

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Docket No. DE 21-063

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP.
d/b/a LIBERTY

Retail Rate Filing

Record Request – Exhibit 2

REQUEST:

Please describe how the allocation of transmission costs to Liberty, which is based on Liberty's share of the ISO-NE annual peak load, is impacted by Liberty's various energy efficiency measures, demand response programs, the battery storage program, and any other similar efforts.

RESPONSE:

Table 1b on page 3 of Liberty's 2019 EE Annual Report, Bates 7 below, shows summer savings of 1,227 kW due to the various energy efficiency programs. Note that the 2019 kW values are the incremental kW impacts resulting from new EE measures installed in 2019, meaning installed EE measures from prior years continue to help reduce peak kW on the system.

For the Battery Pilot Program, our consultant Guidehouse (formerly Navigant) is working on its first quarterly report, which is due May 31. The quarterly report will include peak load reduction data.

We currently do not have any demand response programs in the market although our C&I Load Curtailment Active Demand Response program was proposed in Docket No. DE 20-092.



Steven E. Mullen
Director, Rates and Regulatory Affairs
15 Buttrick Rd.
Londonderry, NH 03053
603-216-3516
Steven.Mullen@libertyutilities.com

December 31, 2020

Via Electronic Mail

Debra A. Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit St., Suite 10
Concord, NH 03301-2429

Dear Ms. Howland:

**Re: DE 17-136; Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
NHSaves Energy Efficiency Programs – YE 2019 (Revised)**

On behalf of Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty, enclosed for filing please find Liberty's revised performance incentive calculations relating to the NHSaves Energy Efficiency Programs for program year 2019. The Commission approved the 2019 programs in its Order No. 26,207 issued on December 31, 2018.

Please note this report has a downward revision to the Winter kW Savings and Summer kW Savings to the Home Performance with ENERGY STAR and the Home Energy Assistance programs. The impact of the downward revision to the kW Savings impacted the overall Benefit totals and the Total Resource Benefit/Cost Ratio for these two programs and the overall Residential sector. The overall effect to the Residential sector is a reduction in Benefits (\$000) from \$5,395 to \$4,817 and a reduction to the Benefit/Cost Ratio from 2.68 to 2.40. Consequently, there is a \$5,137 reduction to the overall Performance Incentive calculation from \$201,137 to \$196,000.

Thank you for your attention to this matter. Please do not hesitate to call if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Steven E. Mullen". The signature is written in a cursive, flowing style.

Steven E. Mullen



Enclosure

Cc: Service List

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

LIBERTY UTILITIES (GRANITE STATE ELECTRIC) CORP.

d/b/a

LIBERTY UTILITIES

NHSAVES EE PROGRAMS - 2019 YEAR-END REPORT

NHPUC Docket No. DE 17-136

Revised December 23, 2020



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SUMMARY OF 2019 PROGRAM ACTIVITY

This report presents the results of Liberty Utilities (Granite State Electric) Corp.'s d/b/a Liberty Utilities ("Liberty Utilities" or "Company") residential and commercial & industrial energy efficiency programs for calendar year 2019.

Table 1a, Table 1b and Table 1c show the 2019 year-end performance for the commercial & industrial and residential programs and the annual goals and spending targets. Overall, the Company achieved 110% and 99% of its goals for annual and lifetime energy savings respectively. The Company achieved 110% and 103% of its goals for winter and summer demand savings. The Company achieved 111% of its planned participation while spending 92% of its planned budget in 2019. In addition, 87% of the annual, and 77% of the lifetime, total energy savings generated were for electricity.

Table 2a, Table 2b and Table 2c document the value created by the 2019 energy efficiency programs. Overall, efforts in 2019 created over \$13.8 million of value through achieved energy, demand and other resource savings.

Table 3a documents the Company's earned 2019 year-end performance incentive of \$196,000. As specified by the Commission, the performance incentive for 2019 has been documented using assumptions that are consistent with assumptions used to develop program-year goals. Table 3a summarizes the performance incentive calculation by component (commercial & industrial and residential). As specified by the Commission, results for all programs have been included in the performance incentive calculation.

Table 3b provides the actual Total Resource Cost (TRC) benefit/cost ratio for each program, by sector (commercial & industrial and residential), and for the entire portfolio of energy efficiency programs implemented in 2019. The overall benefit/cost ratio for energy efficiency efforts in 2019 for residential was 2.40 and for commercial & industrial was 1.88.

