# Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Annual Rate Changes CY 2015 Actual

		Actual <b>7/1/2008</b>	Actual 7/1/2009	Actual 7/1/2010	Actual <b>7/1/2011</b>	Actual 7/1/2012	Actual 7/1/2013	Actual <u>6/1/2014</u>	Actual 5/1/2015	Actual 5/1/2016
<u>A</u>	nnual Incremental Rate Adjustments	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	REP/VMP O&M Adjustment Factor	\$0	\$113,832	\$1,047,770	(\$758,113)	(\$295,207)	(\$52,081)	(\$275,840)	(\$210,585)	\$346,184
2	REP Capital Program	\$165,840	\$75,740	\$163,663	\$102,941	(\$18,005)	\$125,829	\$37,374	\$376,356	\$248,953
3	Total for Fiscal Year	\$165,840	\$189,572	\$1,211,433	(\$655,172)	(\$313,213)	\$73,748	(\$238,466)	\$165,770	\$595,137
4	Termination of Prior Period O&M Recovery	\$0	\$0	(\$113,832)	(\$1,047,770)	\$758,113	\$295,207	\$52,081	\$275,840	\$210,585
5	Net Change in Recovery	\$165,840	\$189,572	\$1,097,601	(\$1,702,942)	\$444,900	\$368,955	(\$186,385)	\$441,611	\$805,722

# Notes:

Line 1 From Page 2 of 3, Line 13 Line 2 From Page 3 of 3, Line 58 Line 3 Line 1 + Line 3 Line 4 - Line 1 of Prior Year Line 5 Line 5 + Line 7

## Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 2 of 12

## Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP O&M Adjustment Factor Computation of Annual Revenue Requirement CY 2015 Actual

		Actual FY <u>2008</u>	Actual FY <u>2009</u>	Actual FY <u>2010</u>	Actual FY <u>2011</u>	Actual FY <u>2012</u>	Actual FY <u>2013</u>	Actual <b>CYS</b> <u>2013</u>	Actual CY <u>2014</u>	Actual CY <u>2015</u>
In	cremental VMP and REP O&M Spend	(a)	(b)	(c)	(d)	(e)	(f)	(f)	(g)	(h)
1	Actual VMP and REP Program Spending	\$2,169,258	\$1,477,916	\$2,556,530	\$1,245,985	\$1,467,486	\$1,560,973	\$1,055,861	\$1,395,166	\$1,994,184
2	Amount Subject to Proposed Recovery	\$1,950,000	\$1,473,832	\$2,556,530	\$1,552,000	\$1,556,000	\$1,721,585	\$1,238,200	\$1,395,166	\$1,994,184
3	Amount Subject to Recovery	\$1,950,000	\$1,473,832	\$2,556,530	\$1,245,985	\$1,467,486	\$1,560,973	\$1,055,861	\$1,395,166	\$1,994,184
4	VMP and REP Base Spending Level	\$1,950,000	\$1,360,000	\$1,360,000	\$1,360,000	\$1,360,000	\$1,360,000	\$1,020,000	\$1,360,000	\$1,360,000
5	Total Revenue Requirement	\$0	\$113,832	\$1,196,530	(\$114,015)	\$107,486	\$200,973	\$35,861	\$35,166	\$634,184
6	Less Reimbursements from FairPoint Communications	\$0	\$0	(\$148,760)	(\$644,098)	(\$402,693)	(\$253,054)	(\$311,701)	(\$245,751)	(\$288,000)
7	Total Incremental Revenue Requirement for Adj. Factor	\$0	\$113,832	\$1,047,770	(\$758,113)	(\$295,207)	(\$52,081)	(\$275,840)	(\$210,585)	\$346,184
8	Total O&M Recovery	\$1,950,000	\$1,473,832	\$2,407,770	\$601,887	\$1,064,793	\$1,307,919	\$744,160	\$1,149,415	\$1,706,184

### Notes:

Line 1 Actual VMP and REP program spending, excluding FairPoint Communications reimbursements.

Line 2 Approved program budget

Line 3 Lesser of Line 1 and Line 3.

Line 4 VMP and REP base spending level per Merger Settlement Agreement in Docket No. DG 06-107.

Line 5 Line 5 minus Line 7.

Line 6 Reflects reimbursements related to vegetation management expenses from FairPoint Communications.

Line 7 Line 9 plus Line 11.

Line 8 Line 5 plus Line 11.

# Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Computation of REP Revenue Requirement CY 2015 Actual

