648,011	8,858,165	10,444,379	12,788,822	15,681,278	18,713,373	25,520,579
18 Statutory Tax Rate	40.53%	40.53%	40.53%	40.53%	40.53%	39.61%	39.61%	39.61%	39.61%
20 Deferred Tax Reserve	398,001	1,729,677	3,099,739	3,590,214	4,233,107	5,161,741	6,211,354	7,412,367	10,108,701
Rate Base Calculation									
23 Plant In Service	1,965,616	4,366,440	7,926,140	9,348,353	11,184,518	13,836,312	17,113,015	20,609,287	28,050,462
24 Accumulated Depreciation	(49,836)	(98,794)	(278,129)	(490,188)	(740,138)	(1,047,490)	(1,431,737)	(1,895,914)	(2,529,883)
25 Net Plant in Service	1,915,780	4,267,646	7,648,011	8,858,166	10,444,379	12,788,822	15,681,278	18,713,373	25,520,579
26 Deferred Tax Reserve	(398,001)	(1,729,677)	(3,099,739)	(3,590,214)	(4,233,107)	(5,161,741)	(6,211,354)	(7,412,367)	(10,108,701)
27 Year End Rate Base	1,517,779	2,537,969	4,548,272	5,267,951	6,211,273	7,627,082	9,469,924	11,301,006	15,411,878
Revenue Requirement Calculation									
30 Year End Rate Base	1,517,779	2,537,969	4,548,272	5,267,951	6,211,273	7,627,082	9,469,924	11,301,006	15,411,878
31 Pre-Tax ROR	11.53%	11.53%	11.63%	11.63%	11.63%	11.50%	10.22%	9.87%	9.87%
32 Return and Taxes	175,003	292,628	528,964	612,663	722,371	877,114	967,826	1,115,409	1,521,152
33 Book Depreciation	49,836	98,794	179,335	212,059	249,951	307,352	384,247	464,177	633,969
34 Property Taxes	37,347	88,340	194,259	231,198	241,265	359,366	503,369	490,290	668,639
35 Annual Revenue Requirement	262,185	479,762	902,558	1,055,920	1,213,587	1,543,832	1,855,442	2,069,876	2,823,760
37 Prior Year Annual Revenue Requirement	-	-	479,762	902,558	1,055,920	1,213,587	1,543,832	1,855,442	2,069,876
38 Incremental Annual Rate Adjustment Since July 1, 2009	262,185	479,762	422,796	153,362	157,667	330,245	311,610	214,434	753,884
Actual Capital Structure/ROR									
	Ratio	Rate	after-tax	Pre Tax	Pre Tax				
54 Long Term Debt	50.00%	4.43%	2.215%	2.215%	2.215%				
55 Short Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%				
56 Common Equity	50.00%	9.25%	4.625%	7.777%	7.659%				
58	100.00%		6.840%	9.992%	9.874%				

Line / Column Notes:

- 20 Using an effective tax rate of 39.61% starting in FY 2014 and an effective tax rate of 40.53% additions prior to fiscal 2014
- 34 Property tax rate reflects actual calendar year 2015 ratio of municipal tax expense to average net plant in service per page 3 of 4.
- Col (b) In accordance with Exhibit EN-3 of the National Grid/KeySpan Merger Settlement Agreement (Docket No. DG 06-107), EnergyNorth is allowed to implement on July 1 of each year, a permanent increase in its base distribution delivery rates to recover the annual revenue requirement for those investments made in the preceding fiscal year ended March 31st in excess of the CIBS base amount. As shown on Attachment A of Exhibit EN-3, the revenue requirement in any year reflects deferred income tax reserves based on the cumulative book/tax timing difference of all prior year CIBS investments. However, on July 1, 2010, EnergyNorth implemented new temporary base distribution delivery rates as part of its rate case in Docket No. DG 10-017. These new rates were based on the historic test year ended June 30, 2009 which included the first three months of CIBS investment for the fiscal year ended March 31, 2010. As a consequence, the revenue requirement for the fiscal year ended March 31, 2010 reflected CIBS investment for only the last nine months of the fiscal year ended March 31, 2010. In addition, this revenue requirement did not reflect deferred income tax reserves based on cumulative book/tax timing differences on CIBS spending prior to June 30, 2009.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Vintage Year Book Depreciation Schedule

