

**Unitil Energy Systems, Inc.**

**2013-2014 Core Energy Efficiency Plan**  
**NHPUC Docket No. DE 12-162**

**2013 Electric Annual Report & Performance Incentive**

Program Cost-Effectiveness - 2013 ACTUAL

	Total Resource Benefit/Cost Ratio (1)	PRESENT VALUE (2013 \$'s)				Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
		Benefits (\$000)	Implementation Costs (\$000)	Performance Incentive (\$000)	Customer Costs (\$000)					
<b>Residential Programs</b>										
ENERGY STAR Homes	1.3	\$ 97.2	\$ 54.4	\$ 2.5	\$ 16.5	51.9	1,251	45.2	3.5	2
Home Performance with Energy Star	1.9	\$ 612.5	\$ 193.1	\$ 8.9	\$ 121.0	21.4	255	1.4	0.6	41
ENERGY STAR Lighting	1.9	\$ 403.8	\$ 173.8	\$ 8.0	\$ 34.0	842.7	6,107	455.4	121.0	53,540 (2)
ENERGY STAR Appliances	2.3	\$ 1,562.6	\$ 291.7	\$ 13.5	\$ 367.3	305.2	3,227	(16.1)	60.5	2,805 (2)
Home Energy Assistance	1.1	\$ 440.8	\$ 373.2	\$ 17.2	\$ -	132.2	1,743	8.2	7.3	48
Res/K-12 Education	-	\$ -	\$ 135.0	\$ 6.2	\$ -	-	-	-	-	-
ISO-Related Expenses Res/LI	-	\$ -	\$ 7.3	\$ 0.3	\$ -	-	-	-	-	-
<b>Subtotal Residential</b>	<b>1.7</b>	<b>\$ 3,116.8</b>	<b>\$ 1,228.5</b>	<b>\$ 56.8</b>	<b>\$ 538.8</b>	<b>1,353.4</b>	<b>12,584</b>	<b>494.1</b>	<b>192.9</b>	<b>56,436</b>
<b>Commercial/Industrial Programs</b>										
Large Business	1.4	\$ 3,024.1	\$ 723.7	\$ 60.6	\$ 1,374.5	2,713.3	35,755.0	337.2	500.6	16
Small Business	1.5	\$ 1,396.3	\$ 412.0	\$ 34.5	\$ 476.8	1,153.3	14,993.4	168.7	323.2	64
C&I Education	-	\$ -	\$ 40.8	\$ 3.4	\$ -	-	-	-	-	-
ISO-Related Expenses C&I	-	\$ -	\$ 15.5	\$ 1.3	\$ -	-	-	-	-	-
<b>Subtotal C&amp;I</b>	<b>1.4</b>	<b>4,420.5</b>	<b>1,192.1</b>	<b>99.8</b>	<b>1,851.3</b>	<b>3,866.6</b>	<b>50,748</b>	<b>505.9</b>	<b>823.8</b>	<b>80</b>
<b>Total</b>	<b>1.5</b>	<b>\$ 7,537.3</b>	<b>\$ 2,420.6</b>	<b>\$ 156.6</b>	<b>\$ 2,390.1</b>	<b>5,220.0</b>	<b>63,332</b>	<b>1,000.0</b>	<b>1,016.7</b>	<b>56,516</b>

Notes:

- (1) Total Resource Cost Ratio = PV Benefits + (PV Implementation Costs + PV Performance Incentives + PV Customer Costs)  
(2) Number of products purchased.

