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May 27, 2021

Via Electronic Mail

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

Dear Ms. Howland:

**Re: DE 17-136; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Energy Efficiency Programs
Performance Incentive Calculation – YE 2020**

Enclosed for filing with the Commission is Liberty's performance incentive calculations related to the Energy Efficiency Programs for year end 2020. The Commission approved the 2020 programs in its Order No. 26, 207 issued on December 31, 2019.

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

Sincerely,

A handwritten signature in black ink that reads 'Steven E. Mullen'.

Steven E. Mullen

Enclosure

Cc: Service List

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

**LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. d/b/a
LIBERTY**

ENERGY EFFICIENCY PROGRAMS - 2020 YEAR-END REPORT

NHPUC Docket No. DE 17-136

May 27, 2021



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SUMMARY OF 2020 PROGRAM ACTIVITY

The following report presents the results of Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty (“Liberty” or “Company”) residential and commercial & industrial energy efficiency programs for calendar year 2020.

Table 1 shows a summary of overall program savings results. In total, the Company served 30,322 participants and saved 2,362,499 Lifetime MMBTUs. Annual MMBTU savings were 147,255 with an average savings per participant per year of 4.86. Of the 30,322 participants, 1,649 also had electric savings which totaled (2,883,033) Lifetime kWh’s. Annual kWh savings were (159,869) with an average savings per participant per year of (94.37).

Table 2 documents the quantified benefits and costs achieved by program for the residential market. In total, the residential programs generated \$8,049,652 in customer benefits and incurred costs of \$6,106,654, for an overall program benefit cost ratio of 1.32.

Table 3 documents the quantified benefits and costs achieved by program for the commercial & industrial market. In total, the commercial & industrial programs generated \$11,625,471 in customer benefits and incurred costs of \$5,332,972 for an overall program benefit cost ratio of 2.18.

Table 4 documents the MMBTU savings achieved by program for the individual residential and commercial and industrial programs. In summary, the residential program activities resulted in 853,963 in total lifetime MMBTU savings and 3,946,867 lifetime kWh savings. The commercial and industrial program activities resulted in 1,508,536 in total lifetime MMBTU savings and (6,829,900) lifetime kWh savings.

Table 5 documents footnotes for the residential and commercial & industrial program benefit cost ratios and the rate of savings per MMBTU based on the Avoided Energy Supply Components in New England: 2018 Report.

Table 6 documents the Company’s earned 2020 year-end performance incentive of \$440,944. As specified by the Commission, the performance incentive for 2020 has been documented using assumptions that are consistent with assumptions used to develop program-year goals. Table 6 summarizes the performance incentive calculation by component. As specified by the Commission, results for all programs have been included in the performance incentive calculation.

Table 7 documents the Company’s expenses by Program and budget category. Overall, the Company incurred a total of \$8,514,515 of expenses in 2020.

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Energy Efficiency Programs 2020 Year End Report
NHPUC Docket No. DE 17-136

Table 1. Program Savings Summary

| | |
|--|-------------|
| Gas Savings in MMBTU's resulting from Energy Efficiency Measures Installed in the Program Year | |
| Number of Participants served in the annual program year time period | 30,322 |
| MMBTU Savings per Participant Per Year | 5 |
| Total MMBTU Savings Per Year | 147,255 |
| Measure Life of Measures Installed in the annual program year time period | 16 |
| Grand Total MMBTU Savings Benchmark for Performance Incentive | 2,362,499 |
| Electric Savings in kWh's resulting from Energy Efficiency Measures Installed in the Program Year | |
| Number of Participants served in the annual program year time period | 1,694 |
| kWh Savings per Participant Per Year | (94) |
| Total kWh Savings Per Year | (159,869) |
| Measure Life of Measures Installed in the annual program year time period | 18 |
| Grand Total kWh Savings Benchmark for Performance Incentive | (2,883,033) |