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	Actual	July 1, 2009 thru March 31, 2010 9 Months	Actual	Actual	Actual	Actual	Actual	Actual	Estimate	
	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	
Book Depreciation Schedule-Mains										
1	Actual CIBS spending	1,736,153	4,049,995	3,391,069	1,570,208	2,174,813	2,781,140	3,006,856	3,304,532	6,571,682
2	Base spending	(352,073)	(402,707)	(417,650)	(408,438)	(465,466)	(441,199)	(402,383)	(423,720)	(424,798)
3	Incremental CIBS spending	1,384,080	3,647,288	2,973,419	1,161,770	1,709,346	2,339,940	2,604,473	2,880,812	6,146,884
4										
5	Book Depreciation Rate:									
6	Year 1	2.54%	35,065	0	0	0	0	0	0	0
7	Year 1 beginning in FY10	1.92%		70,028	57,090	22,306	32,819	44,927	50,006	55,312
8	Year 2	1.92%		70,028	57,090	22,306	32,819	44,927	50,006	55,312
9	Year 3	1.92%			70,028	57,090	22,306	32,819	44,927	50,006
10	Year 4	1.92%				70,028	57,090	22,306	32,819	44,927
11	Year 5	1.92%					70,028	57,090	22,306	32,819
12	Year 6	1.92%						70,028	57,090	22,306
13	Year 7	1.92%							70,028	57,090
14	Year 8	1.92%								70,028
14	Book Depreciation Expense-Mains	35,065	70,028	127,118	149,424	182,243	227,170	277,176	332,487	450,508
15										
16	Accumulated Depreciation Mains-Beginning of Year	-	-	70,028	197,146	346,570	528,813	755,982	1,033,158	1,365,646
17	Accumulated Depreciation Mains-End of Year	35,065	70,028	197,146	346,570	528,813	755,982	1,033,158	1,365,646	1,816,153
18										
19										
20	Book Depreciation Schedule-Services									
21										
22	Actual CIBS spending	729,463	798,555	668,631	352,005	161,352	370,655	776,086	705,984	1,383,737
23	Base spending	(147,927)	(79,403)	(82,350)	(91,562)	(34,534)	(58,801)	(103,857)	(90,524)	(89,446)
24	Incremental CIBS spending	581,536	719,152	586,281	260,443	126,818	311,854	672,229	615,460	1,294,291
25										
26	Book Depreciation Rate:									
27	Year 1	2.54%	14,771	0	0	0	0	0	0	0
28	Year 1 beginning in FY10	4.00%		28,766	23,451	10,418	5,073	12,474	26,889	24,618
29	Year 2	4.00%		28,766	23,451	10,418	5,073	12,474	26,889	24,618
30	Year 3	4.00%			28,766	23,451	10,418	5,073	12,474	26,889
31	Year 4	4.00%				28,766	23,451	10,418	5,073	12,474
32	Year 5	4.00%					28,766	23,451	10,418	5,073
33	Year 6	4.00%						28,766	23,451	10,418
33	Year 7	4.00%							28,766	23,451
34	Year 8	4.00%								28,766
34	Book Depreciation Expense-Services	14,771	28,766	52,217	62,635	67,708	80,182	107,071	131,690	183,461
35										
36										
37	Accumulated Depreciation Services-Beginning of Year	-	-	28,766	80,983	143,618	211,326	291,508	398,579	530,268
38	Accumulated Depreciation Services-End of Year	14,771	28,766	80,983	143,618	211,326	291,508	398,579	530,268	713,730
39										
40										
41										
42	Total Mains & Services Depreciation Expense	49,836	98,794	179,335	212,059	249,951	307,352	384,247	464,177	633,969
43										
44	Total Mains & Services Accumulated Depreciation	49,836	98,794	278,129	490,188	740,138	1,047,490	1,431,737	1,895,914	2,529,883

2(g) & 22(g) FY 2017 estimate split 82.6% Mains / 17.4% Services based upon FY 2016 actual spend.

6(a) & 26(a) FY 2009 filing used the composite depreciation rate for both mains and services.

col. (b) See footnote regarding column (b) on page 1 of 5.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Municipal Taxes as a Percentage of Net Plant

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
1 Plant in Service	258,573	272,678	289,379	305,221	319,737	332,049	344,966	356,165	381,214	419,215	451,950
2 Depreciation and Amortization Reserve	(82,363)	(88,564)	(94,562)	(102,587)	(108,270)	(114,294)	(119,973)	(121,047)	(129,209)	(137,656)	(149,943)
3 Net Plant	176,209	184,114	194,817	202,634	211,467	217,756	224,993	235,118	252,006	281,559	302,007
4											
5 Average Net Plant											
6 Plant in Service		265,625	281,028	297,300	312,479	325,893	338,508	350,565	368,690	400,214	435,582
7 Depreciation Reserve		(85,463)	(91,563)	(98,575)	(105,429)	(111,282)	(117,133)	(120,510)	(125,128)	(133,432)	(143,799)
8 Net Plant		180,162	189,465	198,726	207,051	214,611	221,375	230,056	243,562	266,782	291,783
9											
10 Municipal Taxes		3,534	3,641	3,771	4,294	5,459	5,776	5,321	6,835	8,560	7,644
11											
12 % Municipal Taxes to Net Plant		1.96%	1.92%	1.90%	2.07%	2.54%	2.61%	2.31%	2.81%	3.21%	2.62%

Note: Source of above data is the December 31 PUC Annual Report to be consistent with data previously provided to the Commission.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Bill Impacts due to Cast Iron and Bare Steel Replacement Program

