

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities**  
**REP/VMP Revenue Requirement**  
**Annual Rate Changes**  
**CY 2016 Actual**

	<u>Actual</u> <u>7/1/2008</u> (a)	<u>Actual</u> <u>7/1/2009</u> (b)	<u>Actual</u> <u>7/1/2010</u> (c)	<u>Actual</u> <u>7/1/2011</u> (d)	<u>Actual</u> <u>7/1/2012</u> (e)	<u>Actual</u> <u>7/1/2013</u> (f)	<u>Actual</u> <u>6/1/2014</u> (g)	<u>Actual</u> <u>5/1/2015</u> (h)	<u>Actual</u> <u>6/1/2016</u> (i)	<u>Actual</u> <u>5/1/2017</u> (i)	
<b><u>Annual Incremental Rate Adjustments</u></b>											
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	(\$76,104)
2	REP Capital Program	\$165,840	\$75,740	\$163,663	\$102,941	(\$18,005)	\$125,829	\$37,374	\$274,518	\$159,037	\$120,019
3	Total for Fiscal Year	\$165,840	\$189,572	\$1,211,433	(\$655,172)	(\$313,213)	\$73,748	(\$238,466)	\$63,932	\$505,221	\$43,915
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	(\$346,184)
5	Net Change in Recovery	\$165,840	\$189,572	\$1,097,601	(\$1,702,942)	\$444,900	\$368,955	(\$186,385)	\$339,773	\$715,806	(\$302,269)

**Notes:**

Line 1 From Page 2 of 12, Line 7  
Line 2 From Page 3 of 12, Line 60  
Line 3 Line 1 + Line 2  
Line 4 Line 1 of Prior Year  
Line 5 Line 3 + Line 4

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities  
REP/VMP O&M Adjustment Factor  
Computation of Annual Revenue Requirement  
CY 2016 Actual**

	Actual FY <u>2008</u> (a)	Actual FY <u>2009</u> (b)	Actual FY <u>2010</u> (c)	Actual FY <u>2011</u> (d)	Actual FY <u>2012</u> (e)	Actual FY <u>2013</u> (f)	Actual CYS <u>2013</u> (f)	Actual CY <u>2014</u> (g)	Actual CY <u>2015</u> (h)	Actual CY <u>2016</u> (i)	
<b><u>Incremental VMP and REP O&amp;M Spend</u></b>											
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	\$1,633,896
2	Proposed Annual Program Budget	\$1,950,000	\$1,473,832	\$2,556,530	\$1,552,000	\$1,556,000	\$1,721,585	\$1,238,200	\$1,521,200	\$1,860,397	\$1,948,000
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	\$1,633,896
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	\$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	\$273,896
6	Less Reimbursements from FairPoint Communications	\$0	\$0	(\$148,760)	(\$644,098)	(\$402,693)	(\$253,054)	(\$311,701)	(\$245,751)	(\$288,000)	(\$350,000)
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	(\$76,104)
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	\$1,283,896

**Notes:**

- Line 1 2016 Actual VMP and REP program spending including \$92,335 of 2015 invoices that were paid in 2016 (cash basis accounting)
- Line 2 Program budget reviewed with Staff pursuant to Section 3a of the Settlement Agreement in Docket No. DE 13-063. 2016 Budget included \$250,000 to change from five-year to four-year cycle. That change did not occur in 2016, so the adjusted budget amount is \$1,698,000.
- Line 4 VMP and REP base spending level per Merger Settlement Agreement in Docket No. DG 06-107, continued in Docket No. DE 13-063
- Line 5 Line 3 minus Line 4
- Line 6 Reflects reimbursements related to vegetation management expenses from FairPoint Communications
- Line 7 Line 5 plus Line 6
- Line 8 Line 3 plus Line 6

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities  
REP/VMP Revenue Requirement  
Computation of REP Revenue Requirement  
CY 2016 Actual

