Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty REP/MP Revenue Requirement Annual Rate Changes Annual Incremental Rate Adjustments

Δ	unnual Incremental Rate Adjustment	Actual 7/1/2008 (a)	Actual 7/1/2009 (b)	Actual <u>7/1/2010</u> (c)	Actual 7/1/2011 (d)	Actual 7/1/2012 (e)	Actual 7/1/2013 (f)	Actual 6/1/2014 (g)	Actual <u>5/1/2015</u> (h)	Actual 6/1/2016 (i)	Actual <u>5/1/2017</u> (j)	Actual <u>5/1/2018</u> (k)	Actual 5/1/2019 (I)	Actual <u>5/1/2020</u> (m)	Actual <u>5/1/2021</u> (n)
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)	\$552,414	\$444,301	\$101,147	\$570,000
2	REP Capital Program	\$165,840	\$75,740	\$163,663	\$102,941	(\$18,005)	\$125,829	\$37,374	\$253,423	\$180,132	\$120,019	\$76,833	\$149,538	\$210,503	\$213,246
3	Total for Fiscal Year	\$165,840	\$189,572	\$1,211,433	(\$655,172)	(\$313,213)	\$73,748	(\$238,466)	\$42,838	\$526,316	\$43,915	\$629,247	\$593,839	\$311,650	\$783,246
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)	\$76,104	(\$552,414)	(\$444,301)	(\$101,147)
5	Net Change in Recovery	\$165,840	\$189,572	\$1,097,601	(\$1,702,942)	\$444,900	\$368,955	(\$186,385)	\$318,678	\$736,901	(\$302,269)	\$705,351	\$41,425	(\$132,651)	\$682,099

Notes: Line 1 From DBS-AMH-1, Page 2 of 17, Line 7 Line 2 From DBS-AMH-1, Page 3 of 17, Line 66 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 REP/VMP O&M Adjustment Factor Computation of Annual Revenue Requirement CY 2020 Actual

<u>l</u>	ncremental VMP and REP O&M Spend	Actual FY <u>2008</u> (a)	Actual FY 2009 (b)	Actual FY 2010 (c)	Actual FY 2011 (d)	Actual FY 2012 (e)	Actual FY 2013 (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)	Actual CY <u>2017</u> (j)	Actual CY <u>2018</u> (k)	Actual CY <u>2019</u> (I)	Actual CY 2020 (m)
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	\$2,495,406	\$2,422,443	\$2,096,528	\$2,461,057
2	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	\$2,281,803	\$2,157,086	\$2,307,000	\$2,200,000
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	\$2,495,406	\$2,422,443	\$2,096,528	\$2,420,000
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	\$1,500,000	\$1,500,000	\$1,500,000	\$1,850,000
5	Total Revenue Requirement	\$0	\$113,832	\$1,196,530	(\$114,015)	\$107,486	\$200,973	\$35,861	\$35,166	\$634,184	\$273,896	\$995,406	\$922,443	\$596,528	\$570,000
6	Less Reimbursements from Consolidated	\$0	\$0	(\$148 760)	(\$644 098)	(\$402 693)	(\$253 054)	(\$311 701)	(\$245 751)	(\$288 000)	(\$350 000)	(\$442 992)	(\$478 142)	(\$495 381)	\$0
7	Total Incremental Revenue Requirement	\$0	\$113,832	\$1,047,770	(\$758,113)	(\$295,207)	(\$52,081)	(\$275,840)	(\$210,585)	\$346,184	(\$76,104)	\$552,414	\$444,301	\$101,147	\$570,000
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	\$2,052,414	\$1,944,301	\$1,601,147	\$2,420,000

Notes: Line 1 2020 Actual VMP and REP program spending Line 4 VMP and REP base spending level per Docket No. DE 19-064

