

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

ENERGYNORTH NATURAL GAS, INC.

d/b/a

LIBERTY UTILITIES

CORE PROGRAMS - 2014 YEAR-END REPORT

N.H.P.U.C. Docket No. DE 12-262

May 28, 2015



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EnergyNorth Natural Gas, Inc. d/b/a Liberty Utilities

SUMMARY OF 2014 PROGRAM ACTIVITY

The following report presents the results of EnergyNorth Natural Gas, Inc. d/b/a Liberty Utilities (“Liberty Utilities” or “Company”) residential and commercial and industrial (C&I) energy efficiency programs for calendar year 2014.

Table 1 shows a summary of overall program savings results. In total, the Company served 2,627 participants and saved 1,757,567 Lifetime MMBTUs. Annual MMBTU savings were 116,946 with an average savings per participant per year of 44.52. Of the 2,627 participants, 455 also had electric savings which totaled 1,864,978 Lifetime kWh’s. Annual kWh savings were 98,350 with an average savings per participant per year of 216.15.

Table 2 documents the quantified benefits and costs achieved by program for the residential market. In total, the residential programs generated \$6,128,976 in customer benefits and incurred costs of \$3,736,041, for an overall program benefit cost ratio of 1.64.

Table 3 documents the quantified benefits and costs achieved by program for the commercial and industrial market. In total, the commercial and industrial programs generated \$7,245,702 in customer benefits and incurred costs of \$4,274,157, for an overall program benefit cost ratio of 1.70.

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 687,403 in total lifetime MMBTU savings and 1,849,858 lifetime kWh savings. The commercial and industrial program activities resulted in 1,070,164 in total lifetime MMBTU savings and 15,120 lifetime kWh savings.

Table 5 documents footnotes for the residential and commercial and industrial program benefit cost ratios and the rate of savings per MMBTU based on the Avoided Energy Supply Costs in New England 2014 report.

Table 6 documents the Company’s earned 2014 year-end performance incentive of \$486,396. As specified by the Commission, the performance incentive for 2014 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 (C&I and Residential). As specified by the Commission, results for all programs have been included in the performance incentive calculation.

Table 7 documents the planned versus actual benefit cost ratio by sector (Residential and Commercial and Industrial), and for the entire portfolio of energy efficiency programs implemented in 2014.

Table 8 documents the Company’s expenses by Program and budget category. Overall, the Company incurred a total of \$5,313,979 of expenses in 2014.

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	2,627
MMBTU Savings per Participant Per Year	44.52
Total MMBTU Savings Per Year	116,946
Measure Life of Measures Installed in the annual program year time period	15.03
Grand Total MMBTU Savings Benchmark for Performance Incentive	1,757,567
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	455
kWh Savings per Participant Per Year	216.15
Total kWh Savings Per Year	98,350
Measure Life of Measures Installed in the annual program year time period	19
Grand Total kWh Savings Benchmark for Performance Incentive	1,864,978

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

Residential Programs	Home Energy Assistance	ENERGY STAR Appliances	Home Performance w/ENERGY STAR	ENERGY STAR Homes	Residential Building Practices & Demo	Total
Benefits:						
Avoided Generation, Transmission & Distribution Costs for:						
Program Participants	\$ 1,468,221	\$ 1,788,538	\$ 2,823,434	\$ 48,783	\$ -	\$ 6,128,976
Market effects (e.g., spillover, post-program adoptions)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Benefits (including O&M)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Quantifiable avoided resource costs (e.g., water, electricity)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Adder for other non-quantifiable benefits (e.g., environmental and other)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Benefits	\$ 1,468,221	\$ 1,788,538	\$ 2,823,434	\$ 48,783	\$ -	\$ 6,128,976
Costs:						
Program costs (e.g. incentives, admin, monitoring, evaluation for:						
Utility Costs (e.g., for admin, monitoring, evaluation, markeing)	\$ 905,904	\$ 911,359	\$ 735,997	\$ 58,824	\$ 156,483	\$ 2,768,568
Program participants (e.g., incremental costs not reimbursed)	\$ -	\$ 358,283	\$ 372,913	\$ 900	\$ -	\$ 732,096
Market effects (e.g., spillover, post-program adoptions)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Customer Costs (including O&M)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Quantifiable additional resource costs (e.g. water, electricity)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 905,904	\$ 1,269,642	\$ 1,108,910	\$ 59,724	\$ 156,483	\$ 3,500,664
Utility Performance Incentive at the Sector Level	n/a	n/a	n/a	n/a	n/a	\$ 235,378
Total Costs Including Utility Performance Incentives at Sector Level						\$ 3,736,041
Benefit Cost Ratio by Sector (i.e., B/C Benchmark for PI Calc.)	1.62	1.41	2.55	0.82	-	1.64