Table 2. Benefit Cost (B/C) Benchmark for Computing Performance Incentive - Residential Programs

| Residential Programs | Home Energy Assistance | ENERGY STAR Products | Home Performance w/ENERGY STAR | ENERGY STAR Homes | Home Energy Reports | Total |
|---|------------------------|----------------------|--------------------------------|---------------------|---------------------|---------------------|
| Benefits: | | | | | | |
| Total Resource Benefits | \$ 1,069,098 | \$ 1,596,689 | \$ 2,104,043 | \$ 1,631,793 | \$ 103,948 | \$ 6,505,570 |
| Total Non-Resource Benefits | \$ 332,992 | \$ 336,186 | \$ 470,711 | \$ 385,561 | \$ 18,631 | \$ 1,544,082 |
| Total Benefits | \$ 1,402,090 | \$ 1,932,875 | \$ 2,574,755 | \$ 2,017,354 | \$ 122,579 | \$ 8,049,652 |
| Costs: | | | | | | |
| Program costs (e.g. incentives, admin, monitoring, evaluation for: | | | | | | |
| Utility Costs (e.g., for admin, monitoring, evaluation, marketing) | \$ 1,676,017 | \$ 932,145 | \$ 1,198,339 | \$ 684,613 | \$ 289,531 | \$ 4,780,645 |
| Program participants (e.g., incremental costs not reimbursed) | \$0 | \$ 917,810 | \$ 226,046 | \$ 182,153 | \$ - | \$ 1,326,009 |
| Total Costs | \$ 1,676,017 | \$ 1,849,955 | \$ 1,424,385 | \$ 866,766 | \$ 289,531 | \$ 6,106,654 |
| Utility Performance Incentive at the Sector Level | n/a | n/a | n/a | n/a | n/a | n/a |
| Total Costs Including Utility Performance Incentives at Sector Level | | | | | | \$ 6,106,654 |
| Benefit Cost Ratio by Sector (i.e., B/C Benchmark for PI Calc.) | 0.84 | 1.04 | 1.81 | 2.33 | 0.42 | 1.32 |

Table 3. Benefit Cost (B/C) Benchmark for Computing Performance Incentive - Commercial & Industrial Programs

| Commercial & Industrial Programs | Small Business | Large Business | C&I Education | Total |
|---|---------------------|---------------------|------------------|----------------------|
| Benefits: | | | | |
| Total Resource Benefits | \$ 3,882,050 | \$ 5,448,666 | \$ - | \$ 9,330,715 |
| Total Non-Resource Benefits | \$ 980,175 | \$ 1,314,580 | \$ - | \$ 2,294,755 |
| Total Benefits | \$ 4,862,225 | \$ 6,763,246 | \$ - | \$ 11,625,471 |
| Costs: | | | | |
| Program costs (e.g. incentives, admin, monitoring, evaluation for: | | | | |
| Utility Costs (e.g., for admin, monitoring, evaluation, marketing) | \$ 2,088,171 | \$ 1,619,656 | \$ 26,042 | \$ 3,733,870 |
| Program participants (e.g., incremental costs not reimbursed) | \$ 499,824 | \$ 1,099,279 | \$ - | \$ 1,599,102 |
| Total Costs | \$ 2,587,995 | \$ 2,718,935 | \$ 26,042 | \$ 5,332,972 |
| Utility Performance Incentive at the Sector Level | n/a | n/a | n/a | n/a |
| Total Costs Including Utility Performance Incentives at Sector Level | | | | \$ 5,332,972 |
| Benefit Cost Ratio by Sector (i.e., B/C Benchmark for PI Calc.) | 1.88 | 2.49 | - | 2.18 |