Line 5 Line 3 minus Line 4

Line 6 Reflects reimbursements related to vegetation management expenses from Consolidated 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 REP/MP Revenue Requirement Computation of REP Revenue Requirement CY 2020 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	Actual CY 2017	Actual CY 2018	Actual CY 2019	Actual CY 2020
1 2 3	<u>Deferred Tax Calculation</u> 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	\$849,390 \$8,670,733	\$1,699,030 \$10,369,763	\$756,363 \$11,126,126	\$1,837,934 \$12,964,060	\$1,566,370 \$14,530,430
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%	2.76%	2.75%	2.63%	2.90%
5 6 7 8 9 10 11 12 13 14 15 16 17 18	FEDERAL Vintage Year Tax Depreciation: FY 2008 Spend FY 2019 Spend FY 2010 Spend FY 2011 Spend FY 2011 Spend FY 2013 Spend CY 2013 Spend CY 2013 Spend CY 2014 Spend CY 2016 Spend CY 2016 Spend CY 2017 Spend CY 2017 Spend CY 2018 Spend CY 2018 Spend CY 2018 Spend CY 2019 Spend CY 2018 Spend CY 2018 Spend CY 2018 Spend	\$429,887	\$39,010 \$338,156	\$36,081 \$12,139 \$550,022	\$33,379 \$11,227 \$24,467 \$481,705	\$30,872 \$10,387 \$22,630 \$9,685 \$377,329	\$28,559 \$9,606 \$20,936 \$8,958 \$2,968 \$332,964	\$14,858 \$4,999 \$10,892 \$4,662 \$1,544 \$11,900 \$212,773	\$19,810 \$6,665 \$14,522 \$6,215 \$2,059 \$15,867 \$5,861 \$1,142,236	\$24,112 \$8,219 \$17,913 \$7,665 \$2,539 \$14,676 \$15,043 \$79,478 \$685,505	\$24,106 \$7,503 \$16,567 \$7,090 \$2,349 \$13,577 \$13,913 \$73,510 \$47,698 \$440,621	\$24,112 \$7,501 \$15,123 \$6,558 \$2,173 \$12,557 \$12,871 \$68,006 \$44,117 \$30,659 \$881,372	\$24,106 \$7,503 \$15,120 \$5,986 \$2,009 \$11,616 \$11,905 \$62,897 \$40,813 \$28,357 \$61,326 \$28,364	\$24,106 \$7,501 \$15,123 \$5,985 \$1,834 \$10,744 \$11,013 \$58,185 \$37,747 \$26,233 \$56,722 \$54,602 \$68,923	\$24,106 \$7,503 \$15,120 \$5,986 \$1,834 \$9,807 \$10,185 \$53,814 \$34,919 \$24,263 \$52,475 \$50,502 \$132,680 \$58,739
20 21	Annual Tax Depreciation Cumulative Tax Depreciation	\$429,887 \$429,887	\$377,166 \$807,053	\$598,242 \$1,405,295	\$550,778 \$1,956,073	\$450,902 \$2,406,975	\$403,992 \$2,810,967	\$261,627 \$3,072,594	\$1,213,235 \$4,285,829	\$855,149 \$5,140,977	\$646,934 \$5,787,911	\$1,105,049 \$6,892,960	\$271,638 \$7,164,598	\$378,718 \$7,543,316	\$481,934 \$8,025,249
22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37	STATE Vintage Year Tax Depreciation: FY 2008 Spend FY 2010 Spend FY 2011 Spend FY 2011 Spend FY 2012 Spend FY 2013 Spend CY 2013 Spend CY 2013 Spend CY 2014 Spend CY 2015 Spend CY 2016 Spend CY 2016 Spend CY 2016 Spend CY 2017 Spend CY 2018 Spend CY 2018 Spend CY 2019 Spend CY 2019 Spend CY 2019 Spend	\$334,991	\$46,127 \$176,311	\$42,664 \$24,277 \$223,801	\$39,469 \$22,455 \$48,935 \$199,462	\$36,504 \$20,773 \$45,261 \$30,854 \$181,087	\$33,770 \$19,213 \$41,872 \$28,538 \$19,837 \$179,810	\$17,568 \$9,998 \$21,784 \$14,850 \$10,320 \$20,395 \$8,791	\$23,425 \$13,330 \$29,045 \$19,800 \$13,761 \$27,193 \$11,721 \$82,571	\$28,511 \$16,438 \$35,825 \$24,417 \$16,973 \$25,151 \$30,086 \$158,955 \$49,555	\$28,504 \$15,006 \$33,134 \$22,588 \$15,698 \$23,268 \$27,827 \$147,021 \$95,396 \$31,852	\$28,511 \$15,002 \$30,246 \$20,891 \$14,522 \$21,520 \$25,743 \$136,011 \$88,234 \$61,317 \$63,714	\$28,504 \$15,006 \$30,239 \$19,071 \$13,431 \$19,908 \$23,809 \$125,794 \$81,626 \$56,714 \$122,653 \$28,364	\$28,504 \$15,002 \$30,246 \$19,066 \$12,261 \$18,412 \$22,026 \$116,370 \$75,495 \$52,467 \$113,444 \$54,602 \$68,923	\$28,504 \$15,006 \$30,239 \$19,071 \$12,258 \$16,808 \$20,371 \$107,629 \$69,839 \$44,526 \$104,949 \$50,502 \$132,680 \$58,739
38 39	Annual Tax Depreciation Cumulative Tax Depreciation	\$334,991 \$334,991	\$222,438 \$557,429	\$290,742 \$848,171	\$310,320 \$1,158,492	\$314,480 \$1,472,971	\$323,039 \$1,796,010	\$103,706 \$1,899,716	\$220,846 \$2,120,562	\$385,912 \$2,506,473	\$440,294 \$2,946,767	\$505,712 \$3,452,479	\$477,817 \$3,930,296	\$626,819 \$4,557,115	\$715,121 \$5,272,236
40 41 42	Book Depreciation Cumulative Book Depreciation	\$35,150 \$35,150	\$53,940 \$89,090	\$86,304 \$175,394	\$109,645 \$285,039	\$124,074 \$409,113	\$129,109 \$538,222	\$119,933 \$658,155	\$140,398 \$798,553	\$223,690 \$1,022,243	\$247,983 \$1,270,226	\$286,205 \$1,556,431	\$306,305 \$1,862,736	\$341,565 \$2,204,302	\$422,073 \$2,626,374
43 44 45 46 47 48 49 50 51 52	Book/Tax Timer (Federal) less: Deferred Tax Reserve (State) Net Book/Tax Timer (Federal) Effective Tax Rate (Federal) Deferred Tax Reserve (Federal) Book/Tax Timer (State) Effective Tax Rate (State) Deferred Tax Reserve (State) TOTAL Deferred Tax Reserve	\$394,737 \$25,486 \$369,251 35,00% \$129,238 \$299,841 8,50% \$25,486 \$154,724	\$717,963 \$39,809 \$678,154 35.00% \$237,354 \$468,339 8.50% \$39,809 \$277,163	\$1,229,901 \$57,186 \$1,172,715 35.00% \$410,450 \$672,778 8.50% \$57,186 \$467,636	\$1,671,034 \$74,243 \$1,596,791 35.00% \$558,877 \$873,453 8.50% \$74,243 \$633,120	\$1,997,862 \$90,428 \$1,907,435 35.00% \$667,602 \$1,063,859 8.50% \$90,428 \$758,030	\$2,272,745 \$106,912 \$2,165,833 35.00% \$758,041 \$1,257,788 8.50% \$106,912 \$864,953	\$2,414,439 \$105,533 \$2,308,906 34.00% \$785,028 \$1,241,561 8.50% \$105,533 \$890,561	\$3,487,276 \$112,371 \$3,374,905 34.00% \$1,147,468 \$1,322,009 8.50% \$112,371 \$1,259,839	\$4,118,734 \$126,160 \$3,992,575 34.00% \$1,357,475 \$1,484,231 \$50% \$126,160 \$1,483,635	\$4,517,685 \$142,506 \$4,375,179 34.00% \$1,487,561 \$1,676,542 8.50% \$142,506 \$1,630,067	\$5,336,528 \$155,476 \$5,181,052 34.00% \$1,761,558 \$1,896,048 8.20% \$155,476 \$1,917,034	\$5,301,861 \$159,202 \$5,142,659 21,00% \$1,079,958 \$2,067,559 7.70% \$159,202 \$1,239,161	\$5,339,014 \$181,167 \$5,157,847 21.00% \$1,083,148 \$2,352,813 7.70% \$181,167 \$1,264,315	\$5,398,875 \$203,731 \$5,195,144 21.00% \$1,090,980 \$2,645,862 7.70% \$203,731 \$1,294,712
53 54 55 56 57 58	Rate Base Calculation Plant In Service Accumulated Book Depreciation Deferred Tax Reserve Year End Rate Base	\$950,000 (\$35,150) (\$154,724)	\$1,450,000 (\$89,090) (\$277,163)	\$2,326,243 (\$175,394) (\$467,636)	\$2,937,078 (\$285,039) (\$633,120)	\$3,335,317 (\$409,113) (\$758,030)	\$3,881,233 (\$538,222) (\$864,953)	\$4,297,988 (\$658,155) (\$890,561)	\$6,499,887 (\$798,553) (\$1,259,839)		\$8,670,733 (\$1,270,226) (\$1,630,067)	\$10,369,763 (\$1,556,431)	\$11,126,126	\$12,964,060 (\$2,204,302) (\$1,264,315)	\$14,530,430 (\$2,626,374) (\$1,294,712) \$10,609,344
59 60 61 62 63 64 65 66	Annual Revenue Requirement Prior Period Change for Repairs Tax Deduc	11.91% \$90,515 \$35,150 12% \$21,773 \$147,438 t & Bonus Deprecia	11.91% \$129,051 \$53,940 \$27,218 \$210,209 tion (FY 08 -		11.91% \$240,410 \$109,645 \$89,904 \$439,960	\$2,168,174 11.91% \$258,183 \$124,074 \$110,318 \$492,575 (\$73,471)	11.91% \$295,084 \$129,109 \$118,343 \$542,536 \$2,397	\$2,749,272 11.36% \$312,413 \$119,933 \$149,961 \$582,307	\$4,441,496 11.36% \$504,338 \$140,398 \$190,995 \$835,730	\$5,315,465 11.36% \$603,837 \$223,690 \$161,819 \$1,015,862	\$5,770,440 11.36% \$655,522 \$247,983 \$232,376 \$1,135,881	\$6,896,298 8.74% \$603,059 \$286,205 \$323,449 \$1,212,714	\$8,024,229 9.43% \$756,740 \$306,305 \$299,207 \$1,362,252	\$9,495,444 9.43% \$895,485 \$341,565 \$335,704 \$1,572,755	\$10,609,344 9.36% \$992,522 \$422,073 \$371,407 \$1,786,001
68 69 70 71 72	Adjusted Annual Revenue Requirement Annual Rate Adjustment Incremental Annual Rate Adjustment Prior Period Correction (f) Incremental Annual Rate Adjustment with P	\$147,438 7/1/2008 \$147,438 Prior Period Correction	\$210,209 7/1/2009 \$62,771	\$353,415 7/1/2010 \$143,205	\$439,960 7/1/2011 \$86,545	\$419,104 7/1/2012 (\$20,856)	\$544,933 7/1/2013 \$125,829	\$582,307 6/1/2014 \$37,374	\$835,730 5/1/2015 \$253,423	\$1,015,862 6/1/2016 \$180,132	\$1,135,881 5/1/2017 \$120,019	\$1,212,714 5/1/2018 \$76,833	\$1,362,252 5/1/2019 \$149,538 \$48,274 \$197,812	\$1,572,755 5/1/2020 \$210,503 \$0 \$210,503	\$1,786,001 5/1/2021 \$213,246 \$0 \$213,246
73 74	Imputed Capital Structure (c)	I GIIGG GOITECH		Weighted									ψ131,012	ψ2 10,503	Ψ 2 13,240
75 76 77 78	Long Term Debt Common Equity	Ratio 50.00% 50.00%	Rate 7.54% 9.67%	Rate 3.77% 4.84%	Pre Tax 3.77% 8.14%										
79 80		100.00%		8.61%	11.91%										
81 82 83 84 85	Imputed Capital Structure (d) Long Term Debt Common Equity	Ratio 45.00% 55.00%	Rate 5.95% 9.55%	Weighted Rate 2.68% 5.25%	Pre Tax 2.68% 8.68%										
86 87		100.00%		7.93%	11.36%										
88 89 90 91 92	Imputed Capital Structure (e) Long Term Debt Common Equity	Ratio 50.00% 50.00%	Rate 5.97% 9.40%	Weighted Rate 2.99% 4.70%	Pre Tax 2.99% 6.45%										
93 94		100.00%		7.69%	9.43%										
95 96	Imputed Capital Structure (f)	Ratio	Rate	Weighted Rate	Pre Tax										
97 98	Long Term Debt Common Equity	48.00% 52.00%	5.97% 9.10%	2.87% 4.73%	2.87% 6.49%										
99 100	• •	100.00%		7.60%	9.36%										

Imputed Capital Structure (c)			Weighted	
i	Ratio	Rate	Rate	Pre Tax
Long Term Debt	50.00%	7.54%	3.77%	3.77%
Common Equity	50.00%	9.67%	4.84%	8.14%
	100.00%	=	8.61%	11.91%
Imputed Capital Structure (d)			Weighted	
! 	Ratio	Rate	Rate	Pre Tax
Long Term Debt	45.00%	5.95%	2.68%	2.68%
Common Equity	55.00%	9.55%	5.25%	8.68%
	100.00%	=	7.93%	11.36%
Imputed Capital Structure (e)			Weighted	
Imputed Capital Structure (e)	Ratio	Rate	Weighted Rate	Pre Tax
Imputed Capital Structure (e) Long Term Debt	Ratio 50.00%	Rate 5.97%		Pre Tax 2.99%
,			Rate	
Long Term Debt	50.00%	5.97%	Rate 2.99%	2.99%
Long Term Debt	50.00% 50.00%	5.97%	Rate 2.99% 4.70%	2.99% 6.45%
Long Term Debt Common Equity	50.00% 50.00%	5.97%	Rate 2.99% 4.70% 7.69% Weighted Rate	2.99% 6.45% 9.43% Pre Tax
Long Term Debt Common Equity	50.00% 50.00% 100.00%	5.97% 9.40%	Rate 2.99% 4.70% 7.69% Weighted	2.99% 6.45% 9.43%
Long Term Debt Common Equity Imputed Capital Structure (f)	50.00% 50.00% 100.00%	5.97% 9.40%	Rate 2.99% 4.70% 7.69% Weighted Rate	2.99% 6.45% 9.43% Pre Tax
Long Term Debt Common Equity Imputed Capital Structure (f) Long Term Debt	50.00% 50.00% 100.00% Ratio 48.00%	5.97% 9.40% Rate 5.97%	Rate 2.99% 4.70% 7.69% Weighted Rate 2.87%	2.99% 6.45% 9.43% Pre Tax 2.87%

