

Program Cost-Effectiveness - 2023 Actuals

	B/C Ratio	Benefits (\$000)					
	Granite State Test	Granite State Test (2023\$)	Utility Costs (\$000 - 2023\$) ²	Customer Costs (\$000 - 2023\$) ²	Number of Customers Served	Annual Net MMBtu Savings	Lifetime Net MMBtu Savings
Residential Programs							
B1 - Home Energy Assistance	2.75	\$ 1,432.7	\$ 520.7	\$ -	84	1,756.7	33,756.7
A1 - Energy Star Homes	1.31	\$ 233.6	\$ 178.5	\$ 114.0	63	1,161.5	24,993.8
A2 - Home Performance with Energy Star	0.92	\$ 268.1	\$ 291.9	\$ 71.8	42	1,345.5	26,399.9
A3 - Energy Star Products	2.26	\$ 422.1	\$ 186.5	\$ 242.0	213	2,567.7	45,325.3
A4 - Residential Behavior	6.47	\$ 163.7	\$ 25.3	\$ -	11,728	17,045.0	17,045.0
A6c - Res Education	-	\$ -	\$ 5.8	\$ -	-	-	-
Sub-Total Residential	2.09	\$ 2,520.3	\$ 1,208.8	\$ 427.7	12,130	23,876.3	147,520.6
Commercial, Industrial & Municipal							
C1 - Large Business Energy Solutions	5.31	\$ 3,694.0	\$ 695.5	\$ 717.1	7	21,001.2	430,472.5
C2 - Small Business Energy Solutions	1.75	\$ 493.0	\$ 282.3	\$ 127.8	32	3,220.7	51,076.6
C6c - C&I Education	-	\$ -	\$ 10.0	\$ -	-	-	-
Sub-Total Commercial & Industrial	4.24	\$ 4,187.0	\$ 987.9	\$ 844.9	39	24,221.8	481,549.1
Total	3.05	\$ 6,707.3	\$ 2,196.6	\$ 1,272.6	12,169	48,098.1	629,069.7

Notes:

- (1) The Granite State Test is used as the primary cost test, as approved in Order No. 26,322, 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 2023 Dollars.
- (3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated as of June 2021 for program years 2022-2023.

Program Cost-Effectiveness - 2023 PLAN

	B/C Ratio	Benefits (\$000)					
	Granite State Test	Granite State Test (2023\$)	Utility Costs (\$000 - 2023\$)²	Customer Costs (\$000 - 2023\$)²	Number of Customers Served⁴	Annual Net MMBtu Savings	Lifetime Net MMBtu Savings
Residential Programs							
B1 - Home Energy Assistance	0.98	\$ 484.1	\$ 494.9	\$ -	56	2,208.4	47,567.5
A1 - Energy Star Homes	1.87	\$ 620.9	\$ 331.6	\$ 128.8	106	2,637.0	63,425.0
A2 - Home Performance with Energy Star	1.08	\$ 386.0	\$ 358.6	\$ 82.2	75	1,798.6	38,254.5
A3 - Energy Star Products	1.77	\$ 308.0	\$ 173.7	\$ 131.7	182	1,835.6	32,492.1
A4 - Residential Behavior	1.26	\$ 56.2	\$ 44.7	\$ -	11,200	5,847.4	5,847.4
A6c - Res Education	-	\$ -	\$ 20.7	\$ -	-	-	-
Sub-Total Residential	1.30	\$ 1,855.1	\$ 1,424.0	\$ 342.7	11,619	14,327.0	187,586.5
Commercial, Industrial & Municipal							
C1 - Large Business Energy Solutions	3.71	\$ 1,922.1	\$ 518.4	\$ 537.2	108	14,307.9	220,365.6
C2 - Small Business Energy Solutions	3.00	\$ 1,540.6	\$ 513.6	\$ 184.9	140	10,830.0	156,347.9
C6c - C&I Education	-	\$ -	\$ 18.5	\$ -	-	-	-
C6d - C&I Customer Partnerships	-	\$ -	\$ -	\$ -	-	-	-
Sub-Total Commercial & Industrial	3.30	\$ 3,462.6	\$ 1,050.5	\$ 722.2	248	25,137.8	376,713.5
Total	2.15	\$ 5,317.7	\$ 2,474.5	\$ 1,064.9	11,867	39,464.8	564,300.0

Notes:

(1) The Granite State Test is used as the primary cost test, as approved in Order No. 26,322, 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 2023 Dollars.

(3) Per past precedent, discount and inflation rates have been updated for the year in which measures will be installed, and were updated as of June 2021 for program year 2022-23.