		Revised FY <u>2008</u>	Revised FY <u>2009</u>	Revised FY <u>2010</u>	Revised FY <u>2011</u>	Revised FY <u>2012</u>	Actual FY <u>2013</u>	Actual CYS 2013	Actual CY <u>2014</u>	Actual CY <u>2015</u>
	Deferred Tax Calculation									
1 2	REP Program Annual Spend Cumulative REP Program Spend	\$950,000 \$950,000	\$500,000 \$1,450,000	\$876,243 \$2,326,243	\$610,835 \$2,937,078	\$398,239 \$3,335,317	\$545,916 \$3,881,233	\$416,755 \$4,297,988	\$2,201,899 \$6,499,887	\$1,321,456 \$7,821,343
3	Cumulative KEP Program Spend	\$950,000	\$1,450,000	\$2,320,243	\$2,937,078	\$3,333,317	\$3,881,233	\$4,297,988	\$0,499,887	\$7,821,345
4	Book Depreciation Rate (a)	3.70%	3.72%	3.71%	3.73%	3.72%	3.33%	3.72%	3.72%	3.75%
5 6	FEDERAL Vintage Year Tax Depreciation: FY 2008 Spend	\$429,887	\$39,010	\$36,081	\$33,379	\$30,872	\$28,559	\$14,858	\$19,810	\$24,112
7	FY 2009 Spend	\$ <del>4</del> 27,007	\$338,156	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219
8	FY 2010 Spend			\$550,022	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913
9 10	FY 2011 Spend FY 2012 Spend				\$481,705	\$9,685 \$377,329	\$8,958 \$2,968	\$4,662 \$1,544	\$6,215 \$2,059	\$7,665 \$2,539
11	FY 2013 Spend					ψ511,529	\$332,964	\$11,900	\$15,867	\$14,676
12	CYS 2013 Spend							\$212,773	\$5,861	\$15,043
13 14	CY 2014 Spend CY 2015 Spend								\$1,142,236	\$79,478 \$685,505
15	Annual Tax Depreciation	\$429,887	\$377,166	\$598,242	\$550,778	\$450,902	\$403,992	\$261,627	\$1,213,235	\$855,149
16	Cumulative Tax Depreciation	\$429,887	\$807,053	\$1,405,295	\$1,956,073	\$2,406,975	\$2,810,967	\$3,072,594	\$4,285,829	\$5,140,977
17 18	STATE Vintage Year Tax Depreciation:									
19	FY 2008 Spend	\$334,991	\$46,127	\$42,664	\$39,469	\$36,504	\$33,770	\$17,568	\$23,425	\$28,511
20	FY 2009 Spend		\$176,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438
21 22	FY 2010 Spend FY 2011 Spend			\$223,801	\$48,935 \$199,462	\$45,261 \$30,854	\$41,872 \$28,538	\$21,784 \$14,850	\$29,045 \$19,800	\$35,825 \$24,417
23	FY 2012 Spend					\$181,087	\$19,837	\$10,320	\$13,761	\$16,973
24	FY 2013 Spend						\$179,810	\$20,395	\$27,193	\$25,151
25 26	CYS 2013 Spend CY 2014 Spend							\$8,791	\$11,721 \$82,571	\$30,086 \$158,955
27	CY 2015 Spend									\$49,555
28	Annual Tax Depreciation	\$334,991	\$222,438	\$290,742	\$310,320	\$314,480	\$323,039	\$103,706	\$220,846	\$385,912
29 30	Cumulative Tax Depreciation	\$334,991	\$557,429	\$848,171	\$1,158,492	\$1,472,971	\$1,796,010	\$1,899,716	\$2,120,562	\$2,506,473
31	Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$181,430	\$293,300
32	Cumulative Book Depreciation	\$35,150	\$89,090	\$175,394	\$285,039	\$409,113	\$538,222	\$658,155	\$839,585	\$1,132,885
33 34	Book/Tax Timer (Federal)	\$394,737	\$717,963	\$1,229,901	\$1,671,034	\$1,997,862	\$2,272,745	\$2,414,439	\$3,446,244	\$4,008,092
35	less: Deferred Tax Reserve (State)	\$25,486	\$39,809	\$57,186	\$74,243	\$90,428	\$106,912	\$105,533	\$108,883	\$116,755
36 37	Net Book/Tax Timer (Federal)	\$369,251	\$678,154	\$1,172,715 35.00%	\$1,596,791	\$1,907,435 35.00%	\$2,165,833	\$2,308,906	\$3,337,361	\$3,891,337
38	Effective Tax Rate (Federal) Deferred Tax Reserve (Federal)	35.00% \$129,238	35.00% \$237,354	\$410,450	35.00% \$558,877	\$667,602	35.00% \$758,041	34.00% \$785,028	34.00% \$1,134,703	34.00% \$1,323,055
39	Book/Tax Timer (State)	\$299,841	\$468,339	\$672,778	\$873,453	\$1,063,859	\$1,257,788	\$1,241,561	\$1,280,977	\$1,373,588
40 41	Effective Tax Rate (State) Deferred Tax Reserve (State)	8.50% \$25,486	8.50% \$39,809	8.50% \$57,186	8.50% \$74,243	8.50% \$90,428	8.50% \$106,912	8.50% \$105,533	8.50% \$108,883	8.50% \$116,755
41	TOTAL Deferred Tax Reserve	\$154,724	\$277,163	\$467,636	\$633,120	\$758,030	\$864,953	\$890,561	\$1,243,586	\$1,439,810
43	-									
44 45	Rate Base Calculation Plant In Service	\$050.000	\$1.450.000	\$7 276 742	\$2 027 078	\$3,335,317	\$2 991 222	\$4 207 088	\$6 400 887	\$7,821,343
45	Accumulated Book Depreciation	(\$35,150)	(\$89,090)	(\$175,394)		(\$409,113)		(\$658,155)	(\$839,585)	(\$1,132,885)
47	Deferred Tax Reserve	(\$154,724)	(\$277,163)	(\$467,636)	(\$633,120)	(\$758,030)	(\$864,953)	(\$890,561)	##########	(\$1,439,810)
48 49	Year End Rate Base	\$760,126	\$1,083,747	\$1,683,213	\$2,018,919	\$2,168,174	\$2,478,057	\$2,749,272	\$4,416,717	\$5,248,648
50	Revenue Requirement Calculation									
51	Year End Rate Base		\$1,083,747		\$2,018,919	\$2,168,174		\$2,749,272		\$5,248,648
52 53	Pre-Tax ROR Return and Taxes	11.91% \$90,515	11.91% \$129,051	11.91% \$200,435	11.91% \$240,410	11.91% \$258,183	11.91% \$295,084	11.36% \$312,413	11.36% \$501,524	11.36% \$596,246
54	Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$181,430	\$293,300
55	Property Taxes (b) 4.12%	\$21,773	\$27,218	\$66,676	\$89,904	\$110,318	\$118,343	\$149,961	\$233,204	\$275,564
56 57	Annual Revenue Requirement Prior Period Change for Repairs Tax Deduct & Bonu	\$147,438 s Depreciatio	\$210,209 m (FY 08 - 1	\$353,415 4) (e)	\$439,960	\$492,575 (\$73,471)	\$542,536 \$2,397	\$582,307	\$916,158	\$1,165,111
58	Adjusted Annual Revenue Requirement	\$147,438	\$210,209	\$353,415	\$439,960	\$419,104	\$544,933	\$582,307	\$916,158	\$1,165,111
59	American De Ge Allender and	<b>7/1/2000</b>	7/1/2000	7/1/2010	7/1/2011	7/1/2012	7/1/2012	C/1/2014	5/1/2015	5/1/2017
60 61	Annual Rate Adjustment	7/1/2008	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013	6/1/2014	5/1/2015	5/1/2016
62	Incremental Annual Rate Adjustment	\$147,438	\$62,771	\$143,205	\$86,545	(\$20,856)	\$125,829	\$37,374	\$333,851	\$248,953
63										
64 65	Imputed Capital Structure (c)			Weighted						
66		Ratio	Rate	Rate	Pre Tax	_				
67 68	Long Term Debt Common Equity	50.00% 50.00%	7.54% 9.67%	3.77%	3.77%					
69	Common Equity	50.00%	9.07%	4.84%	8.14%	-				
70		100.00%		8.61%	11.91%	-				
71	Imputed Capital Structure (4)			Waishtad						
72 73	Imputed Capital Structure (d)	Ratio	Rate	Weighted Rate	Pre Tax					
74	Long Term Debt	45.00%	5.95%	2.68%	2.68%					
75 76	Common Equity	55.00%	9.55%	5.25%	8.68%	-				
70		100.00%		7.93%	11.36%					
	=					-				

(a) Actual Calendar Year Composite Depreciation rate for distribution property.
(b) Actual Calendar Year ratio of municipal tax expense to net plant in service.
(c) Capital structure per Merger Settlement in Docket DG 06-107, Exhibit 1, Section 3(c).
(d) Capital structure per Rate Case Settlement in Docket DE 13-063, Attachment A, Schedule 1B.