- (a) Prior Period Actual Calendar Year Composite Depreciation rate for distribution property, reference Schedule DBS-AMH-6.
 (b) Prior Period Actual Calendar Year ratio of municipal tax expense to net plant in service, reference Schedule DBS-AMH-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.
 (e) Capital structure per Rate Case Settlement in Docket DE 16-383, Section II A. Updated LT debt rate as of Q3 2018.
 (f) Capital structure per Rate Case Settlement in Docket DE 19-064

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

	(a) <u>2008</u>	(b) 2009	(c) <u>2010</u>	(d) <u>2011</u>	(e) <u>2012</u>	(f) <u>2013</u>	(g) CYS2013	(h) <u>CY2014</u>	(i) <u>CY2015</u>	(j) <u>CY2016</u>	(k) <u>CY2017</u>	(I) <u>CY2018</u>	(m) <u>CY2019</u>	(n) <u>CY2020</u>
Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction Capital Repairs Deduction	\$950,000 32.74% \$311,030													
6 Bonus Depreciation 7 Plant Additions 8 Less Capital Repairs Deduction 9 Plant Additions Net of Capital Repairs Deduction	\$950,000 \$311,030 \$638,970													
11 Percent of Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007 12 Plant Additions Eligible for Bonus Depreciation April 2007 - December 2007 13 Bonus Depreciation rate April 2007 - December 2007 14 Bonus Depreciation for April 2007 - December 2007 15	69.14% \$441,784 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 18 Bonus Depreciation rate January 2008 - March 2008 19 Bonus Depreciation for January 2008 - March 2008 20	30.86% \$197,186 50% \$98,593													
21 Bonus Depreciation 22 23 Remaining Tax Depreciation (Federal)	\$98,593													
24 Plant Additions 25 Less Capital Repairs Deduction	\$950,000 \$311,030													
26 Less Bonus Depreciation 27 Additions Subject to 20 YR MACRS Tax Depreciation 28 20 YR MACRS Tax Depreciation Rates 29 Remaining Tax Depreciation	\$98,593 \$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 3.666% \$14,858	\$540,377 4 888% \$19,810	\$540,377 4.462% \$24,112	\$540,377 4.461% \$24,106	\$540,377 4.462% \$24,112	\$540,377 4.461% \$24,106	\$540,377 4.461% \$24,106	\$540,377 4.461% \$24,106
30 31 <u>Remaining Tax Depreciation (State)</u> 32 Plant Additions 33 Less Capital Repairs Deduction	\$950,000 \$311,030													
34 Additions Subject to 20 YR MACRS Tax Depreciation 35 20 YR MACRS Tax Depreciation Rates 36 Remaining Tax Depreciation 37	\$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 3.666% \$17,568	\$638,970 4 888% \$23,425	\$638,970 4.462% \$28,511	\$638,970 4.461% \$28,504		\$638,970 4.461% \$28,504		
38 Federal Tax Depreciation 39 State Tax Depreciation	\$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	\$24,106 \$28 504	\$24,112 \$28 511	\$24,106 \$28 504	\$24,106 \$28 504	\$24,106 \$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 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	(j) CY2017	(k) CY2018	(I) CY2019	(m) CY2020
	2005	2010	2011	2012	2010	0102010	012014	012010	012010	012017	<u>012010</u>	012013	<u>O12020</u>
1 Capital Repairs Deduction													
2 Plant Additions	\$500.000												
3 Capital Repairs Deduction Rate	32.74%												
4 Capital Repairs Deduction	\$163,700												
5	,,												
6 Bonus Depreciation													
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 Remaining Tax Depreciation (Federal)													
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	\$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%	4.461%	4.462%		
24 Remaining Tax Depreciation	\$6,306	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,503	\$7,501	\$7,503	\$7,501	\$7,503
25													
26 Remaining Tax Depreciation (State)	¢500.000												
27 Plant Additions	\$500,000												
28 Less Capital Repairs Deduction	\$163,700 \$336,300	# 226 200	# 226 200	#226 200	#226 200	# 226 200	# 226 200	# 220 200	#226 200	# 226 200	# 226 200	# 226 200	# 226 200
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	\$336,300	\$336,300	\$336,300
30 20 YR MACRS Tax Depreciation Rates	3.750% \$12,611	7.219%	6.677%	6.177% \$20,773	5.713%	3.964%	5.285%	4.888%	4.462%	4.461%	4.462% \$15,006		4.462%
31 Remaining Tax Depreciation 32	\$12,011	\$24,277	\$22,455	φ ∠ υ,113	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006	\$15,002	φ15,00b	\$15,002	\$15,006
33 Federal Tax Depreciation	\$338,156	\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,503	\$7,501	\$7,503	\$7,501	\$7,503
34 State Tax Depreciation	\$176,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006	\$15,002	\$15,006	\$15,002	\$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 he Company's REP/VMP program have been as follows:

<u>Period</u>	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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2010 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) 2010	(b) 2011	(c) 2012	(d) 2013	(e) CYS2013	(f) CY2014	(g) CY2015	(h) CY2016	(i) CY2017	(j) CY2018	(k) CY2019	(I) CY2020
1	Capital Repairs Deduction												
2	Plant Additions	\$876,243											
3	Capital Repairs Deduction Rate	22.64%											
4	Capital Repairs Deduction	\$198,381											
5													
6	Bonus Depreciation												
7	Plant Additions	\$876,243											
8	Less Capital Repairs Deduction	\$198,381											
9	Plant Additions Net of Capital Repairs Deduc ion	\$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	D D	# 000 004											
16	Bonus Depreciation	\$338,931											
17	D - 11 - T - D 1 (1 - /E 1 - 1)												
18	Remaining Tax Depreciation (Federal)	0070 040											
19	Plant Additions	\$876,243											
20	Less Capital Repairs Deduction Less Bonus Depreciation	\$198,381											
21	Additions Subject to 20 YR MACRS Tax Depreciation	\$338,931 \$338,931	¢220 024	¢220 024	#220 024	#220 024	¢220 024	¢220 024	#220 024	¢220 024	#220 024	\$338,931	#220 024
22 23	20 YR MACRS Tax Depreciation Rates	3.750%	\$338,931 7.219%	\$338,931 6.677%	\$338,931 6.177%	\$338,931 4.285%	\$338,931 5.713%	\$338,931 5.285%	\$338,931 4.888%	\$338,931 4.462%	\$338,931 4.461%	4.462%	\$338,931 4.461%
24	Remaining Tax Depreciation	\$12,710	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567	\$15,123	\$15,120	\$15,123	\$15,120
25	Nemaining Tax Depreciation	\$12,710	\$24,407	\$22,030	\$20,930	φ10,092	Φ14,322	φ17,913	φ10,301	φ10,120	φ13,120	φ13,123	\$15,120
26	Remaining Tax Depreciation (State)												
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	\$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%		4.461%	4.462%	4.461%
31	Remaining Tax Depreciation	\$25,420	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134	\$30,246	\$30,239	\$30,246	\$30,239
32		\$25,.20	¥ .0,000	J.0,201	¥ , . .	Ψ= ·,· · · ·	120,0.0	¥00,0 <u>=</u> 0	400,.01	200,210	700,200	200, = 10	+00,200
33	Federal Tax Depreciation	\$550,022	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567	\$15,123	\$15,120	\$15,123	\$15,120
34	State Tax Depreciation	\$223,801	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134	\$30,246	\$30,239	\$30,246	\$30,239
	•		. ,		. ,-		- /-	. , ,		. , .			