Table 4. MMBTU Savings Benchmark for Computing Performance Incentive

| Residential Programs | Home Energy Assistance | ENERGY STAR Products | Home Performance w/ENERGY STAR | ENERGY STAR Homes | Home Energy Reports | Total |
|---|------------------------------|----------------------------|---|----------------------|------------------------|-----------|
| Gas Savings in MMBTU's from Measures Installed in the Program Year | | | | | | |
| Number of Participants | 575 | 2,022 | 593 | 226 | 25,541 | 28,957 |
| MMBTU Savings per Participant Per Year | 13 | 6 | 23 | 42 | 0.5 | 2 |
| Total MMBTU Savings Per Year | 7,687 | 11,669 | 13,643 | 9,395 | 11,994 | 54,387 |
| Measure Life of Measures Installed During the Program Year | 17 | 17 | 21 | 25 | 1 | 16 |
| Grand Total MMBTU Savings Benchmark for Performance Incentive | 131,844 | 198,289 | 280,020 | 231,815 | 11,994 | 853,963 |
| | | | | | | |
| Electric Savings in kWh's from Measures Installed in the Program Year | | | | | | |
| Number of Participants | 141 | 1,255 | 288 | 1 | - | 1,685 |
| kWh Savings per Participant | 298 | 104 | 463 | 1,437 | - | 183 |
| Total kWh Savings Per Participant Per Year | 41,960 | 130,883 | 133,273 | 1,437 | - | 307,553 |
| Measure Life of Measures Installed in the annual program year time period | 20 | 16 | 8 | 25 | - | 13 |
| Grand Total kWh Savings Benchmark for Performance Incentive | 829,893 | 2,055,652 | 1,025,395 | 35,928 | - | 3,946,867 |
| | | | | | | |
| Commercial & Industrial Programs | Small Business | Large Business | C&I Education | Total | | |
| Number of Participants | 1,236 | 128 | - | 1,364 | | |
| MMBTU Savings per Participant Per Year | 48 | 264 | - | 68 | | |
| Total MMBTU Savings Per Year | 59,114 | 33,753 | - | 92,867 | | |
| Measure Life of Measures Installed During the Program Year | 11 | 26 | - | 16 | | |
| Grand Total MMBTU Savings Benchmark for Performance Incentive | 633,324 | 875,212 | - | 1,508,536 | | |
| | | | | | | |
| Electric Savings in kWh's from Measures Installed in the Program Year | | | | | | |
| Number of Participants | 3 | 6 | - | 9 | | |
| kWh Savings per Participant | (694) | (77,557) | - | (51,936) | | |
| Total kWh Savings Per Participant Per Year | (2,083) | (465,339) | - | (467,422) | | |
| Measure Life of Measures Installed in the annual program year time period | 36 | 15 | - | 15 | | |
| Grand Total kWh Savings Benchmark for Performance Incentive | (74,300) | (6,755,600) | - | (6,829,900) | | |

