

Program Performance, GST & TRC - 2021																
Impact from Synapse NH Cost-Effectiveness Review	Reference	Granite State Test	Total Resource Cost Test	Total Portfolio	B1 - Home Energy Assistance	A1 - Energy Star Homes	A2 - Home Performance with Energy Star	A3 - Energy Star Products	A4 - Home Energy Reports	A6b - Res ISO Forward Capacity Market Expenses	C1 - Large Business Energy Solutions	C2 - Small Business Energy Solutions	C3 - Municipal Energy Solutions	C6b - C&I ISO Forward Capacity Market Expenses	C6c - C&I Education	
<b>Utility System Costs</b>																
1	Measure costs (utility portion)	Rebate/Services costs, Costs tab	✓	✓	\$ 4,866,359	\$ 982,737	\$ 113,379	\$ 548,757	\$ 445,748	\$ 67,875	\$ -	\$ 1,108,668	\$ 1,438,530	\$ 150,257	\$ -	\$ 10,409
2	Other financial or technical support costs	Included in Measure costs (utility portion)	✓	✓	Included in line 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Other program and administrative costs	Internal Admin, External Admin, Implementation, and Marking costs, Costs tab	✓	✓	\$ 625,690	\$ 121,227	\$ 36,500	\$ 57,848	\$ 40,028	\$ 8,874	\$ 491	\$ 192,011	\$ 144,256	\$ 13,700	\$ 651	\$ 10,104
4	EM&V costs	EM&V costs, Costs tab	✓	✓	\$ 152,787	\$ 24,357	\$ 8,747	\$ 11,697	\$ 7,446	\$ 2,246	\$ 12,656	\$ 39,357	\$ 25,214	\$ 2,783	\$ 16,777	\$ 1,508
5	Performance incentives <sup>1</sup>	Performance Incentive calculation, 3. Att E1 PI tab	✓	✓	\$ 335,192	\$ 67,630	\$ 9,508	\$ 37,060	\$ 29,563	\$ 4,735	\$ -	\$ 80,320	\$ 96,381	\$ 9,994	\$ -	\$ -
<b>Utility System Benefits</b>																
6	Avoided energy costs	2. Att E1 Ben tab (does not include avoided line losses and wholesale risk premium)	✓	✓	\$ 6,915,597	\$ 189,506	\$ 163,650	\$ 151,977	\$ 288,213	\$ 89,234	\$ -	\$ 3,212,375	\$ 2,604,075	\$ 216,567	\$ -	\$ -
7	Avoided generating capacity costs	2. Att E1 Ben tab (does not include avoided line losses and wholesale risk premium for uncleared capacity)	✓	✓	\$ 723,046	\$ 34,248	\$ 6,362	\$ 50,456	\$ 59,299	\$ 12,011	\$ -	\$ 264,775	\$ 276,260	\$ 19,634	\$ -	\$ -
8	Avoided reserves	Embedded in avoided generating capacity costs	✓	✓	Included in line 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Avoided transmission costs	2. Att E1 Ben tab	✓	✓	\$ 875,892	\$ 43,708	\$ 7,221	\$ 54,439	\$ 74,491	\$ 19,719	\$ -	\$ 320,337	\$ 333,904	\$ 22,074	\$ -	\$ -
10	Avoided distribution costs	2. Att E1 Ben tab	✓	✓	\$ 758,791	\$ 37,865	\$ 6,255	\$ 47,161	\$ 64,532	\$ 17,082	\$ -	\$ 277,510	\$ 289,263	\$ 19,123	\$ -	\$ -
11	Avoided T&D line losses	Calculated based on 8% line loss factor applied to Avoided energy, generating capacity, and DRIPE	✓	✓	\$ 672,676	\$ 19,851	\$ 14,731	\$ 17,323	\$ 30,526	\$ 9,439	\$ -	\$ 305,974	\$ 254,076	\$ 20,757	\$ -	\$ -
12	Avoided ancillary services	In the short term, value at \$0 - over time, will determine whether this impact is enough to monetize	✓		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Intrastate price suppression effects (DRIPE)	2. Att E1 Ben tab (does not include avoided line losses and wholesale risk premium)	✓	✓	\$ 469,801	\$ 15,946	\$ 7,254	\$ 7,403	\$ 21,298	\$ 12,589	\$ -	\$ 208,996	\$ 182,398	\$ 13,916	\$ -	\$ -
14	Avoided compliance with RPS requirements	Embedded in avoided energy costs	✓	✓	Included in line 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Avoided environmental compliance costs (embedded)	Embedded in avoided energy costs	✓	✓	Included in line 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Avoided credit and collection costs	Embedded in income eligible (participant non-energy benefits)	✓		Included in line 23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Reduced risk	Calculated based on 8% wholesale risk premium applied to avoided energy, DRIPE, and uncleared avoided generating capacity	✓	✓	\$ 619,310	\$ 17,326	\$ 14,260	\$ 13,612	\$ 26,158	\$ 8,550	\$ -	\$ 286,413	\$ 233,684	\$ 19,307	\$ -	\$ -
18	Increased reliability <sup>2</sup>	2. Att E1 Ben tab	✓ <sup>2</sup>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Market transformation <sup>3</sup>	Net-to-gross rates constitute a negative benefit adjustment that is included in avoided energy and capacity costs	✓	✓ <sup>3</sup>	Included in lines 6-13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Non-Utility System Impacts</b>																
20	Other fuel	2. Att E1 Ben tab	✓	✓	\$ 6,827,903	\$ 600,755	\$ 2,192,533	\$ 3,898,808	\$ 59,660	\$ -	\$ -	\$ (341,947)	\$ (285,332)	\$ 703,426	\$ -	\$ -
21	Water resource	2. Att E1 Ben tab	✓	✓	\$ 83,521	\$ 2,038	\$ 16,629	\$ 1,614	\$ 58,921	\$ -	\$ -	\$ -	\$ 4,318	\$ -	\$ -	\$ -
22	Income eligible (participant costs)	1. Att E1 Cost Eff tab	✓	✓	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	Income eligible (participant non-energy benefits)	2. Att E1 Ben tab	✓	✓	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	Participant costs	1. Att E1 Cost Eff tab		✓	\$ 5,269,671	\$ -	\$ 44,994	\$ 154,410	\$ 33,658	\$ -	\$ -	\$ 2,214,726	\$ 2,293,031	\$ 528,851	\$ -	\$ -
25	Participant non-energy benefits	2. Att E1 Ben tab		✓	\$ 2,807,318	\$ -	\$ 603,067	\$ 1,060,294	\$ 156,044	\$ 42,156	\$ -	\$ 453,443	\$ 388,833	\$ 103,480	\$ -	\$ -
26	Environmental, NH fossil fuel proxy	2. Att E1 Ben tab	✓	✓	\$ 483,843	\$ 44,550	\$ 120,800	\$ 291,212	\$ 4,582	\$ -	\$ -	\$ (28,742)	\$ (23,904)	\$ 75,345	\$ -	\$ -
<b>Granite State Test</b>																

Impact from Synapse NH Cost-Effectiveness Review	Reference	Granite State Test	Total Resource Cost Test	Total Portfolio	B1 - Home Energy Assistance	A1 - Energy Star Homes	A2 - Home Performance with Energy Star	A3 - Energy Star Products	A4 - Home Energy Reports	A6b - Res ISO Forward Capacity Market Expenses	C1 - Large Business Energy Solutions	C2 - Small Business Energy Solutions	C3 - Municipal Energy Solutions	C6b - C&I ISO Forward Capacity Market Expenses	C6c - C&I Education
27	Costs	Utility System Costs (lines 1-4); Income eligible (participant costs) (line 22)	✓	\$ 5,644,837	\$ 1,128,321	\$ 158,626	\$ 618,302	\$ 493,221	\$ 78,995	\$ 13,147	\$ 1,340,036	\$ 1,608,000	\$ 166,740	\$ 17,428	\$ 22,021
28	Benefits	Utility System Benefits (lines 6-19); Non-Utility System Impacts (excluding Participant costs and Participant non-energy benefits) (lines 20-21, 23, 26)	✓	\$ 18,430,379	\$ 1,005,793	\$ 2,549,696	\$ 4,534,004	\$ 687,680	\$ 168,624	\$ -	\$ 4,505,691	\$ 3,868,743	\$ 1,110,149	\$ -	\$ -
29	BC Ratio	Line 28 / Line 27	✓	3.26	0.89	16.07	7.33	1.39	2.13	-	3.36	2.41	6.66	-	-
<b>Total Resource Cost Test</b>															
30	Costs	Utility System Costs (lines 1-4); Income eligible (participant costs) (line 22); Participant Costs (line 24)	✓	\$ 10,914,507	\$ 1,128,321	\$ 203,619	\$ 772,712	\$ 526,879	\$ 78,995	\$ 13,147	\$ 3,554,763	\$ 3,901,032	\$ 695,591	\$ 17,428	\$ 22,021
31	Benefits	Utility System Benefits (lines 6-11, 13-15, 17, 19 <sup>3</sup> ); Non-Utility System Impacts (lines 20-21, 23, 25-26)	✓	\$ 21,237,697	\$ 1,005,793	\$ 3,152,763	\$ 5,594,298	\$ 843,725	\$ 210,780	\$ -	\$ 4,959,134	\$ 4,257,576	\$ 1,213,630	\$ -	\$ -
32	BC Ratio	Line 31 / Line 30	✓	1.95	0.89	15.48	7.24	1.60	2.67	-	1.40	1.09	1.74	-	-

1. Program Performance Incentives estimated based on share of total budget

2. Reliability was included in the Synapse recommendation for the Granite State Test components, but is not included per stakeholder concerns

3. The NH Utilities apply free-ridership and spillover to gross savings to account for market transformation, and while these factors were not applied in the pre-2021 total resource cost test, they will be going forward to comply with the NH TRM

Utility Discount Rates - 2021						
#	Category	Value			Details Justifying Application	
1	<b>Employee Benefit Plans – Pension, SERP, non-SERP, PBOP, etc.</b>					
	Pension	2.93%			The discount rate was chosen by the plan sponsor using the Ryan ALM Above Median Yield Curve, under which the plan’s projected benefit payments are matched against a series of spot rates derived from a market basket of high quality fixed income securities	
	OPEB	2.94%			The discount rate was chosen by the plan sponsor using the Ryan ALM Above Median Yield Curve, under which the plan’s projected benefit payments are matched against a series of spot rates derived from a market basket of high quality fixed income securities	
2	Leases	3.17%			The rate is different for each lease since we use the discount rate associated with the specific lease term. The rate shown is for a 3-year lease term. Lease discount rates are based on BBB Utility Curve, which is the current credit quality of Liberty Utilities. Generally Accepted Accounting Principles (GAAP) on lease account provides the following guidance - “the discount rate used should reflect a borrowing cost over a term equivalent to the lease term. In many cases, this may take the form of selecting or developing a rate curve based upon the credit quality of the entity”.	
<b>3 AFUDC - Effective annual rates with semi-annual compounding</b>						
	Debt	2.92%			Docket # DE 19-064, Order #26,376	
	Equity	4.82%			Docket # DE 19-064, Order #26,376	
<b>4 ROE/WACC</b>						
	<b>WACC EN</b>	Rate of Return Calculation	Portion	After-Tax Cost	Weighted Rate	Pre-Tax WACC
		Equity	52.0%	9.30%	4.84%	6.64%
		Debt	48.0%	4.42%	2.12%	2.12%
			100.0%		6.96%	9.36%
	<b>WACC GSE</b>	Rate of Return Calculation	Portion	After-Tax Cost	Weighted Rate	Pre-Tax WACC
		Equity	52.0%	9.10%	4.737%	6.49%
		Debt	48.0%	5.97%	2.87%	2.87%
			100.0%		7.60%	9.36%
<b>5 Carried interest charge</b>						
						See response to #6.
						The Energy Efficiency real discount rate is calculated in accordance with the methodology outlined in the Avoided Energy Supply Components 2021 study (AESC 2021). The calculation is Real Discount Rate = $[(1 + \text{Nominal Discount Rate}) / (1 + \text{Inflation Rate})] - 1$ . AESC 2021 uses a Real Discount Rate of 0.81% based on default calculated values of 2.82% for the Nominal Discount Rate and 2.00% for the Inflation Rate. AESC 2021 also provides tools for users to insert their own input assumptions for these rates to calculate avoided costs. Following precedent established in previously approved filings, the Utilities use Nominal Discount Rates and Inflation Rates that are updated for the year in which measures will be installed, and were updated as of June 2021 for program years 2022 and 2023. The effect of using these rates resulted in a Real Discount Rate of 1.19%, a lower risk rate than the AESC 2021 default of 0.81%.
						These are very low risk investments that are customer owned and operated and due to the nature of the investments, and confirmed by routine study of baselines and savings, are very reliable in terms of producing the expected reduction.
6	<b>EE Discount Rate</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>		
	Nominal Discount Rate	3.25%	3.25%	3.25%	Updated October 18, 2021. Based on the June 2021 Prime Rate in accordance with the Final Energy Efficiency Group Report, dated July 6, 1999 in DR 96-150. Retrieved from <a href="http://www.moneycafe.com/personal-finance/prime-rate/">http://www.moneycafe.com/personal-finance/prime-rate/</a>	
	Inflation	1.81%	2.03%	2.03%	Updated October 18, 2021. Based on the inflation rate from Q1 2020 to Q1 2021, Retrieved from <a href="https://fred.stlouisfed.org/data/GDPDEF.txt">https://fred.stlouisfed.org/data/GDPDEF.txt</a>	
	Real Discount Rate	1.41%	1.19%	1.19%	Calculated: Real Discount Rate = $[(1 + \text{Nominal Discount Rate}) / (1 + \text{Inflation Rate})] - 1$	