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2008 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY2014</u>	(i) <u>CY2015</u>
1 <u>Capital Repairs Deduction</u> 2 Plant Additions     3 Capital Repairs Deduction Rate     4 Capital Repairs Deduction	From Page 3 of 12, Line 1 Tax Dept Line 2 * Line 3	\$950,000 <u>32.74%</u> \$311,030								
5 6 Bonus Depreciation 7 Plant Additions 8 Less Capital Repairs Deduction 9 Plant Additions Net of Capital Repairs Deduction	Line 2 Line 4 Line 7 - Line 8	\$950,000 \$311,030 \$638,970								
<ol> <li>Percent of Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007</li> <li>Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007</li> </ol>	Tax Dept Line 9 * Line 11	<u>69.14%</u> \$441,784								
<ul><li>13 Bonus Depreciation rate April 2007- December 2007</li><li>14 Bonus Depreciation for April 2007 - December 2007</li><li>15</li></ul>	Tax Dept <sup>1</sup> Line 12 * Line 13	0% \$0								
16 Plant Additions Eligible for Bonus Depreciation for January 2008 - March 2008 17 Plant Additions Eligible for Bonus Depreciation for January 2008 - March 2008	Tax Dept Line 9 * Line 16	30.86% \$197,186								
<ol> <li>Bonus Depreciation rate January 2008 - March 2008</li> <li>Bonus Depreciation for January 2008 - March 2008</li> <li>20</li> </ol>	Tax Dept <sup>1</sup> Line 17 * Line 18	50% \$98,593								
20 21 Bonus Depreciation 22	Line 14 + Line 19	\$98,593								
23 <u>Remaining Tax Depreciation (Federal)</u> 24 Plant Additions 25 Less Capital Repairs Deduction 26 Less Bonus Depreciation	Line 2 Line 4 Line 21	\$950,000 \$311,030 \$98,593								
27 Additions Subject to 20 YR MACRS Tax Depreciation 28 20 YR MACRS Tax Depreciation Rates 29 Remaining Tax Depreciation	Line 24 - Line 25 - Line 26 Tax Dept Line 27 * Line 28	\$540,377 3.750% \$20,264	\$540,377 7.219% \$39,010	\$540,377 6.677% \$36,081	\$540,377 6.177% \$33,379	\$540,377 5.713% \$30,872	\$540,377 5.285% \$28,559	\$540,377 <u>3.666%</u> \$14,858	\$540,377 4.888% \$19,810	\$540,377 <u>4.462%</u> \$24,112
30 31 <u>Remaining Tax Depreciation (State)</u> 32 Plant Additions	Line 2	\$950,000								
<ul> <li>33 Less Capital Repairs Deduction</li> <li>34 Additions Subject to 20 YR MACRS Tax Depreciation</li> <li>35 20 YR MACRS Tax Depreciation Rates</li> <li>36 Remaining Tax Depreciation</li> </ul>	Line 4 Line 32 - Line 33 Tax Dept Line 34 * Line 35	\$311,030 \$638,970 3.750% \$23,961	\$638,970 7.219% \$46,127	\$638,970 6.677% \$42,664	\$638,970 6.177% \$39,469	\$638,970 5.713% \$36,504	\$638,970 5.285% \$33,770	\$638,970 <u>3.666%</u> \$17,568	\$638,970 <u>4.888%</u> \$23,425	\$638,970 4.462% \$28,511
37 38 Federal Tax Depreciation 39 State Tax Depreciation	Sum of Lines 4, 21, and 29 Sum of Lines 4, and 36	\$429,887 \$334,991	\$39,010 \$46,127	\$36,081 \$42,664	\$33,379 \$39,469	\$30,872 \$36,504	\$28,559 \$33,770	\$14,858 \$17,568	\$19,810 \$23,425	\$24,112 \$28,511

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's REP/VMP program have been as follows:

nave been as follows.	
Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2009 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) 2008	(b) 2009	(c) 2010	(d) 2011	(e) 2012	(f) 2013	(g) CYS2013	(h) CY2014	(i) CY2015
1 Capital Repairs Deduction										
2 Plant Additions	From Page 3 of 12, Line 1		\$500,000							
3 Capital Repairs Deduction Rate	Tax Dept		32.74%							
4 Capital Repairs Deduction	Line 2 * Line 3	_	\$163,700							
5										
6 Bonus Depreciation										
7 Plant Additions	Line 2		\$500,000							
8 Less Capital Repairs Deduction	Line 4		\$163,700							
9 Plant Additions Net of Capital Repairs Deduction	Line 7 - Line 8		\$336,300							
10										
11 Percent of Plant Additions Eligible for Bonus Depreciation	Tax Dept	_	100.00%							
12 Plant Additions Eligible for Bonus Depreciation	Line 9 * Line 11		\$336,300							
13 Bonus Depreciation Rate	Tax Dept	_	50%							
14 Bonus Depreciation	Line 12 * Line 13		\$168,150							
15										
16 Bonus Depreciation	Line 14		\$168,150							
17										
18 Remaining Tax Depreciation (Federal)										
19 Plant Additions	Line 2		\$500,000							
20 Less Capital Repairs Deduction	Line 4		\$163,700							
21 Less Bonus Depreciation	Line 16	_	\$168,150							
22 Additions Subject to 20 YR MACRS Tax Depreciation	Line 19 - Line 20 - Line 21		\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150
23 20 YR MACRS Tax Depreciation Rates	Tax Dept	_	3.750%	7.219%	6.677%	6.177%	5.713%	3.964%	5.285%	4.888%
24 Remaining Tax Depreciation	Line 22 * Line 23		\$6,306	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219
25										
26 Remaining Tax Depreciation (State)										
27 Plant Additions	Line 2		\$500,000							
28 Less Capital Repairs Deduction	Line 4	_	\$163,700							
29 Additions Subject to 20 YR MACRS Tax Depreciation	Line 27 - Line 28		\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300
30 20 YR MACRS Tax Depreciation Rates	Tax Dept	_	3.750%	7.219%	6.677%	6.177%	5.713%	3.964%	5.285%	4.888%
31 Remaining Tax Depreciation 32	Line 29 * Line 30		\$12,611	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438
33 Federal Tax Depreciation	Sum of Lines 4, 16, and 24	-	\$338,156	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219
34 State Tax Depreciation	Sum of Lines 4 and 31	-	\$176,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438
-		_								

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the

Company's REP/VMP program have been as follows:	
Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 6 of 12