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 he 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 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) CYS2013	(e) CY2014	(f) CY2015	(g) <u>CY2016</u>	(h) CY2017	(i) <u>CY2018</u>	(j) CY2019	(k) CY2020
1	Capital Repairs Deduction											
2	Plant Additions	\$610,835										
3	Capital Repairs Deduction Rate	30.03%										
4 5	Capital Repairs Deduction	\$183,434										
6	Bonus Depreciation											
7	Plant Additions	\$610,835										
8	Less Capital Repairs Deduction	\$183,434										
9	Plant Additions Net of Capital Repairs Deduction	\$427,401										
10	B	00 700/										
11	Percent of Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010	\$268,322										
12 13	Plant Additions Eligible for Bonus Depreciation April 2010 - September 2010 Bonus Depreciation rate April 2010- September 2010	\$200,322 50%										
14	Bonus Depreciation for April 2010 - September 2010	\$134,161										
15	Bolido Boprosidion for April 2010 Coptombol 2010	ψ10-1,101										
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 201	100%										
19	Bonus Depreciation for October 2010 - March 2011	\$159,079										
20		****										
21 22	Bonus Depreciation	\$293,240										
23	Remaining Tax Depreciation (Federal)											
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				
28	20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%	4.633%	6.177%	5.713%	5.285%	4.888%			
29	Remaining Tax Depreciation	\$5,031	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090	\$6,558	\$5,986	\$5,985	\$5,986
30	Remaining Tax Depreciation (State)											
31 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	\$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%	4.888%		4.461%	4.462%
36	Remaining Tax Depreciation	\$16,028	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588	\$20,891	\$19,071	\$19,066	\$19,071
37												
38	Federal Tax Depreciation	\$481,705	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090	\$6,558	\$5,986	\$5,985	\$5,986
39	State Tax Depreciation	\$199,462	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588	\$20,891	\$19,071	\$19,066	\$19,071

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:

<u>Period</u>	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 REP/NMP Revenue Requirement Calculation of REP Tax Depreciation 2012 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>2012</u>	(b) 2013	(c) CYS2013	(d) <u>CY2014</u>	(e) CY2015	(f) CY2016	(g) CY2017	(h) CY2018	(i) CY2019	(j) CY2020
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 \$274,785									
9 10	Plant Additions Net of Capital Repairs Deduction	\$274,785									
11	Percent of Plant Additions Eligible for Bonus Depreciation April 2011 - December, 2011	72.52%									
	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	D :: T D :: (E D										
23	Remaining Tax Depreciation (Federal) Plant Additions	\$398,239									
	Less Capital Repairs Deduction	\$398,239 \$123,454									
	Less Bonus Depreciation	\$233,677									
	·	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108	\$41,108
	· ·	3.750%	7.219%	5 008%	6 677%	6.177%	5.713%	5 285%	4.888%	4.462%	4.461%
	Remaining Tax Depreciation	\$1,542	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349	\$2,173	\$2,009	\$1,834	\$1,834
30											
31	Remaining Tax Depreciation (State)										
	Plant Additions	\$398,239									
	Less Capital Repairs Deduction	\$123,454									
		\$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%	5 285%	4.888%	4.462%	4.461%
36	Remaining Tax Depreciation	\$10,304	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698	\$14,522	\$13,431	\$12,261	\$12,258
37 38	Federal Tax Depreciation	\$358,673	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349	\$2,173	\$2,009	\$1,834	\$1,834
39	State Tax Depreciation	\$133,758	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698	\$14,522	\$13,431	\$12,261	\$12,258
40	otate Tax Depredation	ψ133,730	ψ10,001	ψ10,320	ψ13,701	ψ10,973	ψ10,000	Ψ14,022	ψ10,401	Ψ12,201	Ψ12,230
41											
	FY 2012 Safe Harbor True Up (Federal)	\$18,656									
	FY 2012 Tax Depreciation (Federal)	\$377,329									
	FY 2012 Safe Harbor True Up (State)	\$47,329									
	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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2013 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>2013</u>	(b) CYS2013	(c) <u>CY2014</u>	(d) <u>CY2015</u>	(e) <u>CY2016</u>	(f) <u>CY2017</u>	(g) <u>CY2018</u>	(h) <u>CY2019</u>	(i) CY2020
1 2	Capital Repairs Deduction Plant Additions	\$545,916								
3 4 5	Capital Repairs Deduction Rate Capital Repairs Deduction	31.00% \$169,234								
6	Bonus Depreciation									
7 8	Plant Additions Less Capital Repairs Deduction	\$545,916 \$169 234								
9	Plant Additions Net of Capital Repairs Deduction	\$376.682								
10	Triant/taditions/tet of Suprial Repairs Beaution	ψ070,002								
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 15	Bonus Depreciation for April 2012 - December 2012	\$117,666								
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	Bassa Danasiation	£450 000								
21 22	Bonus Depreciation	\$156,888								
23	Remaining Tax Depreciation (Federal)									
24	Plant Additions	\$545,916								
25	Less Capital Repairs Deduction	\$169,234								
26	Less Bonus Depreciation	\$156,888								
	Additions Subject to 20 YR MACRS Tax Depreciation	\$219,794	\$219,794	\$219,794					\$219,794	
28	20 YR MACRS Tax Depreciation Rates	3.750% \$8,242	5.414% \$11,900	7 219% \$15,867	6.677% \$14,676	6.177% \$13,577	5.713% \$12,557	5.285% \$11,616	4 888% \$10,744	\$9,807
29 30	Remaining Tax Depreciation	Ф 0,242	φ11,900	φ13,00 <i>1</i>	\$14,070	φ13,377	φ12,33 <i>1</i>	\$11,010	\$10,744	φ 9 ,ου <i>τ</i>
31	Remaining Tax Depreciation (State)									
32	Plant Additions	\$545,916								
	Less Capital Repairs Deduction	\$169 234								
	Additions Subject to 20 YR MACRS Tax Depreciation	\$376,682	\$376,682	\$376,682					\$376,682	
35 36	20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	3.750% \$14.126	5.414% \$20,395	7 219% \$27,193	6.677% \$25,151	6.177% \$23,268	5.713% \$21,520	5.285% \$19,908	4 888% \$18,412	4.462% \$16,808
37	Remaining Tax Depreciation	\$14,120	φ20,393	φ27,193	\$23,131	Φ23,200	Φ21,320	φ19,900	\$10,412	φ10,000
38	Federal Tax Depreciation	\$334,364	\$11,900	\$15,867	\$14,676	\$13,577	\$12,557	\$11,616	\$10,744	\$9,807
39	State Tax Depreciation	\$183,360	\$20,395	\$27,193	\$25,151	\$23,268	\$21,520	\$19,908	\$18,412	\$16,808
40										
41	F#	(04.400)								
	Effect of FY 2012 Safe Harbor True Up on FY 2013 Tax Depreciation (Federal) FY 2013 Tax Depreciation (Federal)	(\$1,400) \$332,964								
	Effect of FY 2012 Safe Harbor True Up on FY 2013 Tax Depreciation (State)	(\$3,550)								
	FY 2013 Tax Depreciation (State)	\$179,810								
	Note: Plant additions not subject to the capital repairs deduction may be subject to horus	depreciation [Ouring 2008	Congress n	assed the F	conomic				

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

<u>Period</u>	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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2013 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CYS2013</u>	(b) <u>CY2014</u>	(c) <u>CY2015</u>	(d) <u>CY2016</u>	(e) <u>CY2017</u>	(f) <u>CY2018</u>	(g) <u>CY2019</u>	(h) <u>CY2020</u>
1 2 3 4	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	\$416,755 0.00% \$0							
5 6	Bonus Depreciation	,							
7 8	Plant Additions Less Capital Repairs Deduc ion	\$416,755 \$0							
9 10	Plant Additions Net of Capital Repairs Deduction	\$416,755							
11 12	Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013 Plant Additions Eligible for Bonus Depreciation for April 2013 - December 2013	100.00% \$416,755							
13	Bonus Depreciation rate April 2013 - December 2013	50%							
14 15	Bonus Depreciation for April 2013 - December 2013	\$208,378							
16 17	Bonus Depreciation	\$208,378							
18	Remaining Tax Depreciation (Federal)								
19	Plant Additions	\$416,755	\$416,755	\$416,755	\$416,755	\$416,755	\$416,755	\$416,755	\$416,755
20 21	Less Capital Repairs Deduc ion Less Bonus Depreciation	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378	\$0 \$208,378
22	Additions Subject to 20 YR MACRS Tax Depreciation	\$208,378	\$208,378	\$208,378	\$208,378	\$208,378	\$208,378	\$208,378	\$208,378
23	20 YR MACRS Tax Depreciation Rates	2.813%	3.750%	7.219%	6.677%	6.177%	5.713%	5.285%	4.888%
24	Remaining Tax Depreciation	\$4,395	\$5,861	\$15,043	\$13,913	\$12,871	\$11,905	\$11,013	\$10,185
25									
26	Remaining Tax Depreciation (State)								
27	Plant Additions	\$416,755	\$416,755	\$416,755	\$416,755		\$416,755	. ,	\$416,755
28	Less Capital Repairs Deduc ion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Additions Subject to 20 YR MACRS Tax Depreciation	\$416,755	\$416,755 3.750%	\$416,755 7.219%	\$416,755 6.677%	\$416,755 6.177%	\$416,755 5.713%	\$416,755 5.285%	\$416,755 4.888%
30 31	20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	2.813% \$8,791	\$11,721	\$30,086	\$27,827	\$25,743	\$23,809	\$22,026	\$20,371
32	Nemaining Tax Depresiation	φυ, ι σ Ι	ψ11,1∠1	φ50,000	ψ21,021	ψ ∠ υ, <i>ι</i> + 3	Ψ25,009	ΨΖΖ,0Ζ0	ψΖΟ,31 Ι
33	Federal Tax Depreciation	\$212,773	\$5,861	\$15,043	\$13,913	\$12,871	\$11,905	\$11,013	\$10,185
34	State Tax Depreciation	\$8,791	\$11,721	\$30,086	\$27,827	\$25,743	\$23,809	\$22,026	\$20,371