Table 5. Footnotes for Benefit Cost Ratio

| Residential Programs | Home Energy Assistance | ENERGY STAR Products | Home Performance w/ENERGY STAR | ENERGY STAR Homes | Home Energy Reports | Total |
|---|------------------------|------------------------|--------------------------------|-------------------|---------------------------------------|--------------|
| Number of Participants* | 575 | 2,022 | 593 | 226 | 25,541 | 28,957 |
| MMBTU Savings per Participant Per Year** | 13 | 6 | 23 | 42 | 0.5 | 2 |
| Total MMBTU Savings Per Year | 7,687 | 11,669 | 13,643 | 9,395 | 11,994 | 54,387 |
| Number of Years in the Measure Life** | 17 | 17 | 21 | 25 | 1 | 16 |
| Grand Total MMBTU Savings Benchmark for Performance Incentive | 131,844 | 198,289 | 280,020 | 231,815 | 11,994 | 853,963 |
| Lifetime Therm Savings | 1,318,444 | 1,982,889 | 2,800,203 | 2,318,151 | 119,940 | 8,539,627 |
| Rate of Savings per MMBTU *** | \$ 8.28 | \$ 8.28 | \$ 8.28 | \$ 8.28 | \$ 8.28 | \$ 8.28 |
| Grand Total Dollar Savings | \$ 1,091,672 | \$ 1,641,832 | \$ 2,318,568 | \$ 1,919,429 | \$ 99,310 | \$ 7,070,811 |
| | | | | | | |
| Commercial & Industrial Programs | Small Business | Large Business | C&I Education | Total | | |
| Number of Participants* | 1,236 | 128 | - | 1,364 | | |
| MMBTU Savings per Participant Per Year** | 48 | 264 | - | 68 | | |
| Total MMBTU Savings Per Year | 59,114 | 33,753 | - | 92,867 | | |
| Number of Years in the Measure Life** | 11 | 26 | - | 16 | | |
| Grand Total MMBTU Savings Benchmark for Performance Incentive | 633,324 | 875,212 | - | 1,508,536 | | |
| Lifetime Therm Savings | 6,333,238 | 8,752,122 | - | 15,085,360 | | |
| Rate of Savings per MMBTU *** | \$ 7.34 | \$ 7.34 | \$ - | \$ 7.34 | | |
| Grand Total Dollar Savings | \$ 4,648,597 | \$ 6,424,058 | \$ - | \$ 11,072,654 | | |
| | | | | | | |
| * eTrack (Liberty Utilities Energy Efficiency Program Tracking System) | | | | | | |
| ** The values are variable for program year measurement purposes and based upon the B/C model assumptions. | | | | | | |
| *** Source: Avoided Energy Supply Components in New England: 2018 Report, Synapse Energy Economics, Inc., (Amended June 1, 2018). Pg.47, Table 14 | | | | | | |
| Residential Programs | Home Energy Assistance | ENERGY STAR Appliances | Home Performance w/ENERGY STAR | ENERGY STAR Homes | Residential Building Practices & Demo | Total |
| Number of Participants* | 575 | 2,022 | 593 | 226 | 25,541 | 28,957 |
| Participant Incremental Cost | \$ - | \$ 917,810 | \$ 226,046 | \$ 182,153 | \$ - | \$ 1,326,009 |
| Program Participant Cost | \$ - | \$ 454 | \$ 381 | \$ 806 | \$ - | \$ 46 |
| | | | | | | |
| Commercial & Industrial Programs | Small Business | Large Business | C&I Education | Total | | |
| Number of Participants* | 1,236 | 128 | - | 1,364 | | |
| Participant Incremental Cost | \$ 499,824 | \$ 1,099,279 | \$ - | \$ 1,599,102 | | |
| Program Participant Cost | \$ 404 | \$ 8,614 | \$ - | \$ 1,172 | | |

Table 6. Performance Incentive Calculation - 2020

| Row | Portfolio | Planned | Threshold | Actual | % of Plan | Design Coefficient | Actual Coefficient | Planned PI | 125% of Planned PI | Actual PI | Source |
|-----|----------------------------------|---------------|--------------|---------------|-----------|--------------------|--------------------|-------------------|--------------------|-------------------|--|
| 1 | Lifetime MMBtu Savings | 2,408,424 | 1,806,318 | 2,362,499 | 98% | 2.475% | 2.428% | \$ 215,885 | \$ 269,856 | \$ 206,716 | Program Cost Effectiveness (Page 1 of 3) |
| 2 | Annual MMBtu Savings | 147,422 | 110,566 | 147,255 | 100% | 1.100% | 1.099% | \$ 95,949 | \$ 119,936 | \$ 93,554 | Program Cost Effectiveness (Page 1 of 3) |
| 3 | Total Resource Benefits | \$ 17,253,478 | | \$ 15,836,286 | 92% | | | | | | Present Value Benefits (Page 2 of 3) |
| 4 | Total Utility Costs ¹ | \$ 8,722,615 | | \$ 8,514,515 | 98% | | | | | | Program Cost Effectiveness (Page 1 of 3) |
| 5 | Net Benefits | \$ 8,530,863 | \$ 5,553,317 | \$ 7,321,771 | 86% | 1.925% | 1.652% | \$ 167,910 | \$ 209,888 | \$ 140,674 | Line 5 minus line 6 |
| 6 | Total | | | | | 5.500% | 5.179% | \$ 479,744 | \$ 599,680 | \$ 440,944 | Sum of Rows 1, 2 & 5 |