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2010 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) CYS2013	(h) CY2014	(i) <u>CY2015</u>
1	Capital Repairs Deduction										
	Plant Additions	From Page 3 of 12, Line 1			\$876.243						
	Capital Repairs Deduction Rate	Tax Dept			22.64%						
	Capital Repairs Deduction	Line 2 * Line 3			\$198,381						
5					+						
6	Bonus Depreciation										
7	Plant Additions	Line 2			\$876,243						
8	Less Capital Repairs Deduction	Line 4			\$198,381						
9	Plant Additions Net of Capital Repairs Deduction	Line 7 - Line 8		_	\$677,862						
10											
	Percent of Plant Additions Eligible for Bonus Depreciation	Tax Dept		_	100.00%						
	Plant Additions Eligible for Bonus Depreciation	Line 9 * Line 11			\$677,862						
	Bonus Depreciation Rate	Tax Dept		_	50%						
14	Bonus Depreciation	Line 12 * Line 13			\$338,931						
15											
	Bonus Depreciation	Line 14			\$338,931						
17											
	Remaining Tax Depreciation (Federal)										
	Plant Additions	Line 2			\$876,243						
	Less Capital Repairs Deduction	Line 4			\$198,381						
	Less Bonus Depreciation	Line 16		_	\$338,931						
	Additions Subject to 20 YR MACRS Tax Depreciation	Line 19 - Line 20 - Line 21			\$338,931	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931
	20 YR MACRS Tax Depreciation Rates	Tax Dept		_	3.750%	7.219%	6.677%	6.177%	4.285%	5.713%	5.285%
	Remaining Tax Depreciation	Line 22 * Line 23			\$12,710	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913
25											
	Remaining Tax Depreciation (State)										
	Plant Additions	Line 2			\$876,243						
	Less Capital Repairs Deduction	Line 4		_	\$198,381	A	A	\$ CTT 0 CT	<b>* (77 0 (2</b>	<b>* (77</b> 0 ( <b>2</b>	A
	Additions Subject to 20 YR MACRS Tax Depreciation	Line 27 - Line 28			\$677,862	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862
	20 YR MACRS Tax Depreciation Rates	Tax Dept		-	3.750%	7.219%	6.677%	6.177%	4.285%	5.713%	5.285%
	Remaining Tax Depreciation	Line 29 * Line 30			\$25,420	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825
32	Federal Tax Depreciation	Sum of Lines 4, 16, and 24		-	\$550.022	\$24,467	\$22,630	\$20,936	\$10.892	\$14,522	\$17,913
	State Tax Depreciation	Sum of Lines 4, 16, and 24 Sum of Lines 4 and 31		-	\$223,801	\$24,467 \$48,935	\$45,261	\$20,936	\$10,892 \$21,784	\$14,522 \$29,045	\$35,825
34	State 1 ax Depreciation	Sum of Lines 4 and 51		=	φ223,001	\$ <del>4</del> 0,733	\$ <del>4</del> 5,∠01	\$41,07Z	¢∠1,/04	\$ <u>2</u> 9,043	\$33,023

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the

Company's REP/VMP program have been as follows:	
Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2011 - Per Tax Return Using Capital Repairs Tax Return Rate

		(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY2014</u>	(i) <u>CY2015</u>
1 2 3 4	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	_	\$610,835 30.03% \$183,434					
5 6 7 8	Bonus Depreciation Plant Additions Less Capital Repairs Deduction		\$610,835 \$183,434					
9 10	Plant Additions Net of Capital Repairs Deduction	-	\$427,401					
11 12 13 14	Percent of Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010 Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010 Bonus Depreciation rate April 2010 - September 2010 Bonus Depreciation for April 2010 - September 2010	-	62.78% \$268,322 50% \$134,161					
15 16 17 18	Plant Additions Eligible for Bonus Depreciation for October 2010 - March 2010 Plant Additions Eligible for Bonus Depreciation for October 2010 - March 2010 Bonus Depreciation rate October 2010 - March 2010	-	37.22% \$159,079 100%					
19 20 21	Bonus Depreciation for October 2010 - March 2010 Bonus Depreciation	-	\$159,079 \$293,240					
22 23 24	Remaining Tax Depreciation (Federal) Plant Additions		\$610,835					
25 26 27	Less Capital Repairs Deduction Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation	_	\$183,434 \$293,240 \$134,161	\$134,161	\$134,161	\$134,161	\$134,161	\$134,161
28 29 30	20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	-	3.750% \$5,031	7.219% \$9,685	6.677% \$8,958	4.633% \$4,662	6.177% \$6,215	5.713% \$7,665
31 32 33	Remaining Tax Depreciation (State) Plant Additions Less Capital Repairs Deduction		\$610,835 \$183,434					
34 35 36	Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	-	\$427,401 3.750% \$16,028	\$427,401 7.219% \$30,854	\$427,401 6.677% \$28,538	\$427,401 4.633% \$14,850	\$427,401 6.177% \$19,800	\$427,401 5.713% \$24,417
37 38 39	Federal Tax Depreciation State Tax Depreciation	-	\$481,705 \$199,462	\$9,685 \$30,854	\$8,958 \$28,538	\$4,662 \$14,850	\$6,215 \$19,800	\$7,665 \$24,417
39	State 1 as Depreciation	=	φ177,402	<i>ф</i> 50,854	920,338	ş14,630	φ17,800	φ <b>∠</b> <del>4</del> , <del>4</del> 17

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions.

Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the

Company's REP/VMP program have been as follows:

Period April 1, 2007 to December 31, 2007 January 1, 2008 to September 7, 2010 September 8, 2010 to December 31, 2011 January 1, 2012 to December 31, 2013

## Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 8 of 12

## Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2012 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) ( <u>2008</u> <u>20</u>	(c) (d) 2010 <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY2014</u>	(i) <u>CY2015</u>
1	Capital Repairs Deduction								
2	Plant Additions	From Page 3 of 12, Line 1			\$398,239				
3	Capital Repairs Deduction Rate	Tax Dept			31.00%				
4	Capital Repairs Deduction	Line 2 * Line 3			\$123,454				
5									
6	Bonus Depreciation								
7	Plant Additions	Line 2			\$398,239				
8	Less Capital Repairs Deduction	Line 4			\$123,454				
9	Plant Additions Net of Capital Repairs Deduction	Line 7 - Line 8			\$274,785				
10									
11	Percent of Plant Additions Eligible for Bonus Depreciation April 2011 - December, 2011	Tax Dept			72.52%				
12	Plant Additions Eligible for Bonus Depreciation April 2011 - December, 2011	Line 9 * Line 11			\$199,274				
13	Bonus Depreciation rate April 2011- December 2011	Tax Dept			100%				
14	Bonus Depreciation for April 2011 - December 2011	Line 12 * Line 13			\$199,274				
15					25.0444				
	Plant Additions Eligible for Bonus Depreciation for January 2012 - March 2012	Tax Dept			25.04%				
17	Plant Additions Eligible for Bonus Depreciation for January 2012 - March 2012	Line 9 * Line 16			\$68,806				
18	Bonus Depreciation rate January 2012 - March 2012	Tax Dept			50%				
19 20	Bonus Depreciation for January 2012 - March 2012	Line 17 * Line 18			\$34,403				
20	Bonus Depreciation	Line 14 + Line 19			\$233.677				
22	Bonus Depreciation	Line 14 + Line 19			\$255,077				
23	Remaining Tax Depreciation (Federal)								
	Plant Additions	Line 2			\$398,239				
25	Less Capital Repairs Deduction	Line 2			\$123,454				
26		Line 21			\$233.677				
27		Line 24 - Line 25 - Line 26			\$41,108	\$41,108	\$41.108	\$41.108	\$41.108
28	20 YR MACRS Tax Depreciation Rates	Tax Dept			3.750%	7.219%	5.008%	6.677%	6.177%
29	1	Line 27 * Line 28			\$1,542	\$2,968	\$1,544	\$2,059	\$2,539
30									
31	Remaining Tax Depreciation (State)								
32	Plant Additions	Line 2			\$398,239				
33	Less Capital Repairs Deduction	Line 4			\$123,454				
34	Additions Subject to 20 YR MACRS Tax Depreciation	Line 32 - Line 33			\$274,785	\$274,785	\$274,785	\$274,785	\$274,785
35		Tax Dept			3.750%	7.219%	5.008%	6.677%	6.177%
36	Remaining Tax Depreciation	Line 34 * Line 35			\$10,304	\$19,837	\$10,320	\$13,761	\$16,973
37									
38		Sum of Lines 4, 21, and 29			\$358,673	\$2,968	\$1,544	\$2,059	\$2,539
39	State Tax Depreciation	Sum of Lines 4, and 36			\$133,758	\$19,837	\$10,320	\$13,761	\$16,973
40									
41									
	FY 2012 Safe Harbor True Up (Federal)	From Page 11 of 11, Line 18(e	)		\$18,656				
	FY 2012 Tax Depreciation (Federal)	Line 38 + Line 42			\$377,329				
	FY 2012 Safe Harbor True Up (State)	From Page 11 of 11, Line 40(e	)		\$47,329				
45	FY 2012 Tax Depreciation (State)	Line 39 + Line 44			\$181,087				

