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May 31, 2022

Via Electronic Mail Only

Daniel Goldner
Chairman
New Hampshire Public Utilities Commission
21 South Fruit St., Suite 10
Concord, NH 03301-2429

Dear Chairman Goldner:

**Re: DE 17-136, DE 20-092; Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty
Energy Efficiency Programs
Performance Incentive Calculation – 2021**

Attached for filing with the Commission is Liberty's performance incentive calculation relating to the NHSaves Energy Efficiency Programs for the program year 2021.

Pursuant to the Commission's procedural order issued on January 24, 2022, in Docket Nos. DE 17-136 and DE 20-092, this 2021 report is being filed under Docket No. DE 17-136. The order states,

"To ensure that filings are made in the correct docket, this procedural order clarifies that filings such as monthly, quarterly, or annual reports for program year 2021, as well as notifications regarding program expenditures made prior to January 1, 2022, should be filed in Docket No. DE 17-136. Program filings for January 1, 2022, or thereafter should be filed in Docket No. DE 20-092."

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 'Erica L. Menard'. The signature is written in a cursive, flowing style.

Erica L. Menard

Attachments

Cc: DE 17-136 and DE 20-092 Service Lists

3739

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

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

ENERGY EFFICIENCY PROGRAMS - 2021 YEAR-END REPORT

NHPUC Docket No. DE 17-136

May 31, 2022



TABLE OF CONTENTS

Table 1a -	Program Cost Effectiveness - 2021 Plan.....	2
Table 1b -	Program Cost Effectiveness - 2021 Actual	2
Table 1c -	Percent of Plan Program Cost Effectiveness Targets Achieved	2
Table 2a -	Present Value Benefits - 2021 Plan.....	3
Table 2b -	Present Value Benefits - 2021 Actual.....	3
Table 2c -	Percent of Plan Present Value Benefits Achieved.....	3
Table 3-	Performance Incentive Calculation – 2021 Planned versus Actual.....	4
Table 4 -	Program Expenditures by Category – 2021 Actual.....	5

Table 1a. Program Cost-Effectiveness - 2021 PLAN

	Benefit/Cost Ratios	Benefits	Utility Costs (\$000 - 2021\$) ²	Customer Costs (\$000 - 2021\$) ²	Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test ¹	Granite State Test										
Residential Programs												
B1 - Home Energy Assistance	1.80	\$ 2,665	\$ 1,483	\$ -	-	-	-	-	-	235	6,381	127,363
A1 - Energy Star Homes	3.63	\$ 3,178	\$ 875	\$ 1,841	-	-	-	-	-	406	12,724	318,111
A2 - Home Performance with Energy Star	2.38	\$ 2,456	\$ 1,030	\$ 353	159	796	34	22	670	13,010	234,604	
A3 - Energy Star Products	2.56	\$ 2,470	\$ 964	\$ 747	19	318	6	(0)	2,052	14,841	244,433	
A4 - Home Energy Reports	0.49	\$ 140	\$ 287	\$ -	-	-	-	-	30,000	13,169	13,169	
Sub-Total Residential	2.35	\$ 10,909	\$ 4,639	\$ 2,941		178	1,114	41	22	33,363	60,126	937,679
Commercial & Industrial Programs												
C1 - Large Business Energy Solutions	3.12	\$ 6,839	\$ 2,191	\$ 2,241	-	-	-	-	93	61,935	774,804	
C2 - Small Business Energy Solutions	2.27	\$ 4,098	\$ 1,805	\$ 1,101	3	45	1	-	939	24,125	404,316	
C6c - C&I Education	-	\$ -	\$ 88	\$ -	-	-	-	-	-	-	-	
Sub-Total Commercial & Industrial	2.68	\$ 10,937	\$ 4,084	\$ 3,341		3	45	1	-	1,031	86,060	1,179,120
Total	2.50	\$ 21,846	\$ 8,723	\$ 6,282	\$ 480	181	1,160	42	22	34,394	146,186	2,116,800
Notes:												
(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance program.												
(2) Utility and Customer Costs and Benefits are expressed in 2021 Dollars.												
(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated in June 2020 for program year 2021.												

Notes:
(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance program.
(2) Utility and Customer Costs and Benefits are expressed in 2021 Dollars.
(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated in June 2020 for program year 2021.