Plan & Actual Energy Savings - 2021												
Program / Sector	Program Costs (\$)		Rebate / Services (\$)		Net Annual Energy (MWh)		Net Lifetime Energy (MWh)		Net Annual MMBtu		Net Lifetime MMBtu	
	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned
<b>A - Residential</b>	\$ 1,362,291	\$ 1,452,149	\$ 1,175,758	\$ 1,148,474	2,359.6	1,795.4	13,226.8	9,479.0	9,926.9	4,475.1	240,424.7	97,907.9
A1 - Energy Star Homes	\$ 158,626	\$ 359,195	\$ 113,379	\$ 286,997	172.9	62.5	3,874.1	1,429.6	2,815.8	613.5	70,875.9	14,682.7
A2 - Home Performance with Energy Star	\$ 618,302	\$ 577,162	\$ 548,757	\$ 461,152	182.9	154.1	2,823.5	2,210.4	7,327.3	4,633.6	166,538.6	83,521.0
A3 - Energy Star Products	\$ 493,221	\$ 367,436	\$ 445,748	\$ 293,581	566.4	782.6	5,091.7	5,042.7	(216.2)	(771.9)	3,010.2	(295.8)
A4 - Home Energy Reports	\$ 78,995	\$ 121,300	\$ 67,875	\$ 106,744	1,437.5	796.3	1,437.5	796.3	-	-	-	-
A6b - Res ISO Forward Capacity Market Expenses	\$ 13,147	\$ 27,057	\$ -	\$ -	-	-	-	-	-	-	-	-
<b>B - Low-Income</b>	\$ 1,128,321	\$ 1,201,849	\$ 982,737	\$ 959,076	369.0	129.3	3,342.6	1,552.6	1,023.3	3,274.5	24,722.9	72,982.4
B1 - Home Energy Assistance	\$ 1,128,321	\$ 1,201,849	\$ 982,737	\$ 959,076	369.0	129.3	3,342.6	1,552.6	1,023.3	3,274.5	24,722.9	72,982.4
<b>C - Commercial &amp; Industrial</b>	\$ 3,154,225	\$ 3,410,298	\$ 2,707,864	\$ 2,674,384	8,281.1	10,002.5	113,313.2	127,171.1	(1,860.6)	(2,058.3)	(4,151.2)	(20,952.0)
C1 - Large Business Energy Solutions	\$ 1,340,036	\$ 1,898,823	\$ 1,108,668	\$ 1,517,160	4,247.9	6,851.9	59,574.2	91,576.1	(1,717.8)	(1,162.0)	(22,058.0)	(11,974.0)
C2 - Small Business Energy Solutions	\$ 1,608,000	\$ 1,208,872	\$ 1,438,530	\$ 965,889	3,741.7	2,817.3	49,571.2	30,942.8	(1,458.7)	(679.9)	(18,409.6)	(6,799.5)
C3 - Municipal Energy Solutions	\$ 166,740	\$ 166,713	\$ 150,257	\$ 133,204	291.5	333.4	4,167.7	4,652.1	1,315.8	(216.4)	36,316.4	(2,178.6)
C6b - C&I ISO Forward Capacity Market Expenses	\$ 17,428	\$ 63,134	\$ -	\$ -	-	-	-	-	-	-	-	-
C6c - C&I Education	\$ 22,021	\$ 72,756	\$ 10,409	\$ 58,132	-	-	-	-	-	-	-	-
<b>Grand Total</b>	\$ 5,644,837	\$ 6,064,297	\$ 4,866,359	\$ 4,781,934	11,009.7	11,927.3	129,882.6	138,202.7	9,089.5	5,691.3	260,996.4	149,938.2

Portfolio Planned Versus Actual Performance - 2021												
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	125% of		Actual PI	Actual Coefficient w/ 100% Threshold	PI w/ 100% Threshold	Source
							Planned PI	Planned PI				
1 Lifetime kWh Savings	138,202,666	103,652,000	129,882,646	94%	1.925%	1.809%	\$ 116,738	\$ 145,922	\$ 102,121	0.000%	\$ -	Program Cost Effectiveness (Page 1 of 3)
2 Annual kWh Savings	11,927,257	8,945,443	11,009,746	92%	0.550%	0.508%	\$ 33,354	\$ 41,692	\$ 28,658	0.000%	\$ -	Program Cost Effectiveness (Page 1 of 3)
3 Summer Peak Demand kW	882	573	946	107%	0.660%	0.708%	\$ 40,024	\$ 50,030	\$ 39,960	0.708%	\$ 39,960	Program Cost Effectiveness (Page 1 of 3)
4 Winter Peak Demand kW	1,111	722	1,281	115%	0.440%	0.507%	\$ 26,683	\$ 33,354	\$ 28,623	0.507%	\$ 28,623	Program Cost Effectiveness (Page 1 of 3)
5 Total Resource Benefits	\$ 15,335,372		17,946,536	117%								Present Value Benefits (Page 2 of 3)
6 Total Utility Costs <sup>1,2</sup>	\$ 6,064,297		5,644,837	93%								Program Cost Effectiveness (Page 1 of 3)
7 Net Benefits	\$ 9,271,075	\$ 6,953,306	\$ 12,301,700	133%	1.925%	2.406%	\$ 116,738	\$ 145,922	\$ 135,829	2.406%	\$ 135,829	Row 5 Minus Row 6
8 Total					5.500%	5.938%	\$ 333,536	\$ 416,920	\$ 335,192	3.621%	\$ 204,412	Sum of Rows 1, 2, 3, 4 & 7

	Granite State Test		Source
	Planned	Actual	
9 Total Benefits	\$ 16,312,966	\$ 18,430,379	Present Value Benefits (Page 2 of 3)
10 Performance Incentive	\$ 333,536	\$ 335,192	from row 8 above
11 Total Utility Costs	\$ 6,064,297	\$ 5,644,837	from row 6 above
12 Portfolio GST BCR	2.55	3.08	row 9 divided by rows 10+11

Costs, Benefits, and PI Expressed in 2021 Dollars.

<sup>1</sup> Note that in order to avoid a circular reference in the calculation of performance incentive, "Total Utility Costs" does not include the value of PI.

<b>Contractor/Consultant Expenses by State &amp; Country - 2021</b>			
<b>Country</b>	<b>State / Province</b>	<b>Total Expenses</b>	<b>Customer Rebate Portion</b>
US	AZ	\$ 1,016	\$ -
US	CA	\$ 285,170	\$ 148,594
US	CO	\$ 20,438	\$ -
US	CT	\$ 32,917	\$ -
US	IL	\$ 7,258	\$ -
US	MA	\$ 588,072	\$ 551,586
US	NH	\$ 1,975,861	\$ 1,513,718
US	NY	\$ 27,166	\$ -
US	OH	\$ 24,006	\$ -
US	RI	\$ 36,807	\$ 36,807
US	TX	\$ 106,518	\$ 18,297
US	VT	\$ 4,773	\$ 550
US	WI	\$ 178,862	\$ -
CA	Ontario	\$ 13,855	\$ -
<b>Total</b>		<b>\$ 3,302,718.42</b>	<b>\$ 2,269,552.52</b>

Notes:

Liberty (Electric) has provided the information as requested but notes that the data provided in and of itself does not accurately reflect the full impact of the programs at large. Some caveats include:

- The business address of a given contractor or vendor is not necessarily reflective of the location of the individual(s) who work with the NHSaves brand. For example, there are vendors with corporate addresses located outside of New Hampshire which have employees the Utilities contract and work with within New Hampshire.
- There are contractors who the Utilities work with who hire subcontractors from other entities to obtain materials and supplies or install and fulfill projects for customers.
- Contractor and vendor payments are not reflective of the full economic impact of the projects performed.
- Additional Federal dollars were invested into the income-eligible projects completed.

Contractor/Consultants by State & Country - 2021					
Vendor	Street	City	State	Zip Code	Country
ADM ASSOCIATES INC	3239 Ramos Circle	Sacramento	CA	95827	US
ANB SYSTEMS INC	4771 Sweetwater Blvd., Ste. 151	Sugarland	TX	77479	US
APEX ANALYTICS LLC	1717 Blubell Avenue	Boulder	CO	80302	US
ARC MECHANICAL CONTRACTORS INC	229 Depot Street	Bradford	NH	05033	US
ARCA RECYCLING, INC.	8051 S Willow Street	Manchester	NH	03103	US
ASSOCIATION OF ENERGY SERVICES PROFESSIONALS	15215 S. 48th Street, Ste. 170	Phoenix	AZ	85044	US
ATLANTIC ELECTRICAL DISTRIBUTORS	173 C Memorial Dr	Shrewsbury	MA	01545	US
CLEARRESULT CONSULTING INC.	50 Washington Street	Westborough	MA	01581	US
COHEN VENTURES INC. DBA ENERGY SOLUTIONS	449 15th St #400	Oakland	CA	94612	US
COMCAST CABLE COM MGMT LLC DBA EFFECTV	PO Box 415949	Boston	MA	02241	US
COMMUNITY DEVELOPMENT FINANCE AUTHORITY	14 Dixon Avenue, Ste. 102	Concord	NH	03301	US
Compressor Energy Services, LLC	395 Daniel Webster Hwy	Merrimack	NH	03054	US
DEFIANCE ELECTRIC	86 Chosen Vale Lane	Enfield	NH	03748	US
DMI - DEMAND MANAGEMENT INSTITUTE	300 Chestnut Street, Suite 150	Needham	MA	02492	US
E SOURCE COMPANIES LLC	1745 38th Street	Boulder	CO	80301	US
EFFICIENCY FORWARD, INC.	10 High Street, Ste. 10	Medford	MA	02155	US
EISENBERG, VITAL, & RYZE LLC	155 Dow Street, Ste. 301	Manchester	NH	03101	US
ENERGY CODE ADVISORS, LLC	24 Joppa Hill Road	Bedford	NH	03110	US
ENERGY FEDERATION INC	40 Washington Street, Ste 2000	Westborough	MA	01752	US
ENERGYX SOLUTIONS INC	212 King St. W, Ste. 600	Toronto	Ontario	60021	CA
EVERSOURCE	780 N Commercial Street	Manchester	NH	03101	US
FRANKLIN ENERGY SERVICES LLC	102 North Franklin Street	Port Washington	WI	53074	US
GATE CITY ELECTRIC LLC	31 Will Street	Nashua	NH	03060	US
GDS ASSOCIATES	1155 Elm Street, Suite 702	Manchester	NH	03101	US
GEOFFREY EMBREE	32 BANNER RD	Ottawa	Ontario	K2H 8L2	CA
GREEN MOUNTAIN ELECTRIC SUPPLY	356 Rathe Road	Colchester	VT	05446	US
HORIZON-RESIDENTIAL ENERGY SERVICES NH, LLC	75 South Main Street	Concord	NH	03301	US
ION LIGHTING DISTRIBUTION INC.	189 Front St	Chicopee	MA	01013	US
JOHN A. MONIZ ELECTRICAL CONTRACTOR INC.	752 Bark St	Swansea	MA	02777	US
KEMA INC.	5202 Paysphere Circle	Chicago	IL	60674	US
LAKES REGION COMMUNITY COLLEGE	379 Belmont Road	Laconia	NH	03246	US
LANSING BUILDING PRODUCTS NORTHEAST LLC	1400 Main Street	Waltham	MA	02451	US
LED CONVERSIONS INC.	50B Northwestern Drive	Salem	NH	03709	US
LIGHTING RETROFIT SERVICES, INC	234 Ballardvale Street, Unit 1	Wilmington	MA	01887	US
LONGCHAMPS ELECTRIC, INC.	700 Harvey Rd	Manchester	NH	03103	US
MANCHESTER RADIO GROUP WZID	500 Commercial Street	Manchester	NH	03101	US
MORGAN ELECTRIC LLC	372 Meriden Rd	Lebanon	NH	03766	US
NATIONAL RESOURCE MANAGEMENT INC	480 Neponset St Bldg 2	Canton	MA	02021	US
NEW HAMPSHIRE BUSINESSES FOR SOCIAL RESPONSIBILITY	24 Crown Hill Road	Atkinson	NH	03811	US
NEW HAMPSHIRE MEP	172 Pembroke Road	Concord	NH	03301	US
NEW HAMPSHIRE PUBLIC RADIO	PO Box 9645 - Dept UW	Manchester	NH	03108	US
NEW HAMPSHIRE SUSTAINABLE ENERGY ASSOCIATION DBA CLEAN ENERGY NH	14 Dixon Avenue, Ste 202	Concord	NH	03301	US
NH DEPARTMENT OF ENERGY	21 South Fruit Street, Ste. 10	Concord	NH	03301	US
NH SCHOOL ADMINISTRATORS ASSOCIATION	46 Donovan St, Bow Brook Pl Ste 3	Concord	NH	03301	US
NMR GROUP INC	50-2 Howard Street	Somerville	MA	02144	US
ORACLE AMERICA INC.	500 Oracle Pkwy	Redwood	CA	94065	US
PERFORMANCE SYSTEMS DEVELOPMENT	124 Brindley Street	Ithaca	NY	14850	US
PIQUETTE & HOWARD ELECTRIC SERVICE, INC.	222 Plaistow Road	Plaistow	NH	03865	US
PLYMOUTH AREA RENEWABLE ENERGY INITIATIVE	79 Highland Street	Plymouth	NH	03264	US
Process Energy Services LLC	2 Lafayette Rd	Londonderry	NH	03053	US
QUESTLINE, INC.	2025 Riverside Drive	Columbus	OH	43221	US
REMIS AMERICA, LLC	1000 Terminal Road	Fort Worth	TX	76106	US
RESILIENT BUILDINGS GROUP, INC.	46 S Main Street, Suite 7	Concord	NH	03301	US
RISE ENGINEERING	1341 Elmwood Avenue	Cranston	RI	02910	US
RIVER ENERGY ASSOCIATES	271 Albany Street	Fall River	MA	02720	US
SACCA ELECTRIC LLC	14 Pine Rd	Hudson	NH	03051	US
SONA ENERGY SOLUTIONS, LLC	8 Longview Road	Chelmsford	MA	01824	US
SOUTH MIDDLESEX OPPORTUNITY COUNCIL INC	7 Bishop Street	Framingham	MA	01702	US
SOUTHERN NEW HAMPSHIRE SERVICE INC	40 Pine Street	Manchester	NH	03103	US
SOUTHWESTERN COMMUNITY SERVICES	63 Community Way	Keene	NH	03431	US
STEVEN LANGLOIS DBA LANGLOIS ELECTRIC	19 Manchester Dr	Lebanon	NH	03766	US
SYNAPSE ENERGY ECONOMICS, INC	485 Massachusetts Avenue	Cambridge	MA	02139	US
THE NEW HAMPSHIRE CHAPTER OF THE AMERICAN INST OF ARCHITECTS	310 Marlboro Street, #2	Keene	NH	03431	US
TIM LATHAM DBA TIM LATHAM ELECTRICAL	380 March Hill Road	Walpole	NH	03608	US
TRC ENVIRONMENTAL CORPORATION	21 Griffin Road North	Windsor	CT	06095	US
TRI COUNTY COMMUNITY ACTION	30 Exchange Street	Berlin	NH	03570	US
VERMONT ENERGY EDUCATION PROGRAM DBA NHEEP	79 River Street	Montpelier	VT	05602	US
WENDCO OF NEW HAMPSHIRE, LLC	2121 Dover Road	Epsom	NH	03234	US
WESCO SERVICES DBA WESCO ENERGY SOLUTIONS	10755 Scripps Poway Parkway	San Diego	CA	92131	US
ZAANA-17 LLC	1105 Lakeview Avenue	Dracut	MA	01826	US