(4) Note that the participant counts (column R) for some programs in the 2022-23 plan filing included a formula error and have been updated to reflect actual planned participant counts. This had no impact on planned savings / benefits.

Present Value Benefits - 2023 Actuals

	Total Benefits (\$000) Granite State Test	Resource Benefits (\$000)						Non-Resource Benefits (\$000)			
		Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Water Benefit	Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits	Total Non- Resource Benefits	Environmental Benefits
Residential Programs											
B1 - Home Energy Assistance	\$ 1,433	\$ 15	\$ 271	\$ 5	\$ 276	\$ 2	\$ 292	\$ 50	\$ 1,091	\$ 1,140	\$ 6
A1 - Energy Star Homes	\$ 234	\$ -	\$ 191	\$ 3	\$ 194	\$ -	\$ 194	\$ 39	\$ 29	\$ 68	\$ -
A2 - Home Performance with Energy Star	\$ 268	\$ 7	\$ 218	\$ 4	\$ 222	\$ 0	\$ 228	\$ 40	\$ 34	\$ 74	\$ 2
A3 - Energy Star Products	\$ 422	\$ 8	\$ 345	\$ 7	\$ 352	\$ -	\$ 360	\$ 62	\$ 54	\$ 116	\$ 4
A4 - Residential Behavior	\$ 164	\$ -	\$ 144	\$ 5	\$ 150	\$ -	\$ 150	\$ 14	\$ 22	\$ 37	\$ -
Sub-Total Residential	\$ 2,520	\$ 29	\$ 1,170	\$ 24	\$ 1,194	\$ 2	\$ 1,225	\$ 205	\$ 1,230	\$ 1,435	\$ 11
Commercial/Industrial Programs											
C1 - Large Business Energy Solutions	\$ 3,694	\$ -	\$ 2,983	\$ 53	\$ 3,036	\$ -	\$ 3,036	\$ 658	\$ 455	\$ 1,113	\$ -
C2 - Small Business Energy Solutions	\$ 493	\$ -	\$ 383	\$ 9	\$ 391	\$ 32	\$ 424	\$ 69	\$ 59	\$ 128	\$ -
Sub-Total Commercial & Industrial	\$ 4,187	\$ -	\$ 3,366	\$ 61	\$ 3,428	\$ 32	\$ 3,460	\$ 727	\$ 514	\$ 1,242	\$ -
Total	\$ 6,707	\$ 29	\$ 4,536	\$ 86	\$ 4,621	\$ 34	\$ 4,685	\$ 932	\$ 1,745	\$ 2,677	\$ 11

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.

Present Value Benefits - 2023 PLAN

	Total Benefits (\$000) Granite State Test	Resource Benefits (\$000)						Non-Resource Benefits (\$000)			
		Total Electric Benefit	Gas Benefit	Gas DRIPE	Total Gas Benefit	Water Benefits	Total Resource Benefits	Fossil Emissions	Other Non- Resource Benefits	Total Non- Resource Benefits	Environmental Benefits
Residential Programs											
B1 - Home Energy Assistance	\$ 484.1	\$ 12.0	\$ 390.8	\$ 6.7	\$ 397.5	\$ -	\$ 409.5	\$ 74.6	\$ -	\$ 74.6	\$ 7.6
A1 - Energy Star Homes	\$ 620.9	\$ -	\$ 508.7	\$ 7.7	\$ 516.4	\$ -	\$ 516.4	\$ 104.4	\$ 77.5	\$ 181.9	\$ -
A2 - Home Performance with Energy Star	\$ 386.0	\$ 5.5	\$ 314.3	\$ 5.5	\$ 319.7	\$ 0.9	\$ 326.2	\$ 59.8	\$ 48.8	\$ 108.6	\$ 2.9
A3 - Energy Star Products	\$ 308.0	\$ (0.2)	\$ 258.6	\$ 5.2	\$ 263.8	\$ -	\$ 263.6	\$ 44.4	\$ 39.5	\$ 83.9	\$ (0.2)
A4 - Residential Behavior	\$ 56.2	\$ -	\$ 49.5	\$ 1.8	\$ 51.3	\$ -	\$ 51.3	\$ 4.9	\$ 7.7	\$ 12.6	\$ -
Sub-Total Residential	\$ 1,855.1	\$ 17.4	\$ 1,521.9	\$ 26.9	\$ 1,548.8	\$ 0.9	\$ 1,567.0	\$ 288.1	\$ 173.5	\$ 461.6	\$ 10.4
Commercial/Industrial Programs											
C1 - Large Business Energy Solutions	\$ 1,922.1	\$ -	\$ 1,570.5	\$ 36.1	\$ 1,606.5	\$ 24.5	\$ 1,631.0	\$ 291.0	\$ 241.0	\$ 532.0	\$ -
C2 - Small Business Energy Solutions	\$ 1,540.6	\$ -	\$ 1,156.3	\$ 28.1	\$ 1,184.4	\$ 155.5	\$ 1,339.9	\$ 200.7	\$ 177.7	\$ 378.4	\$ -
Sub-Total Commercial & Industrial	\$ 3,462.6	\$ -	\$ 2,726.8	\$ 64.2	\$ 2,791.0	\$ 179.9	\$ 2,970.9	\$ 491.7	\$ 418.6	\$ 910.4	\$ -
Total	\$ 5,317.7	\$ 17.4	\$ 4,248.7	\$ 91.1	\$ 4,339.7	\$ 180.8	\$ 4,537.9	\$ 779.8	\$ 592.1	\$ 1,371.9	\$ 10.4