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

C&I Programs	Small Business	Large Business	C&I Education	Total
Benefits:				
Avoided Generation, Transmission & Distribution Costs for:				
Program Participants	\$ 1,796,403	\$ 5,449,299	\$ -	\$ 7,245,702
Market effects (e.g., spillover, post-program adoptions)	\$ -	\$ -	\$ -	\$ -
Customer Benefits (including O&M)	\$ -	\$ -	\$ -	\$ -
Quantifiable avoided resource costs (e.g., water, electricity)	\$ -	\$ -	\$ -	\$ -
Adder for other non-quantifiable benefits (e.g., environmental and other)	\$ -	\$ -	\$ -	\$ -
Total Benefits	\$ 1,796,403	\$ 5,449,299	\$ -	\$ 7,245,702
Costs:				
Program costs (e.g. incentives, admin, monitoring, evaluation for:				
Utility Costs (e.g., for admin, monitoring, evaluation, marketing)	\$ 870,535	\$ 1,644,090	\$ 30,786	\$ 2,545,412
Program participants (e.g., incremental costs not reimbursed)	\$ 158,336	\$ 1,319,392	\$ -	\$ 1,477,727
Market effects (e.g., spillover, post-program adoptions)	\$ -	\$ -	\$ -	\$ -
Customer Costs (including O&M)	\$ -	\$ -	\$ -	\$ -
Quantifiable additional resource costs (e.g. water, electricity)	\$ -	\$ -	\$ -	\$ -
Total Costs	\$ 1,028,871	\$ 2,963,482	\$ 30,786	\$ 4,023,139
Utility Performance Incentive at the Sector Level	n/a	n/a	n/a	\$ 251,019
Total Costs Including Utility Performance Incentives at Sector Level				\$ 4,274,157
Benefit Cost Ratio by Sector (i.e., B/C Benchmark for PI Calc.)	1.75	1.84	-	1.70

Table 4. MMBTU Savings Benchmark for Computing Performance Incentive

Residential Programs	Home Energy Assistance	ENERGY STAR Appliances	Home Performance w/ENERGY STAR	ENERGY STAR Homes	Residential Building Practices & Demo	Total
Gas Savings in MMBTU's from Measures Installed in the Program Year						
Number of Participants	422	1,329	534	10	-	2,295
MMBTU Savings per Participant Per Year	19	9	27	31	-	15
Total MMBTU Savings Per Year	7,883	11,788	14,421	309	-	34,401
Measure Life of Measures Installed During the Program Year	18	18	22	24	-	20
Grand Total MMBTU Savings Benchmark for Performance Incentive	144,999	217,636	317,306	7,462	-	687,403
Electric Savings in kWh's from Measures Installed in the Program Year						
Number of Participants	95	322	30	5	-	452
kWh Savings per Participant	517	121	248	428	-	216
Total kWh Savings Per Participant Per Year	49,105	38,832	7,434	2,139	-	97,510
Measure Life of Measures Installed in the annual program year time period	20.02	17.31	19.91	21.74	-	18.97
Grand Total kWh Savings Benchmark for Performance Incentive	983,144	672,192	148,012	46,510	-	1,849,858
C&I Programs						
	Small Business	Large Business	C&I Education	Total		
Number of Participants	297	35	-	332		
MMBTU Savings per Participant Per Year	61	1,842	-	249		
Total MMBTU Savings Per Year	18,060	64,485	-	82,545		
Measure Life of Measures Installed During the Program Year	15	12	-	13		
Grand Total MMBTU Savings Benchmark for Performance Incentive	271,368	798,796	-	1,070,164		
Electric Savings in kWh's from Measures Installed in the Program Year						
Number of Participants	3	-	-	3		
kWh Savings per Participant	280	-	-	280		
Total kWh Savings Per Participant Per Year	840.00	-	-	840.00		
Measure Life of Measures Installed in the annual program year time period	18.00	-	-	18.00		
Grand Total kWh Savings Benchmark for Performance Incentive	15,120	-	-	15,120		