	Revised FY 2008	Revised FY 2009	Revised FY 2010	Revised FY 2011	Revised FY 2012	Actual FY 2013	Actual CYS 2013	Actual CY 2014	Actual CY 2015	Actual CY 2016	
<b>Deferred Tax Calculation</b>											
1	REP Program Annual Spend	\$950,000	\$500,000	\$876,243	\$610,835	\$398,239	\$545,916	\$416,755	\$2,201,899	\$1,321,456	\$849,390
2	Cumulative REP Program Spend	\$950,000	\$1,450,000	\$2,326,243	\$2,937,078	\$3,335,317	\$3,881,233	\$4,297,988	\$6,499,887	\$7,821,343	\$8,670,733
3											
4	Book Depreciation Rate (a)	3.70%	3.72%	3.71%	3.73%	3.72%	3.33%	3.72%	2.88%	2.86%	2.86%
5	FEDERAL Vintage Year Tax Depreciation:										
6	FY 2008 Spend	\$429,887	\$39,010	\$36,081	\$33,379	\$30,872	\$28,559	\$14,858	\$19,810	\$24,112	\$24,106
7	FY 2009 Spend		\$338,156	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,503
8	FY 2010 Spend			\$550,022	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567
9	FY 2011 Spend				\$481,705	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090
10	FY 2012 Spend					\$377,329	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349
11	FY 2013 Spend						\$332,964	\$11,900	\$15,867	\$14,676	\$13,577
12	CYS 2013 Spend							\$212,773	\$5,861	\$15,043	\$13,913
13	CY 2014 Spend								\$1,142,236	\$79,478	\$73,510
14	CY 2015 Spend									\$685,505	\$47,698
15	CY 2016 Spend										\$440,621
15	Annual Tax Depreciation	\$429,887	\$377,166	\$598,242	\$550,778	\$450,902	\$403,992	\$261,627	\$1,213,235	\$855,149	\$646,934
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	\$5,787,911
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	\$28,504
20	FY 2009 Spend		\$176,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006
21	FY 2010 Spend			\$223,801	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134
22	FY 2011 Spend				\$199,462	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588
23	FY 2012 Spend					\$181,087	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698
24	FY 2013 Spend						\$179,810	\$20,395	\$27,193	\$25,151	\$23,268
25	CYS 2013 Spend							\$8,791	\$11,721	\$30,086	\$27,827
26	CY 2014 Spend								\$82,571	\$158,955	\$147,021
27	CY 2015 Spend									\$49,555	\$95,396
28	CY 2016 Spend										\$31,852
28	Annual Tax Depreciation	\$334,991	\$222,438	\$290,742	\$310,320	\$314,480	\$323,039	\$103,706	\$220,846	\$385,912	\$440,294
29	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	\$2,946,767
30											
31	Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$140,398	\$223,690	\$247,983
32	Cumulative Book Depreciation	\$35,150	\$89,090	\$175,394	\$285,039	\$409,113	\$538,222	\$658,155	\$798,553	\$1,022,243	\$1,270,226
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	\$3,487,276	\$4,118,734	\$4,517,685
35	less: Deferred Tax Reserve (State)	\$25,486	\$39,809	\$57,186	\$74,243	\$90,428	\$106,912	\$105,533	\$112,371	\$126,160	\$142,506
36	Net Book/Tax Timer (Federal)	\$369,251	\$678,154	\$1,172,715	\$1,596,791	\$1,907,435	\$2,165,833	\$2,308,906	\$3,374,905	\$3,992,575	\$4,375,179
37	Effective Tax Rate (Federal)	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	34.00%	34.00%	34.00%	34.00%
38	Deferred Tax Reserve (Federal)	\$129,238	\$237,354	\$410,450	\$558,877	\$667,602	\$758,041	\$785,028	\$1,147,468	\$1,357,475	\$1,487,561
39	Book/Tax Timer (State)	\$299,841	\$468,339	\$672,778	\$873,453	\$1,063,859	\$1,257,788	\$1,241,561	\$1,322,009	\$1,484,231	\$1,676,542
40	Effective Tax Rate (State)	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
41	Deferred Tax Reserve (State)	\$25,486	\$39,809	\$57,186	\$74,243	\$90,428	\$106,912	\$105,533	\$112,371	\$126,160	\$142,506
42	TOTAL Deferred Tax Reserve	\$154,724	\$277,163	\$467,636	\$633,120	\$758,030	\$864,953	\$890,561	\$1,259,839	\$1,483,635	\$1,630,067
43											
44	<b>Rate Base Calculation</b>										
45	Plant In Service	\$950,000	\$1,450,000	\$2,326,243	\$2,937,078	\$3,335,317	\$3,881,233	\$4,297,988	\$6,499,887	\$7,821,343	\$8,670,733
46	Accumulated Book Depreciation	(\$35,150)	(\$89,090)	(\$175,394)	(\$285,039)	(\$409,113)	(\$538,222)	(\$658,155)	(\$798,553)	(\$1,022,243)	(\$1,270,226)
47	Deferred Tax Reserve	(\$154,724)	(\$277,163)	(\$467,636)	(\$633,120)	(\$758,030)	(\$864,953)	(\$890,561)	(\$1,259,839)	(\$1,483,635)	(\$1,630,067)
48	Year End Rate Base	\$760,126	\$1,083,747	\$1,683,213	\$2,018,919	\$2,168,174	\$2,478,057	\$2,749,272	\$4,441,496	\$5,315,465	\$5,770,440
49											
50	<b>Revenue Requirement Calculation</b>										
51	Year End Rate Base	\$760,126	\$1,083,747	\$1,683,213	\$2,018,919	\$2,168,174	\$2,478,057	\$2,749,272	\$4,441,496	\$5,315,465	\$5,770,440
52	Pre-Tax ROR	11.91%	11.91%	11.91%	11.91%	11.91%	11.91%	11.36%	11.36%	11.36%	11.36%
53	Return and Taxes	\$90,515	\$129,051	\$200,435	\$240,410	\$258,183	\$295,084	\$312,413	\$504,338	\$603,837	\$655,522
54	Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$140,398	\$223,690	\$247,983
55	Property Taxes (b)	\$21,773	\$27,218	\$66,676	\$89,904	\$110,318	\$118,343	\$149,961	\$212,090	\$213,492	\$232,376
56	Annual Revenue Requirement	\$147,438	\$210,209	\$353,415	\$439,960	\$492,575	\$542,536	\$582,307	\$856,825	\$1,015,862	\$1,135,881
57	Prior Period Change for Repairs Tax Deduct & Bonus Depreciation (FY 08 - 14) (e)					(\$73,471)	\$2,397				
58	Adjusted Annual Revenue Requirement	\$147,438	\$210,209	\$353,415	\$439,960	\$419,104	\$544,933	\$582,307	\$856,825	\$1,015,862	\$1,135,881
59	<b>Annual Rate Adjustment</b>	<b>7/1/2008</b>	<b>7/1/2009</b>	<b>7/1/2010</b>	<b>7/1/2011</b>	<b>7/1/2012</b>	<b>7/1/2013</b>	<b>6/1/2014</b>	<b>5/1/2015</b>	<b>6/1/2016</b>	<b>5/1/2017</b>
60	Incremental Annual Rate Adjustment	\$147,438	\$62,771	\$143,205	\$86,545	(\$20,856)	\$125,829	\$37,374	\$274,518	\$159,037	\$120,019
61											
62	<b>Imputed Capital Structure (c)</b>										
63		Ratio	Rate	Weighted Rate	Pre Tax						
64	Long Term Debt	50.00%	7.54%	3.77%	3.77%						
65	Common Equity	50.00%	9.67%	4.84%	8.14%						
66											
67		100.00%		8.61%	11.91%						
68											
69	<b>Imputed Capital Structure (d)</b>										
70		Ratio	Rate	Weighted Rate	Pre Tax						
71	Long Term Debt	45.00%	5.95%	2.68%	2.68%						
72	Common Equity	55.00%	9.55%	5.25%	8.68%						
73											
74		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, reference Schedule HMT-5  
(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) 2008	(b) 2009	(c) 2010	(d) 2011	(e) 2012	(f) 2013	(g) CYS2013	(h) CY2014	(i) CY2015	(j) CY2016
1 <u>Capital Repairs Deduction</u>										
2 Plant Additions	\$950,000									
3 Capital Repairs Deduction Rate	32.74%									
4 Capital Repairs Deduction	\$311,030									
5										
6 <u>Bonus Depreciation</u>										
7 Plant Additions	\$950,000									
8 Less Capital Repairs Deduction	\$311,030									
9 Plant Additions Net of Capital Repairs Deduction	\$638,970									
10										
11 Percent of Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007	69.14%									
12 Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007	\$441,784									
13 Bonus Depreciation rate April 2007- December 2007	0%									
14 Bonus Depreciation for April 2007 - December 2007	\$0									
15										
16 Plant Additions Eligible for Bonus Depreciation for January 2008 - March 2008	30.86%									
17 Plant Additions Eligible for Bonus Depreciation for January 2008 - March 2008	\$197,186									
18 Bonus Depreciation rate January 2008 - March 2008	50%									
19 Bonus Depreciation for January 2008 - March 2008	\$98,593									
20										
21 Bonus Depreciation	\$98,593									
22										
23 <u>Remaining Tax Depreciation (Federal)</u>										
24 Plant Additions	\$950,000									
25 Less Capital Repairs Deduction	\$311,030									
26 Less Bonus Depreciation	\$98,593									
27 Additions Subject to 20 YR MACRS Tax Depreciation	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377	\$540,377
28 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	5.713%	5.285%	3.666%	4.888%	4.462%	4.461%
29 Remaining Tax Depreciation	\$20,264	\$39,010	\$36,081	\$33,379	\$30,872	\$28,559	\$14,858	\$19,810	\$24,112	\$24,106
30										
31 <u>Remaining Tax Depreciation (State)</u>										
32 Plant Additions	\$950,000									
33 Less Capital Repairs Deduction	\$311,030									
34 Additions Subject to 20 YR MACRS Tax Depreciation	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970	\$638,970
35 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	5.713%	5.285%	3.666%	4.888%	4.462%	4.461%
36 Remaining Tax Depreciation	\$23,961	\$46,127	\$42,664	\$39,469	\$36,504	\$33,770	\$17,568	\$23,425	\$28,511	\$28,504
37										
38 Federal Tax Depreciation	\$429,887	\$39,010	\$36,081	\$33,379	\$30,872	\$28,559	\$14,858	\$19,810	\$24,112	\$24,106
39 State Tax Depreciation	\$334,991	\$46,127	\$42,664	\$39,469	\$36,504	\$33,770	\$17,568	\$23,425	\$28,511	\$28,504