Table 3c documents the Company's savings by sector and program. Overall, the Company achieved 116,700 megawatt hours of lifetime energy savings.

Table 4 documents the Company's expenses by Program. Overall, the Company had a total of \$3,721,019 of expenses in 2019, including \$43,182 in ISO-NE FCM expenses.

Table 5 provides the 2019 year-end energy efficiency fund balance. The table reflects revenues collected in support of energy efficiency efforts, 2019 spending levels, and the 2019 incentive. Table 5 summarizes the 2019 year-end energy efficiency fund balances for both the residential and commercial & industrial sectors.

Table 6 documents the Company's earned 2019 year-end RGGI RFP – Retail & Large Business Energy Reduction Partners Program performance incentive of \$0.

Table 7a documents the Company's forecasted annualized kWh savings by month, commercial & industrial kW savings by month, and the total lost base revenue calculation.

Table 7b, Table 7c and Table 7d document the actual annualized kWh savings by month, the actual commercial & industrial kW savings by month, and the associated lost base revenue calculation. There was a total program actual annualized savings by month of 10,146,797 kWh, a total C&I actual savings by month of 534 kW, and a total lost base revenue of \$107,427 for 2019.

Table 8 details the calculation of average distribution rates, excluding customer, meter and luminaire charges calculation.

Table 1a. Program Cost-Effectiveness - 2019 PLAN

	Total Resource Benefit/Cost Ratio	Present Value				Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
		Benefit (\$000)	Utility Costs (\$000)	Customer Costs (\$000)									
Residential Programs													
ENERGY STAR Homes	6.30	\$ 1,663	\$ 185	\$ 79		329	7,935	33	77	73	1,171	29,189	
Home Performance with ENERGY STAR	2.03	\$ 1,230	\$ 355	\$ 251		88	1,328	10	16	83	2,452	49,020	
ENERGY STAR Products ¹	2.10	\$ 729	\$ 302	\$ 46		988	6,469	269	118	14,459	132	1,886	
Home Energy Assistance	1.73	\$ 1,196	\$ 690	\$ -		173	1,698	11	14	72	1,998	45,207	
Home Energy Reports	1.43	\$ 185	\$ 129	\$ -		668	1,991	87	63	12,000	-	-	
ISO NE FCM - Residential	0.00	\$ -	\$ -	\$ -		-	-	-	-	-	-	-	
	0.00	\$ -	\$ 20	\$ -		-	-	-	-	-	-	-	
Subtotal Residential	2.43	\$ 5,003	\$ 1,681	\$ 376	\$ 92	2,246	19,421	410	288	26,686	5,753	125,301	
Commercial & Industrial Programs													
Large Business	2.73	\$ 6,180	\$ 1,231	\$ 1,030		4,717	67,850	522	617	101	-	-	
Small Business	1.66	\$ 2,428	\$ 878	\$ 587		1,986	26,724	175	248	95	-	-	
C&I Education	0.00	\$ -	\$ 58	\$ -		-	-	-	-	-	-	-	
Municipal	1.36	\$ 396	\$ 167	\$ 125		275	3,850	25	37	5	59	1,485	
ISO NE FCM - C&I	0.00	\$ -	\$ 46	\$ -		-	-	-	-	-	-	-	
Subtotal Commercial & Industrial	2.18	\$ 9,003	\$ 2,380	\$ 1,742	\$ 131	6,978	98,424	722	901	202	59	1,485	
Total	2.27	\$ 14,006	\$ 4,061	\$ 2,118	\$ 223	9,224	117,845	1,132	1,190	26,888	5,812	126,787	

Note: a 10% NEI adder is applied to total benefits, and an additional 10% NEI adder is applied to total benefits of the Home Energy Assistance program, excluding water.