Table 5. Footnotes for Benefit Cost Ratio

Residential Programs	Home Energy Assistance	ENERGY STAR Appliances	Home Performance w/ENERGY STAR	ENERGY STAR Homes	Residential Building Practices & Demo	Total
Number of Participants*	422	1,329	534	10	-	2,295
MMBTU Savings per Participant Per Year**	19	9	27	31	-	15
Total MMBTU Savings Per Year	7,883	11,788	14,421	309	-	34,401
Number of Years in the Measure Life**	18	18	22	24	-	20
Grand Total MMBTU Savings Benchmark for Performance Incentive	144,999	217,636	317,306	7,462	-	687,403
Lifetime Therm Savings	1,449,989	2,176,363	3,173,060	74,620	-	6,874,032
Rate of Savings per MMBTU ***	\$ 8.91	\$ 8.91	\$ 8.91	\$ 8.91	\$ -	\$ 8.91
Grand Total Dollar Savings	\$ 1,291,940	\$ 1,939,139	\$ 2,827,197	\$ 66,486	\$ -	\$ 6,124,763

C&I Programs	Small Business	Large Business	C&I Education	Total
Number of Participants*	297	35	-	332
MMBTU Savings per Participant Per Year**	61	1,842	-	249
Total MMBTU Savings Per Year	18,060	64,485	-	82,545
Number of Years in the Measure Life**	15	12	-	13
Grand Total MMBTU Savings Benchmark for Performance Incentive	271,368	798,796	-	1,070,164
Lifetime Therm Savings	2,713,679	7,987,962	-	10,701,641
Rate of Savings per MMBTU ***	\$ 7.17	\$ 7.17	\$ -	\$ 7.17
Grand Total Dollar Savings	\$ 1,945,708	\$ 5,727,369	\$ -	\$ 7,673,077

* 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 Costs in New England: 2013 Report, *Synapse Energy Economics, Inc.* (Cambridge, MA). pp. 1-17

Residential Programs	Home Energy Assistance	ENERGY STAR Appliances	Home Performance w/ENERGY STAR	ENERGY STAR Homes	Residential Building Practices & Demo	Total
Number of Participants*	422	1,329	534	10	-	2,295
Participant Incremental Cost	\$ -	\$ 358,283	\$ 372,913	\$ 900	\$ -	\$ 732,096
Program Participant Cost	\$ -	\$ 270	\$ 698	\$ 90	\$ -	\$ 319

C&I Programs	Small Business	Large Business	C&I Education	Total
Number of Participants*	297	35	-	332
Participant Incremental Cost	\$ 158,336	\$ 1,319,392	\$ -	\$ 1,477,727
Program Participant Cost	\$ 533	\$ 37,697	\$ -	\$ 4,451