Note: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Subject to the topological established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's REP/VMP program have been as follows:

Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 9 of 12

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2013 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY2014</u>	(i) <u>CY2015</u>
1 2	Capital Repairs Deduction Plant Additions	From Page 3 of 12, Line 1						\$545,916			
3 4	Capital Repairs Deduction Rate Capital Repairs Deduction	Tax Dept Line 2 * Line 3						31.00% \$169.234			
5		Line 2 · Line 5						\$109,234			
6 7	Bonus Depreciation Plant Additions	Line 2						\$545,916			
8	Less Capital Repairs Deduction	Line 4						\$169,234			
9	Plant Additions Net of Capital Repairs Deduction	Line 7 - Line 8					-	\$376,682			
10 11	Percent of Plant Additions Eligible for Bonus Depreciation April 2012 - December, 2012	Tax Dept						62.48%			
12	Plant Additions Eligible for Bonus Depreciation April 2012 - December, 2012	Line 9 * Line 11						\$235,332			
13	Bonus Depreciation rate April 2012- December 2012	Tax Dept						50%			
14 15	Bonus Depreciation for April 2012 - December 2012	Line 12 * Line 13						\$117,666			
16	Plant Additions Eligible for Bonus Depreciation for January 2013 - March 2013	Tax Dept						20.83%			
17	Plant Additions Eligible for Bonus Depreciation for January 2013 - March 2013	Line 9 * Line 16					•	\$78,444			
18	Bonus Depreciation rate January 2013 - March 2013	Tax Dept						50%			
19	Bonus Depreciation for January 2013 - March 2013	Line 17 * Line 18						\$39,222			
20 21	Bonus Depreciation	Line 14 + Line 19						\$156,888			
22	Bonus Depresiation	Line 14   Line 19						\$150,000			
23	Remaining Tax Depreciation (Federal)										
24	Plant Additions	Line 2						\$545,916			
25	Less Capital Repairs Deduction	Line 4						\$169,234			
26		Line 21						\$156,888	6310 50 <i>1</i>		<b>**</b> **
27 28	Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates	Line 24 - Line 25 - Line 26 Tax Dept						\$219,794 3.750%	\$219,794 5.414%	\$219,794 7.219%	\$219,794 6.677%
28 29	Remaining Tax Depreciation	Line 27 * Line 28					•	\$8,242	\$11,900	\$15.867	\$14,676
30	Remaining Tax Depreciation	Enic 27 Enic 20						\$0,242	\$11,700	\$15,007	\$14,070
31	Remaining Tax Depreciation (State)										
32		Line 2						\$545,916			
33		Line 4						\$169,234			
34	Additions Subject to 20 YR MACRS Tax Depreciation	Line 32 - Line 33						\$376,682	\$376,682	\$376,682	\$376,682
35 36	20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	Tax Dept Line 34 * Line 35						3.750% \$14.126	5.414% \$20.395	7.219% \$27.193	6.677% \$25.151
30	Kemaning Tax Depreciation	Line 34 <sup>or</sup> Line 33						\$14,120	\$20,393	\$27,195	\$25,151
38	Federal Tax Depreciation	Sum of Lines 4, 21, and 29						\$334,364	\$11,900	\$15,867	\$14,676
39	State Tax Depreciation	Sum of Lines 4, and 36						\$183,360	\$20,395	\$27,193	\$25,151
40											
41 42	Effect of FY 2012 Safe Harbor True Up on FY 2013 Tax Depreciation (Federal)	From Page 11 of 11, Line 18(f)						(\$1,400)			
	FY 2013 Tax Depreciation (Federal)	Line 38 + Line 42					•	\$332,964			
44		From Page 11 of 11, Line 40(f)					•	(\$3,550)			
45	FY 2013 Tax Depreciation (State)	Line 39 + Line 44						\$179,810			

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's REP/VMP program have been as follows:

been as follows.	
Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 10 of 12

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2013 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY2014</u>	(i) <u>CY2015</u>
1 2	Capital Repairs Deduction Plant Additions	From Page 3 of 12, Line 1							\$416,755		
3	Capital Repairs Deduction Rate	Tax Dept						-	0.00%		
4	Capital Repairs Deduction	Line 2 * Line 3							\$0		
5											
6	Bonus Depreciation										
7	Plant Additions	Line 2							\$416,755		
8	Less Capital Repairs Deduction	Line 4						-	\$0		
9 10	Plant Additions Net of Capital Repairs Deduction	Line 7 - Line 8							\$416,755		
10	Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013	Tax Dept							100.00%		
12	Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013 Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013	Line 9 * Line 11						-	\$416.755		
13								50%			
14	Bonus Depreciation fra April 2013 - December 2013 Line 12 * Line 13						-	\$208,378			
15	Donas Depreciation for right 2015 December 2015								\$200,570		
16	Bonus Depreciation	Line 14							\$208,378		
17	· · · · · ·										
18	Remaining Tax Depreciation (Federal)										
19	Plant Additions	Line 2							\$416,755	\$416,755	\$416,755
20	Less Capital Repairs Deduction	Line 4							\$0	\$0	\$0
21	Less Bonus Depreciation	Line 16						_	\$208,378	\$208,378	\$208,378
22	Additions Subject to 20 YR MACRS Tax Depreciation	Line 19 - Line 20 - Line 21							\$208,378	\$208,378	\$208,378
23	20 YR MACRS Tax Depreciation Rates	Tax Dept						-	2.813%	3.750%	7.219%
24	Remaining Tax Depreciation	Line 22 * Line 23							\$4,395	\$5,861	\$15,043
25											
26	Remaining Tax Depreciation (State)										
27	Plant Additions	Line 2							\$416,755	\$416,755	\$416,755
28	Less Capital Repairs Deduction	Line 4						-	\$0	\$0	\$0
29 30	Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates	Line 27 - Line 28 Tax Dept							\$416,755 2.813%	\$416,755 3.750%	\$416,755 7.219%
30 31	Remaining Tax Depreciation Rates	Line 29 * Line 30						-	\$8,791	\$11.721	\$30,086
32	Kemaning Tax Depreciation	Line 27 * Line 50							φ0,/91	911,/21	<i>ф</i> 50,080
33	Federal Tax Depreciation	Sum of Lines 4, 16, and 24						-	\$212,773	\$5,861	\$15,043
34	State Tax Depreciation	Sum of Lines 4, and 31						-	\$8,791	\$11,721	\$30,086
5.								=		÷••,/21	<i>120,000</i>