**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	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	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) 2009	(b) 2010	(c) 2011	(d) 2012	(e) 2013	(f) CYS2013	(g) CY2014	(h) CY2015	(i) CY2016
1 <u>Capital Repairs Deduction</u>									
2 Plant Additions	\$500,000								
3 Capital Repairs Deduction Rate	32.74%								
4 Capital Repairs Deduction	\$163,700								
5									
6 <u>Bonus Depreciation</u>									
7 Plant Additions	\$500,000								
8 Less Capital Repairs Deduction	\$163,700								
9 Plant Additions Net of Capital Repairs Deduction	\$336,300								
10									
11 Percent of Plant Additions Eligible for Bonus Depreciation	100.00%								
12 Plant Additions Eligible for Bonus Depreciation	\$336,300								
13 Bonus Depreciation Rate	50%								
14 Bonus Depreciation	\$168,150								
15									
16 Bonus Depreciation	\$168,150								
17									
18 <u>Remaining Tax Depreciation (Federal)</u>									
19 Plant Additions	\$500,000								
20 Less Capital Repairs Deduction	\$163,700								
21 Less Bonus Depreciation	\$168,150								
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150	\$168,150
23 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	5.713%	3.964%	5.285%	4.888%	4.462%
24 Remaining Tax Depreciation	\$6,306	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,503
25									
26 <u>Remaining Tax Depreciation (State)</u>									
27 Plant Additions	\$500,000								
28 Less Capital Repairs Deduction	\$163,700								
29 Additions Subject to 20 YR MACRS Tax Depreciation	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300	\$336,300
30 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	5.713%	3.964%	5.285%	4.888%	4.462%
31 Remaining Tax Depreciation	\$12,611	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006
32									
33 Federal Tax Depreciation	\$338,156	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,503
34 State Tax Depreciation	\$176,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006

**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	Rate
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%

**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**

	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>	<u>(h)</u>
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>CYS2013</u>	<u>CY2014</u>	<u>CY2015</u>	<u>CY2016</u>
1 <u>Capital Repairs Deduction</u>								
2 Plant Additions	\$876,243							
3 Capital Repairs Deduction Rate	22.64%							
4 Capital Repairs Deduction	\$198,381							
5								
6 <u>Bonus Depreciation</u>								
7 Plant Additions	\$876,243							
8 Less Capital Repairs Deduction	\$198,381							
9 Plant Additions Net of Capital Repairs Deduction	\$677,862							
10								
11 Percent of Plant Additions Eligible for Bonus Depreciation	100.00%							
12 Plant Additions Eligible for Bonus Depreciation	\$677,862							
13 Bonus Depreciation Rate	50%							
14 Bonus Depreciation	\$338,931							
15								
16 Bonus Depreciation	\$338,931							
17								
18 <u>Remaining Tax Depreciation (Federal)</u>								
19 Plant Additions	\$876,243							
20 Less Capital Repairs Deduction	\$198,381							
21 Less Bonus Depreciation	\$338,931							
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931	\$338,931
23 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	4.285%	5.713%	5.285%	4.888%
24 Remaining Tax Depreciation	\$12,710	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567
25								
26 <u>Remaining Tax Depreciation (State)</u>								
27 Plant Additions	\$876,243							
28 Less Capital Repairs Deduction	\$198,381							
29 Additions Subject to 20 YR MACRS Tax Depreciation	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862	\$677,862
30 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	6.177%	4.285%	5.713%	5.285%	4.888%
31 Remaining Tax Depreciation	\$25,420	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134
32								
33 Federal Tax Depreciation	\$550,022	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567
34 State Tax Depreciation	\$223,801	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134

**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

<u>Period</u>	<u>Rate</u>
April 1, 2007 to December 31, 2007	0%
January 1, 2008 to September 7, 2010	50%
September 8, 2010 to December 31, 2010	100%