<b>Projects by Municipality - 2021</b>				
<b>City / Town</b>	<b>Number of Ratepayers per City / Town</b>	<b>Number of Participants<sup>1</sup></b>	<b>Spend (\$)</b>	<b>Spend (\$) per Ratepayer</b>
ACWORTH	197	55	\$2,298.41	\$11.67
ALSTEAD	1,103	323	\$30,867.52	\$27.99
ATKINSON	2	-	\$0.00	\$0.00
BATH	11	7	\$102.07	\$9.28
CANAAN	1,565	443	\$30,519.48	\$19.50
CHARLESTOWN	1,738	485	\$89,744.32	\$51.64
CHICHESTER	1	1	\$7.41	\$7.41
CORNISH	116	34	\$274.66	\$2.37
DERRY	136	61	\$13,645.55	\$100.33
DREWSVILLE	55	20	\$223.45	\$4.06
ENFIELD	2,687	701	\$50,785.97	\$18.90
ETNA	387	143	\$35,316.20	\$91.26
GRAFTON	18	1	\$7.41	\$0.41
HANOVER	3,220	1,405	\$385,978.39	\$119.87
LANGDON	290	87	\$25,489.77	\$87.90
LEBANON	8,715	1,916	\$1,362,713.80	\$156.36
MARLOW	6	1	\$7.41	\$1.24
MERIDEN	235	82	\$23,094.57	\$98.27
MONROE	240	81	\$4,760.66	\$19.84
ORANGE	33	11	\$81.55	\$2.47
PELHAM	6,008	388	\$326,400.91	\$54.33
PLAINFIELD	371	99	\$6,120.71	\$16.50
SALEM	15,522	6,522	\$1,053,902.19	\$67.90
SURRY	39	7	\$1,534.91	\$39.36
WALPOLE	2,097	566	\$122,284.01	\$58.31
WINDHAM	1,227	345	\$28,707.22	\$23.40
#N/A <sup>2</sup>	-	4,289	\$68,312.23	\$0.00
<b>Grand Total</b>	<b>46,019</b>	<b>18,072</b>	<b>\$3,663,180.80</b>	<b>\$79.60</b>

<sup>1</sup>Participant counts include Home Energy Report recipients

<sup>2</sup> Participant count reflects non-identifiable retail lighting



<b>Projects by Subsidy Level - 2021</b>			
<b>Subsidy (%)</b>	<b>Number of Projects<sup>1</sup></b>	<b>Total Project Cost</b>	<b>Total Incentive</b>
100%	14,065	\$ 1,309,220	\$ 1,309,220
80% - 99%	1,659	\$ 58,563	\$ 51,086
60% - 79%	657	\$ 1,131,690	\$ 835,548
40% - 59%	1,234	\$ 702,033	\$ 348,484
20% - 39%	220	\$ 1,230,962	\$ 324,649
1% - 19%	240	\$ 3,171,972	\$ 245,721
Total	18,075	\$ 7,604,439	\$ 3,114,708

<sup>1</sup> Number of projects include Home Energy Report recipients

NPV of EE Measures/Services Provided at No Cost					
Program	Subsidy %	Total Participants	Total Project Cost	Total Incentive	Analysis for 100% Incentive
2021 Energy Star Products	100%	4,587	\$363,652	\$363,652	The projects at 100% subsidy are those where the incentive provided is equal to the estimated incremental cost of upgrading from the standard efficiency appliance to the energy efficient model. Measures include heat pumps, clothes dryers, room AC, refrigerators, and air purifiers.
2021 Home Energy Assistance	100%	228	\$791,012	\$791,012	HEA projects are done at no cost to the customer.
2021 Home Energy Reports	100%	9,155	\$67,875	\$67,875	Customers receive personalized, energy analysis reports at no cost
2021 Home Performance w/Energy Star	100%	95	\$86,681	\$86,681	The projects at 100% subsidy are 'baseload' or Visual Audit projects where non-weatherization measure such as LED light bulbs, Wi-Fi thermostats, faucet aerators, and low-flow showerheads are directly installed at no cost to the customer.
<b>Total</b>		<b>14,065</b>	<b>\$1,309,220</b>	<b>\$1,309,220</b>	

Program Budget and Expenses by Category												
Plan or Actual	Year	Utility	Sector	Program	Evaluation	Internal Administration	Internal Implementation	Marketing	Rebates-Services	External Administration	Performance Incentive	Total
Actual	2016	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 9,251	\$ 3,529	\$ 40,534	\$ -	\$ 261,644	\$ -	\$ -	\$ 314,958
Actual	2016	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 11,419	\$ 4,388	\$ 15,731	\$ 2,405	\$ 52,044	\$ -	\$ -	\$ 85,987
Actual	2016	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 10,782	\$ 5,631	\$ 22,157	\$ 3,252	\$ 114,156	\$ -	\$ -	\$ 155,978
Actual	2016	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 6,242	\$ 2,972	\$ 36,425	\$ 11,405	\$ 171,603	\$ -	\$ -	\$ 228,648
Actual	2016	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 8,228	\$ 6,070	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,297
Actual	2016	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 18,299	\$ 5,735	\$ 96,653	\$ 4,902	\$ 546,112	\$ -	\$ -	\$ 671,701
Actual	2016	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 14,447	\$ 3,845	\$ 63,147	\$ 5,931	\$ 208,364	\$ -	\$ -	\$ 295,733
Actual	2016	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 7,088	\$ 1,243	\$ 23,792	\$ 1,239	\$ 129,680	\$ -	\$ -	\$ 163,042
Actual	2016	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 10,907	\$ 8,046	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,952
Actual	2016	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ -	\$ -	\$ -	\$ 1,600	\$ 8,864	\$ -	\$ -	\$ 10,464
Actual	2016	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 81,196	\$ 81,196
Actual	2016	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 114,780	\$ 114,780
<b>Actual</b>	<b>2016</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 96,663</b>	<b>\$ 41,460</b>	<b>\$ 298,439</b>	<b>\$ 30,732</b>	<b>\$ 1,492,466</b>	<b>\$ -</b>	<b>\$ 195,976</b>	<b>\$ 2,155,736</b>
Plan	2016	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 23,141	\$ 6,612	\$ 59,506	\$ -	\$ 241,330	\$ -	\$ -	\$ 330,589
Plan	2016	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 8,026	\$ 2,293	\$ 20,637	\$ 5,733	\$ 77,964	\$ -	\$ -	\$ 114,653
Plan	2016	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 13,133	\$ 3,752	\$ 33,770	\$ 9,381	\$ 127,577	\$ -	\$ -	\$ 187,613
Plan	2016	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 15,322	\$ 4,378	\$ 39,399	\$ 10,944	\$ 148,840	\$ -	\$ -	\$ 218,882
Plan	2016	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 10,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,500
Plan	2016	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 45,367	\$ 12,962	\$ 116,658	\$ 32,405	\$ 440,709	\$ -	\$ -	\$ 648,101
Plan	2016	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 29,489	\$ 8,425	\$ 75,828	\$ 21,063	\$ 286,461	\$ -	\$ -	\$ 421,266
Plan	2016	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 11,465	\$ 3,276	\$ 29,482	\$ 8,189	\$ 111,376	\$ -	\$ -	\$ 163,788
Plan	2016	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 24,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,500
Plan	2016	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ -	\$ -	\$ -	\$ 1,620	\$ 9,181	\$ -	\$ -	\$ 10,802
Plan	2016	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,668	\$ 64,668
Plan	2016	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95,134	\$ 95,134
<b>Plan</b>	<b>2016</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 180,942</b>	<b>\$ 41,698</b>	<b>\$ 375,280</b>	<b>\$ 89,335</b>	<b>\$ 1,443,437</b>	<b>\$ -</b>	<b>\$ 159,802</b>	<b>\$ 2,290,495</b>
Actual	2017	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 13,421	\$ 4,750	\$ 57,788	\$ 10,163	\$ 266,151	\$ 715	\$ -	\$ 352,987
Actual	2017	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 7,958	\$ 902	\$ 12,597	\$ 4,031	\$ 27,652	\$ 219	\$ -	\$ 53,360
Actual	2017	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 6,468	\$ 3,227	\$ 11,971	\$ 8,948	\$ 119,569	\$ 338	\$ -	\$ 150,522
Actual	2017	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 9,335	\$ 3,656	\$ 45,632	\$ 13,718	\$ 179,582	\$ 438	\$ -	\$ 252,360
Actual	2017	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 6,410	\$ 3,847	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,257
Actual	2017	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 24,726	\$ 7,102	\$ 118,409	\$ 17,463	\$ 553,372	\$ 1,281	\$ -	\$ 722,353
Actual	2017	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 24,272	\$ 4,451	\$ 75,402	\$ 11,390	\$ 306,994	\$ 812	\$ -	\$ 423,319
Actual	2017	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 9,611	\$ 1,338	\$ 29,350	\$ 4,471	\$ 116,407	\$ 328	\$ -	\$ 161,505
Actual	2017	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 8,497	\$ 5,099	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,597
Actual	2017	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ -	\$ 575	\$ -	\$ -	\$ 16,174	\$ -	\$ -	\$ 16,748
Actual	2017	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,812	\$ 51,812
Actual	2017	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 91,955	\$ 91,955
<b>Actual</b>	<b>2017</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 110,699</b>	<b>\$ 34,946</b>	<b>\$ 351,149</b>	<b>\$ 70,184</b>	<b>\$ 1,585,900</b>	<b>\$ 4,130</b>	<b>\$ 143,767</b>	<b>\$ 2,300,775</b>
Plan	2017	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 19,608	\$ 9,804	\$ 47,060	\$ 19,608	\$ 296,087	\$ -	\$ -	\$ 392,168
Plan	2017	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 6,002	\$ 3,001	\$ 14,404	\$ 6,002	\$ 90,623	\$ -	\$ -	\$ 120,031
Plan	2017	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 9,275	\$ 4,638	\$ 22,260	\$ 9,275	\$ 140,054	\$ -	\$ -	\$ 185,503
Plan	2017	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 12,003	\$ 6,002	\$ 28,807	\$ 12,003	\$ 181,247	\$ -	\$ -	\$ 240,062
Plan	2017	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 8,550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,550
Plan	2017	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 35,152	\$ 10,546	\$ 87,881	\$ 35,152	\$ 534,318	\$ -	\$ -	\$ 703,050
Plan	2017	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 22,263	\$ 6,679	\$ 55,658	\$ 22,263	\$ 338,401	\$ -	\$ -	\$ 445,265
Plan	2017	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 9,000	\$ 2,700	\$ 22,499	\$ 9,000	\$ 136,793	\$ -	\$ -	\$ 179,990
Plan	2017	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 19,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,950
Plan	2017	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 1,172	\$ 352	\$ 2,929	\$ 1,172	\$ 17,811	\$ -	\$ -	\$ 23,435
Plan	2017	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52,047	\$ 52,047
Plan	2017	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 75,443	\$ 75,443
<b>Plan</b>	<b>2017</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 142,975</b>	<b>\$ 43,720</b>	<b>\$ 281,499</b>	<b>\$ 114,475</b>	<b>\$ 1,735,334</b>	<b>\$ -</b>	<b>\$ 127,490</b>	<b>\$ 2,445,494</b>
Actual	2018	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 17,970	\$ 12,559	\$ 14,310	\$ 11,646	\$ 262,918	\$ 244	\$ -	\$ 319,646