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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2014 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CY 2014</u>	(b) <u>CY 2015</u>	(c) <u>CY 2016</u>	(d) <u>CY 2017</u>	(e) <u>CY 2018</u>	(f) CY 2019	(g) <u>CY 2020</u>
1	Capital Repairs Deduction							
2	Plant Additions	\$2,201,899						
3	Capital Repairs Deduction Rate	0.00%						
4	Capital Repairs Deduction	\$0						
5								
6	Bonus Depreciation							
7	Plant Additions	\$2,201,899						
8	Less Capital Repairs Deduction	\$0						
9	Plant Additions Net of Capital Repairs Deduction	\$2,201,899						
10								
11	Plant Additions Eligible for Bonus Depreciation	100.00%						
12	Plant Additions Eligible for Bonus Depreciation	\$2,201,899						
13	Bonus Depreciation rate	50%						
14	Bonus Depreciation rate	\$1,100,950						
15								
16	Bonus Depreciation	\$1,100,950						
17								
18	Remaining Tax Depreciation (Federal)							
19	Plant Additions	\$2,201,899	\$2,201,899	\$2,201,899	\$2,201,899			\$2,201,899
20	Less Capital Repairs Deduction	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Less Bonus Depreciation	\$1,100,950	\$1,100,950	\$1,100,950			\$1,100,950	
22	Additions Subject to 20 YR MACRS Tax Depreciation	\$1,100,950	\$1,100,950	\$1,100,950	\$1,100,950		\$1,100,950	\$1,100,950
23	20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6 677%	6.177%	5.713%	5.285%	4 888%
24	Remaining Tax Depreciation	\$41,286	\$79,478	\$73,510	\$68,006	\$62,897	\$58,185	\$53,814
25	D T D							
26	Remaining Tax Depreciation (State) Plant Additions	#0.004.000	#0.004.000	#0.004.000	#0.004.000	#0.004.000	# 0 004 000	#0.004.000
27		\$2,201,899	\$2,201,899	\$2,201,899		\$2,201,899	\$2,201,899	\$2,201,899
28	Less Capital Repairs Deduction	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Additions Subject to 20 YR MACRS Tax Depreciation	\$2,201,899	\$2,201,899	\$2,201,899	\$2,201,899	\$2,201,899		\$2,201,899
30	20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6 677%	6.177%	5.713%	5.285%	4 888%
31	Remaining Tax Depreciation	\$82,571	\$158,955	\$147,021	\$136,011	\$125,794	\$116,370	\$107,629
32	Endand Tour Demonstration —	£4.440.00C	670 470	₾70 540	# CO 000	# 00.007	ФE0 40Е	ФEО 044
33 34	Federal Tax Depreciation State Tax Depreciation	\$1,142,236 \$82,571	\$79,478 \$158,955	\$73,510 \$147,021	\$68,006 \$136,011	\$62,897 \$125,794	\$58,185 \$116,370	\$53,814 \$107,629
34	State 1ax Depressation =	φοΖ,υ/ Ι	φ100,900	φ141,021	φ130,011	φ120,134	φ110,370	ψ101,029

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

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

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

	(a) CY 2015	(b) CY 2016	(c) CY 2017	(d) CY 2018	(e) CY 2019	(f) CY 2020
	<u>C1 2015</u>	<u>C1 2010</u>	<u>C1 2017</u>	<u>C1 2016</u>	C1 2019	C1 2020
1 Capital Repairs Deduction						
2 Plant Additions	\$1,321,456					
3 Capital Repairs Deduction Rate	0 00%					
4 Capital Repairs Deduction	\$0					
5						
6 Bonus Depreciation						
7 Plant Additions	\$1,321,456					
8 Less Capital Repairs Deduction	\$0					
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	\$1,321,456					
13 Bonus Depreciation rate	50%					
14 Bonus Depreciation rate	\$660,728					
15						
16 Bonus Depreciation	\$660,728					
17						
18 Remaining Tax Depreciation (Federal)						
19 Plant Additions	\$1,321,456				\$1,321,456	\$1,321,456
20 Less Capital Repairs Deduction	\$0	\$0	\$0	\$0	\$0	\$0
21 Less Bonus Depreciation	\$660,728	\$660,728		\$660,728	\$660,728	\$660,728
22 Additions Subject to 20 YR MACRS Tax Depreciation	\$660,728	\$660,728		\$660,728	\$660,728	\$660,728
23 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%		6.177%	5.713%	5 285%
24 Remaining Tax Depreciation	\$24,777	\$47,698	\$44,117	\$40,813	\$37,747	\$34,919
25						
26 Remaining Tax Depreciation (State)						
27 Plant Additions	\$1,321,456		. , ,	\$1,321,456		\$1,321,456
28 Less Capital Repairs Deduction	\$0	\$0	\$0	\$0	\$0	\$0
29 Additions Subject to 20 YR MACRS Tax Depreciation	\$1,321,456		\$1,321,456	\$1,321,456	\$1,321,456	\$1,321,456
30 20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6 677%	6.177%	5.713%	5 285%
31 Remaining Tax Depreciation	\$49,555	\$95,396	\$88,234	\$81,626	\$75,495	\$69,839
32	-					
33 Federal Tax Depreciation	\$685,505	\$47,698	\$44,117	\$40,813	\$37,747	\$34,919
34 State Tax Depreciation	\$49,555	\$95,396	\$88,234	\$81,626	\$75,495	\$69,839
						,

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>	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%
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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2016 - Per Tax Return Using Capital Repairs Tax Return Rate

Capital Repairs Deduction S849,390 Capital Repairs Deduction Rate O.00% S0 S0 S0 S0 S0 S0 S0			(a) CY 2016	(b) CY 2017	(c) <u>CY 2018</u>	(d) CY 2019	(e) CY 2020
Capital Repairs Deduction Rate 0.00%	1	Capital Repairs Deduction					
Capital Repairs Deduction \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	2	Plant Additions	\$849,390				
Samus Depreciation Samus D	3	Capital Repairs Deduction Rate	0.00%				
Bonus Depreciation S849,390	4	Capital Repairs Deduction	\$0				
Plant Additions \$849,390 Less Capital Repairs Deduction \$849,390							
Less Capital Repairs Deduction \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$							
Plant Additions Net of Capital Repairs Deduction \$849,390	7		\$849,390				
Plant Additions Eligible for Bonus Depreciation 100.00% Plant Additions Eligible for Bonus Depreciation \$849,390 Bonus Depreciation rate 50% Bonus Depreciation rate \$424,695 Bonus Depreciation \$424,695 Plant Additions \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 Less Capital Repairs Deduction \$424,695 \$424,695 \$424,695 \$424,695 \$424,695 Less Bonus Depreciation \$424,695 \$424,695 \$424,695 \$424,695 \$424,695 Additions Subject to 20 YR MACRS Tax Depreciation \$424,695 \$424,695 \$424,695 \$424,695 \$424,695 Remaining Tax Depreciation Rates 3.750% 7.219% 6.677% 6.177% 5.713% Remaining Tax Depreciation \$849,390 \$849,390 \$849,390 \$849,390 Bay Say Say Say Say Say Say Say Say Say S		· · ·					
Plant Additions Eligible for Bonus Depreciation 100.00% 8849,390 8849,390 8449		Plant Additions Net of Capital Repairs Deduction	\$849,390				
Plant Additions Eligible for Bonus Depreciation \$849,390 \$424,695 \$42							
Bonus Depreciation rate \$10% \$424,695							
Bonus Depreciation rate \$424,695							
Bonus Depreciation \$424,695 \$424,695 \$49,390 \$849,695 \$424,695							
Bonus Depreciation \$424,695		Bonus Depreciation rate	\$424,695				
Remaining Tax Depreciation (Federal)		Danie Danie dation	#404.00 5				
Remaining Tax Depreciation (Federal) \$849,390 \$8424,695 \$424,695		Bonus Depreciation	\$424,695				
Plant Additions \$849,390 \$424,695		Demoising Tay Demoniation (Foderal)					
20 Less Capital Repairs Deduction \$0 \$0 \$0 \$0 21 Less Bonus Depreciation \$424,695 \$			¢040.200	\$940 200	¢940 200	¢940.200	¢940.300
21 Less Bonus Depreciation \$424,695 \$428,695 \$428,390 \$849,390 \$849,390							
22 Additions Subject to 20 YR MACRS Tax Depreciation \$424,695 \$428,935 \$26,233 \$424,693 \$49,390							
23 20 YR MACRS Tax Depreciation Rates 3.750% 7.219% 6.677% 6.177% 5.713% 24 Remaining Tax Depreciation \$15,926 \$30,659 \$28,357 \$26,233 \$24,263 25 Remaining Tax Depreciation (State) \$15,926 \$49,390 \$849,390 <t< td=""><td></td><td></td><td>. ,</td><td></td><td></td><td></td><td></td></t<>			. ,				
24 Remaining Tax Depreciation \$15,926 \$30,659 \$28,357 \$26,233 \$24,263 25 Remaining Tax Depreciation (State) \$849,390							
25 Remaining Tax Depreciation (State) \$49,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Remaining Tax Depreciation (State) \$849,390		Tromaining Tax Boprosidion	ψ10,020	ψου,οοο	Ψ20,007	Ψ20,200	Ψ24,200
27 Plant Additions \$849,390		Remaining Tax Depreciation (State)					
28 Less Capital Repairs Deduction \$0 \$0 \$0 \$0 \$0 29 Additions Subject to 20 YR MACRS Tax Depreciation \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$849,390 \$6,177 \$5,713 \$5,713 \$6,177 \$5,713 \$6,177 \$5,713 \$4,526 \$			\$849.390	\$849.390	\$849.390	\$849.390	\$849.390
29 Additions Subject to 20 YR MACRS Tax Depreciation \$849,390 <td>28</td> <td>Less Capital Repairs Deduction</td> <td></td> <td></td> <td></td> <td></td> <td></td>	28	Less Capital Repairs Deduction					
30 20 YR MACRS Tax Depreciation Rates 3.750% 7.219% 6.677% 5.713% 31 Remaining Tax Depreciation \$31,852 \$61,317 \$56,714 \$52,467 \$48,526 32 Federal Tax Depreciation \$440,621 \$30,659 \$28,357 \$26,233 \$24,263							
31 Remaining Tax Depreciation \$31,852 \$61,317 \$56,714 \$52,467 \$48,526 32 \$31,852 \$61,317 \$56,714 \$52,467 \$48,526 33 Federal Tax Depreciation \$440,621 \$30,659 \$28,357 \$26,233 \$24,263	30					6.177%	
32							
	32				•		•
34 State Tax Depreciation \$31,852 \$61,317 \$56,714 \$52,467 \$48,526	33	Federal Tax Depreciation	\$440,621	\$30,659	\$28,357	\$26,233	\$24,263
	34	State Tax Depreciation	\$31,852	\$61,317	\$56,714	\$52,467	\$48,526