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Estimate FY2017
1 Annual Increase due to Cast Iron Bare Steel program	262,185	479,762	\$21,590	(44,226)	157,667	330,245	311,610	214,434	753,884
2									
3 Annual Throughput (see Summer COG filing - schedule 10B)	154,702,063	150,828,182	154,648,622	163,588,592	158,062,349	160,018,819	166,523,068	172,103,158	172,103,158
4									
5 Increase Factor	\$0.0017	\$0.0032	\$0.0034	(\$0.0003)	\$0.0010	\$0.0021	\$0.0019	\$0.0012	\$0.0044
6									
7 Annual Calendar Year Gross Revenues (Annual Report - Page 11)	\$176,520,000	\$151,224,178	\$132,475,941	\$146,365,316	\$119,363,340	\$137,617,008	\$119,363,341	\$156,933,825	\$156,933,825
8									
9 Annual Percent Increase	0.15%	0.32%	0.39%	-0.03%	0.13%	0.24%	0.26%	0.14%	0.48%
10									
11 Miles of Cast Iron/Bare Steel Main Replaced Annually through CIBS	2.96	3.98	2.79	1.56	1.65	3.51	5.00	5.05	9.00
12 Cumulative Miles of Main Replaced through CIBS	2.96	6.94	9.73	11.29	12.94	16.45	21.45	26.50	35.50
13 Total Miles of Cast Iron/Bare Steel Main Remaining ¹	149.8	142.0	137.4	132.1	126.30	120.88	113.96	106.46	95.46
14									
15 Services Replaced Annually ²	101	127	282	81	84	174	316	291	535
16 Cumulative Number of Services Replaced	101	228	510	591	675	849	1,165	1,456	1,991
17									
18 Typical Residential bill	\$1,292	\$1,107	\$1,118	\$1,059	\$1,020	\$1,123	\$1,309	\$1,309	\$1,309
19									
20 Typical Usage	800	800	800	800	800	800	800	800	800
21									
22 Annual Increase for Residential Heating customer	\$1.36	\$2.54	\$2.70	(\$0.22)	\$0.80	\$1.65	\$1.50	\$1.00	\$3.50
23									
24 Percent Bill Increase	0.10%	0.23%	0.24%	-0.02%	0.08%	0.15%	0.11%	0.08%	0.27%
25									
26									
27 Typical G-41	\$3,375	\$2,939	\$2,842	\$2,696	\$2,654	\$2,926	\$3,499	\$3,499	\$3,499
28									
29 Typical Usage	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167
30									
31 Annual Increase for G-41 customer	\$3.67	\$6.89	\$7.31	(\$0.59)	\$2.16	\$4.47	\$4.06	\$2.70	\$9.49
32									
33 Percent Bill Increase	0.11%	0.23%	0.26%	-0.02%	0.08%	0.15%	0.12%	0.08%	0.27%
34									
35									
36 Typical G-42	\$22,595	\$18,926	\$18,432	\$17,516	\$16,884	\$18,853	\$22,486	\$22,486	\$22,486
37									
38 Typical Usage	15,567	15,567	15,567	15,567	15,567	15,567	15,567	15,567	15,567
39									
40 Annual Increase for G-42 customer	\$26.38	\$49.52	\$52.50	(\$4.21)	\$15.53	\$32.13	\$29.13	\$19.40	\$68.19
41									
42 Percent Bill Increase	0.12%	0.26%	0.28%	-0.02%	0.09%	0.17%	0.13%	0.09%	0.30%
43									
44									
45 Typical G-52	\$21,973	\$16,707	\$16,605	\$16,025	\$14,629	\$16,555	\$18,667	\$18,667	\$18,667
46									
47 Typical Usage	15,687	15,687	15,687	15,687	15,687	15,687	15,687	15,687	15,687
48									
49 Annual Increase for G-52 customer	\$26.59	\$49.90	\$52.91	(\$4.24)	\$15.65	\$32.37	\$29.35	\$19.55	\$68.72
50									
51 Percent Bill Increase	0.12%	0.30%	0.32%	-0.03%	0.11%	0.20%	0.16%	0.10%	0.37%

Line / Column Notes:

1(b)-16(b) Amounts are cumulative from July 1, 2009

¹ These figures are as of the end of the prior calendar year (i.e. FY 2016 data is as of 12/31/2015)

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
d/b/a Liberty Utilities
Docket No. DG 16-XXX
Attachment DBS-2
April 15, 2016**

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Revenue Requirement From Inception
April 15, 2016**

Computation of Revenue Requirement From Inception	1
Vintage Year Book Depreciation Schedule From Inception	2
Municipal Taxes as a Percentage of Net Plant From Inception	3
Bill Impacts due to Cast Iron and Bare Steel Replacement Program Fro	4

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Revenue Requirement From Inception