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

	(a) <u>2011</u>	(b) <u>2012</u>	(c) <u>2013</u>	(d) <u>CYS2013</u>	(e) <u>CY2014</u>	(f) <u>CY2015</u>	(g) <u>CY2016</u>
1 <u>Capital Repairs Deduction</u>							
2 Plant Additions	\$610,835						
3 Capital Repairs Deduction Rate	30.03%						
4 Capital Repairs Deduction	\$183,434						
5							
6 <u>Bonus Depreciation</u>							
7 Plant Additions	\$610,835						
8 Less Capital Repairs Deduction	\$183,434						
9 Plant Additions Net of Capital Repairs Deduction	\$427,401						
10							
11 Percent of Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010	62.78%						
12 Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010	\$268,322						
13 Bonus Depreciation rate April 2010- September 2010	50%						
14 Bonus Depreciation for April 2010 - September 2010	\$134,161						
15							
16 Plant Additions Eligible for Bonus Depreciation for October 2010 - March 2011	37.22%						
17 Plant Additions Eligible for Bonus Depreciation for October 2010 - March 2011	\$159,079						
18 Bonus Depreciation rate October 2010 - March 2011	100%						
19 Bonus Depreciation for October 2010 - March 2011	\$159,079						
20							
21 Bonus Depreciation	\$293,240						
22							
23 <u>Remaining Tax Depreciation (Federal)</u>							
24 Plant Additions	\$610,835						
25 Less Capital Repairs Deduction	\$183,434						
26 Less Bonus Depreciation	\$293,240						
27 Additions Subject to 20 YR MACRS Tax Depreciation	\$134,161	\$134,161	\$134,161	\$134,161	\$134,161	\$134,161	\$134,161
28 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	4.633%	6.177%	5.713%	5.285%
29 Remaining Tax Depreciation	\$5,031	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090
30							
31 <u>Remaining Tax Depreciation (State)</u>							
32 Plant Additions	\$610,835						
33 Less Capital Repairs Deduction	\$183,434						
34 Additions Subject to 20 YR MACRS Tax Depreciation	\$427,401	\$427,401	\$427,401	\$427,401	\$427,401	\$427,401	\$427,401
35 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	4.633%	6.177%	5.713%	5.285%
36 Remaining Tax Depreciation	\$16,028	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588
37							
38 Federal Tax Depreciation	\$481,705	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090
39 State Tax Depreciation	\$199,462	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588

**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	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%

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) 2012	(b) 2013	(c) CYS2013	(d) CY2014	(e) CY2015	(f) CY2016
1 Capital Repairs Deduction						
2 Plant Additions	\$398,239					
3 Capital Repairs Deduction Rate	31.00%					
4 Capital Repairs Deduction	\$123,454					
5						
6 Bonus Depreciation						
7 Plant Additions	\$398,239					
8 Less Capital Repairs Deduction	\$123,454					
9 Plant Additions Net of Capital Repairs Deduction	\$274,785					
10						
11 Percent of Plant Additions Eligible for Bonus Depreciation April 2011 - December, 2011	72.52%					
12 Plant Additions Eligible for Bonus Depreciation April 2011 - December, 2011	\$199,274					
13 Bonus Depreciation rate April 2011 - December 2011	100%					
14 Bonus Depreciation for April 2011 - December 2011	\$199,274					
15						
16 Plant Additions Eligible for Bonus Depreciation for January 2012 - March 2012	25.04%					
17 Plant Additions Eligible for Bonus Depreciation for January 2012 - March 2012	\$68,806					
18 Bonus Depreciation rate January 2012 - March 2012	50%					
19 Bonus Depreciation for January 2012 - March 2012	\$34,403					
20						
21 Bonus Depreciation	\$233,677					
22						
23 Remaining Tax Depreciation (Federal)						
24 Plant Additions	\$398,239					
25 Less Capital Repairs Deduction	\$123,454					
26 Less Bonus Depreciation	\$233,677					
27 Additions Subject to 20 YR MACRS Tax Depreciation	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108
28 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	5.008%	6.677%	6.177%	5.713%
29 Remaining Tax Depreciation	\$1,542	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349
30						
31 Remaining Tax Depreciation (State)						
32 Plant Additions	\$398,239					
33 Less Capital Repairs Deduction	\$123,454					
34 Additions Subject to 20 YR MACRS Tax Depreciation	\$274,785	\$274,785	\$274,785	\$274,785	\$274,785	\$274,785
35 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	5.008%	6.677%	6.177%	5.713%
36 Remaining Tax Depreciation	\$10,304	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698
37						
38 Federal Tax Depreciation	\$358,673	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349
39 State Tax Depreciation	\$133,758	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698
40						
41						
42 FY 2012 Safe Harbor True Up (Federal)	\$18,656					
43 FY 2012 Tax Depreciation (Federal)	\$377,329					
44 FY 2012 Safe Harbor True Up (State)	\$47,329					
45 FY 2012 Tax Depreciation (State)	\$181,087					

**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

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 2013 - Per Tax Return  
Using Capital Repairs Tax Return Rate

	(a) 2013	(b) CYS2013	(c) CY2014	(d) CY2015	(e) CY2016
1 <u>Capital Repairs Deduction</u>					
2 Plant Additions	\$545,916				
3 Capital Repairs Deduction Rate	31.00%				
4 Capital Repairs Deduction	\$169,234				
5					
6 <u>Bonus Depreciation</u>					
7 Plant Additions	\$545,916				
8 Less Capital Repairs Deduction	\$169,234				
9 Plant Additions Net of Capital Repairs Deduction	\$376,682				
10					
11 Percent of Plant Additions Eligible for Bonus Depreciation April 2012 - December, 2012	62.48%				
12 Plant Additions Eligible for Bonus Depreciation April 2012 - December, 2012	\$235,332				
13 Bonus Depreciation rate April 2012 - December 2012	50%				
14 Bonus Depreciation for April 2012 - December 2012	\$117,666				
15					
16 Plant Additions Eligible for Bonus Depreciation for January 2013 - March 2013	20.83%				
17 Plant Additions Eligible for Bonus Depreciation for January 2013 - March 2013	\$78,444				
18 Bonus Depreciation rate January 2013 - March 2013	50%				
19 Bonus Depreciation for January 2013 - March 2013	\$39,222				
20					
21 Bonus Depreciation	\$156,888				
22					
23 <u>Remaining Tax Depreciation (Federal)</u>					
24 Plant Additions	\$545,916				
25 Less Capital Repairs Deduction	\$169,234				
26 Less Bonus Depreciation	\$156,888				
27 Additions Subject to 20 YR MACRS Tax Depreciation	\$219,794	\$219,794	\$219,794	\$219,794	\$219,794
28 20 YR MACRS Tax Depreciation Rates	3.750%	5.414%	7.219%	6.677%	6.177%
29 Remaining Tax Depreciation	\$8,242	\$11,900	\$15,867	\$14,676	\$13,577
30					
31 <u>Remaining Tax Depreciation (State)</u>					
32 Plant Additions	\$545,916				
33 Less Capital Repairs Deduction	\$169,234				
34 Additions Subject to 20 YR MACRS Tax Depreciation	\$376,682	\$376,682	\$376,682	\$376,682	\$376,682
35 20 YR MACRS Tax Depreciation Rates	3.750%	5.414%	7.219%	6.677%	6.177%
36 Remaining Tax Depreciation	\$14,126	\$20,395	\$27,193	\$25,151	\$23,268
37					
38 Federal Tax Depreciation	\$334,364	\$11,900	\$15,867	\$14,676	\$13,577
39 State Tax Depreciation	\$183,360	\$20,395	\$27,193	\$25,151	\$23,268
40					
41					
42 Effect of FY 2012 Safe Harbor True Up on FY 2013 Tax Depreciation (Federal)	(\$1,400)				
43 FY 2013 Tax Depreciation (Federal)	\$332,964				
44 Effect of FY 2012 Safe Harbor True Up on FY 2013 Tax Depreciation (State)	(\$3,550)				
45 FY 2013 Tax Depreciation (State)	\$179,810				