Present Value Benefits - 2013 ACTUALS

	Total Benefits (\$000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
<b>Residential Programs</b>										
ENERGY STAR Homes	\$97,167	\$6,366	\$0	\$1,156	\$3,693	\$61,118	\$23,123	\$974	\$670	\$67
Home Performance with Energy Star	\$612,476	\$248	\$0	\$54	\$172	\$5,701	\$7,868	\$914	\$1,092	\$596,427
ENERGY STAR Lighting	\$403,783	\$38,453	\$0	\$972	\$3,107	\$104,966	\$135,663	\$54,265	\$66,357	\$0
ENERGY STAR Appliances	\$1,562,597	\$33,138	\$0	\$8,899	\$28,432	\$81,770	\$27,990	\$57,050	\$33,603	\$1,291,714
Home Energy Assistance	\$440,822	\$4,337	\$0	\$1,263	\$4,034	\$38,972	\$49,155	\$9,067	\$9,337	\$324,658
<b>Subtotal Residential</b>	<b>\$3,116,845</b>	<b>\$82,542</b>	<b>\$0</b>	<b>\$12,344</b>	<b>\$39,438</b>	<b>\$292,528</b>	<b>\$243,799</b>	<b>\$122,269</b>	<b>\$111,060</b>	<b>\$2,212,865</b>
<b>Commercial/Industrial Programs</b>										
Large Business	\$3,024,148	\$387,007	\$0	\$83,270	\$242,038	\$834,447	\$586,840	\$495,523	\$322,752	\$72,271
Small Business	\$1,396,304	\$243,871	\$0	\$51,029	\$163,040	\$361,484	\$249,554	\$201,359	\$125,967	\$0
<b>Subtotal C&amp;I</b>	<b>\$4,420,452</b>	<b>\$630,878</b>	<b>\$0</b>	<b>\$134,300</b>	<b>\$405,078</b>	<b>\$1,195,931</b>	<b>\$836,394</b>	<b>\$696,882</b>	<b>\$448,718</b>	<b>\$72,271</b>
<b>Total</b>	<b>\$7,537,297</b>	<b>\$713,421</b>	<b>\$0</b>	<b>\$146,643</b>	<b>\$444,516</b>	<b>\$1,488,459</b>	<b>\$1,080,192</b>	<b>\$819,151</b>	<b>\$559,778</b>	<b>\$2,285,136</b>

**Performance Incentive Calculation  
 2013**

	Planned	Actual
<b>Commercial/Industrial Incentive</b>		
1. Benefit/Cost Ratio	1.4	1.4
2. Threshold Benefit / Cost Ratio <sup>1</sup>	1.0	
3. Lifetime kWh Savings	47,591,310	50,748,436
4. Threshold Lifetime kWh Savings (65%) <sup>2</sup>	30,934,351	
5. Budget / Actual Costs Excluding PI <sup>3</sup>	\$1,321,664	\$1,206,673
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
<b>8. C/I Performance Incentive <sup>3</sup></b>	<b>\$119,230</b>	<b>\$100,330</b>
<b>9. Cap (12%)</b>	<b>\$158,600</b>	
<b>Residential Incentive</b>		
10. Benefit / Cost Ratio	2.8	1.7
11. Threshold Benefit / Cost Ratio <sup>1</sup>	1.0	
12. Lifetime kWh Savings	19,153,042	12,583,693
13. Threshold Lifetime kWh Savings (65%) <sup>2</sup>	12,449,477	
14. Budget / Actual Costs Excluding PI <sup>3,4</sup>	\$1,293,855	\$1,126,025
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
<b>17. Residential Performance Incentive <sup>3</sup></b>	<b>\$118,116</b>	<b>\$57,089</b>
<b>18. Cap (12%)</b>	<b>\$155,263</b>	
<b>19. TOTAL PLANNED / EARNED INCENTIVE</b>	<b>\$237,346</b>	<b>\$157,420</b>

**Notes**

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.
3. Nominal dollars (i.e.: current year dollars unadjusted for inflation).
4. Reduced for non-electric weatherization rebates from the HPwES program.

**Planned Versus Actual Benefit / Cost Ratio by Sector  
 2013**

	PRESENT VALUE (2013 \$'s)	
	Planned	Actual
<b>Commercial &amp; Industrial:</b>		
1. Benefits (Value) From Eligible Programs	\$ 5,799,902	\$ 4,420,452
2. Implementation Expenses	\$ 1,321,664	\$ 1,192,065
3. Customer Contribution	\$ 2,733,912	\$ 1,851,322
4. Performance Incentive	\$ 119,230	\$ 99,781
5. Total Costs	\$ 4,174,806	\$ 3,143,168
<b>6. Benefit/Cost Ratio - C&amp;I Sector</b>	<b>1.4</b>	<b>1.4</b>

	PRESENT VALUE (2013 \$'s)	
	Planned	Actual
<b>Residential:</b>		
7. Benefits (Value) From Eligible Programs	\$ 5,617,389	\$ 3,116,845
8. Implementation Expenses	\$ 1,293,855	\$ 1,228,489
9. Customer Contribution	\$ 594,991	\$ 538,800
10. Performance Incentive	\$ 118,116	\$ 56,777
11. Total Costs	\$ 2,006,962	\$ 1,824,066
<b>12. Benefit/Cost Ratio - Residential Sector</b>	<b>2.8</b>	<b>1.7</b>

