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Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
 REP/MP Revenue Requirement
 Computation of REP Revenue Requirement
 CY 2017 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
Deferred Tax Calculation											
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	\$1,699,030
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	\$10,369,763
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%	2.76%
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	\$24,112
7 FY 2009 Spend		\$338,156		\$12,139	\$11,227	\$10,387	\$9,606	\$4,999	\$6,665	\$8,219	\$7,501
8 FY 2010 Spend			\$550,022	\$24,467	\$22,630	\$20,936	\$10,892	\$14,522	\$17,913	\$16,567	\$15,123
9 FY 2011 Spend				\$481,705	\$9,685	\$8,958	\$4,662	\$6,215	\$7,665	\$7,090	\$6,558
10 FY 2012 Spend					\$377,329	\$2,968	\$1,544	\$2,059	\$2,539	\$2,349	\$2,173
11 FY 2013 Spend						\$332,964	\$11,900	\$15,867	\$14,676	\$13,577	\$12,557
12 CYS 2013 Spend							\$212,773	\$5,861	\$15,043	\$13,913	\$12,871
13 CY 2014 Spend								\$1,142,236	\$79,478	\$73,510	\$68,006
14 CY 2015 Spend									\$685,505	\$47,898	\$44,117
15 CY 2016 Spend										\$440,621	\$30,659
16 CY 2017 Spend											\$881,372
15 Annual Tax Depreciation	\$429,887	\$377,166	\$598,242	\$550,778	\$450,902	\$403,992	\$281,627	\$1,213,235	\$855,149	\$646,934	\$1,105,049
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	\$6,892,960
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	\$28,511
20 FY 2009 Spend		\$178,311	\$24,277	\$22,455	\$20,773	\$19,213	\$9,998	\$13,330	\$16,438	\$15,006	\$15,002
21 FY 2010 Spend			\$223,801	\$48,935	\$45,261	\$41,872	\$21,784	\$29,045	\$35,825	\$33,134	\$30,246
22 FY 2011 Spend				\$199,462	\$30,854	\$28,538	\$14,850	\$19,800	\$24,417	\$22,588	\$20,891
23 FY 2012 Spend					\$181,087	\$19,837	\$10,320	\$13,761	\$16,973	\$15,698	\$14,522
24 FY 2013 Spend						\$179,810	\$20,395	\$27,193	\$25,151	\$23,268	\$21,520
25 CYS 2013 Spend							\$8,791	\$11,721	\$30,086	\$27,827	\$25,743
26 CY 2014 Spend								\$82,571	\$158,955	\$147,021	\$136,011
27 CY 2015 Spend									\$49,555	\$95,398	\$88,234
28 CY 2016 Spend										\$31,852	\$61,317
29 CY 2017 Spend											\$63,714
28 Annual Tax Depreciation	\$334,991	\$222,438	\$290,742	\$310,320	\$314,480	\$323,039	\$103,706	\$220,846	\$385,912	\$440,294	\$505,712
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	\$3,452,479
30											
31 Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$140,398	\$223,690	\$247,983	\$286,205
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	\$1,556,431
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	\$5,336,528
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	\$155,476
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	\$5,181,052
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%	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	\$1,761,558
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	\$1,896,048
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%	8.20%
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	\$155,476
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	\$1,917,034
43											
44 Rate Base Calculation											
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	\$10,369,763
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)	(\$1,556,431)
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)	(\$1,917,034)
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	\$6,896,298
49											
50 Revenue Requirement Calculation											
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	\$6,896,298
52 Pre-Tax ROR	11.91%	11.91%	11.91%	11.91%	11.91%	11.91%	11.91%	11.36%	11.36%	11.36%	8.74%
53 Return and Taxes	\$90,515	\$129,051	\$200,435	\$240,410	\$258,183	\$295,084	\$312,413	\$504,338	\$603,837	\$655,522	\$803,059
54 Book Depreciation	\$35,150	\$53,940	\$86,304	\$109,645	\$124,074	\$129,109	\$119,933	\$140,398	\$223,690	\$247,983	\$286,205
55 Property Taxes (b)	\$21,773	\$27,218	\$68,676	\$89,904	\$110,318	\$118,343	\$149,961	\$190,995	\$161,819	\$232,376	\$323,449
56 Annual Revenue Requirement	\$147,438	\$210,209	\$353,415	\$439,960	\$492,575	\$542,536	\$582,307	\$835,730	\$1,015,862	\$1,135,881	\$1,212,714
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	\$835,730	\$1,015,862	\$1,135,881	\$1,212,714
59 Annual Rate Adjustment	7/1/2008	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013	6/1/2014	5/1/2015	6/1/2016	5/1/2017	5/1/2018
60 Incremental Annual Rate Adjustment	\$147,438	\$62,771	\$143,205	\$86,545	(\$20,856)	\$125,829	\$37,374	\$253,423	\$180,132	\$120,019	\$76,833
61											
62 Imputed Capital Structure (c)											
63											
64 Long Term Debt	Ratio	Rate	Weighted Rate	Pre Tax							
65 Common Equity	50.00%	7.54%	3.77%	3.77%							
66											
67											
68											
69 Imputed Capital Structure (d)											
70											
71 Long Term Debt	Ratio	Rate	Weighted Rate	Pre Tax							
72 Common Equity	45.00%	5.95%	2.68%	2.68%							
73											
74											
75											
76 Imputed Capital Structure (e)											
77											
78 Long Term Debt	Ratio	Rate	Weighted Rate	Pre Tax							
79 Common Equity	50.00%	4.57%	2.29%	2.29%							
80											
81											

(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 DBS-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 16-363, Section II A. Updated LT debt rate as of Q3 2017.