#### Reprinted 4/18/2020:

Rows A6b-Res ISO Forward Capacity Market Expenses, A6c-Res Education and Colum Total Resource Cost Test were not displayed in Attachment H1, Page 1 of 6, of the March 1, 2022 Compliance Filing.

No changes were made to program budgets or goals.

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# Program Cost-Effectiveness - 2022 Compliance Plan

	Benefit/C	ost Ratios	Benefits	(\$000)									
	Total	Granite	Total	Granite	Utility Costs (\$000 -	<b>Customer Costs</b>	Annual Net	Lifetime Net	Winter kW	Summer kW	Number of	Annual Net	Lifetime Net
	Resource	State Test	Resource	State Test	2022\$) <sup>2</sup>	(\$000 - 2022\$) <sup>2</sup>	MWh Savings	MWh Savings	Savings	Savings	Customers	MMBtu Savings	MMBtu Savings
	Cost Test		Cost Test								Served		
Residential Programs													
B1 - Home Energy Assistance	1.73	1.73	2,077.5	2,077.5	1,204.3	-	142.4	2,096.2	21.9	22.7	112	2,124.8	43,427.1
A1 - Energy Star Homes	2.82	3.39	2,035.8	1,642.6	484.4	237.9	124.4	3,000.0	37.1	1.9	158	1,564.0	38,400.0
A2 - Home Performance with Energy Star	2.32	2.08	1,751.9	1,415.4	681.4	73.0	156.5	3,145.6	38.8	13.6	66	1,808.0	36,241.9
A3 - Energy Star Products	1.69	2.09	1,337.6	1,095.0	524.6	268.0	800.1	8,586.0	165.0	105.5	5,499	482.3	10,211.5
A4 - Residential Behavior	2.20	1.76	385.8	308.6	175.0	=	3,100.0	3,100.0	669.2	431.7	-	-	-
A5 - Residential Active Demand Response	-	-	-	-	67.0	=	-	-	=	=		-	-
A6b - Res ISO Forward Capacity Market Expenses	-	-	-	-	10.9	-	-	-	-	-	-	-	-
A6c - Res Education	-	-	-	-	33.3	-	-	-	-	-	-	-	-
Sub-Total Residential	2.02	2.06	7.588.6	6,539.2	3,180.9	578.8	4.323.4	19,927.7	932.0	575.3	5,835	5,979.1	128,280.5
Sub-Total Residential	2.02	2.00	7,388.0	0,333.2	3,180.9	376.6	4,323.4	13,327.7	332.0	3/3.3	3,633	3,373.1	120,200.3
Commercial, Industrial & Municipal													
C1 - Large Business Energy Solutions	1.67	2.05	2,765.1	2,517.3	1,225.3	425.6	2,266.5	28,144.5	427.1	353.8	146	(354.1)	(3,653.8)
C2 - Small Business Energy Solutions	1.33	1.74	2,270.0	2,063.3	1,182.6	526.7	2,160.3	26,503.5	243.6	208.1	321	(368.7)	(3,855.9)
C3 - Municipal Energy Solutions	1.12	1.18	281.6	256.0	217.2	33.9	308.5	3,457.4	29.4	28.7	9	(33.9)	(305.0)
C5 - C&I Active Demand Response	-	-	-	-	175.4	-	-	-	-	-		-	-
C6b - C&I ISO Forward Capacity Market Expenses	-	-	-	-	18.4	-	-	-	-	-	-	-	-
C6c - C&I Education	-	-	-	-	29.1	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	1.39	1.70	5,316.7	4,836.7	2,848.1	986.2	4,735.3	58,105.4	700.1	590.5	476	(756.7)	(7,814.7)
Total	1.70	1.89	12,905.3	11,375.9	6,029.0	1,565.0	9,058.7	78,033.1	1,632.1	1,165.9	6,310.7	5,222.4	120,465.8

### 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. For the illustrative Total Resource Cost Test, NEI adders of 25% for Residential and 10% for C&I are applied to total benefits

(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.

1	Annual kWh Savings	9,058,743	85.5%	kWh > 65%	Lifetime kWh Savings	78,033,127	68.8%	kWh > 65%
	Annual MMBTU Savings (in kWh)	1,530,547	14.5%		Lifetime MMBTU Savings (in kWh)	35,305,051	31.2%	
		10,589,290	100.0%			113,338,178	100.0%	

Annual Net Savings as a % of 2019 Sales	0.78%

Spending per Customer	Low-Income	\$ 181.37
	Residential	\$ 33.08
	C&I	\$ 260.74

<sup>(2)</sup> Utility and Customer Costs and Benefits are expressed in 2022 Dollars.