| Row | Portfolio | Total Resource Cost Test | | Source |
|-----|--|--------------------------|---------------|--|
| | | Planned | Actual | |
| 7 | Total Benefits | \$ 21,252,105 | \$ 19,675,123 | Present Value Benefits (Page 2 of 3) |
| 8 | Performance Incentive | \$ 479,744 | \$ 440,944 | Row 6 |
| 9 | Participant Costs | \$ 6,501,354 | \$ 2,925,111 | Program Cost Effectiveness (Page 1 of 3) |
| 10 | Total Utility Costs | \$ 8,722,615 | \$ 8,514,515 | Row 4 |
| 11 | Total Resource Benefit / Cost Ratio | 1.35 | 1.66 | Row 7 Divided by Rows 8+9+10 |

All dollar values are expressed in 2020 dollars.

¹ In order to avoid circular reference in the calculation of the Performance Incentive (PI), "Total Utility Costs" does not include the value of the PI.

Table 7. Program Expenditures by Category - 2020 Actual

| Program | Evaluation | External Administration | Internal Administration | Internal Implementation | Marketing | Rebates- Services | Total |
|---|-------------------|------------------------------------|------------------------------------|------------------------------------|-------------------|------------------------------|---------------------|
| Residential Programs | | | | | | | |
| ENERGY STAR Products | \$ 30,819 | \$ 3,136 | \$ 10,284 | \$ 44,300 | \$ 29,609 | \$ 813,998 | \$ 932,145 |
| ENERGY STAR Homes | \$ 31,071 | \$ 3,162 | \$ 8,820 | \$ 46,118 | \$ 28,476 | \$ 566,967 | \$ 684,613 |
| Home Energy Assistance | \$ 59,551 | \$ 6,060 | \$ 7,635 | \$ 85,331 | \$ 52,060 | \$ 1,465,382 | \$ 1,676,017 |
| Home Performance with ENERGY STAR | \$ 33,150 | \$ 3,373 | \$ 3,513 | \$ 42,522 | \$ 29,437 | \$ 1,086,344 | \$ 1,198,339 |
| Home Energy Reports | \$ 10,195 | \$ 948 | \$ 2,225 | \$ 13,662 | \$ - | \$ 262,501 | \$ 289,531 |
| Subtotal - Residential | \$ 164,786 | \$ 16,679 | \$ 32,475 | \$ 231,933 | \$ 139,581 | \$ 4,195,191 | \$ 4,780,645 |
| Commercial & Industrial Programs | | | | | | | |
| C&I Education | \$ 3,216 | \$ 318 | \$ 1,604 | \$ 6,959 | \$ 2,647 | \$ 11,299 | \$ 26,042 |
| Large Business Energy Solutions | \$ 72,647 | \$ 7,919 | \$ 8,001 | \$ 130,106 | \$ 74,907 | \$ 1,326,076 | \$ 1,619,656 |
| Small Business Energy Solutions | \$ 56,281 | \$ 5,113 | \$ 8,818 | \$ 111,690 | \$ 62,019 | \$ 1,844,251 | \$ 2,088,171 |
| Subtotal - C&I | \$ 132,144 | \$ 13,350 | \$ 18,423 | \$ 248,756 | \$ 139,572 | \$ 3,181,625 | \$ 3,733,870 |
| Total - All | \$ 296,929 | \$ 30,029 | \$ 50,898 | \$ 480,688 | \$ 279,154 | \$ 7,376,817 | \$ 8,514,515 |