Annual kWh Savings	9,224,361	84% kWh > 55%	Lifetime kWh Savings	117,844,688	76% kWh > 55%
Annual MMBTU Savings (in kWh)	1,703,488	16%	Lifetime MMBTU Savings (in kWh)	37,159,052	24%
	10,927,849	100%		155,003,740	100%

Table 1b. Program Cost-Effectiveness - 2019 ACTUAL

	Total Resource Benefit/Cost Ratio	Present Value				Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
		Benefit (\$000)	Utility Costs (\$000)	Customer Costs (\$000)									
Residential Programs													
ENERGY STAR Homes	8.52	\$ 1,838	\$ 168	\$ 48		130	2,909	6	3	40	2,536	58,863	
Home Performance with ENERGY STAR	2.20	\$ 1,099	\$ 314	\$ 185		106	1,877	10	24	62	1,936	41,458	
ENERGY STAR Products	2.56	\$ 988	\$ 318	\$ 67		1,313	8,776	356	160	19,138	171	2,443	
Home Energy Assistance	0.91	\$ 610	\$ 671	\$ -		199	2,722	19	28	168	587	13,548	
Home Energy Reports	2.16	\$ 282	\$ 131	\$ -		1,210	3,509	74	54	10,289	-	-	
ISO-NE FCM	0.00	\$ -	\$ 19	\$ -		-	-	-	-	-	-	-	
Subtotal Residential	2.40	\$ 4,817	\$ 1,621	\$ 300	\$ 89	2,957,560	19,793,075	465,372	268,987	29,698	5,229	116,311	
Commercial & Industrial Programs													
Large Business	2.11	\$ 5,238	\$ 968	\$ 1,519		4,338	57,940	488	534	33	-	-	
Small Business	1.92	\$ 3,073	\$ 886	\$ 717		2,342	31,415	249	356	118	-	-	
C&I Education	0.00	\$ -	\$ 54	\$ -		-	-	-	-	-	-	-	
Municipal	1.38	\$ 708	\$ 167	\$ 346		542	7,552	47	68	19	56	1,104	
ISO-NE FCM	0.00	\$ -	\$ 25	\$ -		-	-	-	-	-	-	-	
Subtotal Commercial & Industrial	1.88	\$ 9,019	\$ 2,100	\$ 2,582	\$ 107	7,221,503	96,907,071	783,315	958,135	170	56	1,104	
Total	2.03	\$ 13,836	\$ 3,721	\$ 2,882	\$ 196	10,179	116,700	1,249	1,227	29,868	5,285	117,415	

Annual kWh Savings	10,179,064	87% kWh > 55%	Lifetime kWh Savings	116,700,147	77% kWh > 55%
Annual MMBTU Savings (in kWh)	1,548,928	13%	Lifetime MMBTU Savings (in kWh)	34,412,381	23%
Total Energy Savings	11,727,992	100%	Total Energy Savings	151,112,528	100%

Table 1c. Percent of Plan Program Cost-Effectiveness Targets Achieved

	Total Resource Benefit/Cost Ratio	Present Value				Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
		Benefit (\$000)	Utility Costs (\$000)	Customer Costs (\$000)									
Residential Programs	99%	96%	96%	80%	97%	132%	102%	113%	93%	111%	91%	93%	
Commercial & Industrial Programs	86%	100%	88%	148%	81%	103%	98%	109%	106%	84%	94%	74%	
Total	90%	99%	92%	136%	88%	110%	99%	110%	103%	111%	91%	93%	