RESTATED AS IF RATE CASE WAS NOT FILED. FOR INFORMATIONAL PURPOSES ONLY.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
	Actual FY09	12 Months FY10	Actual FY11	Actual FY12	Actual FY13	Actual FY14	Actual FY15	Actual FY16	Estimate FY17	
Incremental Investment										
1	CIBS Program Actual Spend-Mains	1,736,153	4,206,295	3,391,069	1,570,208	2,174,813	2,781,140	3,006,856	\$3,304,532	-
2	CIBS Program Actual Spend-Service	729,463	822,173	668,631	352,005	161,352	370,655	776,086	\$705,984	-
3	CIBS Program Estimated Spend-Mains	-	-	-	-	-	-	-	-	6,571,682
4	CIBS Program Estimated Spend-Service	-	-	-	-	-	-	-	-	1,383,737
5	Base Spending Amount	500,000	500,000	500,000	500,000	500,000	500,000	506,240	514,244	514,244
6	Incremental Amount	1,965,616	4,528,468	3,559,700	1,422,213	1,836,165	2,651,795	3,276,702	3,496,272	7,441,175
7	Cumulative CIBS Program Spend Since July 1, 2009	1,965,616	6,494,084	10,053,784	11,475,997	13,312,162	15,963,956	19,240,659	22,736,931	30,178,106
8										
Deferred Tax Calculation										
10	Annual Tax Depreciation	1,031,948	5,462,136	3,559,700	1,422,213	1,836,165	2,651,795	3,276,702	3,496,272	7,441,175
11	Cumulative Tax Depreciation Since July 1, 2009	1,031,948	6,494,084	10,053,784	11,475,997	13,312,162	15,963,956	19,240,659	22,736,931	30,178,106
12										
13	Annual Book Depreciation	49,836	152,184	232,725	265,448	303,340	360,741	437,636	517,566	687,358
14	Cumulative Book Depreciation Since July 1, 2009	49,836	202,019	434,744	700,192	1,003,531	1,364,272	1,801,908	2,319,474	3,006,832
15										
16	Annual Book/Tax Timer	982,112	5,309,953	3,326,975	1,156,765	1,532,825	2,291,054	2,839,067	2,978,706	6,753,817
17	Cumulative Book/Tax Timer	982,112	6,292,065	9,619,040	10,775,805	12,308,630	14,599,684	17,438,751	20,417,457	27,171,274
18	Statutory Tax Rate	40.53%	40.53%	40.53%	40.53%	40.53%	39.61%	39.61%	39.61%	39.61%
19										
20	Deferred Tax Reserve	398,001	2,550,174	3,898,597	4,367,434	4,988,688	5,896,174	6,907,489	8,087,355	10,762,542
21										
Rate Base Calculation										
22										
23	Plant In Service	1,965,616	6,494,084	10,053,784	11,475,997	13,312,162	15,963,956	19,240,659	22,736,931	30,178,106
24	Accumulated Depreciation	(49,836)	(202,019)	(434,744)	(700,192)	(1,003,531)	(1,364,272)	(1,801,908)	(2,319,474)	(3,006,832)
25	Net Plant in Service	1,915,780	6,292,065	9,619,040	10,775,806	12,308,630	14,599,684	17,438,751	20,417,457	27,171,274
26	Deferred Tax Reserve	(398,001)	(2,550,174)	(3,898,597)	(4,367,434)	(4,988,688)	(5,896,174)	(6,907,489)	(8,087,355)	(10,762,542)
27	Year End Rate Base	1,517,779	3,741,891	5,720,443	6,408,372	7,319,943	8,703,510	10,531,262	12,330,102	16,408,732
28										
Revenue Requirement Calculation										
29										
30	Year End Rate Base	1,517,779	3,741,891	5,720,443	6,408,372	7,319,943	8,703,510	10,531,262	12,330,102	16,408,732
31	Pre-Tax ROR	11.53%	11.53%	11.63%	11.63%	11.63%	11.50%	10.22%	9.87%	9.87%
32	Return and Taxes	175,003	431,440	665,288	745,294	851,309	1,000,904	1,076,295	1,216,981	1,619,542
33	Book Depreciation	49,836	152,184	232,725	265,448	303,340	360,741	437,636	517,566	687,358
34	Property Taxes	37,347	130,246	244,324	281,249	284,329	410,251	559,784	534,937	711,887
35	Annual Revenue Requirement	262,185	713,870	1,142,337	1,291,991	1,438,978	1,771,896	2,073,715	2,269,484	3,018,787
36										
37	Prior Year Annual Revenue Requirement	-	262,185	713,870	1,142,337	1,291,991	1,438,978	1,771,896	2,073,715	2,269,484
38										
39	Incremental Annual Rate Adjustment Since July 1, 2009	262,185	451,684	428,467	149,654	146,987	332,918	301,819	195,769	749,303
40										
46										
47										
Actual Capital Structure/ROR										
49										
50										
51										
52										
53										
54	Long Term Debt	50.00%	4.43%	2.215%	2.215%	2.215%				
55	Short Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%				
56	Common Equity	50.00%	9.25%	4.625%	7.777%	7.659%				
57										
58		100.00%	6.840%	9.992%	9.874%					

Line / Column Notes:

- 20 Using an effective tax rate of 39.61% starting in FY 2014 and an effective tax rate of 40.53% additions prior to fiscal 2014
- 34 Property tax rate reflects actual calendar year 2015 ratio of municipal tax expense to average net plant in service per page 3 of 4.
- Col (b) In accordance with Exhibit EN-3 of the National Grid/KeySpan Merger Settlement Agreement (Docket No. DG 06-107), EnergyNorth is allowed to implement on July 1 of each year, a permanent increase in its base distribution delivery rates to recover the annual revenue requirement for those investments made in the preceding fiscal year ended March 31st in excess of the CIBS base amount. As shown on Attachment A of Exhibit EN-3, the revenue requirement in any year reflects deferred income tax reserves based on the cumulative book/tax timing difference of all prior year CIBS investments. However, on July 1, 2010, EnergyNorth implemented new temporary base distribution delivery rates as part of its rate case in Docket No. DG 10-017. These new rates were based on the historic test year ended June 30, 2009 which included the first three months of CIBS investment for the fiscal year ended March 31, 2010. As a consequence, the revenue requirement for the fiscal year ended March 31, 2010 reflected CIBS investment for only the last nine months of the fiscal year ended March 31, 2010. In addition, this revenue requirement did not reflect deferred income tax reserves based on cumulative book/tax timing differences on CIBS spending prior to June 30, 2009.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Vintage Year Book Depreciation Schedule From Inception

RESTATE AS IF RATE CASE WAS NOT FILED. FOR INFORMATIONAL PURPOSES ONLY.