**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

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 2013 - Per Tax Return  
Using Capital Repairs Tax Return Rate**

	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>
	<u>CYS2013</u>	<u>CY2014</u>	<u>CY2015</u>	<u>CY2016</u>
1 <u>Capital Repairs Deduction</u>				
2 Plant Additions	\$416,755			
3 Capital Repairs Deduction Rate	<u>0.00%</u>			
4 Capital Repairs Deduction	\$0			
5				
6 <u>Bonus Depreciation</u>				
7 Plant Additions	\$416,755			
8 Less Capital Repairs Deduction	<u>\$0</u>			
9 Plant Additions Net of Capital Repairs Deduction	\$416,755			
10				
11 Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013	<u>100.00%</u>			
12 Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013	\$416,755			
13 Bonus Depreciation rate April 2013 - December 2013	<u>50%</u>			
14 Bonus Depreciation for April 2013 - December 2013	\$208,378			
15				
16 Bonus Depreciation	\$208,378			
17				
18 <u>Remaining Tax Depreciation (Federal)</u>				
19 Plant Additions	\$416,755	\$416,755	\$416,755	\$416,755
20 Less Capital Repairs Deduction	\$0	\$0	\$0	\$0
21 Less Bonus Depreciation	<u>\$208,378</u>	<u>\$208,378</u>	<u>\$208,378</u>	<u>\$208,378</u>
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$208,378	\$208,378	\$208,378	\$208,378
23 20 YR MACRS Tax Depreciation Rates	<u>2.813%</u>	<u>3.750%</u>	<u>7.219%</u>	<u>6.677%</u>
24 Remaining Tax Depreciation	\$4,395	\$5,861	\$15,043	\$13,913
25				
26 <u>Remaining Tax Depreciation (State)</u>				
27 Plant Additions	\$416,755	\$416,755	\$416,755	\$416,755
28 Less Capital Repairs Deduction	\$0	\$0	\$0	\$0
29 Additions Subject to 20 YR MACRS Tax Depreciation	<u>\$416,755</u>	<u>\$416,755</u>	<u>\$416,755</u>	<u>\$416,755</u>
30 20 YR MACRS Tax Depreciation Rates	<u>2.813%</u>	<u>3.750%</u>	<u>7.219%</u>	<u>6.677%</u>
31 Remaining Tax Depreciation	\$8,791	\$11,721	\$30,086	\$27,827
32				
33 Federal Tax Depreciation	<u>\$212,773</u>	<u>\$5,861</u>	<u>\$15,043</u>	<u>\$13,913</u>
34 State Tax Depreciation	<u>\$8,791</u>	<u>\$11,721</u>	<u>\$30,086</u>	<u>\$27,827</u>

**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

<u>Period</u>	<u>Rate</u>
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 2014 - Per Tax Return  
Using Capital Repairs Tax Return Rate

	<u>(a)</u> <u>CY 2014</u>	<u>(b)</u> <u>CY 2015</u>	<u>(c)</u> <u>CY 2016</u>
1 <u>Capital Repairs Deduction</u>			
2 Plant Additions	\$2,201,899		
3 Capital Repairs Deduction Rate	0.00%		
4 Capital Repairs Deduction	<u>\$0</u>		
5			
6 <u>Bonus Depreciation</u>			
7 Plant Additions	\$2,201,899		
8 Less Capital Repairs Deduction	<u>\$0</u>		
9 Plant Additions Net of Capital Repairs Deduction	\$2,201,899		
10			
11 Plant Additions Eligible for Bonus Depreciation	<u>100.00%</u>		
12 Plant Additions Eligible for Bonus Depreciation	<u>\$2,201,899</u>		
13 Bonus Depreciation rate	<u>50%</u>		
14 Bonus Depreciation rate	<u>\$1,100,950</u>		
15			
16 Bonus Depreciation	\$1,100,950		
17			
18 <u>Remaining Tax Depreciation (Federal)</u>			
19 Plant Additions	\$2,201,899	\$2,201,899	\$2,201,899
20 Less Capital Repairs Deduction	\$0	\$0	\$0
21 Less Bonus Depreciation	<u>\$1,100,950</u>	<u>\$1,100,950</u>	<u>\$1,100,950</u>
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$1,100,950	\$1,100,950	\$1,100,950
23 20 YR MACRS Tax Depreciation Rates	<u>3.750%</u>	<u>7.219%</u>	<u>6.677%</u>
24 Remaining Tax Depreciation	<u>\$41,286</u>	<u>\$79,478</u>	<u>\$73,510</u>
25			
26 <u>Remaining Tax Depreciation (State)</u>			
27 Plant Additions	\$2,201,899	\$2,201,899	\$2,201,899
28 Less Capital Repairs Deduction	\$0	\$0	\$0
29 Additions Subject to 20 YR MACRS Tax Depreciation	<u>\$2,201,899</u>	<u>\$2,201,899</u>	<u>\$2,201,899</u>
30 20 YR MACRS Tax Depreciation Rates	<u>3.750%</u>	<u>7.219%</u>	<u>6.677%</u>
31 Remaining Tax Depreciation	<u>\$82,571</u>	<u>\$158,955</u>	<u>\$147,021</u>
32			
33 Federal Tax Depreciation	<u>\$1,142,236</u>	<u>\$79,478</u>	<u>\$73,510</u>
34 State Tax Depreciation	<u>\$82,571</u>	<u>\$158,955</u>	<u>\$147,021</u>

**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

<u>Period</u>	<u>Rate</u>
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%
January 1, 2014 to December 31, 2014	50%