Table 6. Performance Incentive Calculation - 2014

Commercial/Industrial Incentive	<u>Planned</u>	<u>Actual</u>
1. Benefit/Cost Ratio	1.25	1.70
2. Threshold Benefit / Cost Ratio ¹	1.00	
3. Lifetime MMBTU Savings	963,600	1,070,164
4. Threshold Lifetime MMBTU Savings (65%) ²	626,340	
5. Budget / Actual Spend	\$2,425,501	\$2,545,412
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime MMBTU Percentage of Budget	4.00%	
8. C/I Incentive	\$194,040	\$251,019
9. Cap	\$291,060	\$291,060
Residential Incentive		
10. Benefit / Cost Ratio	1.52	1.64
11. Threshold Benefit / Cost Ratio ¹	1.00	
12. Lifetime MMBTU Savings	658,486	687,403
13. Threshold Lifetime MMBTU Savings (65%) ²	428,016	
14. Budget / Actual Spend	\$2,744,250	\$2,768,568
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime MMBTU Percentage of Budget	4.00%	
17. Residential Incentive	\$219,540	\$235,378
18. Cap	\$329,310	\$329,310
19. TOTAL INCENTIVE	\$413,580	\$486,396

Notes

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime MMBTU Savings for each sector must be greater than or equal to 65% of projected savings.

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Table 7. Planned Versus Actual Benefit / Cost Ratio by Sector - 2014

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	\$6,843,931	\$7,245,702
2. Implementation Expenses	\$2,425,501	\$2,545,412
3. Customer Contribution	\$2,850,048	\$1,477,727
4. Performance Incentive	\$194,040	\$251,019
5. Total Costs Including Performance Incentive	\$5,469,589	\$4,274,157
6. Benefit/Cost Ratio - C&I Sector	1.30	1.80
7. Benefit/Cost Ratio including PI in cost	1.25	1.70
Residential:		
8. Benefits (Value) From Eligible Programs	\$5,815,570	\$6,128,976
9. Implementation Expenses	\$2,744,250	\$2,768,568
10. Customer Contribution	\$870,234	\$732,096
11. Performance Incentive	\$219,540	\$235,378
12. Total Costs Including Performance Incentive	\$3,834,024	\$3,736,041
13. Benefit/Cost Ratio - Residential Sector	1.61	1.75
14. Benefit/Cost Ratio including PI in cost	1.52	1.64

Table 8. Program Expenditures by Category - 2014 Actual

Program	Evaluation	External Administration	Internal Administration	Internal Implementation	Marketing	Rebates- Services	Total
Residential Programs							
ENERGY STAR Appliances	\$ 13,085		\$ 10,015	\$ 33,942	\$ 29,790	\$ 824,528	\$ 911,359
ENERGY STAR Homes	\$ 2,114		\$ 1,564	\$ 17,370	\$ 1,781	\$ 35,995	\$ 58,824
Home Energy Assistance	\$ 12,210		\$ 9,941	\$ 41,862	\$ 2,495	\$ 839,397	\$ 905,904
Home Performance with ENERGY STAR	\$ 15,153		\$ 7,674	\$ 90,013	\$ 2,918	\$ 620,239	\$ 735,997
Residential Building Practices & Demonstration	\$ 2,400		\$ 864	\$ 757	\$ 1,120	\$ 151,342	\$ 156,483
Subtotal - Residential	\$ 44,961	\$ -	\$ 30,059	\$ 183,943	\$ 38,104	\$ 2,471,500	\$ 2,768,568
Commercial/Industrial Programs							
C&I Education	\$ 174		\$ 4,242	\$ 126	\$ 18,671	\$ 7,572	\$ 30,786
Large Business Energy Solutions	\$ 87,606		\$ 19,543	\$ 89,179	\$ 28,365	\$ 1,419,397	\$ 1,644,090
Small Business Energy Solutions	\$ 19,170		\$ 16,390	\$ 133,390	\$ 30,266	\$ 671,319	\$ 870,535
Subtotal - C&I	\$ 106,951	\$ -	\$ 40,175	\$ 222,695	\$ 77,302	\$ 2,098,288	\$ 2,545,412
Total - All	\$ 151,912	\$ -	\$ 70,234	\$ 406,639	\$ 115,406	\$ 4,569,788	\$ 5,313,979