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
		Actual FY09	12 Months FY10	Actual FY11	Actual FY12	Actual FY13	Actual FY14	Actual FY15	Actual FY16	Estimate FY17
Book Depreciation Schedule-Mains										
1	Actual CIBS spending	1,736,153	4,206,295	3,391,069	1,570,208	2,174,813	2,781,140	3,006,856	3,304,532	6,571,682
2	Base spending	(352,073)	(418,248)	(417,650)	(408,438)	(465,466)	(441,199)	(402,383)	(423,720)	(424,798)
3	Incremental CIBS spending	1,384,080	3,788,047	2,973,419	1,161,770	1,709,346	2,339,940	2,604,473	2,880,812	6,146,884
4										
5	Book Depreciation Rate:									
6	Year 1	2.54%	35,065	35,065	35,065	35,065	35,065	35,065	35,065	35,065
7	Year 1 beginning in FY10	1.92%		72,731	57,090	22,306	32,819	44,927	50,006	55,312
8	Year 2	1.92%		72,731	57,090	22,306	32,819	44,927	50,006	55,312
9	Year 3	1.92%			72,731	57,090	22,306	32,819	44,927	50,006
10	Year 4	1.92%				72,731	57,090	22,306	32,819	44,927
11	Year 5	1.92%					72,731	57,090	22,306	32,819
12	Year 6	1.92%						72,731	57,090	22,306
13	Year 7	1.92%							72,731	57,090
14	Year 8	1.92%								72,731
14	Book Depreciation Expense-Mains	35,065	107,796	164,886	187,191	220,010	264,937	314,943	370,255	488,275
15										
16	Accumulated Depreciation Mains-Beginning of Year	-	35,065	142,860	307,746	494,937	714,947	979,884	1,294,827	1,665,081
17	Accumulated Depreciation Mains-End of Year	35,065	142,860	307,746	494,937	714,947	979,884	1,294,827	1,665,081	2,153,356
18										
19										
Book Depreciation Schedule-Services										
22	Actual CIBS spending	729,463	822,173	668,631	352,005	161,352	370,655	776,086	705,984	1,383,737
23	Base spending	(147,927)	(81,752)	(82,350)	(91,562)	(34,534)	(58,801)	(103,857)	(90,524)	(89,446)
24	Incremental CIBS spending	581,536	740,421	586,281	260,443	126,818	311,854	672,229	615,460	1,294,291
25										
26	Book Depreciation Rate:									
27	Year 1	2.54%	14,771	14,771	14,771	14,771	14,771	14,771	14,771	14,771
28	Year 1 beginning in FY10	4.00%		29,617	23,451	10,418	5,073	12,474	26,889	24,618
29	Year 2	4.00%		29,617	23,451	10,418	5,073	12,474	26,889	24,618
30	Year 3	4.00%			29,617	23,451	10,418	5,073	12,474	26,889
31	Year 4	4.00%				29,617	23,451	10,418	12,474	5,073
32	Year 5	4.00%					29,617	23,451	10,418	5,073
33	Year 6	4.00%						29,617	23,451	10,418
34	Year 7	4.00%							29,617	23,451
34	Year 8	4.00%								29,617
35	Book Depreciation Expense-Services	14,771	44,388	67,839	78,257	83,330	95,804	122,693	147,311	199,083
36										
37	Accumulated Depreciation Services-Beginning of Year	-	14,771	59,159	126,998	205,255	288,584	384,388	507,081	654,392
38	Accumulated Depreciation Services-End of Year	14,771	59,159	126,998	205,255	288,584	384,388	507,081	654,392	853,475
39										
40										
41										
42	Total Mains & Services Depreciation Expense	49,836	152,184	232,725	265,448	303,340	360,741	437,636	517,566	687,358
43										
44	Total Mains & Services Accumulated Depreciation	49,836	202,019	434,744	700,192	1,003,531	1,364,272	1,801,908	2,319,474	3,006,831

2(g) & 22(g) FY 2017 estimate split 82.6% Mains / 17.4% Services based upon FY 2016 actual spend.

6(a) & 26(a) FY 2009 filing used the composite depreciation rate for both mains and services.

col. (b) See footnote regarding column (b) on page 1 of 5.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Municipal Taxes as a Percentage of Net Plant From Inception

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
1 Plant in Service	258,573	272,678	289,379	305,221	319,737	332,049	344,966	356,165	381,214	419,215	451,950
2 Depreciation and Amortization Reserve	(82,363)	(88,564)	(94,562)	(102,587)	(108,270)	(114,294)	(119,973)	(121,047)	(129,209)	(137,656)	(149,943)
3 Net Plant	176,209	184,114	194,817	202,634	211,467	217,756	224,993	235,118	252,006	281,559	302,007
4											
5 Average Net Plant											
6 Plant in Service		265,625	281,028	297,300	312,479	325,893	338,508	350,565	368,690	400,214	435,582
7 Depreciation Reserve		(85,463)	(91,563)	(98,575)	(105,429)	(111,282)	(117,133)	(120,510)	(125,128)	(133,432)	(143,799)
8 Net Plant		180,162	189,465	198,726	207,051	214,611	221,375	230,056	243,562	266,782	291,783
9											
10 Municipal Taxes		3,534	3,641	3,771	4,294	5,459	5,776	5,321	6,835	8,560	7,644
11											
12 % Municipal Taxes to Net Plant		1.96%	1.92%	1.90%	2.07%	2.54%	2.61%	2.31%	2.81%	3.21%	2.62%

Note: Source of above data is the December 31 PUC Annual Report to be consistent with data previously provided to the Commission.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Bill Impacts due to Cast Iron and Bare Steel Replacement Program From Inception