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's REP/VMP program have been as follows:

Period	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 11 of 12 Revised

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2014 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY 2014</u>	(i) <u>CY 2015</u>
1 2 3 4 5	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	From Page 3 of 12, Line 1 Tax Dept Line 2 * Line 3								\$2,201,899 0.00% \$0	
5 6 7 8 9 10	Bonus Depreciation Plant Additions Less Capital Repairs Deduction Plant Additions Net of Capital Repairs Deduction	Line 2 Line 4 Line 7 - Line 8								\$2,201,899 \$0 \$2,201,899	
10 11 12 13 14 15	Plant Additions Eligible for Bonus Depreciation for January 2014 - December 2014 Plant Additions Eligible for Bonus Depreciation for January 2014 - December 2014 Bonus Depreciation rate January 2014 - December 2014 Bonus Depreciation rate January 2014 - December 2014	Tax Dept Line 9 * Line 11 Tax Dept Line 12 * Line 13								100.00% \$2,201,899 50% \$1,100,950	
16 17	Bonus Depreciation	Line 14								\$1,100,950	
18 19 20 21 22 23 24 25 26	Remaining Tax Depreciation (Federal) Plant Additions Less Capital Repairs Deduction Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation Description	Line 2 Line 4 Line 16 Line 19 - Line 20 - Line 21 Tax Dept Line 22 * Line 23								\$2,201,899 \$0 \$1,100,950 \$1,100,950 3.750% \$41,286	\$2,201,899 \$0 \$1,100,950 \$1,100,950 7.219% \$79,478
26 27 28 29 30 31 32 33 34	Remaining Tax Depreciation (State)         Plant Additions         Less Capital Repairs Deduction         Additions Subject to 20 YR MACRS Tax Depreciation         20 YR MACRS Tax Depreciation Rates         Remaining Tax Depreciation         Federal Tax Depreciation         State Tax Depreciation	Line 2 Line 4 Line 27 - Line 28 Tax Dept Line 29 * Line 30 Sum of Lines 4, 16, and 24 Sum of Lines 4, and 31								\$2,201,899 \$0 \$2,201,899 3.750% \$82,571 \$1,142,236 \$82,571	\$2,201,899 \$0 \$2,201,899 7.219% \$158,955 \$79,478 \$158,955

Rate

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's

REP/VMP program have been as follows: <u>Period</u> 1, 2007 to December 31, 2007

0%
50%
100%
50%

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-1 Page 12 of 12

#### Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities **REP/VMP** Revenue Requirement Calculation of REP Tax Depreciation 2015 - Per Tax Return Using Capital Repairs Tax Return Rate

			(a) <u>2008</u>	(b) <u>2009</u>	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) <u>CYS2013</u>	(h) <u>CY 2014</u>	(i) <u>CY 2015</u>
1 2 3 4	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	From Page 3 of 12, Line 1 Tax Dept Line 2 * Line 3									\$1,321,456 0.00% \$0
5 6 7 8 9	Bonus Depreciation Plant Additions Less Capital Repairs Deduction Plant Additions Net of Capital Repairs Deduction	Line 2 Line 4 Line 7 - Line 8									\$1,321,456 \$0 \$1,321,456
10 11 12 13 14 15	Plant Additions Eligible for Bonus Depreciation for January 2014 - December 2014 Plant Additions Eligible for Bonus Depreciation for January 2014 - December 2014 Bonus Depreciation rate January 2014 - December 2014 Bonus Depreciation rate January 2014 - December 2014	Tax Dept Line 9 * Line 11 Tax Dept Line 12 * Line 13									100.00% \$1,321,456 50% \$660,728
16 17	Bonus Depreciation	Line 14									\$660,728
18 19 20 21 22 23 24 25	Remaining Tax Depreciation (Federal) Plant Additions Less Capital Repairs Deduction Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	Line 2 Line 4 Line 16 Line 19 - Line 20 - Line 21 Tax Dept Line 22 * Line 23									\$1,321,456 \$0 \$660,728 \$660,728 3.750% \$24,777
26 27 28 29 30 31 32 33 34	Remaining Tax Depreciation (State)         Plant Additions         Less Capital Repairs Deduction         Additions Subject to 20 YR MACRS Tax Depreciation         20 YR MACRS Tax Depreciation Rates         Remaining Tax Depreciation         Federal Tax Depreciation         State Tax Depreciation	Line 2 Line 4 Line 27 - Line 28 Tax Dept Line 29 * Line 30 Sum of Lines 4, 16, and 24 Sum of Lines 4, and 31									\$1,321,456 \$0 \$1,321,456 3.750% \$49,555 \$685,505 \$49,555

Note: Plant additions not subject to the capital repairs deduction may be subject to bonus depreciation. During 2008, Congress passed the Economic Stimulus Act of 2008 which established a 50% bonus depreciation deduction for certain eligible plant additions. Congress has passed further laws which have extended and changed the bonus depreciation rate at different periods of time. The bonus depreciation rates in effect since the start of the Company's

REP/VMP program have been as follows: Period rv 1 2007 to December 31 2007

Period	Rate
January 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2011	100%
January 1, 2012 to December 31, 2013	50%

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-2 Page 1 of 4 Revised

# Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities REP/VMP Rate Design Procedure for Adjusting Distribution Rates for Capital Investment Allowance Calculation of Percentage Adjustment to Distribution Rates Rates Effective May 1, 2016

(1)	Increase in Annual Revenue Requirement	\$204,854
(2)	Revenue Requirement in Docket DE 15-087	\$35,523,239
(3)	Percentage of Adjustment to Distribution Rates	0.58%

(1) Schedule HMT-1, Page 1

- (2) Approved revenue requirement in Docket DE 15-087 Step Adjustment effective May 1, 2015
- (3) Line (1)  $\div$  Line (2)

# Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities Calculation of Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor Rates Effective May 1, 2016

(1)	O&M Expense Above Base O&M Expense	\$346,184
(2)	Final Balance of Reconciliation of Refund of FY 2015 Incremental O&M Expense Above Base O&M Expense	<u>(\$22,416)</u>
(3)	Reliability Enhancement Program and Vegetation Management Plan Expense	\$323,768
(4)	Estimated Interest During Recovery Period	<u>(\$9,146)</u>
(5)	Reliability Enhancement Program and Vegetation Management Plan Expense, Including Interest	\$314,623
(6)	Estimated kWh deliveries	957,563,085
(7)	Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor	\$0.00032