Table 2a. Present Value Benefits - 2019 PLAN

	Total Benefits (\$000)	CAPACITY				ENERGY				Electric DRIPE	Gas Benefits	Gas DRIPE	Other Fuels Benefits	Fossil Emissions	Water Benefits	Other Non Resource Benefits
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak							
Residential Programs																
ENERGY STAR Homes	\$1,663	\$116	\$0	\$127	\$113	\$118	\$152	\$49	\$62	\$33	\$0	\$0	\$710	\$34	\$2	\$148
Home Performance w/Energy Star	\$1,230	\$17	\$0	\$21	\$18	\$22	\$27	\$8	\$10	\$7	\$0	\$0	\$940	\$54	\$0	\$107
ENERGY STAR Products	\$729	\$39	\$0	\$69	\$61	\$156	\$102	\$65	\$40	\$28	\$4	\$0	\$26	\$2	\$77	\$59
Home Energy Assistance	\$1,196	\$15	\$0	\$18	\$16	\$34	\$31	\$13	\$12	\$7	\$21	\$1	\$783	\$56	\$0	\$190
Home Energy Reports	\$185	\$8	\$0	\$17	\$15	\$48	\$41	\$17	\$15	\$8	\$0	\$0	\$0	\$0	\$0	\$17
Subtotal Residential	\$5,003	\$195	\$0	\$252	\$223	\$377	\$352	\$152	\$139	\$83	\$26	\$1	\$2,458	\$146	\$80	\$521
Commercial & Industrial Programs																
Large Business	\$6,180	\$518	\$0	\$679	\$601	\$1,411	\$1,091	\$590	\$434	\$294	\$0	\$0	\$0	\$0	\$0	\$562
Small Business	\$2,428	\$193	\$0	\$260	\$230	\$551	\$445	\$231	\$177	\$119	\$0	\$0	\$0	\$0	\$0	\$221
C&I Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Municipal	\$396	\$31	\$0	\$40	\$36	\$83	\$61	\$34	\$23	\$17	\$0	\$0	\$33	\$2	\$0	\$36
Subtotal Commercial & Industrial	\$9,003	\$742	\$0	\$979	\$866	\$2,045	\$1,598	\$855	\$634	\$431	\$0	\$0	\$33	\$2	\$0	\$818
Total	\$14,006	\$937	\$0	\$1,230	\$1,089	\$2,422	\$1,950	\$1,007	\$773	\$514	\$26	\$1	\$2,490	\$148	\$80	\$1,339

Table 2b. Present Value Benefits - 2019 ACTUAL

	Total Benefits (\$000)	CAPACITY				ENERGY				Electric DRIPE	Gas Benefits	Gas DRIPE	Other Fuels Benefits	Fossil Emissions	Water Benefits	Other Non Resource Benefits
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak							
Residential Programs																
ENERGY STAR Homes	\$1,838	\$3	\$0	\$4	\$4	\$47	\$53	\$19	\$21	\$4	\$0	\$0	\$1,449	\$67	\$5	\$161
Home Performance w/Energy Star	\$1,099	\$27	\$0	\$32	\$29	\$29	\$38	\$11	\$15	\$10	\$5	\$0	\$761	\$45	\$0	\$96
ENERGY STAR Products	\$988	\$55	\$0	\$96	\$85	\$210	\$138	\$88	\$55	\$40	\$5	\$0	\$33	\$2	\$99	\$81
Home Energy Assistance	\$610	\$26	\$0	\$32	\$29	\$50	\$56	\$17	\$19	\$13	\$0	\$0	\$253	\$17	\$0	\$99
Home Energy Reports	\$282	\$7	\$0	\$14	\$13	\$85	\$72	\$29	\$26	\$12	\$0	\$0	\$0	\$0	\$0	\$26
Subtotal Residential	\$4,817	\$118	\$0	\$180	\$159	\$421	\$356	\$165	\$136	\$78	\$11	\$0	\$2,496	\$132	\$104	\$461
Commercial & Industrial Programs																
Large Business	\$5,238	\$416	\$0	\$558	\$494	\$1,200	\$901	\$538	\$397	\$256	\$0	\$0	\$0	\$0	\$0	\$476
Small Business	\$3,073	\$276	\$0	\$371	\$328	\$674	\$508	\$277	\$198	\$162	\$0	\$0	\$0	\$0	\$0	\$279
C&I Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Municipal	\$708	\$53	\$0	\$71	\$63	\$164	\$119	\$67	\$46	\$33	\$0	\$0	\$28	\$1	\$0	\$64
Subtotal Commercial & Industrial	\$9,019	\$744	\$0	\$1,000	\$886	\$2,038	\$1,527	\$883	\$641	\$451	\$0	\$0	\$28	\$1	\$0	\$820
Total	\$13,836	\$862	\$0	\$1,180	\$1,045	\$2,459	\$1,883	\$1,048	\$777	\$529	\$11	\$0	\$2,524	\$133	\$104	\$1,281

Table 2c. Percent of Plan Present Value Benefits Achieved

	Total Benefits (\$000)	CAPACITY				ENERGY				Electric DRIPE	Gas Benefits	Gas DRIPE	Other Fuels Benefits	Fossil Emissions	Water Benefits	Other Non Resource Benefits
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak							
Residential Programs	96%	61%	0%	71%	71%	112%	101%	109%	98%	93%	41%	43%	102%	90%	130%	89%
Commercial & Industrial Programs	100%	100%	0%	102%	102%	100%	96%	103%	101%	105%	0%	0%	85%	64%	0%	100%
Total	99%	92%	0%	96%	96%	102%	97%	104%	100%	103%	41%	43%	101%	90%	130%	96%