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

	<u>(a)</u>	<u>(b)</u>
	<u>CY 2015</u>	<u>CY 2016</u>
1 <u>Capital Repairs Deduction</u>		
2 Plant Additions	\$1,321,456	
3 Capital Repairs Deduction Rate	0.00%	
4 Capital Repairs Deduction	<u>\$0</u>	
5		
6 <u>Bonus Depreciation</u>		
7 Plant Additions	\$1,321,456	
8 Less Capital Repairs Deduction	<u>\$0</u>	
9 Plant Additions Net of Capital Repairs Deduction	\$1,321,456	
10		
11 Plant Additions Eligible for Bonus Depreciation	100.00%	
12 Plant Additions Eligible for Bonus Depreciation	<u>\$1,321,456</u>	
13 Bonus Depreciation rate	50%	
14 Bonus Depreciation rate	<u>\$660,728</u>	
15		
16 Bonus Depreciation	\$660,728	
17		
18 <u>Remaining Tax Depreciation (Federal)</u>		
19 Plant Additions	\$1,321,456	\$1,321,456
20 Less Capital Repairs Deduction	\$0	\$0
21 Less Bonus Depreciation	<u>\$660,728</u>	<u>\$660,728</u>
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$660,728	\$660,728
23 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%
24 Remaining Tax Depreciation	<u>\$24,777</u>	<u>\$47,698</u>
25		
26 <u>Remaining Tax Depreciation (State)</u>		
27 Plant Additions	\$1,321,456	\$1,321,456
28 Less Capital Repairs Deduction	\$0	\$0
29 Additions Subject to 20 YR MACRS Tax Depreciation	<u>\$1,321,456</u>	<u>\$1,321,456</u>
30 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%
31 Remaining Tax Depreciation	<u>\$49,555</u>	<u>\$95,396</u>
32		
33 Federal Tax Depreciation	<u>\$685,505</u>	<u>\$47,698</u>
34 State Tax Depreciation	<u>\$49,555</u>	<u>\$95,396</u>

**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

<u>Period</u>	<u>Rate</u>
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%
January 1, 2014 to December 31, 2014	50%
January 1, 2015 to December 31, 2015	50%

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities  
REP/VMP Revenue Requirement  
Calculation of REP Tax Depreciation 2016 - Per Tax Return  
Using Capital Repairs Tax Return Rate

	(a)
	<u>CY 2016</u>
1 <u>Capital Repairs Deduction</u>	
2 Plant Additions	\$849,390
3 Capital Repairs Deduction Rate	0.00%
4 Capital Repairs Deduction	<u>\$0</u>
5	
6 <u>Bonus Depreciation</u>	
7 Plant Additions	\$849,390
8 Less Capital Repairs Deduction	<u>\$0</u>
9 Plant Additions Net of Capital Repairs Deduction	\$849,390
10	
11 Plant Additions Eligible for Bonus Depreciation for January 2014 - December	<u>100.00%</u>
12 Plant Additions Eligible for Bonus Depreciation for January 2014 - December	\$849,390
13 Bonus Depreciation rate January 2014 - December 2014	50%
14 Bonus Depreciation rate January 2014 - December 2014	<u>\$424,695</u>
15	
16 Bonus Depreciation	\$424,695
17	
18 <u>Remaining Tax Depreciation (Federal)</u>	
19 Plant Additions	\$849,390
20 Less Capital Repairs Deduction	<u>\$0</u>
21 Less Bonus Depreciation	<u>\$424,695</u>
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$424,695
23 20 YR MACRS Tax Depreciation Rates	<u>3.750%</u>
24 Remaining Tax Depreciation	<u>\$15,926</u>
25	
26 <u>Remaining Tax Depreciation (State)</u>	
27 Plant Additions	\$849,390
28 Less Capital Repairs Deduction	<u>\$0</u>
29 Additions Subject to 20 YR MACRS Tax Depreciation	\$849,390
30 20 YR MACRS Tax Depreciation Rates	<u>3.750%</u>
31 Remaining Tax Depreciation	<u>\$31,852</u>
32	
33 Federal Tax Depreciation	<u>\$440,621</u>
34 State Tax Depreciation	<u>\$31,852</u>

**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

<u>Period</u>	<u>Rate</u>
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%
January 1, 2014 to December 31, 2014	50%
January 1, 2015 to December 31, 2015	50%
January 1, 2016 to December 31, 2016	50%

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities**  
**Procedure for Adjusting Distribution Rates for Capital Investment Allowance**  
**Calculation of Percentage Adjustment to Distribution Rates**  
**Based on Rates Effective July 1, 2016**

Rate Class	Distribution Rate Component	Current		
		Base Distribution	Forecasted	Forecasted
		Rates	Units	Revenues
		(a)	(b)	(c)
D	Customer Charge	\$ 12.12	413,052	\$ 5,006,190
	1st 250 kWh	\$ 0.03278	98,115,450	\$ 3,216,224
	Excess 250 kWh	\$ 0.04924	181,619,358	\$ 8,942,937
	Off Peak kWh	\$ 0.03130	1,553,262	\$ 48,617
	Farm kWh	\$ 0.04101	1,057,178	\$ 43,355
	D-6 kWh	\$ 0.03268	844,034	\$ 27,583
	Interruptible Credit IC-1	\$ (7.11)	1,670	\$ (11,874)
	Interruptible Credit IC-2	\$ (10.16)	315	\$ (3,200)
D-10	Customer Charge	\$ 12.28	5,193	\$ 765,240
	On Peak kWh	\$ 0.09272	1,846,551	\$ 171,212
	Off Peak kWh	\$ 0.00078	3,462,368	\$ 2,701
G-1	Customer Charge	\$ 333.68	1,681	\$ 560,916
	Demand Charge	\$ 7.11	981,764	\$ 6,980,342
	On Peak kWh	\$ 0.00398	172,899,682	\$ 688,141
	Off Peak kWh	\$ 0.00078	214,509,740	\$ 167,318
	Credit for High Voltage Delivery > 2.4 kv	(0.38)	354,650	\$ (119,955)
G-2	Customer Charge	\$ 55.64	10,491	\$ 583,719
	Demand Charge	\$ 7.15	522,041	\$ 3,732,593
	All kWh	\$ 0.00118	161,883,791	\$ 191,023
	Credit for High Voltage Delivery > 2.4 kv	\$ (0.38)	1,121	
G-3	Customer Charge	\$ 12.03	63,888	\$ 768,573
	All kWh	\$ 0.04075	93,578,891	\$ 3,813,340
	Minimum Charge > 25 kVA	\$ 2.42		
M	Luminaire Charge			\$ 931,821
	All kWh <sup>1</sup>		4,276,150	\$ -
T	Customer Charge	\$ 12.25	11,131	\$ 136,355
	All kWh	\$ 0.03614	15,018,041	\$ 542,752
	Interruptible Credit IC-1	\$ (7.11)	2,203	\$ (21,430)
	Interruptible Credit IC-2	\$ (10.16)	86	\$ (616)
V	Minimum Charge	\$ 12.07	173	\$ 2,088
	All kWh	\$ 0.04171	258,456	\$ 10,780
Total Forecasted Revenues				\$ 37,176,745