- (1) Schedule HMT-1, Page 1
- (2) Schedule HMT-3, Page 1
- (3) Line (1) + Line (2)
- (4) Page 4
- (5) Line (3) + Line (5)
- (6) Per Company forecast
- (7) Line  $(5) \div$  Line (6), truncated after 5 decimal places

# Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-2 Page 3 of 4

	Beginning Balance With Interest (a)	Estimated Recovery (b)	Ending Balance (c)	Balance Subject to Interest (d)	Effective Interest Rate (e)	Interest (f)	Cumulative Interest (g)
January 2016	(\$323,768)		(\$323,768)	(\$323,768)	3.25%	(\$864)	(\$864)
February	(\$324,632)		(\$324,632)	(\$324,632)	3.25%	(\$866)	(\$1,730)
March	(\$325,499)		(\$325,499)	(\$325,499)	3.25%	(\$869)	(\$2,599)
April	(\$326,367)		(\$326,367)	(\$326,367)	3.25%	(\$871)	(\$3,470)
May	(\$327,238)	\$27,270	(\$299,969)	(\$313,603)	3.25%	(\$837)	(\$4,307)
June	(\$300,805)	\$25,067	(\$275,738)	(\$288,272)	3.25%	(\$769)	(\$5,076)
July	(\$276,508)	\$25,137	(\$251,371)	(\$263,939)	3.25%	(\$704)	(\$5,781)
August	(\$252,075)	\$25,208	(\$226,868)	(\$239,471)	3.25%	(\$639)	(\$6,420)
September	(\$227,507)	\$25,279	(\$202,228)	(\$214,867)	3.25%	(\$573)	(\$6,993)
October	(\$202,802)	\$25,350	(\$177,451)	(\$190,126)	3.25%	(\$507)	(\$7,501)
November	(\$177,959)	\$25,423	(\$152,536)	(\$165,247)	3.25%	(\$441)	(\$7,942)
December	(\$152,977)	\$25,496	(\$127,481)	(\$140,229)	3.25%	(\$374)	(\$8,316)
January 2017	(\$127,855)	\$25,571	(\$102,284)	(\$115,070)	3.25%	(\$307)	(\$8,623)
February	(\$102,591)	\$25,648	(\$76,943)	(\$89,767)	3.25%	(\$240)	(\$8,863)
March	(\$77,183)	\$25,728	(\$51,455)	(\$64,319)	3.25%	(\$172)	(\$9,034)
April	(\$51,627)	\$25,814	(\$25,813)	(\$38,720)	3.50%	(\$111)	(\$9,146)

# Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities Calculation of Interest on CY 2015 Incremental O&M Expense Below Base O&M Expense

(a) January 2014 per Page 3, Line (3); all other months = prior month Column (c) + prior month Column (f)

- (b) Column (a)  $\div$  number of remaining months in recovery period
- (c) Column (a) + Column (b)
- (d) Average of Column (a) and Column (c)
- (e) Interest rate on customer deposits
- (f) Column (d) x [ (1 + Column (e) ) ^ (  $1 \div 12$ ) 1 ]
- (g) Prior month Column (g) + Current month Column (f)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-2 Page 4 of 4 Revised

# Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities REP/VMP Rate Design

Procedure for Adjusting Distribution Rates for Capital Investment Allowance & Incremental O&M Expense Rates Effective May 1, 2016

Rate Class	Distribution Rate Component	Current Base Distribution <u>Charges</u> (a)	Proposed Distribution % Increase/ % (Decrease) (b)	Proposed Base Distribution <u>Charges</u> (c)	Current Business Profits <u>Surcharge</u> (d)	Current Default Service Cost Reclassification <u>Distribution Credit</u> (e)	Proposed REP/VMP O&M Adjustment <u>Factor</u> (f)	Proposed Total Distribution <u>Charges</u> (g)
D	Customer Charge	\$11.79	0.58%	\$11.85				\$11.85
	1st 250 kWh	\$0.03185	0.58%	\$0.03203	\$0.00057	(\$0.00017)	\$0.00032	\$0.03275
	Excess 250 kWh	\$0.04784	0.58%	\$0.04811	\$0.00057	(\$0.00017)	\$0.00032	\$0.04883
	Off Peak kWh	\$0.03042	0.58%	\$0.03059	\$0.00057	(\$0.00017)	\$0.00032	\$0.03131
	Farm kWh	\$0.03984	0.58%	\$0.04007	\$0.00057	(\$0.00017)	\$0.00032	\$0.04079
	D-6 kWh Interruptible Credit IC-1	\$0.03176 (\$6.91)	0.58% 0.58%	\$0.03194 (\$6.95)	\$0.00057	(\$0.00017)	\$0.00032	\$0.03266
	Interruptible Credit IC-2	(\$9.88)	0.58%	(\$0.93)				(\$6.95) (\$9.93)
		(11-1-1)		(11.1.1)				
D-10	Customer Charge	\$11.95	0.58%	\$12.01	¢0.00057	(\$0.0000)	¢0.00022	\$12.01
	On Peak kWh Off Peak kWh	\$0.09007 \$0.00076	0.58% 0.58%	\$0.09059 \$0.00076	\$0.00057 \$0.00057	(\$0.00008) (\$0.00008)	\$0.00032 \$0.00032	\$0.09140 \$0.00157
		<i><b>Q</b></i> <b>0000000000000</b>	010070	40.00070	<i><b>Q</b>0.00007</i>	(\$0.00000)	\$0.00032	\$0.00127
G-1	Customer Charge	\$324.09	0.58%	\$325.96				\$325.96
	Demand Charge On Peak kWh	\$6.91	0.58%	\$6.95	¢0.00057	¢0,0000	¢0.00022	\$6.95
	Off Peak kWh	\$0.00389 \$0.00076	0.58% 0.58%	\$0.00391 \$0.00076	\$0.00057 \$0.00057	\$0.00000 \$0.00000	\$0.00032 \$0.00032	\$0.00480 \$0.00165
	Credit for High Voltage Delivery > 2.4 kv		0.58%	(\$0.38)	φ0.000 <i>0</i> 7	40.00000	\$0.00052	(\$0.38)
~ •								
G-2	Customer Charge	\$54.05	0.58%	\$54.36				\$54.36
	Demand Charge All kWh	\$6.96 \$0.00116	0.58% 0.58%	\$7.00 \$0.00116	\$0.00057	\$0.00000	\$0.00032	\$7.00 \$0.00205
	Credit for High Voltage Delivery > 2.4 kv		0.58%	(\$0.38)	\$0.00057	\$0.00000	\$0.00032	(\$0.38)
G-3	Customer Charge	\$11.70	0.58%	\$11.76	¢0.00057	(\$0.00017)	¢0.00022	\$11.76
	All kWh Minimum Charge > 25 kVA	\$0.03958 \$2.52	0.58% 0.58%	\$0.03980 \$2.53	\$0.00057	(\$0.00017)	\$0.00032	\$0.04052 \$2.53
	initial charge / 25 k m	02102	010070	¢2.00				¢2100
М	Luminaire Charge							
	Description LUM INC RWY 103W	\$104.48	0.58%	\$105.08				\$105.08
	LUM MV RWY 100W	\$75.61	0.58%	\$76.04				\$76.04
	LUM MV RWY 175W	\$91.95	0.58%	\$92.48				\$92.48
	LUM MV RWY 400W	\$173.92	0.58%	\$174.92				\$174.92
	LUM MV RWY 1000W	\$330.00	0.58%	\$331.91				\$331.91
	LUM MV FLD 400W	\$192.34	0.58%	\$193.45				\$193.45
	LUM MV FLD 1000W	\$332.14	0.58%	\$334.06				\$334.06
	LUM HPS RWY 50W LUM HPS RWY 100W	\$78.26 \$94.89	0.58% 0.58%	\$78.71 \$95.44				\$78.71 \$95.44
	LUM HPS RWY 250W	\$166.63	0.58%	\$167.59				\$167.59
	LUM HPS RWY 400W	\$217.12	0.58%	\$218.37				\$218.37
	LUM HPS FLD 250W	\$168.11	0.58%	\$169.08				\$169.08
	LUM HPS FLD 400W	\$232.07	0.58%	\$233.41				\$233.41
	LUM HPS POST 100W	\$109.28	0.58%	\$109.91				\$109.91
	Pole and Accessory Charge Description							
	POLE – WOOD	\$92.22	0.58%	\$92.75				\$92.75
	POLE FIBER PT <25FT	\$95.50	0.58%	\$96.05				\$96.05
	POLE FIBER RWY <25FT	\$161.99	0.58%	\$162.92				\$162.92
	POLE FIBER RWY=>25	\$270.63	0.58%	\$272.19				\$272.19
	POLE METAL EMBEDDED	\$193.16	0.58%	\$194.28				\$194.28
	POLE METAL =>25FT	\$232.75	0.58%	\$234.09	#0.000 <b>-</b>		AC	\$234.09
	All kWh	\$0.00000	0.58%	\$0.00000	\$0.00057	\$0.00000	\$0.00032	\$0.00089
Т	Customer Charge	\$11.92	0.58%	\$11.98				\$11.98
	All kWh	\$0.03511	0.58%		\$0.00057	(\$0.00007)	\$0.00032	\$0.03613
	Interruptible Credit IC-1	(\$6.91)	0.58%	(\$6.95)				(\$6.95)
	Interruptible Credit IC-2	(\$9.88)	0.58%	(\$9.93)				(\$9.93)
v	Minimum Charge	\$11.74	0.58%	\$11.80				\$11.80
	All kWh	\$0.04052	0.58%	\$0.04075	\$0.00057	(\$0.00009)	\$0.00032	\$0.04155