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
NHPUC Docket No. DE 17-136**

Table 3a. Performance Incentive Calculation - 2019

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial Incentive		
1. Benefit/Cost Ratio	2.18	1.88
2. Threshold Benefit / Cost Ratio ¹	1.00	1.00
3. Lifetime kWh Savings	98,424,088	96,907,071
4. Threshold Lifetime kWh Savings (65%) ²	63,975,657	63,975,657
5. Implementation Expenses	\$ 2,379,917	\$ 2,100,171
6. Benefit / Cost Percentage of Implementaton Expenses	2.75%	2.75%
7. Lifetime kWh Percentage of Implementation Expenses	2.75%	2.75%
8. Commercial & Industrial Performance Incentive	\$ 130,895	\$ 106,662
9. Maximum Commercial & Industrial Performance Incentive (6.875%)	\$ 163,619	\$ 163,619
Residential Incentive		
10. Benefit / Cost Ratio	2.43	2.40
11. Threshold Benefit / Cost Ratio ¹	1.00	1.00
12. Lifetime kWh Savings	19,420,600	19,793,075
13. Threshold Lifetime kWh Savings (65%)	12,623,390	12,623,390
14. Implementation Expenses	\$ 1,680,951	\$ 1,620,849
15. Benefit / Cost Percentage of Implementation Expenses	2.75%	
16. Lifetime kWh Percentage of Implementation Expenses	2.75%	
17. Residential Performance Incentive	\$ 92,452	\$ 89,337
18. Maximum Residential Performance Incentive (6.875%)	\$ 115,565	\$ 115,565
19. TOTAL PLANNED / EARNED INCENTIVE	\$ 223,348	\$ 196,000

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.
3. Benefit Cost ratios are Nominal\$/Nominal\$

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
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Table 3b. Planned Versus Actual Benefit / Cost Ratio by Sector - 2019

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	\$ 9,003	\$ 9,019
2. Implementation Expenses	\$ 2,380	\$ 2,100
3. Customer Contribution	\$ 1,742	\$ 2,582
4. Performance Incentive	<u>\$ 131</u>	<u>\$ 107</u>
5. Total Costs Including Performance Incentive	\$ 4,253	\$ 4,789
6. Benefit/Cost Ratio - Commercial & Industrial Sector	2.18	1.93
7. Benefit/Cost Ratio - Commercial & Industrial Sector including PI	2.18	1.88
Residential:		
8. Benefits (Value) From Eligible Programs	\$ 5,003	\$ 4,817
9. Implementation Expenses	\$ 1,681	\$ 1,621
10. Customer Contribution	\$ 376	\$ 300
11. Performance Incentive	<u>\$ 92</u>	<u>\$ 89</u>
12. Total Costs Including Performance Incentive	\$ 2,149	\$ 2,010
13. Benefit/Cost Ratio - Residential Sector	2.43	2.51
14. Benefit/Cost Ratio - Residential Sector including PI	2.33	2.40

**Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
NHPUC Docket No. DE 17-136**

Table 3c. Actual Lifetime Energy Savings by Sector and Program - 2019

	Lifetime kWh Savings	
	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
Large Business	67,850,378	57,940,088
Small Business	26,723,868	31,415,220
C&I Education	0	0
Municipal	3,849,842	7,551,764
Total Commercial & Industrial Included for Incentive Calculation	98,424,088	96,907,071
Residential:		
ENERGY STAR Homes	7,935,055	2,908,931
NH Home Performance with ENERGY STAR	1,327,806	1,876,918
ENERGY STAR Products	6,469,068	8,776,072
Home Energy Assistance	1,697,671	2,722,154
Home Energy Reports	1,991,000	3,509,000
Total Residential Included for Incentive Calculation	19,420,600	19,793,075
Total	117,844,688	116,700,147