RESTATED AS IF RATE CASE WAS NOT FILED. FOR INFORMATIONAL PURPOSES ONLY.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Estimate FY2017
1 Annual Increase due to Cast Iron Bare Steel program	262,185	713,870	527,261	(92,035)	146,987	332,918	301,819	195,769	749,303
2									
3 Annual Throughput (see Summer COG filing - schedule 10B)	154,702,063	150,828,182	154,648,622	163,588,592	158,062,349	160,018,819	166,523,068	172,103,158	172,103,158
4									
5 Increase Factor	\$0.0017	\$0.0047	\$0.0034	(\$0.0006)	\$0.0009	\$0.0021	\$0.0018	\$0.0011	\$0.0044
6									
7 Annual Calendar Year Gross Revenues (Annual Report - Page 11)	\$176,520,000	\$151,224,178	\$132,475,941	\$146,365,316	\$119,363,340	\$137,617,008	\$119,363,341	\$156,933,825	\$156,933,825
8									
9 Annual Percent Increase	0.15%	0.47%	0.40%	-0.06%	0.12%	0.24%	0.25%	0.12%	0.48%
10									
11 Miles of Cast Iron/Bare Steel Main Replaced Annually through CIBS	2.96	3.98	2.79	1.56	1.65	3.51	5.00	5.05	9.00
12 Cumulative Miles of Main Replaced through CIBS	2.96	6.94	9.73	11.29	12.94	16.45	21.45	26.50	35.50
13 Total Miles of Cast Iron/Bare Steel Main Remaining ¹	149.8	142.0	137.4	132.1	126.30	120.88	113.96	106.46	95.46
14									
15 Services Replaced Annually ²	101	127	282	81	84	174	316	291	535
16 Cumulative Number of Services Replaced	101	228	510	591	675	849	1,165	1,456	1,991
17									
18 Typical Residential bill	\$1,292	\$1,107	\$1,118	\$1,059	\$1,020	\$1,123	\$1,309	\$1,309	\$1,309
19									
20 Typical Usage	800	800	800	800	800	800	800	800	800
21									
22 Annual Increase for Residential Heating customer	\$1.36	\$3.79	\$2.73	(\$0.45)	\$0.74	\$1.66	\$1.45	\$0.91	\$3.48
23									
24 Percent Bill Increase	0.10%	0.34%	0.24%	-0.04%	0.07%	0.15%	0.11%	0.07%	0.27%
25									
26									
27 Typical G-41	\$3,375	\$2,939	\$2,842	\$2,696	\$2,654	\$2,926	\$3,499	\$3,499	\$3,499
28									
29 Typical Usage	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167
30									
31 Annual Increase for G-41 customer	\$3.67	\$10.26	\$7.39	(\$1.22)	\$2.02	\$4.51	\$3.93	\$2.46	\$9.43
32									
33 Percent Bill Increase	0.11%	0.35%	0.26%	-0.05%	0.08%	0.15%	0.11%	0.07%	0.27%
34									
35									
36 Typical G-42	\$22,595	\$18,926	\$18,432	\$17,516	\$16,884	\$18,853	\$22,486	\$22,486	\$22,486
37									
38 Typical Usage	15,567	15,567	15,567	15,567	15,567	15,567	15,567	15,567	15,567
39									
40 Annual Increase for G-42 customer	\$26.38	\$73.68	\$53.07	(\$8.76)	\$14.48	\$32.39	\$28.21	\$17.71	\$67.78
41									
42 Percent Bill Increase	0.12%	0.39%	0.29%	-0.05%	0.09%	0.17%	0.13%	0.08%	0.30%
43									
44									
45 Typical G-52	\$21,973	\$16,707	\$16,605	\$16,025	\$14,629	\$16,555	\$18,667	\$18,667	\$18,667
46									
47 Typical Usage	15,687	15,687	15,687	15,687	15,687	15,687	15,687	15,687	15,687
48									
49 Annual Increase for G-52 customer	\$26.59	\$74.25	\$53.48	(\$8.83)	\$14.59	\$32.64	\$28.43	\$17.84	\$68.30
50									
51 Percent Bill Increase	0.12%	0.44%	0.32%	-0.06%	0.10%	0.20%	0.15%	0.10%	0.37%

Line / Column Notes:

1(b)-16(b) Amounts are cumulative from July 1, 2009

¹These figures are as of the end of the prior calendar year (i.e. FY 2016 data is as of 12/31/2015)

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
d/b/a Liberty Utilities
Docket No. DG 16-XXX
Attachment DBS-3
April 15, 2016**

**Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact of Refund of Degradation Fees - Informational Only
April 15, 2016**

Computation of Estimated Revenue Requirement Refund on Degradation Fees - Informational Only	1
Vintage Year Book Depreciation Schedule	2
Municipal Taxes as a Percentage of Net Plant	3
Bill Impacts due to Cast Iron and Bare Steel Replacement Program	4

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Refund on Degradation Fees - Informational Only

(a)	(b) <u>Refund Year</u>
<u>Incremental Investment</u>	
1 CIBS Program Actual - Refund of Degradation Fees	(1,018,481)
2 Base Spending Amount	
3 Incremental Amount	<u>(1,018,481)</u>
4 Cumulative CIBS Program - Refund of Degradation Fees	(1,018,481)
5	
<u>Deferred Tax Calculation</u>	
6 Annual Tax Depreciation	(1,018,481)
7 Cumulative Tax Depreciation on Degradation Fees	(1,018,481)
8	
9 Annual Book Depreciation	(19,555)
10 Cumulative Book Depreciation on Degradation Fees	(19,555)
11	
12 Annual Book/Tax Timer	(998,926)
13 Cumulative Book/Tax Timer	<u>(998,926)</u>
14 Effective Tax Rate	39.61%
15	
16 Estimated Deferred Tax Reserve	<u>(395,675)</u>
17	
<u>Rate Base Calculation</u>	
18 Plant In Service	(1,018,481)
19 Accumulated Depreciation	<u>19,555</u>
20 Net Plant in Service	(998,926)
21 Deferred Tax Reserve	<u>395,675</u>
22 Year End Rate Base	<u><u>(603,252)</u></u>
23	
<u>Revenue Requirement Calculation</u>	
24 Year End Rate Base	(603,252)
25 Pre-Tax ROR	<u>9.87%</u>
26 Return and Taxes	(59,541)
27 Book Depreciation	(19,555)
28 Property Taxes	2.62% <u>(23,075)</u>
29 Revenue Requirement Reduction	(102,171)
30	
31	