Annual kWh Savings	0.4%	kWh < 55%	Lifetime kWh Savings	1,159,677	0.2%	kWh < 55%
Annual MMBTU Savings (in kWh)	99.6%		Lifetime MMBTU Savings (in kWh)	620,372,800	99.8%	
	100.0%			621,532,476	100.0%	

Table 1b. Program Cost-Effectiveness - 2021 ACTUAL

	Benefit/Cost Ratios		Benefits		Utility Costs (\$000 - 2021S) ²	Customer Costs (\$000 - 2021S) ²	Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test ¹	Granite State Test												
Residential Programs														
B1 - Home Energy Assistance	0.93	\$ 1,530	\$ 1,649	\$ -				121	2,824	20	31	271	5,896	115,358
A1 - Energy Star Homes	2.36	\$ 1,324	\$ 561	\$ 472				-	-	-	-	241	5,331	132,521
A2 - Home Performance with Energy Star	3.29	\$ 4,213	\$ 1,280	\$ 305				83	834	14	19	338	17,784	407,503
A3 - Energy Star Products	3.06	\$ 2,556	\$ 836	\$ 875				29	491	9	(0)	2,143	15,490	253,746
A4 - Home Energy Reports	1.01	\$ 220	\$ 218	\$ -				-	-	-	-	23,705	20,661	20,661
Sub-Total Residential	2.17	\$ 9,842	\$ 4,544	\$ 1,652				233	4,149	43	50	26,698	65,161	929,790
Commercial & Industrial Programs														
C1 - Large Business Energy Solutions	3.82	\$ 6,896	\$ 1,804	\$ 2,527				(28)	(553)	0	-	1,104	51,816	769,235
C2 - Small Business Energy Solutions	2.83	\$ 4,385	\$ 1,549	\$ 1,706				(10)	(201)	1	-	3,015	24,365	424,282
C6c - C&I Education	0.00	\$ -	\$ 22	\$ -				-	-	-	-	-	-	-
Subtotal Commercial & Industrial	3.34	\$ 11,281	\$ 3,374	\$ 4,233				(38)	(753)	1	-	4,119	76,181	1,193,517
Total	2.67	\$ 21,123	\$ 7,918	\$ 5,885	\$ 455			196	3,396	44	50	30,817	141,342	2,123,307
Notes:														
(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance program.														
(2) Utility and Customer Costs and Benefits are expressed in 2021 Dollars.														
(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated in June 2020 for program year 2021.														

Notes:
(1) The Granite State Test is used as the primary cost test, as approved in Order No. 36,322, and includes an annual NEI adder of \$405.71 per weatherization project in the Home Energy Assistance program.
(2) Utility and Customer Costs and Benefits are expressed in 2021 Dollars.
(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated in June 2020 for program year 2021.

Annual kWh Savings	0.5%	kWh < 55%	Lifetime kWh Savings	3,395,580	0.5%	kWh < 55%
Annual MMBTU Savings (in kWh)	100%		Lifetime MMBTU Savings (in kWh)	622,305,576	99%	
Total Energy Savings	100%		Total Energy Savings	625,701,156	100%	

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

	Benefit/Cost Ratios		Benefits		Utility Costs (\$000 - 2021S) ²	Customer Costs (\$000 - 2021S) ²	Performance Incentive (\$000)	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served	Annual MMBTU Savings	Lifetime MMBTU Savings
	Granite State Test	Granite State Test	Granite State Test	Granite State Test										
Residential Programs	92%	90%	98%	56%			n/a	131%	372%	105%	225%	80%	108%	99%
Commercial & Industrial Programs	125%	103%	83%	127%			n/a	-1499%	-1661%	113%	0%	399%	89%	101%
Total	107%	97%	91%	94%			95%	108%	293%	105%	225%	90%	97%	100%

Table 2a. Present Value Benefits - 2021 PLAN

	Total Benefits (\$000) ¹	Resource Benefits (\$000)													Non-Resource Benefits (\$000)				
		Electric										Non - Electric			Total Resource Benefits	Fossil Emissions	Other Non-Resource Benefits ²	Total Non-Resource Benefits	
		CAPACITY					ENERGY												
		Summer Generation	Winter Generation	Transmission	Distribution	Reliability	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	Electric DRIPE	Other Fuels	Water Benefit						
Granite State Test																			
Residential Programs																			
B1 - Home Energy Assistance	\$2,665	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,120	\$0	\$1,120	\$162	\$1,383	\$1,545	
A1 - Energy Star Homes	\$3,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,716	\$0	\$2,716	\$462	\$407	\$869	
A2 - Home Performance with Energy Star	\$2,456	\$3	\$0	\$11	\$9	\$0	\$21	\$17	\$9	\$6	\$7	\$84	\$2,082	\$0	\$2,166	\$290	\$325	\$615	
A3 - Energy Star Products	\$2,470	\$0	\$0	\$0	\$0	\$0	\$11	\$13	-\$1	\$0	\$1	\$23	\$2,164	\$0	\$2,188	\$283	\$328	\$611	
A4 - Home Energy Reports	\$140	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$130	\$0	\$130	\$10	\$20	\$29	
Sub-Total Residential	\$10,909	\$3	\$0	\$10	\$9	\$0	\$32	\$30	\$9	\$6	\$8	\$108	\$8,213	\$0	\$8,320	\$1,206	\$2,463	\$3,669	
Commercial & Industrial Programs																			
C1 - Large Business Energy Solutions	\$6,839	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,030	\$0	\$6,030	\$809	\$904	\$1,713	
C2 - Small Business Energy Solutions	\$4,098	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$0	\$0	\$0	\$3	\$3,038	\$572	\$3,614	\$484	\$456	\$940	
C6c - C&I Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal Commercial & Industrial	\$10,937	\$0	\$0	\$0	\$0	\$0	\$1	\$2	\$0	\$0	\$0	\$3	\$9,068	\$572	\$9,644	\$1,293	\$1,361	\$2,654	
Total	\$21,846	\$3	\$0	\$10	\$9	\$0	\$34	\$32	\$9	\$6	\$8	\$111	\$17,281	\$572	\$17,964	\$2,499	\$3,824	\$6,323	