- (a) Approved rates effective July 1, 2016  
(b) Company Forecast  
(c) Column (a) x column (b)

<sup>1</sup>Kilowatt-hour charge for streetlighting is \$0.00000

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, 2017

(1) Increase in Annual Revenue Requirement	\$120,019
(2) Forecasted Base Distribution Revenues	\$37,176,745
(3) Percentage of Adjustment to Distribution Rates	0.32%

(1) HMT-1 Page 3 Line 60

(2) Forecasted Base Distribution Revenues for the period of May 1, 2017 - April 30, 2018

(3) Line (1) ÷ 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, 2017**

(1)	O&M Expense Above Base O&M Expense	(\$76,104)
(2)	Final Balance of Reconciliation of CY 2015 Incremental O&M Expense Above Base O&M Expense	<u>\$31,484</u>
(3)	Reliability Enhancement Program and Vegetation Management Plan Expense	<u>(\$44,620)</u>
(4)	Estimated kWh deliveries May 1, 2017 - April 30, 2018	950,922,952
(5)	Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor	(\$0.00004)

- (1) Schedule HMT-1, Page 2
- (2) Schedule HMT-3, Page 1, Line 15
- (3) Line (1) + Line (2)
- (4) Schedule HMT-2, Page 3, Column (g)
- (5) Line (3) + Line (4)
- (6) Per Company forecast
- (7) Line (5) ÷ Line (6), truncated after 5 decimal places

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, 2017

Rate Class	Distribution Rate Component	Approved July 1, 2016 Base Distribution Charges (a)	Proposed May 1, 2017 Distribution % Increase/ % (Decrease) (b)	Proposed May 1, 2017 Base Distribution Charges (c)	Proposed May 1, 2017 Business Profits Surcharge (d)	Energy Service Cost Reclassification Distribution Credit (e)	Proposed May 1, 2017 REP/VMP O&M Adjustment Factor (f)	Proposed May 1, 2017 Total Distribution Charges (g)
D	Customer Charge	\$12.12	0.32%	\$12.15				\$12.15
	1st 250 kWh	\$0.03278	0.32%	\$0.03288	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.03324
	Excess 250 kWh	\$0.04924	0.32%	\$0.04939	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.04975
	Off Peak kWh	\$0.03130	0.32%	\$0.03140	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.03176
	Farm kWh	\$0.04101	0.32%	\$0.04114	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.04150
	D-6 kWh	\$0.03268	0.32%	\$0.03278	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.03314
	Interruptible Credit IC-1	(\$7.11)	0.32%	(\$7.13)				(\$7.13)
	Interruptible Credit IC-2	(\$10.16)	0.32%	(\$10.19)				(\$10.19)
D-10	Customer Charge	\$12.28	0.32%	\$12.31				\$12.31
	On Peak kWh	\$0.09272	0.32%	\$0.09301	\$0.00057	(\$0.00008)	(\$0.00004)	\$0.09346
	Off Peak kWh	\$0.00078	0.32%	\$0.00078	\$0.00057	(\$0.00008)	(\$0.00004)	\$0.00123
G-1	Customer Charge	\$333.68	0.32%	\$334.74				\$334.74
	Demand Charge	\$7.11	0.32%	\$7.13				\$7.13
	On Peak kWh	\$0.00398	0.32%	\$0.00399	\$0.00057	\$0.00000	(\$0.00004)	\$0.00452
	Off Peak kWh	\$0.00078	0.32%	\$0.00078	\$0.00057	\$0.00000	(\$0.00004)	\$0.00131
	Credit for High Voltage Delivery > 2.4 k	(\$0.38)	0.32%	(\$0.38)				(\$0.38)
G-2	Customer Charge	\$55.64	0.32%	\$55.81				\$55.81
	Demand Charge	\$7.15	0.32%	\$7.17				\$7.17
	All kWh	\$0.00118	0.32%	\$0.00118	\$0.00057	\$0.00000	(\$0.00004)	\$0.00171
	Credit for High Voltage Delivery > 2.4 k	(\$0.38)	0.32%	(\$0.38)				(\$0.38)
G-3	Customer Charge	\$12.03	0.32%	\$12.06				\$12.06
	All kWh	\$0.04075	0.32%	\$0.04088	\$0.00057	(\$0.00017)	(\$0.00004)	\$0.04124
	Minimum Charge > 25 kVA	\$2.58	0.32%	\$2.58				\$2.58
M	Luminaire Monthly Charge							
	Description							
	LUM HPS RWY 50W	\$6.71	0.32%	\$6.73				\$6.73
	LUM HPS RWY 100W	\$8.14	0.32%	\$8.16				\$8.16
	LUM HPS RWY 250W	\$14.30	0.32%	\$14.34				\$14.34
	LUM HPS RWY 400W	\$18.63	0.32%	\$18.68				\$18.68
	LUM HPS POST 100W	\$9.38	0.32%	\$9.40				\$9.40
	LUM HPS FLD 250W	\$14.42	0.32%	\$14.46				\$14.46
	LUM HPS FLD 400W	\$19.91	0.32%	\$19.97				\$19.97
	LUM INC RWY 103W	\$8.96	0.32%	\$8.99				\$8.99
	LUM MV RWY 100W	\$6.49	0.32%	\$6.50				\$6.50
	LUM MV RWY 175W	\$7.89	0.32%	\$7.91				\$7.91
	LUM MV RWY 400W	\$14.92	0.32%	\$14.96				\$14.96
	LUM MV RWY 1000W	\$28.31	0.32%	\$28.40				\$28.40
	LUM MV FLD 400W	\$16.50	0.32%	\$16.55				\$16.55
	LUM MV FLD 1000W	\$28.50	0.32%	\$28.58				\$28.58
	Pole and Accessory Charge							
	Description							
	Pole -Wood	\$7.91	0.32%	\$7.93				\$7.93
	Pole Fiber PT<25FT	\$8.19	0.32%	\$8.21				\$8.21
	Pole Fiber RWT <25FT	\$13.90	0.32%	\$13.94				\$13.94
	Pole Fiber RWT =>25	\$23.22	0.32%	\$23.29				\$23.29
	Pole Metal Embedded	\$16.57	0.32%	\$16.62				\$16.62
	Pole Metal	\$19.97	0.32%	\$20.03				\$20.03
	All kWh	\$0.00000	0.32%	\$0.00000	\$0.00057	\$0.00000	(\$0.00004)	\$0.00053
T	Customer Charge	\$12.25	0.32%	\$12.28				\$12.28
	All kWh	\$0.03614	0.32%	\$0.03625	\$0.00057	(\$0.00007)	(\$0.00004)	\$0.03671
	Interruptible Credit IC-1	(\$7.11)	0.32%	(\$7.13)				(\$7.13)
	Interruptible Credit IC-2	(\$10.16)	0.32%	(\$10.19)				(\$10.19)
V	Minimum Charge	\$12.07	0.32%	\$12.10				\$12.10
	All kWh	\$0.04171	0.32%	\$0.04184	\$0.00057	(\$0.00009)	(\$0.00004)	\$0.04228