Table 4. Program Expenditures by Category - 2019 ACTUAL

	Evaluation	External Administration	Internal Administration	Internal Implementation	Marketing	Rebates-Services	Total
Residential Programs							
ENERGY STAR Homes	\$ 8,662	\$ 25	\$ 8,705	\$ 9,306	\$ 3,608	\$ 137,659	\$ 167,964
Home Performance with ENERGY STAR	\$ 16,611	\$ 48	\$ 26,828	\$ 21,123	\$ 8,574	\$ 241,239	\$ 314,424
ENERGY STAR Products	\$ 13,637	\$ 18	\$ 6,141	\$ 14,851	\$ 5,759	\$ 278,041	\$ 318,447
Home Energy Assistance	\$ 32,298	\$ 93	\$ 50,253	\$ 42,822	\$ 11,171	\$ 533,885	\$ 670,522
Home Energy Reports	\$ 3,022	\$ 8	\$ 3,015	\$ 5,230	\$ 2,055	\$ 117,595	\$ 130,924
ISO-NE FCM	\$ 18,568	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,568
Subtotal Residential	\$ 92,798	\$ 191	\$ 94,941	\$ 93,331	\$ 31,167	\$ 1,308,420	\$ 1,620,849
Commercial & Industrial Programs							
C&I Education	\$ 2,943	\$ 8	\$ 1,394	\$ 7,651	\$ 438	\$ 41,882	\$ 54,316
Large Business Energy Solutions	\$ 56,697	\$ 166	\$ 13,725	\$ 96,804	\$ 14,281	\$ 786,599	\$ 968,272
Small Business Energy Solutions	\$ 40,422	\$ 118	\$ 12,184	\$ 78,836	\$ 13,939	\$ 740,628	\$ 886,127
Municipal	\$ 7,693	\$ 20	\$ 2,481	\$ 14,509	\$ 2,174	\$ 139,966	\$ 166,842
ISO-NE FCM	\$ 24,614	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,614
Subtotal Commercial & Industrial	\$ 132,369	\$ 312	\$ 29,783	\$ 197,800	\$ 30,833	\$ 1,709,074	\$ 2,100,171
Total	\$ 225,167	\$ 503	\$ 124,725	\$ 291,131	\$ 62,000	\$ 3,017,494	\$ 3,721,019

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
 NHPUC Docket No. DE 17-136

Table 5. Revenue and Expense Balance
12 Months Actual 2019

			2019
1	Beginning Balance: 1/1/2019	(Over) / Under	\$843,082.90
Revenues			
2	System Benefits Charge		\$3,311,243.43
3	RGGI Funding		\$216,195.98
4	FCM Payments		\$738,155.71
5	Interest		<u>\$91,898.86</u>
6	Total Revenues	Sum Lines 2 - 5	\$4,357,493.98
Expenses			
7	Program Expenses		\$3,721,019.35
8	Performance Incentive - 2019	Table 3a	<u>\$195,999.56</u>
9	Total Expenses	Sum Lines 7 - 8	\$3,917,018.91
10	Ending Balance: 12/31/2019	Lines 1 + 6 - 9	<u><u>\$1,283,557.97</u></u>

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
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**Table 6. RGGI RFP – Retail & Large Business Energy Reduction Partners
Program Performance Incentive Calculation - 2019**

Total RGGI Grant Expenses 2019	\$0
Percentage for PI calculation	7.50%
TOTAL RGGI RFP INCENTIVE EARNED	\$0

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
NHSaves Energy Efficiency Programs 2019 Year End Report
NHPUC Docket No. DE 17-136

Table 7b. Lost Base Revenue - 2019 Actual
Actual C&I kW Savings - New Component for Year 2019
January 1, 2019 to December 31, 2019

Line No.	Description	Liberty
1	Gross Annualized kWh Savings	4,337,870
2	Maximum Demand Factor (MDF)	Varies by measure
3	Extended Max. Load Reduction kW	816.8
4	% kW Demand Reduction at Customer Peak	Varies by measure
5	Sub-Total Customer Peak kW Reduction	534.3
6	% Net to Gross	100.00%
7	Sub-Total Customer Peak kW Reduction	534.3
8	% In-Service Rate	100.00%
9	Sub-Total Customer Peak kW Reduction	534.3
10	% kW Realization Rate	Varies by measure
11	Sub-Total Customer Peak kW Reduction	218.8
12	% Billing Adjustment to Reflect Ratchets (1)	100.00%
13	Sub-Total Customer Peak kW Reduction	218.8
14	% Retirement Adjustment	100.00%
15	Total Customer Peak kW Reduction, Full Year	218.8
16	% Annual Savings Achieved in First Year	n/a
17	Total Customer Peak Red. in First Year	218.8
18	Annualized (x12)	2,626.2
19	Average Distribution Rate (ADR)	\$ 7.997
20	LBR Calculation	\$ 1,750