Plan or Actual	Year	Utility	Sector	Program	Evaluation	Internal Administration	Internal Implementation	Marketing	Rebates-Services	External Administration	Performance Incentive	Total
Actual	2018	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 5,430	\$ 7,695	\$ 15,455	\$ 3,378	\$ 109,937	\$ 74	\$ -	\$ 141,968
Actual	2018	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 7,039	\$ 3,472	\$ 13,317	\$ 4,871	\$ 169,539	\$ 96	\$ -	\$ 198,334
Actual	2018	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 26,375	\$ 3,535	\$ 14,024	\$ 11,299	\$ 187,570	\$ 104	\$ -	\$ 242,908
Actual	2018	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 4,939	\$ 4,159	\$ 8,065	\$ 2,472	\$ 145,000	\$ 67	\$ -	\$ 164,703
Actual	2018	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 14,926	\$ 1,260	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,186
Actual	2018	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 30,722	\$ 9,616	\$ 91,241	\$ 12,684	\$ 595,088	\$ 415	\$ -	\$ 739,766
Actual	2018	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 24,962	\$ 7,958	\$ 61,547	\$ 10,044	\$ 447,204	\$ 316	\$ -	\$ 552,031
Actual	2018	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 6,079	\$ 1,378	\$ 18,651	\$ 2,331	\$ 139,469	\$ 76	\$ -	\$ 167,985
Actual	2018	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 19,786	\$ 1,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,456
Actual	2018	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 231	\$ 19	\$ 24	\$ 272	\$ 11,549	\$ 15	\$ -	\$ 12,110
Actual	2018	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,902	\$ 70,902
Actual	2018	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,106	\$ 90,106
<b>Actual</b>	<b>2018</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 158,460</b>	<b>\$ 53,321</b>	<b>\$ 236,634</b>	<b>\$ 58,998</b>	<b>\$ 2,068,274</b>	<b>\$ 1,405</b>	<b>\$ 161,008</b>	<b>\$ 2,738,100</b>
Plan	2018	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 22,818	\$ 16,107	\$ 69,797	\$ 21,476	\$ 405,683	\$ 1,017	\$ -	\$ 536,898
Plan	2018	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 6,895	\$ 4,867	\$ 21,091	\$ 6,489	\$ 122,585	\$ 307	\$ -	\$ 162,235
Plan	2018	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 8,938	\$ 6,309	\$ 27,340	\$ 8,412	\$ 158,907	\$ 399	\$ -	\$ 210,304
Plan	2018	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 9,704	\$ 6,850	\$ 29,683	\$ 9,133	\$ 172,528	\$ 433	\$ -	\$ 228,331
Plan	2018	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 1,850	\$ 1,250	\$ 4,850	\$ 1,750	\$ 137,000	\$ 250	\$ -	\$ 146,950
Plan	2018	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 19,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,500
Plan	2018	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 38,788	\$ 27,380	\$ 118,645	\$ 36,506	\$ 689,603	\$ 1,729	\$ -	\$ 912,651
Plan	2018	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 29,579	\$ 20,879	\$ 90,477	\$ 27,839	\$ 525,885	\$ 1,319	\$ -	\$ 695,978
Plan	2018	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 7,130	\$ 5,033	\$ 21,808	\$ 6,710	\$ 126,756	\$ 318	\$ -	\$ 167,755
Plan	2018	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 45,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,500
Plan	2018	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 1,395	\$ 985	\$ 4,268	\$ 1,313	\$ 24,806	\$ 62	\$ -	\$ 32,829
Plan	2018	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 71,732	\$ 71,732
Plan	2018	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102,009	\$ 102,009
<b>Plan</b>	<b>2018</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 192,097</b>	<b>\$ 89,659</b>	<b>\$ 387,957</b>	<b>\$ 119,629</b>	<b>\$ 2,363,753</b>	<b>\$ 5,835</b>	<b>\$ 173,741</b>	<b>\$ 3,332,671</b>
Actual	2019	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 32,298	\$ 50,253	\$ 42,822	\$ 11,171	\$ 533,885	\$ 93	\$ -	\$ 670,522
Actual	2019	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 8,662	\$ 8,705	\$ 9,306	\$ 3,608	\$ 137,659	\$ 25	\$ -	\$ 167,964
Actual	2019	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 16,611	\$ 26,828	\$ 21,123	\$ 8,574	\$ 241,239	\$ 48	\$ -	\$ 314,424
Actual	2019	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 13,637	\$ 6,141	\$ 14,851	\$ 5,759	\$ 278,041	\$ 18	\$ -	\$ 318,447
Actual	2019	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 3,022	\$ 3,015	\$ 5,230	\$ 2,055	\$ 117,595	\$ 8	\$ -	\$ 130,924
Actual	2019	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 17,940	\$ 628	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,568
Actual	2019	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 56,697	\$ 13,725	\$ 96,804	\$ 14,281	\$ 786,599	\$ 166	\$ -	\$ 968,272
Actual	2019	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 40,422	\$ 12,184	\$ 78,836	\$ 13,939	\$ 740,628	\$ 118	\$ -	\$ 886,127
Actual	2019	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 7,693	\$ 2,481	\$ 14,509	\$ 2,174	\$ 139,966	\$ 20	\$ -	\$ 166,842
Actual	2019	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 23,781	\$ 833	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,614
Actual	2019	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 2,943	\$ 1,394	\$ 7,651	\$ 438	\$ 41,882	\$ 8	\$ -	\$ 54,316
Actual	2019	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 89,337	\$ 89,337
Actual	2019	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 106,662	\$ 106,662
<b>Actual</b>	<b>2019</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 223,707</b>	<b>\$ 126,185</b>	<b>\$ 291,131</b>	<b>\$ 62,000</b>	<b>\$ 3,017,494</b>	<b>\$ 503</b>	<b>\$ 196,000</b>	<b>\$ 3,917,019</b>
Plan	2019	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 34,517	\$ 23,102	\$ 89,745	\$ 27,614	\$ 514,309	\$ 1,060	\$ -	\$ 690,348
Plan	2019	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 9,257	\$ 6,195	\$ 24,068	\$ 7,406	\$ 137,928	\$ 284	\$ -	\$ 185,138
Plan	2019	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 17,753	\$ 11,882	\$ 46,157	\$ 14,202	\$ 264,515	\$ 545	\$ -	\$ 355,054
Plan	2019	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 15,081	\$ 10,093	\$ 39,210	\$ 12,064	\$ 224,701	\$ 463	\$ -	\$ 301,612
Plan	2019	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 2,550	\$ 1,550	\$ 5,300	\$ 2,150	\$ 117,500	\$ 250	\$ -	\$ 129,300
Plan	2019	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 19,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,500
Plan	2019	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 61,561	\$ 41,201	\$ 160,057	\$ 49,248	\$ 917,253	\$ 1,891	\$ -	\$ 1,231,211
Plan	2019	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 43,889	\$ 29,374	\$ 114,112	\$ 35,111	\$ 653,949	\$ 1,348	\$ -	\$ 877,784
Plan	2019	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 8,352	\$ 5,590	\$ 21,716	\$ 6,682	\$ 124,451	\$ 257	\$ -	\$ 167,048
Plan	2019	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 45,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,500
Plan	2019	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 2,919	\$ 1,953	\$ 7,588	\$ 2,335	\$ 43,488	\$ 90	\$ -	\$ 58,373
Plan	2019	Liberty - Electric	A - Residential	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92,452	\$ 92,452
Plan	2019	Liberty - Electric	C - Commercial & Industrial	Performance Incentive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,895	\$ 130,895
<b>Plan</b>	<b>2019</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 260,878</b>	<b>\$ 130,941</b>	<b>\$ 507,954</b>	<b>\$ 156,813</b>	<b>\$ 2,998,093</b>	<b>\$ 6,189</b>	<b>\$ 223,348</b>	<b>\$ 4,284,216</b>
Actual	2020	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 40,458	\$ 7,915	\$ 120,643	\$ 17,740	\$ 730,624	\$ 4,197	\$ -	\$ 921,576
Actual	2020	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 12,092	\$ 2,346	\$ 29,769	\$ 5,257	\$ 125,543	\$ 1,254	\$ -	\$ 176,261
Actual	2020	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 19,429	\$ 3,174	\$ 36,611	\$ 7,112	\$ 496,887	\$ 2,015	\$ -	\$ 565,229
Actual	2020	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 12,369	\$ 2,346	\$ 23,854	\$ 10,225	\$ 489,463	\$ 1,283	\$ -	\$ 539,539
Actual	2020	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 4,012	\$ 1,315	\$ 9,182	\$ -	\$ 90,502	\$ 386	\$ -	\$ 105,397