- (a) Per approved July 1, 2016 tariff
- (b) Schedule HMT-2, Page 2, Line 3
- (c) Column (a) x (1+Column (b))
- (d) Distribution Energy Charges include a Business Profits Tax Surcharge of \$0.00057 per kWh for usage on and after 8/1/01
- (e) Per Energy Service Cost Reclassification Adjustment Provision
- (f) Schedule HMT-2, Page 3, Line 5
- (g) Column (c) + Column (d) + Column (e) + Column (f)

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities**  
**Docket No DE 17-xxx**  
**Schedule HMT-3**  
**Page 1 of 1**

**Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities**  
**Reconciliation of CY 2015 O&M Expense**

	Beginning Balance With Interest (a)	Delivery Sales (b)	(Credit)/ Charge (c)	Ending Balance (d)	Balance Subject to Interest (e)	Effective Interest Rate (f)	Interest (g)	Cumulative Interest (h)	
1	May-16	\$23,117	64,584,095	(\$10,979)	\$34,096	\$28,607	3.50%	\$82	\$82
2	June-16	\$345,015	76,995,713	\$29,258	\$315,757	\$330,386	3.50%	\$949	\$1,031
3	July-16	\$316,706	86,482,993	\$32,864	\$283,842	\$300,274	3.50%	\$862	\$1,893
4	August-16	\$284,704	88,443,073	\$33,608	\$251,096	\$267,900	3.50%	\$769	\$2,662
5	September-16	\$251,865	83,129,676	\$31,589	\$220,276	\$236,070	3.50%	\$678	\$3,340
6	October-16	\$220,953	70,587,250	\$26,823	\$194,130	\$207,542	3.50%	\$596	\$3,935
7	November-16	\$194,726	64,782,484	\$24,617	\$170,109	\$182,417	3.50%	\$524	\$4,459
8	December-16	\$170,632	74,840,466	\$28,439	\$142,193	\$156,413	3.50%	\$449	\$4,908
9	January-17	\$142,642	79,542,988	\$30,226	\$112,416	\$127,529	3.75%	\$392	\$5,300
10	February-17	\$112,807	68,567,497	\$26,056	\$86,752	\$99,780	3.75%	\$307	\$5,607
* 11	March-17	\$87,058	75,555,820	\$28,711	\$58,347	\$72,703	3.75%	\$223	\$5,830
* 12	April-17	\$58,571	71,281,140	\$27,087	\$31,484	\$45,027	3.75%	\$138	\$5,968
13			(Over)/Under Recovery:	\$31,484					

- (a) Schedule HMT-2, Page 3, Line 5 in Docket DE 16-277
- (b) Company Billing Reports, Line 11 & 12 estimated
- (c) Column (b) x rate
- (d) Column (a) + Column (c)
- (e) Average of Column (a) and Column (d)
- (f) Interest rate on customer deposits
- (g) Column (e) x [ (1 + Column (f) ) ^ ( 1 ÷ 12) - 1 ]
- (h) Prior month Column (h) + Current month Column (g)
- \* Estimate



**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities**  
**Docket No DE 17-xxx**  
**Schedule HMT-5**  
**Page 1 of 1**

**Liberty Utilities (Granite State Electric) d/b/a Liberty Utilities**  
**Municipal Taxes as a Percentage of Net Plant**

	12/31/2014	12/31/2015
1 Plant in Service, per Form 1, Page 200, Line 3 (+) Line 6	175,044	197,251
2 Depreciation Reserve, per Form 1, Page 200, Line 12 (+) Line 18	(65,428)	(67,534)
3 Net Plant	109,616	129,718
 4 Average Net Plant		
5 Plant in Service	160,407	178,829
6 Depreciation Reserve	(64,802)	(66,168)
7 Net Plant	95,605	112,661
 8 Municipal Taxes, Form 1, Page 262, Line 1	3,557	3,540
 9 % Municipal Taxes to Net Plant	3.72%	3.14%

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities  
Book Depreciation Calculation Using 2015 FERC Form 1 Data Filed May 18, 2016**

	Depreciation Expense		Depreciable Plant Balances		Average	Depreciation
	12/31/2014	12/31/2015	12/31/2014	12/31/2015	Depreciable Plant	Rate
1 Distribution	4,191,146	4,631,462	154,281,058	169,913,794	162,097,426	<b>2.86%</b>
2 General	374,785	491,007	9,989,463	15,756,662	12,873,063	3.81%
3 Total - Granite	<u>4,565,931</u>	<u>5,122,469</u>	<u>164,270,521</u>	<u>185,670,456</u>	<u>174,970,489</u>	<u>2.93%</u>
4 Depreciation Expense per Form 1:						
5 FERC Form 1, Page 114						
6 Depreciation Expense (403) Line 6	4,565,931	5,122,569				
7 Depreciation Expense for ARO (403.1) Line 7	-	-				
8 Total per Form 1, Page 114	<u>4,565,931</u>	<u>5,122,569</u>				
9 FERC Form 1, Page 336						
10 Distribution (incl ARO) Line 8	4,191,146	4,631,462				
11 General Line 10	374,785	491,007				
12 Total per Form 1, Page 336	<u>4,565,931</u>	<u>5,122,469</u>				
13 Depreciable Plant Balances per Form 1:						
14 FERC Form 1, Page 204-207						
15 Distribution Plant Page 207 Line 75	155,946,965	171,576,043				
16 Land & Land Rights Page 207 Line 60	1,665,907	1,662,249				
17 Total	<u>154,281,058</u>	<u>169,913,794</u>				
18 General Plant Page 207 Line 99						
19 Land & Land Rights Page 207 Line 86	11,609,835	17,377,034				
20 Total	<u>1,620,372</u>	<u>1,620,372</u>				
21 Total, excluding Land & Land Rights	<u>9,989,463</u>	<u>15,756,662</u>				
	<u>164,270,521</u>	<u>185,670,456</u>				