#### Reprinted 4/18/2020:

Rows A4-Residential Behavior, A6c-Res Education and Colum Total Resource Cost Test were not displayed in Attachment H1, Page 4 of 6, of the March 1, 2022 Compliance Filing.

No changes were made to program budgets or goals.

Unitil Energy Systems Inc NHPUC Docket No. DE 20-092 March 1, 2022 -Plan Filing (2022-2023) REVISED Attachment H1 (2023) Page 4 of 6

# Program Cost-Effectiveness - 2023 Compliance Plan

	Benefit/C	Cost Ratios	Benefits	(\$000)									
	Total	Granite	Total	Granite	Utility Costs (\$000 -	<b>Customer Costs</b>	<b>Annual Net</b>	Lifetime Net	Winter kW	Summer kW	Number of	Annual Net	Lifetime Net
	Resource	State Test	Resource	State Test	2022\$) <sup>2</sup>	(\$000 - 2022\$) <sup>2</sup>	MWh Savings	MWh Savings	Savings	Savings	Customers	MMBtu Savings	<b>MMBtu Savings</b>
	Cost Test		Cost Test								Served		
Residential Programs													
B1 - Home Energy Assistance	1.92	1.92	2,433.7	2,433.7	1,269.7	-	144.4	2,159.0	21.7	24.2	128	2,425.5	49,628.6
A1 - Energy Star Homes	3.03	3.67	2,202.3	1,778.2	484.9	241.6	118.4	2,835.0	30.1	2.0	166	1,690.0	41,550.0
A2 - Home Performance with Energy Star	2.46	2.21	1,859.5	1,503.2	681.6	72.9	157.3	3,163.6	38.8	14.0	68	1,869.8	37,547.3
A3 - Energy Star Products	1.70	2.10	1,343.3	1,103.4	524.6	263.4	788.3	8,024.0	150.5	105.6	5,856	558.2	10,799.9
A4 - Residential Behavior	2.17	1.73	380.6	304.5	175.8	-	3,116.3	3,116.3	672.7	433.9	-	-	-
A5 - Residential Active Demand Response	-	-	-	-	67.1	-	-	-	-	-		-	-
A6b - Res ISO Forward Capacity Market Expenses	-	-	-	-	10.9	-	-	-	-	-	-	-	-
A6c - Res Education	-	-	-	-	30.1	-	-	-	-	-	-	-	-
Sub-Total Residential	2.15	2.20	8,219.4	7,122.9	3,244.6	577.8	4,324.7	19,298.0	913.8	579.7	6,218	6,543.4	139,525.8
Commercial, Industrial & Municipal													
C1 - Large Business Energy Solutions	1.30	1.48	2,197.9	2,001.8	1,350.7	338.2	2,419.2	29,284.3	182.8	129.1	128	(330.0)	(2,890.4)
C2 - Small Business Energy Solutions	1.31	1.65	2,360.1	2,145.1	1,303.9	497.1	2,354.4	28,951.3	216.7	166.9	327	(408.3)	(4,236.2)
C3 - Municipal Energy Solutions	1.10	1.15	265.8	241.6	209.3	31.3	324.0	3,614.8	30.5	8.5	7	(32.0)	(287.8)
C5 - C&I Active Demand Response	-	-	-	-	193.0	-	-	-	-	-		-	- '
C6b - C&I ISO Forward Capacity Market Expenses	-	-	-	-	20.3	-	-	-	-	-	-	-	-
C6c - C&I Education	-	-	-	-	26.9	-	-	-	-	-	-	-	-
C6d - C&I Customer Partnerships	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Commercial & Industrial	1.21	1.41	4,823.8	4,388.5	3,104.1	866.6	5,097.5	61,850.4	430.0	304.5	462	(770.3)	(7,414.4
Total	1.67	1.81	13,043.1	11,511.5	6,348.7	1,444.5	9,422.3	81,148.4	1,343.8	884.2	6,680	5,773.2	132,111.3

### Notes:

(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 2023.

Annual kWh Savings	9,422,287	84.8%	kWh > 65%	Lifetime kWh Savings	81,148,382	67.7%	kWh > 65%
Annual MMBTU Savings (in kWh)	1,691,950	<u>15.2%</u>		Lifetime MMBTU Savings (in kWh)	38,718,005	32.3%	
	11,114,237	100.0%			119,866,387	100.0%	

Ar	nnual Net Savings as	a % of 2019 Sales	0.81%

Spending per Customer	Low-Income	\$ 191.23
	Residential	\$ 33.05
	C&I	\$ 284.18

<sup>(1)</sup> 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. For the illustrative Total Resource Cost Test, NEI adders of 25% for Residential and 10% for C&I are applied to total benefits

<sup>(2)</sup> Utility and Customer Costs and Benefits are expressed in 2022 Dollars.