Plan or Actual	Year	Utility	Sector	Program	Evaluation	Internal Administration	Internal Implementation	Marketing	Rebates-Services	External Administration	Performance Incentive	Total
Actual	2020	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 16,508	\$ 454	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,962
Actual	2020	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 63,125	\$ 12,427	\$ 147,269	\$ 19,697	\$ 1,371,224	\$ 6,631	\$ -	\$ 1,620,373
Actual	2020	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 44,074	\$ 8,618	\$ 106,338	\$ 12,566	\$ 1,325,891	\$ 5,634	\$ -	\$ 1,503,121
Actual	2020	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 5,083	\$ 1,492	\$ 11,420	\$ 1,382	\$ 145,536	\$ 449	\$ -	\$ 165,361
Actual	2020	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 21,882	\$ 602	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,484
Actual	2020	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 2,665	\$ 974	\$ 7,092	\$ 800	\$ 17,388	\$ 254	\$ -	\$ 29,173
Actual	2020	Liberty - Electric	D - Portfolio	Performance Incentive - Portfolio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 320,987	\$ 320,987
<b>Actual</b>	<b>2020</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 241,698</b>	<b>\$ 41,662</b>	<b>\$ 492,178</b>	<b>\$ 74,778</b>	<b>\$ 4,793,058</b>	<b>\$ 22,103</b>	<b>\$ 320,987</b>	<b>\$ 5,986,464</b>
Plan	2020	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 60,092	\$ 39,661	\$ 156,240	\$ 60,092	\$ 883,359	\$ 2,404	\$ -	\$ 1,201,849
Plan	2020	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 17,960	\$ 11,853	\$ 46,695	\$ 3,592	\$ 278,376	\$ 718	\$ -	\$ 359,195
Plan	2020	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 28,858	\$ 17,892	\$ 72,145	\$ 35,056	\$ 422,056	\$ 1,154	\$ -	\$ 577,162
Plan	2020	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 18,372	\$ 12,125	\$ 44,092	\$ 12,860	\$ 279,251	\$ 735	\$ -	\$ 367,436
Plan	2020	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 6,065	\$ 4,003	\$ 15,163	\$ -	\$ 95,827	\$ 243	\$ -	\$ 121,300
Plan	2020	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 21,646	\$ 1,623	\$ -	\$ -	\$ -	\$ 3,788	\$ -	\$ 27,057
Plan	2020	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 94,941	\$ 62,661	\$ 227,859	\$ 37,976	\$ 1,471,589	\$ 3,798	\$ -	\$ 1,898,824
Plan	2020	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 60,444	\$ 39,893	\$ 145,065	\$ 24,177	\$ 936,876	\$ 2,418	\$ -	\$ 1,208,872
Plan	2020	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 8,336	\$ 5,502	\$ 21,673	\$ 8,336	\$ 122,534	\$ 333	\$ -	\$ 166,713
Plan	2020	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 50,507	\$ 3,788	\$ -	\$ -	\$ -	\$ 8,839	\$ -	\$ 63,134
Plan	2020	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 3,638	\$ 2,401	\$ 9,458	\$ 3,638	\$ 53,475	\$ 146	\$ -	\$ 72,756
Plan	2020	Liberty - Electric	D - Portfolio	Performance Incentive - Portfolio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 333,536	\$ 333,536
<b>Plan</b>	<b>2020</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 370,858</b>	<b>\$ 201,403</b>	<b>\$ 738,390</b>	<b>\$ 185,728</b>	<b>\$ 4,543,343</b>	<b>\$ 24,575</b>	<b>\$ 333,536</b>	<b>\$ 6,397,833</b>
Actual	2021	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 24,357	\$ 11,383	\$ 90,591	\$ 18,643	\$ 982,737	\$ 610	\$ -	\$ 1,128,321
Actual	2021	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 8,747	\$ 3,571	\$ 26,738	\$ 5,169	\$ 113,379	\$ 1,022	\$ -	\$ 158,626
Actual	2021	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 11,697	\$ 5,043	\$ 43,358	\$ 9,155	\$ 548,757	\$ 293	\$ -	\$ 618,302
Actual	2021	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 7,446	\$ 5,613	\$ 28,941	\$ 5,288	\$ 446,317	\$ 187	\$ -	\$ 493,790
Actual	2021	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 2,246	\$ 2,792	\$ 6,038	\$ -	\$ 67,875	\$ 44	\$ -	\$ 78,995
Actual	2021	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 12,656	\$ 491	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,147
Actual	2021	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 39,357	\$ 31,719	\$ 128,587	\$ 30,741	\$ 1,108,668	\$ 964	\$ -	\$ 1,340,036
Actual	2021	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 25,214	\$ 11,139	\$ 112,359	\$ 19,965	\$ 1,438,530	\$ 792	\$ -	\$ 1,608,000
Actual	2021	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 2,783	\$ 2,180	\$ 9,587	\$ 1,889	\$ 150,257	\$ 44	\$ -	\$ 166,740
Actual	2021	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 16,777	\$ 651	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,428
Actual	2021	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 1,508	\$ 1,778	\$ 7,006	\$ 1,282	\$ 10,409	\$ 37	\$ -	\$ 22,021
Actual	2021	Liberty - Electric	D - Portfolio	Performance Incentive - Portfolio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 335,189	\$ 335,189
<b>Actual</b>	<b>2021</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 152,787</b>	<b>\$ 76,360</b>	<b>\$ 453,205</b>	<b>\$ 92,131</b>	<b>\$ 4,866,928</b>	<b>\$ 3,994</b>	<b>\$ 335,189</b>	<b>\$ 5,980,595</b>
Plan	2021	Liberty - Electric	B - Low-Income	B1 - Home Energy Assistance	\$ 60,092	\$ 61,294	\$ 88,937	\$ 30,046	\$ 959,076	\$ 2,404	\$ -	\$ 1,201,849
Plan	2021	Liberty - Electric	A - Residential	A1 - Energy Star Homes	\$ 17,960	\$ 18,319	\$ 26,221	\$ 8,980	\$ 286,997	\$ 718	\$ -	\$ 359,195
Plan	2021	Liberty - Electric	A - Residential	A2 - Home Performance with Energy Star	\$ 28,858	\$ 29,435	\$ 42,133	\$ 14,429	\$ 461,152	\$ 1,154	\$ -	\$ 577,162
Plan	2021	Liberty - Electric	A - Residential	A3 - Energy Star Products	\$ 18,372	\$ 18,739	\$ 26,823	\$ 9,186	\$ 293,581	\$ 735	\$ -	\$ 367,436
Plan	2021	Liberty - Electric	A - Residential	A4 - Residential Behavior	\$ 6,065	\$ 3,396	\$ 3,639	\$ 1,213	\$ 106,744	\$ 243	\$ -	\$ 121,300
Plan	2021	Liberty - Electric	A - Residential	A6b - Res ISO Forward Capacity Market Expenses	\$ 24,811	\$ 758	\$ 1,488	\$ -	\$ -	\$ -	\$ -	\$ 27,057
Plan	2021	Liberty - Electric	C - Commercial & Industrial	C1 - Large Business Energy Solutions	\$ 94,941	\$ 96,840	\$ 138,614	\$ 47,471	\$ 1,517,160	\$ 3,798	\$ -	\$ 1,898,823
Plan	2021	Liberty - Electric	C - Commercial & Industrial	C2 - Small Business Energy Solutions	\$ 60,444	\$ 61,652	\$ 88,248	\$ 30,222	\$ 965,889	\$ 2,418	\$ -	\$ 1,208,872
Plan	2021	Liberty - Electric	C - Commercial & Industrial	C3 - Municipal Energy Solutions	\$ 8,336	\$ 8,502	\$ 12,170	\$ 4,168	\$ 133,204	\$ 333	\$ -	\$ 166,713
Plan	2021	Liberty - Electric	C - Commercial & Industrial	C6b - C&I ISO Forward Capacity Market Expenses	\$ 57,894	\$ 1,768	\$ 3,472	\$ -	\$ -	\$ -	\$ -	\$ 63,134
Plan	2021	Liberty - Electric	C - Commercial & Industrial	C6c - C&I Education	\$ 3,638	\$ 3,711	\$ 5,311	\$ 1,819	\$ 58,132	\$ 146	\$ -	\$ 72,756
Plan	2021	Liberty - Electric	D - Portfolio	Performance Incentive - Portfolio	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 333,536	\$ 333,536
<b>Plan</b>	<b>2021</b>	<b>Liberty - Electric</b>	<b>Total Portfolio</b>		<b>\$ 381,410</b>	<b>\$ 304,415</b>	<b>\$ 437,056</b>	<b>\$ 147,533</b>	<b>\$ 4,781,934</b>	<b>\$ 11,948</b>	<b>\$ 333,536</b>	<b>\$ 6,397,833</b>

Note: Liberty (Electric) did not expend any program dollars on "Subsidiaries", as the Company does not have any subsidiaries.

Liberty (Electric)  
NHPUC Docket No. IR 22-042  
2021 Program Year Compliance Filing  
Order No. 26,621, Report 6

<b>Program Funding by Category</b>				
<b>Plan or Actual</b>	<b>Year</b>	<b>Utility</b>	<b>Category</b>	<b>Amount</b>
Plan	2016	Liberty - Electric	System Benefits Charge	\$1,714,102
Plan	2016	Liberty - Electric	Carryforward	\$147,654
Plan	2016	Liberty - Electric	RGGI	\$218,739
Plan	2016	Liberty - Electric	FCM	\$210,000
<b>Plan</b>	<b>2016</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$2,290,495</b>
Actual	2016	Liberty - Electric	System Benefits Charge	\$1,638,441
Actual	2016	Liberty - Electric	RGGI Funding	\$195,761
Actual	2016	Liberty - Electric	FCM Payments	\$213,930
Actual	2016	Liberty - Electric	Interest	\$9,447
<b>Plan</b>	<b>2016</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$2,057,580</b>
Plan	2017	Liberty - Electric	System Benefits Charge	\$1,874,309
Plan	2017	Liberty - Electric	Carryforward	\$132,282
Plan	2017	Liberty - Electric	RGGI	\$221,401
Plan	2017	Liberty - Electric	FCM	\$217,502
<b>Plan</b>	<b>2017</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$2,445,494</b>
Actual	2017	Liberty - Electric	System Benefits Charge	\$1,761,647
Actual	2017	Liberty - Electric	RGGI Funding	\$215,199
Actual	2017	Liberty - Electric	FCM Payments	\$448,999
Actual	2017	Liberty - Electric	Interest	\$15,295
<b>Plan</b>	<b>2017</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$2,441,140</b>
Plan	2018	Liberty - Electric	System Benefits Charge	\$2,486,071
Plan	2018	Liberty - Electric	Carryforward	\$22,660
Plan	2018	Liberty - Electric	RGGI	\$217,087
Plan	2018	Liberty - Electric	FCM	\$606,853
<b>Plan</b>	<b>2018</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$3,332,671</b>
Actual	2018	Liberty - Electric	System Benefits Charge	\$2,494,292
Actual	2018	Liberty - Electric	RGGI Funding	\$210,395
Actual	2018	Liberty - Electric	FCM Payments	\$669,230
Actual	2018	Liberty - Electric	Interest	\$44,241
<b>Plan</b>	<b>2018</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$3,418,158</b>
Plan	2019	Liberty - Electric	System Benefits Charge	\$3,424,682
Plan	2019	Liberty - Electric	Carryforward	\$13,024
Plan	2019	Liberty - Electric	RGGI	\$213,985
Plan	2019	Liberty - Electric	FCM	\$632,524
<b>Plan</b>	<b>2019</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$4,284,216</b>
Actual	2019	Liberty - Electric	System Benefits Charge	\$3,311,243
Actual	2019	Liberty - Electric	RGGI Funding	\$216,196
Actual	2019	Liberty - Electric	FCM Payments	\$738,156
Actual	2019	Liberty - Electric	Interest	\$91,899
<b>Plan</b>	<b>2019</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$4,357,494</b>

Plan or Actual	Year	Utility	Category	Amount
Plan	2020	Liberty - Electric	System Benefits Charge	\$4,882,641
Plan	2020	Liberty - Electric	Carryforward	\$693,083
Plan	2020	Liberty - Electric	RGGI	\$212,954
Plan	2020	Liberty - Electric	FCM	\$609,155
<b>Plan</b>	<b>2020</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$6,397,833</b>
Actual	2020	Liberty - Electric	System Benefits Charge	\$4,614,349
Actual	2020	Liberty - Electric	RGGI Funding	\$214,280
Actual	2020	Liberty - Electric	FCM Payments	\$623,179
Actual	2020	Liberty - Electric	Interest	\$76,676
<b>Plan</b>	<b>2020</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$5,528,484</b>
Plan	2021	Liberty - Electric	System Benefits Charge	\$4,882,641
Plan	2021	Liberty - Electric	Carryforward	\$693,083
Plan	2021	Liberty - Electric	RGGI	\$212,954
Plan	2021	Liberty - Electric	FCM	\$609,155
<b>Plan</b>	<b>2021</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$6,397,833</b>
Actual	2021	Liberty - Electric	System Benefits Charge	\$4,762,864
Actual	2021	Liberty - Electric	RGGI Funding	\$217,037
Actual	2021	Liberty - Electric	FCM Payments	\$599,079
Actual	2021	Liberty - Electric	Interest	\$60,747
<b>Plan</b>	<b>2021</b>	<b>Liberty - Electric</b>	<b>Total</b>	<b>\$5,639,727</b>

<b>HEA Projects, By Incentive Level - 2021</b>		
<b>Rebate Range</b>	<b>Owner Occupied Dwelling</b>	<b>Renter Occupied Dwelling</b>
\$0-\$9K	7	315
\$9K-\$12K	1	2
\$12K-\$15K	1	0
\$15K+	11	8

Notes

- (1) The Company has not historically required internal tracking of renter vs. owner-occupied projects, and therefore cannot guarantee the accuracy of this field.
- (2) It is assumed by the Utilities that 100% of the benefits from these projects flow to the occupant of the home.



HEA Projects, Incentive Above \$15,000 - 2021					
Project	Sq Ft	Dwelling Type	Owner/Renter	Heating System Replacement	Details
1	1,711	Multi-family	Renter	N	All common space overhead lighting. Approx 125 new interior and exterior reduced wattage fixtures w/ timers and occupancy sensors, disposal of old; 114 dwelling units at property
2	1,250	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space and minimized <b>total heating load; 2 dwelling units</b>
3	1,250	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space w/ Minimal <b>heating load; 2 dwelling units</b>
4	1,089	Multi-family	Renter	N	All common space overhead lighting. New interior and exterior reduced wattage fixtures w/ timers and occupancy sensors, reduced wattage emergency exit lights, disposal of old; 40 dwelling units at property
5	1,008	Single family	Owner	Y	Comprehensive weatherization, new heating boiler installed
6	950	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space and minimized <b>total heating load; 4 dwelling unit</b>
7	950	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space and minimized <b>total heating load; 4 dwelling unit</b>
8	950	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space and minimized <b>total heating load; 4 dwelling unit</b>
9	950	Multi-family	Renter	N	Advanced wall insulation, window replacements, advanced flashing for durability and moisture resistance. Doubled cond.space and minimized <b>total heating load; 4 dwelling unit</b>
10	1,693	Single family	Owner	Y	Comprehensive weatherization, new heating furnace, required new A/C system.
11	1,302	Single family	Owner	Y	Comprehensive weatherization, new heating boiler installed
12	1,176	Single family	Owner	Y	Comprehensive weatherization, "No heat" situation, new heating boiler installed
13	1,973	Single family	Owner	Y	Comprehensive weatherization, new heating boiler installed
14	1,056	Single family	Owner	N	Comprehensive weatherization, including full ext. wall insulation, ventilation measures w/ heavy licensed electrical repair
15	784	Single family	Owner	N	Substantial renovation including windows, attic measures, spray foam flooring,
16	2,456	Single family	Owner	Y	Comprehensive weatherization, "No heat" situation, new heating boiler installed
17	1,094	Single family	Owner	N	Comprehensive weatherization, including full ext. wall insulation, ventilation measures
18	924	Single family	Owner	Y	Comprehensive weatherization, Mobile home, complete belly rebuild, new water heater, ventilation and safety measures including furnace cabinet louver door for pressure reduction
19	938	Single family	Owner	Y	Substantial renovation including belly and ceiling insulation, air sealing, ventilation, new furnace and lg. refrigerator.