Comments:

Above schedule mirrors the Template recommended by the LBRWG Report (p.6)

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Table 7c. Lost Base Revenue - 2019 Actual
Actual Calculation for LBR New Methodology for Year 2019
January 1, 2019 to December 31, 2019

Description	Residential kWh	Commercial kWh	C&I kW	Total
Legacy (Measures Installed in 2017 and 2018): (1)				
1 Program Year 2017 Actual LBR Savings (2)	-	-	-	-
2 2019 Average Distribution Rate (ADR)	\$ 0.0474	\$ 0.0088	\$ -	
3 Sub-Total LBR	\$ -	\$ -	\$ -	\$ -
4 Program Year 2018 Estimated LBR Savings	\$ -	\$ -	\$ -	\$ -
5 2019 Average Distribution Rate (ADR)	\$ 0.0474	\$ 0.0088	\$ -	
6 Sub-Total LBR	\$ -	\$ -	\$ -	\$ -
7 Sub-Total Legacy (Measures Installed in 2017 and 2018)	\$ -	\$ -	\$ -	\$ -
8 Sub-Total Legacy LBR	\$ -	\$ -	\$ -	\$ -
New Methodology (Measures Installed in 2019 and forward):				
9 Program Year 2019 Estimated LBR Savings to be achieved (annualized)	2,925,291	7,221,506	534	10,147,331
10 Program Year 2019 Estimated LBR Savings to be achieved in 2019	1,653,370	3,101,468	219	4,755,058
11 2019 Average Distribution Rate (ADR)	\$ 0.0474	\$ 0.0088	\$ 7.9967	
12 Sub-Total LBR (Line 2 x Line 3)	\$ 78,353	\$ 27,324	\$ 1,750	\$ 107,427
13 Total Actual LBR - Year 2019	\$ 78,353	\$ 27,324	\$ 1,750	\$ 107,427

Comments:

New methodology disaggregates kWh and kW components as specified in the Settlement Agreement in DE 17-136 (Order No. 26,095).

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Table 8. Calculation of Average Distribution Rates Excluding Customer, Meter, and per Luminaire Charges
Based on 2019 actual data

<u>Line</u>	<u>Rate Class</u> Col. A	<u>Delivery</u> <u>kWh</u> Col. B	2019		<u>Average</u> <u>\$/kWh</u> Col. D
			<u>Distribution</u> <u>Revenue</u> <u>Excluding</u> <u>Fixed Charges</u> Col. C		
1	Residential Rate D	269,097,087	\$	12,930,181	
2	Residential D-6	744,413	\$	31,487	
3	Residential TOU Rate D-10 All kWh	5,390,208	\$	196,947	
4	Residential Electric Heat Rate T	14,723,325	\$	582,575	
5	Residential Subtotal (kWh only)	289,955,033	\$	13,741,189	\$ 0.04739
6	General Service Rate G-1 All kWh	377,564,381	\$	1,297,424	
7	General Service Rate G-1 Credit for High Voltage (KV)	-	\$	(234,618)	
8	General Service Rate G-2 All kWh	141,341,341	\$	328,408	
9	General Service Rate G-2 Credit for High Voltage (KV)	-	\$	(1,814)	
10	General Service Rate G-3 All kWh	86,048,678	\$	3,926,553	
11	Commercial Electric Heat Rate V All kWh	325,565	\$	15,239	
12	Commercial and Industrial Subtotal (kWh only)	605,279,965		5,331,192	\$ 0.00881
13	Outdoor Lighting Rate M	-	\$	-	
14	Total Retail	895,234,998	\$	19,072,381	\$ 0.02130
<u>Line</u>	<u>Rate Class</u>	<u>KW</u>		<u>Distribution</u> <u>Revenue</u>	<u>\$/KW</u>
15	General Service Rate G-1 Demand Charge (KW)	938,346	\$	7,493,962	
16	General Service Rate G-2 Demand Charge (KW)	488,463	\$	3,915,864	
17	Total Retail per KW	1,426,809	\$	11,409,826	\$ 7.99674

*Excludes customer charge and street light luminaire charges.