<u>Capital Structure/ROR</u>					
	<u>Ratio</u>	<u>Rate</u>	<u>Weighted after-tax</u>	(prior federal tax rate of 35% and state rate of 8.5%) <u>Pre Tax</u>	(current federal tax rate of 34% and state rate of 8.5%) <u>Pre Tax</u>
32 Long Term Debt	50.00%	4.43%	2.215%	2.215%	2.215%
33 Short Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
34 Common Equity	<u>50.00%</u>	<u>9.25%</u>	<u>4.625%</u>	<u>7.777%</u>	<u>7.659%</u>
35					
36	<u>100.00%</u>		<u>6.840%</u>	<u>9.992%</u>	<u>9.874%</u>
37					
38					
39					
40					
41					
42					
43					
44					
45					

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact of Refund of Degradation Fees - Informational Only

Vintage Year Book Depreciation Schedule

Book Depreciation Schedule-Mains	Refund Year				
1	Actual CIBS spending	(1,018,481)			
2					
3	Incremental CIBS spending	(1,018,481)			
4					
5	Book Depreciation Rate:				
6	Year 1	1.92%	(19,555)		
7	Year 2	1.92%			
8	Year 3	1.92%			
9	Year 4	1.92%			
10					
11	Book Depreciation Expense-Mains		(19,555)		
12					
13	Accumulated Depreciation-Beginning of Year		-		
14	Accumulated Depreciation-End of Year		(19,555)		

Degradation Fees by Year by City:							
	F/Y 2011	F/Y 2012	F/Y 2013	F/Y 2014	F/Y 2015	F/Y 2016	Totals
Concord	19,856	37,960	9,747	48,350	75,541	129,773	321,226
Manchester	275,035	39,885	382,335	-	-	-	697,255
Totals	294,891	77,845	392,082	48,350	75,541	129,773	1,018,481

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact of Refund of Degradation Fees - Informational Only

Municipal Taxes as a Percentage of Net Plant

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
1 Plant in Service	258,573	272,678	289,379	305,221	319,737	332,049	344,966	356,165	381,214	419,215	451,950
2 Depreciation and Amortization Reserve	(82,363)	(88,564)	(94,562)	(102,587)	(108,270)	(114,294)	(119,973)	(121,047)	(129,209)	(137,656)	(149,943)
3 Net Plant	176,209	184,114	194,817	202,634	211,467	217,756	224,993	235,118	252,006	281,559	302,007
4											
5 Average Net Plant											
6 Plant in Service	265,625	281,028	297,300	312,479	325,893	338,508	350,565	368,690	400,214	435,582	
7 Depreciation Reserve	(85,463)	(91,563)	(98,575)	(105,429)	(111,282)	(117,133)	(120,510)	(125,128)	(133,432)	(143,799)	
8 Net Plant	180,162	189,465	198,726	207,051	214,611	221,375	230,056	243,562	266,782	291,783	
9											
10 Municipal Taxes		3,534	3,641	3,771	4,294	5,459	5,776	5,321	6,835	8,560	7,644
11											
12 % Municipal Taxes to Net Plant		1.96%	1.92%	1.90%	2.07%	2.54%	2.61%	2.31%	2.81%	3.21%	2.62%

Note: Source of above data is the December 31 PUC Annual Report to be consistent with data previously provided to the Commission.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact of Refund of Degradation Fees - Informational Only

Bill Impacts due to Cast Iron and Bare Steel Replacement Program

(a)	(b) Refund Year
1 Decrease Related to Refund of Degradation Fees	(102,171)
2	
3 Annual Throughput (see Summer COG filing - schedule 10B)	172,103,158
4	
5 Decrease Factor	(\$0.0006)
6	
7 Annual Calendar Year Gross Revenues (Annual Report - Page 11, line 2)	\$156,933,825
8	
9 Annual Percent Decrease	-0.07%
10	
11	
12	
13 Typical Residential bill	\$1,309
14	
15 Typical Usage	800
16	
17 Annual Decrease for Residential Heating customer	(\$0.47)
18	
19 Percent Bill Decrease	-0.04%
20	
21	
22 Typical G-41	\$3,499
23	
24 Typical Usage	2,167
25	
26 Annual Decrease for G-41 customer	(\$1.29)
27	
28 Percent Bill Decrease	-0.04%
29	
30	
31 Typical G-42	\$22,486
32	
33 Typical Usage	15,567
34	
35 Annual Decrease for G-42 customer	(\$9.24)
36	
37 Percent Bill Decrease	-0.04%
38	
39	
40 Typical G-52	\$18,667
41	
42 Typical Usage	15,687
43	
44 Annual Decrease for G-52 customer	(\$9.31)
45	
46 Percent Bill Decrease	-0.05%

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact if the Company Does Not Prevail in the Degradation Fee Litigation - Informational Only
April 15, 2016

Computation of Estimated Revenue Requirement Refund on Degradation Fees - Informational Only	1
Vintage Year Book Depreciation Schedule	2
Municipal Taxes as a Percentage of Net Plant	3
Bill Impacts due to Cast Iron and Bare Steel Replacement Program	4

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Refund on Degradation Fees - Informational Only