**Template for the Annual Certification of Accuracy of Measurement and Verification Documents Form – to be completed and signed by the Lead Participant and returned to ISO-NE by May 25, 2021**

In accordance with the ISO-NE requirement to annually provide a statement to certify the accuracy of the performance of Demand Capacity Resources I hereby certify:

- that the Demand Capacity Resource projects for which the Project Sponsor is requesting compensation continue to perform in accordance with the submitted Measurement and Verification Documents reviewed by the ISO
- that the calculation of the demand reduction performance complies with the minimum statistical significance requirements described in Section 7.2.2 of Manual MVDR
- that compliance with the submitted Measurement and Verification Plan was reviewed by the independent third party listed here

ADM Associates, Inc.  
Curtis Robbins  
3239 Romas Circle  
1-775-229-4433  
Sacramento, CA 95827  
Curtis.robbsins@admenergy.com

- that for projects for which I cannot certify compliance with the approved Measurement and Verification Plan or, for projects using statistical sampling where there are deviations from minimum statistical significance requirements, the corresponding projects have been specified in the independent third party report included with this certification and are listed here:

Included with this certification is a copy of the detailed audit report as well as the supporting documentation that was used in conducting the audit/evaluation and developing the certification.

Signed

Eric M Stanley  
Authorized Market Participant Signature

May 17, 2021  
Date

Title Manger, Energy Efficiency and Customer Programs  
Print Name Eric Stanley  
Phone 603-216-3602  
Email Eric.Stanley@libertyutilities.com

# ISO-NE Forward Capacity Market Annual Certification

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*Prepared for:*  
*Liberty Utilities (Granite State Electric)*

*May 2021*

*Prepared by:*



*ADM Associates, Inc.*

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## INTRODUCTION

This report presents the findings of the annual measurement and verification (M&V) certification for the Independent System Operator – New England Forward Capacity Market (ISO-NE-FCM). The estimates provided represent the statistical accuracy of demand reduction values (DRVs) available for the twelfth ISO-NE Forward Capacity Auction (FCA12). Estimates are for eligible equipment that has been installed due to energy efficiency program participation. Eligible measures are considered that have not reached the end of their effective useful life as of June 1, 2021. The statistical accuracy of the DRVs complies with the requirements as specified in ISO-NE Measurement and Verification of On-Peak Demand Resources and Seasonal Peak Demand Resources manual (M-MVDR) for ISO-NE-FCM submittal. Certification of DRVs was accomplished through a program data review, measure specific algorithm review, a verification of a sample of projects and a statistical analysis. Certification ensures offerings are within 10% precision at an 80% confidence interval.

Liberty's demand reduction calculation methodology, as described in Liberty's M&V Plan, determines gross kilowatt reduction (kW) through equipment verification, short-term on-site monitoring, and industry approved engineering calculations. Gross kW values are adjusted based on stipulated factors from the public utility commission (PUC) approved benefit cost model. DRVs are evaluated through a state-wide third-party evaluation effort.

## PROGRAM DATA REVIEW

Certification for ISO-NE includes the review of M&V practices as specified in the ISO-NE M-MVDR. As described in Liberty's M&V plan, energy and demand savings are generated by accounting for data associated with every installed measure or groups of installed measures, such as upstream markdowns. The summation of measures installed comprises the DRV estimate. Liberty performs quality controls of data, including program administrator staff review, to identify outliers, missing data, and determine eligibility. All tracking system data and supporting data are available at Liberty for audit purposes.

ADM conducted a review of the program tracking data, measure specific gross demand reduction algorithms, and adjusted gross stipulations. Program tracking data was reviewed for accuracy and consistency across data fields such as business sector, measure life, and program classification.

The provided program tracking data underwent a series of checks for completeness and systematic errors that can often arise from developing a subset of program information. ADM did not find any systematic issues with the provided program tracking data.

## SAMPLE PROJECT VERIFICATION

Verification of DRV accuracy was achieved through stratified sampling across sector types Residential, Low Income, and Commercial. There has been no demand reduction from the low-income sector since the FCA11 certification. Statistical representation of the population was achieved through determination of a sample size consistent with the ISO-NE M-MVDR. Projects were selected randomly by strata, with three strata based on winter kW for commercial lighting, two strata based on winter kW for commercial non-lighting, and two strata for each non-commercial program based on winter kW. There were 13 strata in total accounting for measures within 26 sampled projects. Due to the nature of program tracking data, a census review was conducted for new Energy Star Products lighting measures. This covered the classifications of upstream lighting measures. With these measures considered as sampled, the sample size increased to 259; however, for extrapolation purposes a sample size of 26 was considered.

### Residential

Max peak demand reduction for residential projects was verified through a review of the applicable measure algorithms from the approved benefit cost model and industry standard references. Most algorithms were consistent with the Massachusetts Technical Reference Manual (MA TRM). Determination of adjustments to gross demand reduction (In-Service Rates, Realization Rates, Net-to-gross Rates) was completed using stipulations from Liberty's benefit cost model.

Determination of winter and summer peak demand reduction factors are driven by measure level load shapes. ADM has reviewed the factors derived from load shapes to represent the winter and summer On-Peak periods to check for relevance. Load shapes were modified since the FCA11 analysis and prove to be reasonable.

ADM reviewed and found consistency with industry standards for the gross kW, adjusted gross summer kW, and adjusted gross winter kW of the following measure types:

- LED Lighting
- Dehumidifier
- Primary refrigerator recycling
- Secondary refrigerator recycling
- Mini-split heat pumps.
- Central Air Source Heat Pump (ASHP)
- Heat Pump Water Heater (HPWH)
- ECM Motor for circulating pump

### Commercial

Project documentation was acquired for commercial projects, including invoices, savings calculators, inspection reports and specification sheets. M&V efforts as well as deemed industry

standards were considered for gross winter and summer peak demand reduction. Eleven commercial projects were chosen for detailed review; two non-lighting projects and nine lighting projects (including Large Commercial, Small Commercial, New Construction, and Retrofit).

### **Commercial Lighting**

ADM found max demand reductions to be consistent with the provided lighting calculators. The lighting calculators provided documentation of inspections and equipment specifications. Inspections provided photographic evidence of equipment as well as quantities and model type verification. Provided invoices allowed ADM to verify quantities. Calculator reviews included confirmation of baseline and efficient condition wattages, ballast factors, and space types. The provided lighting calculators use measure type factors to account for ballast factor impacts. ADM found this table of factors to be consistent with industry standard references. ADM adjusted the max gross demand reduction based on M&V findings and the approved benefit cost model. In two instances, lighting was proven to be in full operation during the peak windows and therefore a factor of one was applied to determine winter and summer kW. Stipulated values of in-service rates, realization rates, and net-to-gross were considered based on the approved benefit cost model.

ADM findings showed varying degrees of difference from project to project for winter and summer kW values. Across the nine projects, ADM found higher summer kW values and higher winter kW values compared to the program tracking data.

### **Commercial Non-Lighting**

The two commercial non-lighting projects consisting of mechanical equipment such as computer room air conditioners (CRAC), variable refrigerant flow (VRF) heat pumps, and energy recovery ventilation (ERV) systems were reviewed. ADM found industry standard methods were used for energy saving algorithms. The only discrepancy observed was in the use of a bin analysis based on temperature for the ERV system.

ADM found consistency and accuracy in the application of adjusted gross values as well as stipulated demand factors. The correction in the gross demand reduction analysis of the ERV calculation resulted in a small reduction of both winter and summer kW.

Liberty reports their DRV to ISO-NE through ISO-NE's online Customer and Asset Management System (CAMS) database. Liberty is available for any auditing that ISO-NE feels is necessary and continues to provide an independent annual certification of their DRV through annual reporting.



## STATISTICAL APPROACH

Certification for ISO-NE includes calculating the statistical precision of peak demand reduction of the evaluated portfolio as specified in ISO-NE M-MVDR. Results are calculated within 10% precision at the 80% confidence interval. The statistical review is applied to the claimed adjusted gross summer and winter peak demand reductions. A random stratified sample was drawn from current year projects to represent the population with precision combining all DRV inputs and stipulations (such as in-service rates, realization rates, and coincidence factors). Statistical precision is designed to meet ISO-NE M-MVDR for all eligible DRV from current and past program participation.

Statistical precision of eligible DRV includes the assurance of equipment installation, operation, and accountability of baseline conditions. Liberty Utilities performs post-inspection protocols on all commercial projects, ensuring the accuracy of inputs for DRV calculations. As described in the sample project verification, prescriptive algorithms reference the MA TRM, when applicable, and use industry approved algorithms when not available.

Prior certifications were reviewed for their statistical approach to incorporate statistical precision from past projects that remain eligible for FCA12. Some prior certification's used chaining and pooling statistical approaches which adhere to our sampling methods for this year. In the stratified approach, a relative precision is calculated for each stratum, using a  $t$  value of 1.282, which corresponds to a two tailed 80% confidence interval. A coefficient of variation of 0.5 was applied to each stratum. Relative precision for each stratum was calculated as:

$$RP = 1.282 * CV * \sqrt{1/n - 1/N}$$

Where:

$RP$  is the relative precision.

$CV$  is the coefficient of variation for reported project demand impacts.

$N$  is the population size for the stratum and,

$n$  is the achieved sample size.

Relative precision for each sector and for the portfolio across projects in service from June 2020 until present was calculated. This was achieved through the application of the root sum squared across the aggregated relative precision and aggregated demand reductions of all strata.

## STATISTICAL SIGNIFICANCE

Results for summer and winter peak demand reductions, across all sectors, are shown in Table 1. Results are based on eligible DRV from FCA5 through FCA12. Results from this year's certification sample yielded a higher calculated summer kW and a lower winter kW for measures added to the offering. The differences appear to be driven by the selection of coincidence factors from the approved benefit cost model or M&V findings relating to usage during the peak periods. The differences represent a 1% decrease in winter kW and a 7% increase in summer kW.

**Table 1: Summary of Results**

Season	Demand Reduction (kW)	Error Bound	Relative Precision
Winter	8,650.3	551.5	6.38%
Summer	7,449.2	498.6	6.69%

Relative precision and error bound were determined by sector from projects with eligible DRV from FCA5 through FCA12. Results are shown in Table 2. Residential energy efficiency measures have a larger influence on winter demand reduction compared to summer demand reduction. This is driven by the large influence of lighting. The measure type with the largest influence on commercial DRV is also lighting, however, operating schedules for commercial applications somewhat level DRV between summer and winter demand reduction.

**Table 2: Savings and Precision by Sector**

Season	Demand Reduction (kW)	Error Bound	Relative Precision
<b>Summer</b>			
C&I	5,728.8	449.8	7.85%
Low Income	96.1	22.5	23.46%
Residential	1,624.3	213.8	13.17%
<b>Summer Totals</b>	<b>7,449.2</b>	<b>498.6</b>	<b>6.69%</b>
<b>Winter</b>			
C&I	4,393.6	250.0	5.69%
Low Income	275.0	86.5	31.46%
Residential	3,981.7	483.9	12.15%
<b>Winter Totals</b>	<b>8,650.3</b>	<b>551.5</b>	<b>6.38%</b>

## CONCLUSIONS AND RECOMMENDATIONS

Based on results from the statistical analysis review, Liberty Utilities (Granite State Electric) has met the +/- 10% precision requirement at the 80% confidence interval set forth by ISO-NE. Liberty Utilities consistently follows applicable industry standard references for demand reduction algorithms and applies the most recent versions, when applicable. Liberty Utilities M&V Practices coincide with ISO-NE M-MVDR requirements.