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.

Portfolio Planned Versus Actual Performance - 2023										
Portfolio	Planned	Threshold	Actual	% of Plan	Design Coefficient	Actual Coefficient	Planned PI	125% of Planned PI	Actual PI	Source
1 Lifetime MMBtu Savings	564,300	423,225	629,070	111%	2.475%	2.759%	\$ 61,244	\$ 76,555	\$ 60,606	Planned and Actual from Cost Eff Tab
2 Annual MMBtu Savings	39,465	29,599	48,098	122%	1.100%	1.341%	\$ 27,219	\$ 34,024	\$ 29,449	Planned and Actual from Cost Eff Tab
3 Total Resource Benefits	\$ 4,537,940	\$ 2,949,661	\$ 4,684,520	103%					\$ -	Planned and Actual from Benefits Tab
4 Total Utility Costs ¹	\$ 2,474,490	\$ 1,608,419	\$ 2,196,609	89%					\$ -	Planned and Actual from Cost Eff Tab
5 Net Benefits	\$ 2,063,450	\$ 1,341,242	\$ 2,487,911	121%	1.925%	2.321%	\$ 47,634	\$ 59,542	\$ 50,983	Line 3 minus line 4
6 Total					5.500%	6.421%	\$ 136,097	\$ 170,121	\$ 141,038	

Granite State Test			
	Planned	Actual	Source
7 Total Benefits	\$ 5,317,738	\$ 6,707,271	Planned and Actual from Cost Eff Tab
8 Performance Incentive	\$ 136,097	\$ 141,038	from row 6 above
9 Total Utility Costs	\$ 2,474,490	\$ 2,196,609	from row 4 above
10 Portfolio GST BCR	2.04	2.87	row 7 divided by rows 8+9

Costs, Benefits, and PI Expressed in 2023 Dollars.

Notes:

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.

2023 Annual Report Reconciliation
Northern Utilities - Unitil Gas
January 1, 2023 - December 31, 2023

			Total 2023
1.	Ending Balance: 12/31/2022	(Over)/Under	\$ 166,596
2.	Prior Year(s) True Up		<u>\$ (1,489)</u>
3.	Beginning Balance 1/1/2023		\$ 165,107
2023 Revenues			
4.	Energy Efficiency Charge Revenue		\$ 2,274,736
5.	Estimated Interest		<u>\$ 15,854</u>
6.	Total Funding	Σ Lines 4 - 5	\$ 2,290,590
2023 Expenses			
7.	Program Expenses		\$ 2,196,609
8.	Current Year Planned PI		<u>\$ 88,463</u>
9.	Total Expenses	Σ Lines 7 thru 8	\$ 2,285,072
10.	Prelim Ending Balance: 12/31/2023	Lines 3 - 6 + 9	\$ 159,589
11.	Current Year Actual PI		\$ 141,038
12.	Expected Ending Balance: 12/31/2023	Line 10 - 8 + 11	\$ 212,163

Notes:

Line 2: Prior Year(s) True-Up reflects adjustments to the 2022 ending balance related to 2022 PI and interest, as booked in 2023

Line 11: Current Year (2023) Actual PI reflects the PI calculation from this annual report.

2023 Annual Report Reconciliation
Northern Utilities - Unitil Gas
On-Bill Financing
January 1, 2023 - December 31, 2023

Revenue and Expense Reconciliation

	<u>Resi</u>	<u>C&I</u>	<u>Total</u>
Beginning Balance: 1/1/2023	\$ 71,572	\$ 203,000	\$ 274,572
2023 Activity			
New Funding 2023	\$ -	\$ -	\$ -
Loans to Customers 2023	\$ 22,500	\$ -	\$ 22,500
Payments from Customers 2023	\$ 9,694	\$ -	\$ 9,694
Ending Balance: 12/31/2023	\$ 58,766	\$ 203,000	\$ 261,766