(a)	(b) Refund Year
<u>Incremental Investment</u>	
1 CIBS Program Actual - Charge of Degradation Fees	685,409
2 Base Spending Amount	
3 Incremental Amount	685,409
4 Cumulative CIBS Program - Charge of Degradation Fees	685,409
5	
<u>Deferred Tax Calculation</u>	
6 Annual Tax Depreciation	685,409
7 Cumulative Tax Depreciation on Degradation Fees	685,409
8	
9 Annual Book Depreciation	13,160
10 Cumulative Book Depreciation on Degradation Fees	13,160
11	
12 Annual Book/Tax Timer	672,249
13 Cumulative Book/Tax Timer	672,249
14 Effective Tax Rate	39.61%
15	
16 Estimated Deferred Tax Reserve	266,278
17	
18	
19 <u>Rate Base Calculation</u>	
20 Plant In Service	685,409
21 Accumulated Depreciation	(13,160)
22 Net Plant in Service	672,249
23 Deferred Tax Reserve	(266,278)
24 Year End Rate Base	405,971
25	
26 <u>Revenue Requirement Calculation</u>	
27 Year End Rate Base	405,971
28 Pre-Tax ROR	9.87%
29 Return and Taxes	40,069
30 Book Depreciation	13,160
31 Property Taxes	15,529
32 Revenue Requirement Increase	68,758
33	
34	

Capital Structure/ROR

	Ratio	Rate	Weighted after-tax	(prior federal tax rate of 35% and state rate of 8.5%) Pre Tax	(current federal tax rate of 34% and state rate of 8.5%) Pre Tax
36 Long Term Debt	50.00%	4.43%	2.215%	2.215%	2.215%
37 Short Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
38 Common Equity	50.00%	9.25%	4.625%	7.777%	7.659%
39					
40	<u>100.00%</u>		<u>6.840%</u>	<u>9.992%</u>	<u>9.874%</u>
41					
42					
43					
44					
45					

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
Computation of Estimated Revenue Requirement Impact if the Company Does Not Prevail in the Degradation Fee Litigation - Informational Only

Vintage Year Book Depreciation Schedule

Book Depreciation Schedule-Mains	Refund
	Year
1 Actual CIBS spending	685,409
2	
3 Incremental CIBS spending	685,409
4	
5 Book Depreciation Rate:	
6 Year 1	1.92% 13,160
7 Year 2	1.92%
8 Year 3	1.92%
9 Year 4	1.92%
10	
11 Book Depreciation Expense-Mains	13,160
12	
13 Accumulated Depreciation-Beginning of Year	-
14 Accumulated Depreciation-End of Year	13,160

Uncharged Degradation Fees by Year by City:

	F/Y 2011	F/Y 2012	F/Y 2013	F/Y 2014	F/Y 2015	F/Y 2016	Totals
Concord	-	-	-	-	-	-	-
Manchester	-	-	-	246,449	236,710	202,250	685,409
Totals	-	-	-	246,449	236,710	202,250	685,409

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Municipal Taxes as a Percentage of Net Plant

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
1 Plant in Service	258,573	272,678	289,379	305,221	319,737	332,049	344,966	356,165	381,214	419,215	451,950
2 Depreciation and Amortization Reserve	(82,363)	(88,564)	(94,562)	(102,587)	(108,270)	(114,294)	(119,973)	(121,047)	(129,209)	(137,656)	(149,943)
3 Net Plant	176,209	184,114	194,817	202,634	211,467	217,756	224,993	235,118	252,006	281,559	302,007
4											
5 Average Net Plant											
6 Plant in Service	265,625	281,028	297,300	312,479	325,893	338,508	350,565	368,690	400,214	435,582	
7 Depreciation Reserve	(85,463)	(91,563)	(98,575)	(105,429)	(111,282)	(117,133)	(120,510)	(125,128)	(133,432)	(143,799)	
8 Net Plant	180,162	189,465	198,726	207,051	214,611	221,375	230,056	243,562	266,782	291,783	
9											
10 Municipal Taxes	3,534	3,641	3,771	4,294	5,459	5,776	5,321	6,835	8,560	7,644	
11											
12 % Municipal Taxes to Net Plant	1.96%	1.92%	1.90%	2.07%	2.54%	2.61%	2.31%	2.81%	3.21%	2.62%	

Note: Source of above data is the December 31 PUC Annual Report to be consistent with data previously provided to the Commission.

Liberty Utilities (EnergyNorth Natural Gas) Corp.
Fiscal Year 2016 Cast Iron/Bare Steel Replacement Program
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Bill Impacts due to Cast Iron and Bare Steel Replacement Program
(a)

(a)	(b) Charge Year
1 Increase Related to Unpaid Degradation Fees	68,758
2	
3 Annual Throughput (see Summer COG filing - schedule 10B)	172,103,158
4	
5 Increase Factor	\$0.0004
6	
7 Annual Calendar Year Gross Revenues (Annual Report - Page 11, line 2)	\$156,933,825
8	
9 Annual Percent Increase	0.04%
10	
11	
12	
13 Typical Residential bill	\$1,309
14	
15 Typical Usage	800
16	
17 Annual Increase for Residential Heating customer	\$0.32
18	
19 Percent Bill Increase	0.02%
20	
21	
22 Typical G-41	\$3,499
23	
24 Typical Usage	2,167
25	
26 Annual Increase for G-41 customer	\$0.87
27	
28 Percent Bill Increase	0.02%
29	
30	
31 Typical G-42	\$22,486
32	
33 Typical Usage	15,567
34	
35 Annual Increase for G-42 customer	\$6.22
36	
37 Percent Bill Increase	0.03%
38	
39	
40 Typical G-52	\$18,667
41	
42 Typical Usage	15,687
43	
44 Annual Increase for G-52 customer	\$6.27
45	
46 Percent Bill Increase	0.03%