Liberty Utilities participates in the filing of 3-year CORE New Hampshire Energy Efficiency Programs Plans (NH EEP) for approval with the New Hampshire Public Utilities Commission (NHPUC). The NH EEP provides details of the CORE energy efficiency programs with are delivered jointly by the utilities throughout New Hampshire, as well as several utility-specific programs. The annual NH EEP also includes a discussion of the role of monitoring and evaluation in program development and for ISO-NE FCM purposes. The responsibility for monitoring and evaluation activities in NH is a collaborative effort between the NHPUC, utility companies, and other stakeholders.

ADM would like to provide the following recommendations:

- Continue activity with state-wide and regional impact evaluation studies as well as updating measure level savings algorithms to account for current market conditions. The inclusion of a New Hampshire specific Technical Reference Manual will assist with consistency.
- Continue to ensure that all measure types have corresponding and current coincidence factors. This means continued review of load shapes and the need for any new load shapes. Updates to the load shapes for this current year have resulted in some decreases in coincidence factors for measures such as Large Commercial Lighting Retrofits.

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 05/31/2023
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**SCHEDULE 1. IDENTIFICATION**

<p><b>SURVEY CONTACTS:</b> Persons to contact with question about this form</p> <p><b>Contact</b> Pamela Moriarty          Title: Senior Accountant</p> <p>Phone: (603) 216-3661 FAX: Email: pamelamoriarty@libertyutilities.com</p> <p><b>Supervisor</b> Erin OBrien          Title: Director of Accounting          Phone: (603) 247-8636 FAX: Email: erin.obrien@libertyutilities.com</p>	<p><b>RESPONSE DUE DATE:</b> Please submit by April 30th following the close of calendar year</p> <p>REPORT FOR: Liberty Utilities (Granite State Electric) Corp 26510          REPORTING PERIOD: 2020</p> <p>Logged By / Date:          Logged In: <input type="checkbox"/> Receipt Date (mm/dd/yyyy):</p>
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1	Legal Name of Industry Participant	Liberty Utilities (Granite State Electric) Corp	<b>Submission Status/Date:</b>	Submitted	04/23/2021
2	Current Address of Principal Business Office	15 Buttrick Road  Londonderry NH 03053			
3	Preparer's Legal Name Operator (if different than line 1)				
4	Current Address of Preparer's Office (if different than line 2)				
5	Respondent Type (Check One)	<input type="checkbox"/> Federal <input type="checkbox"/> Political Subdivision <input type="checkbox"/> Municipal Marketing Authority <input type="checkbox"/> Cooperative <input type="checkbox"/> Independent Power Producer or Qualifying Facility	<input type="checkbox"/> State <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Investor-Owned <input type="checkbox"/> Retail Power Marketer (or Energy Service Provider) <input type="checkbox"/> Community Choice Aggregator	<input type="checkbox"/> Transmission <input type="checkbox"/> Behind the Meter <input type="checkbox"/> Wholesale Power Marketer <input type="checkbox"/> DSM Administrator	

For questions or additional information about the Form EIA-861 contact the Survey Manager: Fax: (202) 287 - 1938 Email: EIA-861@eia.gov  
**Stephen Scott** Phone: (202) 586-5140 Email: stephen.scott@eia.gov

REPORT FOR: Liberty Utilities (Granite State Electric) Corp 26510  
REPORT PERIOD ENDING: 2020

**SCHEDULE 2. PART A. GENERAL INFORMATION**

LINE NO.

1	Regional North American Electric Reliability Council (Not applicable for power marketers)	<input type="checkbox"/> TRE (formerly ERCOT)	<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/> SPP
		<input type="checkbox"/> FRCC	<input type="checkbox"/> RFC (formerly ECAR, MAIN, MAAC)	<input type="checkbox"/> WECC
		<input type="checkbox"/> MRO	<input type="checkbox"/> SERC	
2	Name of RTO or ISO	<input type="checkbox"/> California ISO	<input type="checkbox"/> Southwest Power Pool	
		<input type="checkbox"/> Electric Reliability Council of Texas	<input type="checkbox"/> Midwest ISO	
		<input type="checkbox"/> PJM Interconnection	<input checked="" type="checkbox"/> ISO New England	
		<input type="checkbox"/> New York ISO	<input type="checkbox"/> None	
3	(For EIA Use Only) Identify the North American Electric Reliability Council where you are physically located	NPCC		
4	Did Your Company Operate Generating Plants(s)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
5	Identify The Activities Your Company Was Engaged In During The Year (Check appropriate activities)	<input type="checkbox"/> Generation from company owned plant	<input type="checkbox"/> Buying distribution on other electrical system	
		<input type="checkbox"/> Transmission	<input type="checkbox"/> Wholesale power marketing	
		<input type="checkbox"/> Buying transmission services on other electrical system	<input type="checkbox"/> Retail power marketing	
		<input checked="" type="checkbox"/> Distribution using owned/leased electric wires	<input checked="" type="checkbox"/> Bundled Services (electricity plus other services such as gas, water, etc. in addition to electric service)	
6	Highest Hourly Electrical Peak System Demand	Summer (Megawatts)	191.2	Prior Year 193.9
		Winter (Megawatts)	143.4	Prior Year 150.4
7	Did Your Company Operate Alternative-Fueled Vehicles During the Year?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	Does Your Company Plan to Operate Such Vehicles During the Coming Year?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
	If "Yes", Please Provide Additional Contact Information	Name: Richard Foley Title: Director, Procurement (East) Telephone: 603 - 216 - 3536 Fax: 603 - 421 - 1769 Email: richard.foley@libertyutilities.com		

REPORT FOR: Liberty Utilities (Granite State Electri 26510  
 REPORT PERIOD ENDING: 2020

**SCHEDULE 2. PART B. ENERGY SOURCES AND DISPOSITION**

	SOURCE OF ENERGY	MEGAWATTHOURS		DISPOSITION OF ENERGY	MEGAWATTHOURS
1	Net Generation		11	Sales to Ultimate Consumers	445,902
2	Purchases from Electricity Suppliers	473,869	12	Sales For Resale	945
3	Exchanged Received (In)		13	Energy Furnished Without Charge	
4	Exchanged Delivered (Out)		14	Energy Consumed By Respondent Without Charge	370
5	Exchanged Net				
6	Wheeled Received (In)				
7	Wheeled Delivered (Out)		15	Total Energy Losses (positive number)	26,652
8	Wheeled Net				
9	Transmission by Others Losses (Negative Number)				
10	Total Sources (sum of lines 1, 2, 5, 8 & 9 )	473,869	16	Total Disposition (sum of lines 11, 12, 13, 14, & 15)	473,869

REPORT FOR: Liberty Utilities (Granite State Electri

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REPORT PERIOD ENDING: 2020

**SCHEDULE 2. PART C. ELECTRIC OPERATING REVENUE**

LINE NO.	TYPE OF OPERATING REVENUE	(THOUSAND DOLLARS to the nearest 0.1)
1	Electrical Operating Revenue From Sales to Ultimate Customers (Schedule 4: Parts A, B, and D) \$	72,163.1
2	Revenue From Unbundled (Delivery) Customers (Schedule 4: Part C) \$	23,741.8
3	Electric Operating Revenue from Sales for Resale \$	141.4
4	Electric Credits/Other Adjustments \$	4,593.5
5	Revenue from Transmission \$	
6	Other Electric Operating Revenue \$	3,426.4
7	Total Electric Operating Revenue (sum of lines 1, 2, 3, 4, 5 and 6) \$	104,066.2



REPORT FOR: Liberty Utilities (Granite State Electri

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REPORT PERIOD ENDING: 2020

**SCHEDULE 3. PART A.  
 DISTRIBUTION SYSTEM RELIABILITY DATA**

INSTRUCTIONS: For the purpose of this schedule, a distribution circuit is any circuit with a voltage of 34kV or below that emanate from a substation and that serves end use customers.

**State/Territory**      **NH**

1	Total Number of Distribution Circuits	52.0
2	Number of Distribution Circuits that employ voltage/VAR optimization (VVO)	.0

REPORT FOR: Liberty Utilities (Granite State Electri 26510  
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**SCHEDULE 3. PART B.  
DISTRIBUTION SYSTEM RELIABILITY DATA**

**Who is required to complete this schedule?**

This schedule collects System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) statistics. If your organization does not compute these indexes, answer 'no' to Question 1 and then skip to Schedule 4A. You do not have to complete any other part of this schedule 3B or 3C.

**Should you complete Part B or Part C?**

If your organization computes the SAIFI and SAIDI indexes and determines Major Event Days using the IEEE 1366-2003 or the IEEE 1366-2012 standard, answer 'YES' to Questions 1 and 2, and complete Part B. Then skip to Schedule 4A. (You do not complete Schedule 3, Part C.)

If your organization does not use the IEEE 1366-2003 or the IEEE 1366-2012 standard but calculates SAIDI and SAIFI indexes via other method, answer 'yes' to question 1 and 'no' to question 2 and complete Part C. Then go to Schedule 4A.

- 1 Do you calculate SAIDI and SAIFI by any method? If Yes, go to Question 2. If No, go to Schedule 4, Part A.  Yes  No
- 2 Do you calculate SAIDI and SAIFI and determine Major Event Days using the IEEE1366-2003 standard or IEEE-2012 standard? If Yes, complete Part B. If No, go to complete Part C.  Yes  No

**Part B: SAIDI and SAIFI in accordance with IEEE 1366-2003 standard or IEEE 1366-2012 standard**

	State	NH
3a. SAIDI value including Major Event days		151.500
3b. SAIDI value excluding Major Event days		100.870
4 SAIDI value including Major Event days minus loss of supply		143.320
5a. SAIFI value including Major Event days		1.180
5b. SAIFI value excluding Major Event days		0.995
6. SAIFI value including Major Event days minus loss of supply		1.030
7. Total number of customers used in these calculations		45,192.0
8. What is the highest voltage that you consider part of the distribution system, as opposed to the supply system? (kV)		23.0
9. Do you receive information about a customer outage in advance of a customer reporting it?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Thank You for completing this part. Skip Part C and go directly to Schedule 4 Part A.

REPORT FOR: Liberty Utilities (Granite State Electri

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**Part C: SAIDI and SAIFI calculated by other methods**

State

10a. SAIDI value including Major Events

10b. SAIDI value excluding Major Events

11a. SAIFI value including Major Events

11b. SAIFI value excluding Major Events

12. Total number of customers used in these calculations

13. Do you include inactive accounts?

Yes

No

14. How do you define momentary interruptions

Less than 1 min.

Less than 5 min.

Other

15. What is the highest voltage that you consider part of the distribution system, as opposed to the supply system?

kv

16. Is information about customer outages recorded automatically?

Yes

No

REPORT FOR: Liberty Utilities (Granite State Electri

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**SCHEDULE 4. PART A. SALES TO ULTIMATE CUSTOMERS. FULL SERVICE - ENERGY AND DELIVERY SERVICE (BUNDLED)**

	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
<b>State</b> NH <b>Balancing Authority</b>	13434				
Revenue (thousand dollars)	48,274.3	21,726.2	2,162.6		72,163.1
Megawatthours	281,555	149,817	14,530		445,902
Number of Customers	34,240	5,358	135		39,733
Are your rates decoupled?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If the answer is YES, is the revenue adjustment automatic or does it require a rate-making proceeding?	<input checked="" type="checkbox"/> N automatic	<input checked="" type="checkbox"/> N automatic	<input checked="" type="checkbox"/> N automatic	<input checked="" type="checkbox"/> N automatic	
	<input checked="" type="checkbox"/> N proceeding	<input checked="" type="checkbox"/> N proceeding	<input checked="" type="checkbox"/> N proceeding	<input checked="" type="checkbox"/> N proceeding	
Cents/Kwh	17.146	14.502	14.884		16.184

**State**

Revenue (thousand dollars)

Megawatthours

Number of Customers

Are your rates decoupled?

If the answer is YES, is the revenue adjustment automatic or does it require a rate-making proceeding?