(a) (b) (c) (d) (e) (f)

Per currently effective tariffs REP/VMP adjustment increase divided by the annual revenue per DE 15-087 of \$35,523,239 Column (a) x (1+Column (b)) Distribution Energy Charges include a Business Profits Tax Surcharge of \$0.00057 per kWh for usage on and after 8/1/01 Per Default Service Cost Reclassification Adjustment Provision Page 2, Line (7)

Column (c) + Column (d) + Column (e) + Column (f) (g)

# Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities Reconciliation of Refund of FY 2014 O&M Expense

		Beginning Balance Refund With Interest (a)	Delivery Sales (b)	Refund (c)	Ending alance Refu (d)	Balance Subject to Interest (e)	Effective Interest Rate (f)	Interest (g)	Cumulative Interest (h)
	May 2014	\$178,351	57,033,130	(\$9,696)	\$168,655	\$173,503	3.25%	\$463	\$463
	June	\$169,118	110,263,603	(\$18,745)	\$150,374	\$159,746	3.25%	\$426	\$889
	July	\$150,800	82,616,869	(\$14,045)	\$136,755	\$143,778	3.25%	\$384	\$1,273
	August	\$137,139	87,401,647	(\$14,858)	\$122,280	\$129,710	3.25%	\$346	\$1,619
	September	\$122,627	82,570,434	(\$14,037)	\$108,590	\$115,608	3.25%	\$309	\$1,928
	October	\$108,898	71,981,746	(\$12,237)	\$96,661	\$102,780	3.25%	\$274	\$2,202
	November	\$96,936	62,404,131	(\$10,609)	\$86,327	\$91,631	3.25%	\$245	\$2,447
	December	\$86,571	77,760,896	(\$13,219)	\$73,352	\$79,962	3.25%	\$213	\$2,660
	January 2015	\$73,566	79,203,232	(\$13,465)	\$60,101	\$66,833	3.25%	\$178	\$2,838
	February	\$60,279	73,627,678	(\$12,517)	\$47,763	\$54,021	3.25%	\$144	\$2,983
k	March	\$47,907	77,664,261	(\$13,203)	\$34,704	\$41,305	3.25%	\$110	\$3,093
k	April	\$34,814	73,413,970	(\$12,480)	\$22,334	\$28,574	3.50%	\$82	\$3,175

Total refund: (\$159,110) Remaining Refund: (\$22,416)

- (a) Schedule HMT-2, page 3, Docket DE 15-087
- (b) Company Billing Reports
- (c) Column (b) x rate

\*

- (d) Column (a) + Column (b)
- (e) Average of Column (a) and Column (d)
- (f) Interest rate on customer deposits
- (g) Column (e) x [  $(1 + Column (f))^{(1 \div 12) 1}$ ]
- (h) Prior month Column (h) + Current month Column (g)
- \* Kilowatt-hours are estimated

# Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities Docket No DE 16-277 Schedule HMT-4 Page 1 of 1 Revised Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities

# Liberty Utilities (Gramite State Electric) d/b/a Liberty Utilities Residential Bill Impact Rates Effective May 1, 2016

Usage 650 kWh

	Current	Proposed	Current	Proposed
	Rates	Rates	Bill	Bill
Customer Charge	\$11.79	\$11.85	\$11.79	\$11.85
Distribution Charge				
1st 250 kWh	\$0.03208	\$0.03275	\$8.02	\$8.19
excess of 250 kWh	\$0.04807	\$0.04883	\$19.23	\$19.53
Storm Recovery Adjustment	\$0.00000	\$0.00000	\$0.00	\$0.00
Transmission Charge <sup>1</sup>	\$0.03557	\$0.01597	\$23.12	\$10.38
Stranded Cost Charge <sup>1</sup>	-\$0.00150	\$0.00040	-\$0.98	\$0.26
System Benefits Charge	\$0.00330	\$0.00330	\$2.15	\$2.15
Electricity Consumption Tax	\$0.00055	\$0.00055	\$0.36	<u>\$0.36</u>
Subtotal Retail Delivery Services			\$63.69	\$52.71
Default Service Charge	\$0.09221	\$0.09221	<u>\$59.94</u>	<u>\$59.94</u>
Total Bill			\$123.62	\$112.65
\$ increase in 650 kWh Total Residential Bil	-\$10.97			
% increase in 650 kWh Total Residential B	-8.88%			

<sup>1</sup>Includes rate changes filed in Docket DE 16-346