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

<u>Period</u>	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%
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 REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2017 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CY 2017</u>	(b) <u>CY 2018</u>	(c) <u>CY 2019</u>	(d) <u>CY 2020</u>
1 2 3 4	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	\$1,699,030 0.00% \$0			
5 6 7 8	Bonus Depreciation Plant Additions Less Capital Repairs Deduction	\$1,699,030 \$0			
9	Plant Additions Net of Capital Repairs Deduction	\$1,699,030			
11 12 13 14	Plant Additions Eligible for Bonus Depreciation Plant Additions Eligible for Bonus Depreciation Bonus Depreciation rate Bonus Depreciation rate	100.00% \$1,699,030 50% \$849,515			
15 16 17	Bonus Depreciation	\$849,515			
18 19	Remaining Tax Depreciation (Federal) Plant Additions Less Capital Repairs Deduction	\$1,699,030 \$0	\$1,699,030 \$0	\$1,699,030 \$0	\$1,699,030 \$0
	Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates	\$849,515 \$849,515 3.750%	\$849,515 \$849,515 7.219%	\$849,515 \$849,515 6.677%	\$849,515 \$849,515 6.177%
24 25	Remaining Tax Depreciation	\$31,857	\$61,326	\$56,722	\$52,475
27 28	Remaining Tax Depreciation (State) Plant Additions Less Capital Repairs Deduction	\$1,699,030 \$0	\$0	\$1,699,030 \$0	\$1,699,030 \$0
29 30 31	Additions Subject to 20 YR MACRS Tax Depreciation 20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation	\$1,699,030 3.750% \$63,714	\$1,699,030 7.219% \$122,653	\$1,699,030 6.677% \$113,444	\$1,699,030 6.177% \$104,949
32	Federal Tax Depreciation	\$881,372	\$61,326	\$56,722	\$52,475
34	State Tax Depreciation	\$63,714	\$122,653	\$113,444	\$104,949
	Note: Plant additions not subject to the capital repairs deduction may be Period January 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 January 1, 2014 to December 31, 2014 January 1, 2015 to December 31, 2015 January 1, 2016 to December 31, 2016 January 1, 2017 to December 31, 2017	Rate 0% 50% 100% 50% 50% 50% 50% 50%			

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2018 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CY 2018</u>	(b) <u>CY 2019</u>	(c) <u>CY 2020</u>
1	Capital Repairs Deduction			
2	Plant Additions	\$756,363		
3	Capital Repairs Deduction Rate	0.00%		
4 5	Capital Repairs Deduction	\$0		
6	Bonus Depreciation			
7	Plant Additions	\$756,363		
8	Less Capital Repairs Deduction	\$0		
9	Plant Additions Net of Capital Repairs Deduction	\$756,363		
10	Thank that the field of Gapital Flopano Douglastic	ψ. σσ,σσσ		
11	Plant Additions Elig ble for Bonus Depreciation	100.00%		
12	Plant Additions Elig ble for Bonus Depreciation	\$756,363		
13	Bonus Depreciation rate	0%		
14	Bonus Depreciation rate	\$0		
15				
16	Bonus Depreciation	\$0		
17	D T D			
	Remaining Tax Depreciation (Federal)	#750.000	#750.000	4750 000
19		\$756,363	\$756,363	\$756,363
20		\$0 ¢0	\$0 \$0	\$0 ©0
21	Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation	\$0 \$756,363	\$0 \$756,363	\$0 \$756,363
23	20 YR MACRS Tax Depreciation Rates	3.750%	7.219%	6.677%
24	Remaining Tax Depreciation	\$28,364	\$54,602	\$50,502
25	Tremaining Tax Depreciation	\$20,304	Ψ54,002	φ30,302
	Remaining Tax Depreciation (State)			
	Plant Additions	\$756,363	\$756,363	\$756,363
28	Less Capital Repairs Deduction	\$0	\$0	\$0
	Additions Subject to 20 YR MACRS Tax Depreciation	\$756,363	\$756,363	\$756,363
30		3.750%	7.219%	6.677%
31	Remaining Tax Depreciation	\$28,364	\$54,602	\$50,502
32	·			
33	Federal Tax Depreciation	\$28,364	\$54,602	\$50,502
34	State Tax Depreciation	\$28,364	\$54,602	\$50,502
	-			

<u>Note</u>: Plant additions not subject to the capital repairs deduction may be

<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%
January 1, 2017 to December 31, 2017	50%
January 1, 2018 to December 31, 2018	0%

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2019 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CY 2019</u>	(b) <u>CY 2020</u>
1 2 3 4	Capital Repairs Deduction Plant Additions Capital Repairs Deduction Rate Capital Repairs Deduction	\$1,837,934 0.00% \$0	
5 6 7 8 9	Bonus Depreciation Plant Additions Less Capital Repairs Deduction Plant Additions Net of Capital Repairs Deduction	\$1,837,934 \$0 \$1,837,934	
11 12 13 14 15	Plant Additions Elig ble for Bonus Depreciation Plant Additions Elig ble for Bonus Depreciation Bonus Depreciation rate Bonus Depreciation rate	100.00% \$1,837,934 0% \$0	
16 17 18 19	Bonus Depreciation Remaining Tax Depreciation (Federal) Plant Additions	\$0 \$1,837,934	\$1,837,934
	Less Bonus Depreciation Additions Subject to 20 YR MACRS Tax Depreciation	\$0 \$0 \$1,837,934	
23 24 25 26	20 YR MACRS Tax Depreciation Rates Remaining Tax Depreciation Remaining Tax Depreciation (State)	3.750% \$68,923	7.219% \$132,680
27 28 29	Plant Additions	\$1,837,934 \$0 \$1,837,934 3.750%	\$1,837,934 \$0 \$1,837,934 7.219%
31 32 33	Remaining Tax Depreciation Federal Tax Depreciation	\$68,923 \$68,923	\$132,680 \$132,680
34	State Tax Depreciation Note: Plant additions not subject to the capital repairs deduction may be	\$68,923	\$132,680
	Period January 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 January 1, 2014 to December 31, 2014 January 1, 2015 to December 31, 2015 January 1, 2016 to December 31, 2016 January 1, 2017 to December 31, 2017 January 1, 2018 to December 31, 2018 January 1, 2019 to December 31, 2019	Rate 0% 50% 100% 50% 50% 50% 50% 50% 0%	

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty REP/VMP Revenue Requirement Calculation of REP Tax Depreciation 2020 - Per Tax Return Using Capital Repairs Tax Return Rate