Cents/Kwh

<b>Total</b>					
Revenue (thousand dollars)	48,274.3	21,726.2	2,162.6		72,163.1
Megawatthours	281,555	149,817	14,530		445,902
Number of Customers	34,240	5,358	135		39,733

REPORT FOR: Liberty Utilities (Granite State Electri 26510

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**SCHEDULE 4. PART B. SALES TO ULTIMATE CUSTOMERS. ENERGY -- ONLY SERVICE (WITHOUT DELIVERY SERVICE )**

	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
<b>State</b>	<b>Balancing Authority</b>				
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					
<b>State</b>					
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					
<b>Total</b>					
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					

REPORT FOR: Liberty Utilities (Granite State Electri 26510  
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**SCHEDULE 4. PART C. SALES TO ULTIMATE CUSTOMERS. DELIVERY -- ONLY SERVICE (AND OTHER RELATED CHARGES)**

		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
<b>State</b>	NH	<b>Balancing Authority</b>	13434			
Revenue (thousand dollars)		2,430.2	16,325.2	4,986.4		23,741.8
Megawatthours		23,548	310,993	105,554		440,095
Number of Customers		3,321	1,991	58		5,370
Cents/Kwh		10.320	5.249	4.724		5.395
<b>State</b>						
Revenue (thousand dollars)						
Megawatthours						
Number of Customers						
Cents/Kwh						

<b>Total</b>						
Revenue (thousand dollars)		2,430.2	16,325.2	4,986.4		23,741.8
Megawatthours		23,548	310,993	105,554		440,095
Number of Customers		3,321	1,991	58		5,370

REPORT FOR: Liberty Utilities (Granite State Electri

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**SCHEDULE 4. PART D. BUNDLED SERVICE BY RETAIL ENERGY PROVIDERS AND POWER MARKETERS**

	RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
<b>State</b>	<b>Balancing Authority</b>				
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					
<b>State</b>					
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					

<b>Total</b>
Revenue (thousand dollars)
Megawatthours
Number of Customers

REPORT FOR: Liberty Utilities (Granite State Electri 26510

REPORTING PERIOD ENDING: 2020

**SCHEDULE 5. MERGERS and/or ACQUISITIONS**

**Mergers and/or acquisitions during the reporting month**

**If Yes, Provide:**

**Date of Merger or Acquisition**

**Company merged with or acquired**

**Name of new parent company**

**Address**

**City**

**State, Zip**

**New Contact Name**

**Telephone No.**

**Email address**



REPORT FOR: Liberty Utilities (Granite State Electri

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**SCHEDULE 6. PART A. ENERGY EFFICIENCY PROGRAMS**  
**Adjusted Gross Energy and Demand Savings -- Energy Efficiency**

If you have a non utility DSM administrator that reports your DSM activity for you please select them from the list

State/Territory	NH	Balancing Authority				Total
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANS	
		(a)	(b)	(c)	(d)	(e)
<b>Reporting Year Incremental Annual Savings</b>						
1	Energy Savings (MWh)	1,762.402	6,718.591	4,117.849		12,598.842
2	Peak Demand Savings (MW)	0.296	0.266	0.163		0.725
<b>Increment Life Cycle Savings</b>						
3	Energy Savings (MWh)	14338.322	44,303.720	27,153.374		85,795.416
4	Peake Demand Savings (MW)	1.793	6.667	4.086		12.546
<b>Reporting Year Incremental Costs</b>						
5	Customer Incentives	1,959.000	2,223.000	362.000		4,544.000
6	All other costs	763.000	748.000	122.000		1,633.000
<b>Incremental Life Cycle Costs</b>						
7	Customer Incentives	1,959.000	2,223.000	362.000		4,544.000
8	All other costs	763.000	748.000	122.000		1,633.000
<b>Weighted Average Life for Portfolio (Years) - Use Spreadsheet to Calculate</b>						
9	Weighted Average Life	8.935	13.602	14.238		37.000

Please provide website address to your energy efficiency program reports:

<http://www/puc.state.nh.us/>

REPORT FOR: Liberty Utilities (Granite State Electri 26510  
REPORT PERIOD ENDING: 2020

**SCHEDULE 6. PART A. ENERGY EFFICIENCY PROGRAMS**

DMS Administration only. List all utilities that you provide service for.

State	Utility Name
-------	--------------

REPORT FOR: Liberty Utilities (Granite State Electri 26510

REPORT PERIOD ENDING: 2020

**Schedule 6. Part B. Yearly Energy and Demand Savings - Demand Response**

**Reporting Year Savings**

State/Territory	Balancing Authority	(a)	(b)	(c)	(d)	(e)
		Residential	Commercial	Industrial	Transportation	Total
1	Number of Customers Enrolled					
2	Energy Savings (Mwh)					
3	Potential Peak Demand Savings (MW)					
4	Actual Peak Demand Savings (MW)					

**Schedule 6. Part B. Program Cost -- Demand Response (Thousand Dollars)**

**Reporting Year Costs**

5	Customer Incentives	
6	All other costs	
7	If you have a demand side management (DMS) program for grid-interactive water heaters (as defined by DOE), how many grid interactive water heaters were added to your program this year?	

REPORT FOR: Liberty Utilities (Granite State Electri 26510  
 REPORT PERIOD ENDING: 2020

**SCHEDULE 6. PART C. DYNAMIC PRICING PROGRAMS**

**Number of Customers**

INSTRUCTIONS: Report the number of customers participating in dynamic pricing programs, e.g. Time-of-Use-Pricing, Real-Time-Pricing, Variable Peak Pricing, Critical Peak Pricing Programs.

State/Territory NH Balancing Authority 13434

		Residential (a)	Commercial (b)	Industrial (c)	Transportatio (d)	Total (e)
1	Number of Customers enrolled in dynamic pricing programs, by customer class	484		148		632

**Types of Dynamic Pricing Programs**

INSTRUCTIONS: For each customer class, mark the types of dynamic pricing programs in which the customers are participating.

		Residential (a)	Commercial (b)	Industrial (c)	Transportatio (d)
2	Time-of-Use Pricing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3	Real-Time Pricing	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4	Variable Peak Pricing	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	Critical Peak Pricing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6	Critical Peak Rebate	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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**SCHEDULE 6. PART D. ADVANCED METERING**

Only customers from schedule 4A and 4C need to be reported on this schedule.  
AMR- data transmitted one-way, to the utility.  
AMI- data transmitted in both directions, to the utility and customer

State	NH	Balancing Authority	13434				Total (e)
			Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	
1		Number of AMR Meters	38,124	6,073			44,197
2		Number of AMI Meters		10			10
3		Number of AMI Meters with home area network (HAN) gateway enabled					
4		Number of non AMR/AMI Meters	428	985			1,413
5		Total Number of Meters (All Types), line 1+2+4	38,552	7,068			45,620
6		Energy Served Through AMI		104,277			104,277
7		Number of Customers able to access daily energy usage through a webportal or other electronic means					
8		Number of customers with direct load control					

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**SCHEDULE 7. PART A. NET METERING**

**Net Metering** programs allow customers to sell excess power they generated back to the electrical grid to offset consumption. Provide the information about programs by State balancing authority, customer class, and technology for all net metering applications.

State	NH	Balancing Authority	13434	Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	Total (e)
		Net Metering Installed Capacity (MW)		4.712	5.115			9.827
		Net Metering Installations		625	76			701
		Storage Installed Capacity (MW)						0.000
		Storage Installations						0
<b>Photovoltaic</b>		Virtual NM Installed Capacity (1 MW and greater)						0.000
		Virtual NM Customers (1 MW and greater)						0
		Virtual NM Installed Capacity (less than 1MW)		0.060	0.309			0.369
		Virtual NM Customers (less than 1MW)		6	7			13
		If Available, Enter the Electric Energy Sold Back to the Utility (MWh)						0.000
		Installed Net Metering Capacity (MW)			0.006			0.006
<b>Wind</b>		Number of Net Metering Customers			1			1
		If Available, Enter the Electric Energy Sold Back to the Utility (MWh)						0.000
		Installed Net Metering Capacity (MW)						0.000
<b>Other</b>		Number of Net Metering Customers						0
		If Available, Enter the Electric Energy Sold Back to the Utility (MWh)						0.000
<b>Total</b>		Installed Net Metering Capacity (MW)		4.772	5.430	0.000	0.000	10.202
		Number of Net Metering Customers		631	84	0	0	715
		If Available, Enter the Electric Energy Sold Back to the Utility (MWh)		0.000	0.000	0.000	0.000	0.000
<b>Grand Total All States</b>		Net Metering Installed Capacity (MW)		4.772	5.43	0	0	10.202
		Net Metering Installations/customers		631	84	0	0	715
		If Available, Enter the Electric Energy Sold Back to the Utility (MWh)		0	0	0	0	0

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**SCHEDULE 7. PART B. NON NET-METERED DISTRIBUTED GENERATORS**

If your company owns and/or operates a distribution system, please report information on known distributed generation (grid connected/synchronized) capacity on the system. Such capacity must be utility or customer-owned

**NUMBER AND CAPACITY**

State	Balancing Authority	< 1MW
1. Number of generators		3. Capacity that consists of backup-only units
2. Total combined capacity (MW)		4. Capacity owned by respondent

**Capacity by Technology and Sector (MW)**

	Residential	Commercial	Industrial	Transportation	Direct Connected	Total
5. Internal combustion						
6. Combustion turbine(s)						
7. Steam turbine(s)						
8. Fuel Cell(s)						
9. Hydroelectric						
10. Photovoltaic						
11. Storage						
12. Wind turbine(s)						
13. Other						
14. Total						





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**SCHEDULE 9. COMMENTS**

SCHEDULE	PART	LINE NO.	COLUMN	NOTES
(a)	(b)	(c)	(d)	(e)

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**EIA861 ERROR LOG**

Part	State	BA ID	Error No.	Error Description/Override Comment	Type	Override	
6	A	NH	13434	626	<p>Please review Residential Reporting Year Costs (Line 5 + Line 6). Values should be reported in thousand dollars. The calculated costs/kWh should be below the industry average of 80 cents/kWh.</p> <p>The Residential Reporting Year Costs as reported is correct. The calculated cost per kWh is above the expected industry average of 80 cents/kWh because the Company's programs were modified to also include measures that have MMBtu savings from heating oil, kerosene and propane measures including boilers, furnaces and water heaters where each has minimal kWh savings.</p>	W	
6	A	NH	13434	634	<p>Residential Incremental Life Cycle costs (Line 7 + Line 8) should be reported in thousand dollars. The calculated costs/kWh should be below the industry average of 4 cents/kWh. Please provide corrected data or an explanation.</p> <p>The residential data as reported is correct. The calculated incremental life cycle cost per kWh is above the expected industry average of 4 cents/kWh because the Company's programs were modified to also include measures that have MMBtu savings from heating oil, kerosene and propane measures including boilers, furnaces and water heaters where each has minimal kWh savings.</p>	W	
6	A	NH	13434	670	<p>You may have reported a cumulative sum of peak demand savings (Schedule 6A -line 4) and not an average of all years for the residential sector. Please provide updated data.</p> <p>The peak demand savings data as reported is correct. Discussions have previously been held between Liberty Utilities Energy Efficiency personnel and EIA regarding the calculation of the savings. Based on those discussions, the Company's methodology was accepted. Company representatives are available if additional discussions are needed.</p>	W	
6	A	NH	13434	671	<p>You may have reported a cumulative sum of peak demand savings (Schedule 6A -line 4) and not an average for the commercial sector. Please provide updated data.</p> <p>The peak demand savings data as reported is correct. Discussions have previously been held between Liberty Utilities Energy Efficiency personnel and EIA regarding the calculation of the savings. Based on those discussions, the Company's methodology was accepted. Company representatives are available if additional discussions are needed.</p>	W	
6	A	NH	13434	672	<p>You may have reported a cumulative sum of peak demand savings (Schedule 6A -line 4) and not an average for the industrial sector. Please provide updated data.</p> <p>The peak demand savings data as reported is correct. Discussions have previously been held between Liberty Utilities Energy Efficiency personnel and EIA regarding the calculation of the savings. Based on those discussions, the Company's methodology was accepted. Company representatives are available if additional discussions are needed.</p>	W	





ISO-NE PUBLIC

## Heating Electrification Funded Under EE Conservation Dollars

1	Utility Name	Granite State Electric Company D/B/A Liberty Utilities				
2	Utility Contact	Tina Poirier				
	Year		2020			
	Sector		Residential	Low Income	C&I	Total
3	ASHP or Other Heating Electrification Funded with EE Budget	yes/no	yes	yes	yes	
4	ASHP or Other Heating Electrification Included in EE Program Performance	yes/no	yes	yes	yes	
	If answer to 3 and 4 are no, do not continue					
5	Budget Dollars Spent for ASHPs	\$	\$54,896	0	\$5,090	\$59,986
6	Net Annual Energy Savings Claimed	kWh	78,909	0	25,126	104,035
7	Net Lifetime Energy Savings Claimed	kWh	1,420,368	0	375,774	1,796,142
8	Net Summer Peak Capacity Savings Claimed	kW	8.490	0	0	8.490
9	Net Winter Peak Capacity Savings Claimed	kW	14.563	0	2.956	17.519
10	Total Number of ASHP Projects	#	185	0	3	188
11	Number of Projects Replacing Electric Resistance Legacy Heat	#				
12	Number of Projects Replacing Less Efficient ASHPs	#				
13	Number of Fuel Switching Projects with Full Legacy Heat Source Displacement	#				
14	Number of Fuel Switching Projects with Partial Legacy Heat Source Displacement	#				
15	Budget Dollars Spent for Heat Pump Water Heating	\$	\$25,500	0	0	\$25,500
16	Net Annual Energy Savings Claimed	kWh	78,812	0	0	78,812
17	Net Lifetime Energy Savings Claimed	kWh	1,113,418	0	0	1,113,418
18	Net Summer Peak Capacity Savings Claimed	kW	10.369	0	0	10.369
19	Net Winter Peak Capacity Savings Claimed	kW	13.932	0	0	13.932
20	Total Number of HPWH Projects	#	54	0	0	54