Notes:

(1) The Granite State Test is used as the primary cost test, as approved in Order No. 26,322. Benefits are calculated based on net savings.

(2) Non-resource benefits include NEIs, which are only applied to the Home Energy Assistance program in the GST primary cost test.

(3) Non-embedded environmental benefits are not included in the GST primary cost test.

Table 2b. Present Value Benefits - 2021 ACTUAL

	Total Benefits (\$000) ¹	Resource Benefits											Non-Resource Benefits							
		Electric											Non - Electric		Total Resource Benefits	Fossil Emissions	Other Non-Resource Benefits ²	Total Non-Resource Benefits		
		CAPACITY				ENERGY							Total Electric Resource Benefits	Other Fuels Benefits					Water Benefit	
		Summer Generation	Winter Generation	Transmission	Distribution	Reliability	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	Electric DRIPE									
												Granite State Test								
Residential Programs																				
B1 - Home Energy Assistance	\$1,530	\$67	\$0	\$61	\$53	\$0	\$53	\$56	\$43	\$34	\$7	\$374	\$1,001	\$2	\$1,377	\$153	\$0	\$153		
A1 - Energy Star Homes	\$1,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,132	\$0	\$1,132	\$192	\$170	\$362		
A2 - Home Performance with Energy Star	\$4,213	\$25	\$0	\$25	\$22	\$0	\$12	\$11	\$18	\$14	\$3	\$130	\$3,508	\$3	\$3,641	\$572	\$546	\$1,118		
A3 - Energy Star Products	\$2,556	\$0	\$0	\$0	\$0	\$0	\$16	\$19	\$0	\$0	\$2	\$36	\$2,228	\$0	\$2,263	\$293	\$339	\$632		
A4 - Home Energy Reports	\$220	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$204	\$0	\$204	\$15	\$31	\$46		
Sub-Total Residential	\$9,842	\$92	\$0	\$86	\$75	\$0	\$82	\$85	\$60	\$47	\$12	\$539	\$8,073	\$5	\$8,617	\$1,225	\$1,086	\$2,310		
Commercial & Industrial Programs																				
C1 - Large Business Energy Solutions	\$6,896	\$0	\$0	\$0	\$0	\$0	-\$12	-\$6	-\$11	-\$6	-\$2	-\$37	\$6,039	\$0	\$6,001	\$894	\$900	\$1,795		
C2 - Small Business Energy Solutions	\$4,385	\$0	\$0	\$0	\$0	\$0	\$1	\$1	\$0	\$0	\$0	\$3	\$3,153	\$700	\$3,856	\$529	\$473	\$1,003		
C6c - C&I Education	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Sub-Total Commercial & Industrial	\$11,281	\$0	\$0	\$0	\$0	\$0	-\$11	-\$5	-\$11	-\$6	-\$2	-\$35	\$9,192	\$700	\$9,857	\$1,424	\$1,374	\$2,797		
Total	\$21,123	\$92	\$0	\$86	\$75	\$0	\$71	\$80	\$49	\$41	\$11	\$505	\$17,265	\$705	\$18,474	\$2,648	\$2,459	\$5,108		

Notes:

(1) The Granite State Test is used as the primary cost test, as approved in Order No. 26,322. Benefits are calculated based on net savings.

(2) Non-resource benefits include NEIs, which are only applied to the Home Energy Assistance program in the GST primary cost test.

(3) Non-embedded environmental benefits are not included in the GST primary cost test.