		(a) <u>CY 2020</u>
1	Capital Repairs Deduction	
2	Plant Additions	\$1,566,370
3	Capital Repairs Deduction Rate	0.00% \$0
4 5	Capital Repairs Deduction	ΦΟ
6	Bonus Depreciation	
7	Plant Additions	\$1,566,370
8	Less Capital Repairs Deduction	\$0
9 10	Plant Additions Net of Capital Repairs Deduction	\$1,566,370
11	Plant Additions Eligible for Bonus Depreciation	100.00%
12	Plant Additions Eligible for Bonus Depreciation	\$1,566,370
13	Bonus Depreciation rate	0%
14 15	Bonus Depreciation rate	\$0
16	Bonus Depreciation	\$0
17	D T D (5 L N	
18 19	Remaining Tax Depreciation (Federal) Plant Additions	\$1,566,370
20	Less Capital Repairs Deduction	\$1,300,370
21	Less Bonus Depreciation	\$0
22	Additions Subject to 20 YR MACRS Tax Depreciation	\$1,566,370
23	20 YR MACRS Tax Depreciation Rates	3.750%
24	Remaining Tax Depreciation	\$58,739
25 26	Remaining Tax Depreciation (State)	
27	Plant Additions	\$1,566,370
28	Less Capital Repairs Deduction	\$0
29	Additions Subject to 20 YR MACRS Tax Depreciation	\$1,566,370
30	20 YR MACRS Tax Depreciation Rates	3.750%
31 32	Remaining Tax Depreciation	\$58,739
33	Federal Tax Depreciation	\$58,739
34	State Tax Depreciation	\$58,739
	<u>Note</u> : Plant additions not subject to the capital repairs deduction may be	
	<u>Period</u> January 1, 2007 to December 31, 2007	<u>Rate</u> 0%
	January 1, 2007 to December 31, 2007 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%
	January 1, 2017 to December 31, 2017	50%
	January 1, 2018 to December 31, 2018	0%
	January 1, 2019 to December 31, 2019 January 1, 2020 to December 31, 2020	0% 0%
	January 1, 2020 to December 31, 2020	U 70

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Procedure for Adjusting Distribution Rates for Capital Investment Allowance Calculation of Percentage Adjustment to Distribution Rates Based on Rates Effective July 1, 2020

Rate Class	Distribution Rate Component	Base	Current e Distribution <u>Rates</u> (<u>a)</u>	Forecasted <u>Units</u> (b)		Forecasted Revenues (c)
D	Customer Charge 1st 250 kWh Excess 250 kWh Off Peak kWh Farm kWh D-6 kWh	\$ \$ \$ \$ \$	14.74 0.05705 0.05705 0.04926 0.05385 0.05017	424,580 95,969,225 180,071,056 1,120,448 894,780 769,373	\$ \$ \$ \$ \$ \$	6,258,309 5,475,044 10,273,054 55,193 48,184 38,599
D-10	Customer Charge On Peak kWh Off Peak kWh	\$ \$ \$	14.74 0.12143 0.00165	5,277 2,037,588 3,591,661	\$ \$ \$	77,783 247,424 5,926
G-1	Customer Charge Demand Charge On Peak kWh Off Peak kWh Credit for High Voltage Delivery > 2.4 kv	\$ \$ \$ \$	426.78 9.06 0.00580 0.00172 (0.48)	1,658 951,328 166,678,890 212,506,102 354,348	\$ \$ \$ \$	707,601 8,619,032 966,738 365,510 (170,087)
G-2	Customer Charge Demand Charge All kWh Credit for High Voltage Delivery > 2.4 kv	\$ \$ \$	71.14 9.11 0.00230 (0.48)	10,882 510,109 147,993,116 1,949	\$ \$ \$	774,145 4,647,093 340,384 (936)
G-3	Customer Charge All kWh	\$ \$	16.36 0.05182	68,040 88,095,304	\$ \$	1,113,134 4,565,099
М	Luminaire Charge All kWh	\$	0.03985	3,836,676	\$ \$	1,127,629 152,892
Т	Customer Charge All kWh	\$ \$	14.74 0.04631	11,565 15,352,073	\$ \$	170,468 710,955
V	Minimum Charge All kWh	\$ \$	16.36 0.05330	211 328,389	\$ \$	3,452 17,503
			Total Foreca	sted Revenues	\$	46,590,130

⁽a) Distribution Rates Effective July 1, 2020

Luminaire forecasted revenues determined by attachmentment 5 of Settlement Agreement in Docket DE 19-064

⁽b) Company forecast

⁽c) Column (a) x column (b)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

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Liberty Utilities (Granite State Electric) d/b/a Liberty REP/VMP Rate Design Procedure for Adjusting Distribution Rates for Capital Investment Allowance Calculation of Percentage Adjustment to Distribution Rates Rates Effective May 1, 2021

(1) Increase in Annual Revenue Requirement \$213,246
 (2) Forecasted Base Distribution Revenues \$46,590,130
 (3) Percentage of Adjustment to Distribution Rates 0.46%

- (1) DBS-AMH-1 Page 3 Line 70
- (2) Forecasted Base Distribution Revenues for the period of May 1, 2020 April 30, 2021
- (3) Line (1) ÷ Line (2)

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Docket No DE 21-xxx
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Liberty Utilities (Granite State Electric) d/b/a Liberty Calculation of Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor Rates Effective May 1, 2021

(1)	CY 2020 O&M Expense Above Base O&M Expense	\$570,000
(2)	Final Balance of Reconciliation Calendar Year Incremental O&M (Over)/Under Collection	(\$6,259)
(3)	Reliability Enhancement Program and Vegetation Management Plan Expense	\$563,741
(4)	Estimated kWh deliveries May 1, 2021 - April 30, 2022	879,426,489
(5)	Reliability Enhancement Program and Vegetation Management Plan Adjustment Factor	\$0.00064

- (1) Schedule DBS-AMH-1, Page 2, Line 7
- (2) Schedule DBS-AMH-3, Page 1, Line 15
- (3) Line (1) + Line (2)
- (4) Per Company forecast
- (5) Line (3) ÷ Line (4), truncated after 5 decimal places

Liberty Utilities (Granite State Electric) d/b/a Liberty REP/VMP Rate Design Procedure for Adjusting Distribution Rates for Capital Investment Allowance & Incremental O&M Expense Rates Effective May 1, 2021

Rate Class	Distribution Rate Component	Current <u>Rates</u>	% Increase/ % (Decrease)	Base Distribution <u>Charges</u>	REP/VMP Adjustment <u>Factor</u>	May 1, 2021 <u>Rates</u>
		(a)	(b)	(c)	(d)	(e)
D	Customer Charge	\$14.74	0 00%	\$14.74		\$14.74
	All kWh	\$0.05705	0.64%	\$0 05741	\$0 00064	\$0.05805
	16 Hour Off Peak kWh	\$0.04926	0.64%	\$0 04957	\$0 00064	\$0.05021
	Farm kWh	\$0.05385	0.64%	\$0 05419	\$0 00064	\$0.05483
	D-6 kWh	\$0.05017	0.64%	\$0 05049	\$0 00064	\$0.05113
D-10	Customer Charge	\$14.74	0 00%	\$14.74		\$14.74
	On Peak kWh	\$0.12143	0.60%	\$0.12215	\$0 00064	\$0.12279
	Off Peak kWh	\$0.00165	0.60%	\$0 00165	\$0 00064	\$0.00229
D-11	Customer Charge	\$14.74		\$14.74		\$14.74
	Off Peak	\$0.04196		\$0 03625	\$0 00064	\$0.03689
	Mid Peak	\$0.06289		\$0 05334	\$0 00064	\$0.05398
	Critical Peak	\$0.08955		\$0 09667	\$0 00064	\$0.09731
EV	Customer Charge	\$11 35		\$11.35		\$11 35
	Off Peak	\$0.04196		\$0 03625	\$0 00064	\$0.03689
	Mid Peak	\$0.06289		\$0 05334	\$0 00064	\$0.05398
	Critical Peak	\$0.08955		\$0 09667	\$0 00064	\$0.09731
G-1	Customer Charge	\$426.78	0.46%	\$428.73		\$428.73
	Demand Charge	\$9 06	0.46%	\$9.10		\$9.10
	On Peak kWh	\$0.00580	0.46%	\$0 00582	\$0 00064	\$0.00646
	Off Peak kWh	\$0.00172	0.46%	\$0 00172	\$0 00064	\$0.00236
	Credit for High Voltage Delivery > 2.4 k	(\$0.48)	0.46%	(\$0.48)		(\$0.48)
G-2	Customer Charge	\$71.14	0.46%	\$71.46		\$71.46
	Demand Charge	\$9.11	0.46%	\$9.15	4	\$9.15
	All kWh	\$0.00230	0.46%	\$0 00231	\$0 00064	\$0.00295
	Credit for High Voltage Delivery > 2.4 k	(\$0.48)	0.46%	(\$0.48)		(\$0.48)
G-3	Customer Charge	\$16 36	0.46%	\$16.43		\$16.43
	All kWh	\$0.05182	0.46%	\$0 05205	\$0 00064	\$0.05269
M	Luminaire Charge					
	Description					4
	HPS 4,000	\$8 39	0.46%	\$8.42		\$8.42
	HPS 9,600	\$9.69	0.46%	\$9.73		\$9.73
	HPS 27,500	\$16 07	0.46%	\$16.14		\$16.14
	HPS 50,000	\$19 08	0.46%	\$19.16		\$19.16
	HPS 9,600 (Post Top)	\$11 36	0.46%	\$11.41		\$11.41
	HPS 27,500 Flood	\$16 24	0.46%	\$16.31		\$16 31
	HPS 50,000 Flood	\$21.69 \$10.75	0.46% 0.46%	\$21.78 \$10.79		\$21.78 \$10.79
	Incandescent 1,000 Mercury Vapor 4,000	\$10.75 \$7.44	0.46%	\$10.79 \$7.47		\$10.79 \$7.47
	Mercury Vapor 8,000	\$8.36	0.46%	\$8.39		\$7.47 \$8.39
	Mercury Vapor 22,000	\$14 93	0.46%	\$14.99		\$14 99
	Mercury Vapor 63,000	\$25 21	0.46%	\$25.32		\$25 32
	Mercury Vapor 03,000 Mercury Vapor 22,000 Flood	\$17 08	0.46%	\$17.15		\$17.15
	Mercury Vapor 63,000 Flood	\$33 06	0.46%	\$33.21		\$33 21
	,	7-1-00	2.7070	T		7

Liberty Utilities (Granite State Electric) d/b/a Liberty REP/VMP Rate Design Procedure for Adjusting Distribution Rates for Capital Investment Allowance & Incremental O&M Expense Rates Effective May 1, 2021

Rate Class	Distr bution Rate Component	Current <u>Rates</u> (a)	% Increase/ % (Decrease) (b)	Base Distribution Charges (c)	REP/VMP Adjustment <u>Factor</u> (d)	May 1, 2021 <u>Rates</u> (e)
LED-1	LED-1 Fixtures					
	30 Watt Pole Top	\$5.44	0.46%	\$5.46		\$5.46
	50 Watt Pole Top	\$5.67	0.46%	\$5.69		\$5.69
	130 Watt Pole Top	\$8.75	0.46%	\$8.79		\$8.79
	190 Watt Pole Top	\$16.75	0.46%	\$16.82		\$16.82
	30 Watt URD	\$12.67	0.46%	\$12.72		\$12.72
	90 Watt Flood	\$8.62	0.46%	\$8.65		\$8.65
	130 Watt Flood	\$9.90	0.46%	\$9.94		\$9.94
	30 Watt Caretaker	\$4.88	0.46%	\$4.90		\$4.90
	Rates M, LED-1 & LED-2 Pole Accessory Charge					
	Pole -Wood	\$9.47	0.46%	\$9.51		\$9.51
	Fiberglass - Direct Embedded	\$9.87	0.46%	\$9.92		\$9.92
	Fiberglass w/Foundation <25 ft	\$16.65	0.46%	\$16.73		\$16.73
	Fiberglass w/Foundation >=25 ft	\$27.84	0.46%	\$27.97		\$27.97
	Metal Poles - Direct Embedded	\$19.85	0.46%	\$19.94		\$19.94
	Metal Poles with Foundation	\$23.94	0.46%	\$24.05		\$24.05
	Rate M, LED-1					
	All kWh	\$0.03985	0.46%	\$0.04003	\$0.00064	\$0.04067
	Rate LED-2	\$0.03985	0.46%	\$0.04003	\$0.00064	\$0.04067
Т	Customer Charge	\$14.74	0.00%	\$14.74		\$14.74
	All kWh	\$0.04631	0.57%	\$0.04657	\$0.00064	\$0.04721
V	Minimum Charge	\$16.36	0.46%	\$16.43		\$16.43
	All kWh	\$0.05330	0.46%	\$0.05354	\$0.00064	\$0.05418

Rates D-11 and EV are calculated through the TOU model approved in Docket DE 17-189.

Liberty Utilities (Granite State Electric) d/b/a Liberty Reconciliation of CY 2019 O&M Expense

		Beginning Balance With Interest (a)	Revenue (b)	Ending Balance (c)	Balance Subject to Interest (d)	Effective Interest Rate (e)	Interest (f)	Cumulative Interest (g)
1	May-20	\$77,582	\$17,960	\$59,622	\$68,602	3.25%	\$183	\$183
2	June-20	\$59,805	\$6,359	\$53,446	\$56,626	3.25%	\$151	\$334
3	July-20	\$53,597	\$7,151	\$46,446	\$50,022	3.25%	\$134	\$468
4	August-20	\$46,580	\$6,986	\$39,594	\$43,087	3.25%	\$115	\$583
5	September-20	\$39,709	\$6,044	\$33,665	\$36,687	3.25%	\$98	\$681
6	October-20	\$33,762	\$5,356	\$28,406	\$31,084	3.25%	\$83	\$764
7	November-20	\$28,489	\$5,227	\$23,262	\$25,875	3.25%	\$69	\$833
8	December-20	\$23,331	\$6,048	\$17,283	\$20,307	3.25%	\$54	\$887
9	January-21	\$17,337	\$6,379	\$10,958	\$14,148	3.25%	\$38	\$925
10	February-21	\$10,996	\$6,059	\$4,936	\$7,966	3.25%	\$21	\$946
11	March-21	\$4,958	\$5,843	(\$885)	\$2,036	3.25%	\$5	\$951
12	April-21	(\$880)	\$5,370	(\$6,250)	(\$3,565)	3.25%	(\$10)	\$942
13		(Over)/Unde	er Recovery:	(\$6,259)				

- (a) Line 1: Per Company Records
- (a) Lines 2 12: Prior month Column (c) + Prior month Column (f)
- (b) Revenues per the Company's Records
- (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 ÷ 12) 1]
- (g) Prior month Column (g) + Current month Column (f)
- * Estimate

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Docket No DE 21-xxx Schedule DBS-AMH-4 Page 1 of 1

Liberty Utilities (Granite State Electric) d/b/a Liberty Bill Calculation

Usage	650	kWh

Osage oso kwii	Current Rates (a)	May 1, 2021 Proposed Rates (b)	Current Bill	May 1, 2021 Proposed Bill		
Customer Charge	\$14.74	\$14.74	\$14.74	\$14.74		
Distribution Charge	·	·	·	·		
Base Distibution Charge	\$0.05705	\$0.05741	\$37.08	\$37.32		
VMP	\$0.00008	\$0.00064	\$0.05	\$0.42		
Storm Recovery Adjustment	\$0.00000	\$0.00000	\$0.00	\$0.00		
Transmission Charge	\$0.02660	\$0.02660	\$17.29	\$17.29		
Stranded Cost Charge	(\$0.00072)	(\$0.00072)	-\$0.47	-\$0.47		
System Benefits Charge	\$0.00678	\$0.00678	\$4.41	\$4.41		
Electricity Consumption Tax	\$0.00000	\$0.00000	\$0.00	<u>\$0.00</u>		
Subtotal Retail Delivery Services			\$73.10	\$73.70		
Energy Service Charge	\$0.06426	\$0.06426	<u>\$41.77</u>	<u>\$41.77</u>		
		Total Bill	\$114.87	\$115.47		
\$ increase in 650 kW	h Total Reside	ntial Bill		\$0.60		
% increase in 650 kWh Total Residential Bill						

⁽a) Rates effective March 1, 2021

⁽b) Rates proposed in this filing only and effective May 1, 2021

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Docket No DE 21-xxx Schedule DBS-AMH-5 Page 1 of 1

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

	12/31/2018	12/31/2019
1 Plant in Service, per Form 1, Page 200, Line 3 (+) Line 6 2 Depreciation Reserve, per Form 1, Page 200, Line 12 (+) Line 18 3 Net Plant	247,731 (93,624) 154,107	262,416 (99,447) 162,969
4 Average Net Plant 5 Plant in Service 6 Depreciation Reserve 7 Net Plant	238,514 (86,707) 151,807	255,074 (96,536) 158,538
8 Municipal Taxes, Form 1, Page 262, Line 1	4,730	4,858
9 % Municipal Taxes to Net Plant	3.12%	3.06%

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Book Depreciation Calculation Using 2019 FERC Form 1 Data Filed April 18, 2020

					Average	Depreciation
	Depreciation	Depreciation Expense Depreciable Plant Balances		Depreciable Plant	Rate	
	12/31/2018	12/31/2019	12/31/2018	12/31/2019		
1 Distribution	5,463,619	6,442,418	215,580,549	227,997,637	221,789,093	2.90%
2 General	703,675	824,131	17,651,307	18,966,996	18,309,152	4.50%
3 Total - Granite	6,167,294	7,266,549	233,231,856	246,964,633	240,098,245	3.03%
4 Depreciation Expense per Form 1: 5 FERC Form 1, Page 114						
6 Depreciation Expense (403) Line 6	6,167,294	7,266,549				
7 Depreciation Expense for ARO (403.1) Line 7		-				
8 Total per Form 1, Page 114	6,167,294	7,266,549				
9 FERC Form 1, Page 336						
10 Distribution (incl ARO) Line 8	5,463,619	6,442,418				
11 General Line 10	703,675	824,131				
12 Total per Form 1, Page 336	6,167,294	7,266,549				
13 Depreciable Plant Balances per Form 1:						
14 FERC Form 1, Page 204-207						
15 Distribution Plant Page 207 Line 75	217,253,495	229,670,583				
16 Land & Land Rights Page 207 Line 60	1,672,946	1,672,946				
17 Total	215,580,549	227,997,637				
	210,000,010	22.,00.,00.				
18 General Plant Page 207 Line 99	19,271,679	20,587,368				
19 Land & Land Rights Page 207 Line 86	1,620,372	1,620,372				
20 Total	17,651,307	18,966,996				
		,,				
21 Total, excluding Land & Land Rights	233,231,856	246,964,633				