Table 2c. Percent of Plan Present Value Benefits Achieved

	Total Benefits (\$000) ¹	Resource Benefits													Non-Resource Benefits				
		Electric										Non - Electric			Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits ²	Total Non- Resource Benefits	
		CAPACITY				ENERGY						Total Electric Resource Benefits	Other Fuels Benefits	Fossil Emissions					
		Summer Generation	Winter Generation	Transmission	Distribution	Reliability	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	Electric DRIPE								
Residential Programs	90%	3253%	0%	830%	830%	0%	253%	281%	680%	779%	154%	501%	98%	0%	104%	102%	44%	63%	
Commercial & Industrial Programs	103%	0%	0%	0%	0%	0%	-719%	-302%	0%	0%	-1063%	-1048%	101%	122%	102%	110%	101%	105%	
Total	97%	3253%	0%	830%	830%	0%	211%	251%	551%	681%	130%	455%	100%	123%	103%	106%	64%	81%	

Table 3. Performance Incentive Calculation - 2021

Row	Category	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1	Lifetime MMBtu Savings	2,116,800	1,587,600	2,123,307	100%	2.475%	2.483%	\$ 215,885	\$ 269,856	\$ 196,579	Program Cost Effectiveness (Page 1 of 3)
2	Annual MMBtu Savings	146,186	109,639	141,342	97%	1.100%	1.064%	\$ 95,949	\$ 119,936	\$ 84,215	Program Cost Effectiveness (Page 1 of 3)
3	Total Resource Benefits	\$17,964,374		\$18,474,474	103%						Present Value Benefits (Page 2 of 3)
4	Total Utility Costs ¹	\$8,722,615		\$7,918,253	91%						Program Cost Effectiveness (Page 1 of 3)
5	Net Benefits	\$9,241,760	\$6,931,319.65	\$10,556,221	114%	1.925%	2.199%	\$ 167,910	\$ 209,888	\$ 174,106	Line 5 minus line 6
6	Total					5.500%	5.745%	\$ 479,744	\$ 599,680	\$ 454,900	Sum of Rows 1, 2 & 5

Row	Category	Granite State Test		Source
		Planned	Actual	
7	Total Benefits	\$ 21,846,243	\$ 21,122,921	Present Value Benefits (Page 2 of 3)
8	Performance Incentive	\$ 479,744	\$ 454,900	from row 6 above
9	Total Utility Costs	\$ 8,722,615	\$ 7,918,253	from row 4 above
10	Portfolio GST BCR	2.37	2.52	Row 7 Divided by Rows 8+9

Costs, Benefits, and PI Expressed in 2021 Dollars.

¹ 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.

Table 4. Program Expenditures by Category - 2021 ACTUAL

	Evaluation	External Administration	Internal Administration	Internal Implementation	Marketing	Rebates- Services	Total
Residential Programs							
ENERGY STAR Homes	\$ 17,682	\$ 441	\$ 12,271	\$ 43,421	\$ 12,517	\$ 474,678	\$ 561,010
Home Performance with ENERGY STAR	\$ 18,864	\$ 471	\$ 7,357	\$ 46,143	\$ 19,302	\$ 1,187,733	\$ 1,279,870
ENERGY STAR Products	\$ 17,538	\$ 438	\$ 11,525	\$ 41,166	\$ 12,415	\$ 752,615	\$ 835,696
Home Energy Assistance	\$ 33,889	\$ 845	\$ 12,247	\$ 98,872	\$ 23,862	\$ 1,479,298	\$ 1,649,014
Home Energy Reports	\$ 5,330	\$ 103	\$ 1,990	\$ 13,979	\$ -	\$ 196,874	\$ 218,276
Subtotal Residential	\$ 93,302	\$ 2,298	\$ 45,390	\$ 243,581	\$ 68,095	\$ 4,091,199	\$ 4,543,866
Commercial & Industrial Programs							
C&I Education	\$ 1,778	\$ 44	\$ 2,531	\$ 4,497	\$ 2,384	\$ 10,982	\$ 22,215
Large Business Energy Solutions	\$ 44,964	\$ 1,105	\$ 14,139	\$ 130,607	\$ 63,087	\$ 1,549,622	\$ 1,803,524
Small Business Energy Solutions	\$ 39,890	\$ 732	\$ 27,209	\$ 92,025	\$ 56,998	\$ 1,331,792	\$ 1,548,647
Subtotal Commercial & Industrial	\$ 86,632	\$ 1,881	\$ 43,879	\$ 227,129	\$ 122,470	\$ 2,892,397	\$ 3,374,386
Total	\$ 179,934	\$ 4,179	\$ 89,269	\$ 470,710	\$ 190,565	\$ 6,983,596	\$ 7,918,253