**Actual Lifetime Energy Savings by Sector and Program  
 2013**

	<b>LIFETIME KWH SAVINGS</b>	
	<b><u>Planned</u></b>	<b><u>Actual</u></b>
<b>Commercial &amp; Industrial:</b>		
Large Business	36,361,285	35,755,038
Small Business	11,230,025	14,993,398
<b>Total Commercial &amp; Industrial Included for Incentive Calculation</b>	<b>47,591,310</b>	<b>50,748,436</b>
<b>Residential:</b>		
Home Energy Assistance Program	953,318	1,742,785
Home Performance with ENERGY STAR	480,570	255,210
ENERGY STAR Homes Program	10,639,499	1,251,293
ENERGY STAR Appliance Program	3,703,976	3,227,258
ENERGY STAR Lighting Program	3,375,679	6,107,147
<b>Total Residential Included for Incentive Calculation</b>	<b>19,153,042</b>	<b>12,583,693</b>

**2013 Electric EE Systems Benefits Charge Fund Reconciliation** <sup>(Note 1)</sup>

1. Beginning Balance: 1/1/2013		\$	81,740	(Over) / Under Collected
<b>Funding</b>				
2. System Benefits Charge Revenue		\$	2,223,743	
3. FCM Revenue		\$	200,192	
4. RGGI Proceeds		\$	712,289	
5. Interest		\$	205,180	
6. Total Funding	Σ Lines 2 - 5	\$	3,341,404	
<b>Expenses</b>				
7. Program Expenses		\$	2,295,199	
8. Performance Incentive	Note 2	\$	207,584	
9. Total Expenses	Σ Lines 7 - 8	\$	2,502,782	
10. Ending Balance: 12/31/2013	Lines 1 - 6 + 9	\$	(756,881)	(Over) / Under Collected

Notes

1. Includes actuals through December 31, 2013.
2. Includes accrual of estimated 2013 performance incentive as approved in Docket No. DE 12-262 plus reconciliation for prior year(s) earned performance incentives.

**Unitil Energy Systems, Inc.**

**Regional Greenhouse Gas Initiative (RGGI)**

**2012 Expansion**

**per PUC Order No. 25,425**

**2013 RGGI Annual Report & Performance Incentive**



**Unitil Energy Systems, Inc.**  
**RGGI 2012 Expansion per PUC Order to 25,425**  
**for 2012 and 2013**

<b>Programs</b>	<b>Planned Budget</b>	<b>Actual Spending</b>
<b>Residential Programs</b>		
1. ENERGY STAR® Homes	\$0	\$0
2. Home Performance w/ ENERGY STAR® (Electric)	\$0	\$0
3. ENERGY STAR® Lighting	\$0	\$0
4. ENERGY STAR® Appliances	\$5,745	\$873
5. Home Energy Assistance Program	\$257,585	\$258,030
6. <b>Total Residential</b>	<b>\$263,330</b>	<b>\$258,904</b>
<b>Commercial &amp; Industrial</b>		
7. Large Business New Construction	\$69,253	\$66,642
8. Large Business Retrofit	\$103,000	\$118,550
9. Small Business Solutions	\$0	\$0
10. C&I Education and Training	\$2,873	\$2,839
11. <b>Total Commercial &amp; Industrial</b>	<b>\$175,126</b>	<b>\$188,031</b>
12. <b>Total All Sectors</b>	<b>\$438,456</b>	<b>\$446,935</b>
<b>Performance Incentive Calculation</b>		
13. Residential Programs	\$460	\$70
14. Commercial & Industrial	\$14,010	\$15,042
15. <b>Total All Sectors</b>	<b>\$14,470</b>	<b>\$15,112</b>
<b>Total Spending incl. PI<sup>1</sup></b>	<b>\$452,925</b>	<b>\$462,047</b>
16. Residential Programs	\$263,789	\$258,973
17. Commercial & Industrial	\$189,136	\$203,073

**Notes:**

- Per Order 25,425, the Company received a total of \$438,455.76 from the NH PUC in March, 2013 to cover planned program expenses. Upon PUC approval of this final report, the Company requests payment of the performance incentive of 8% of actual spending (exclusive of funds spent on the low income sector), or \$15,112.35. The remaining undercollection of \$8,548.64 will be reconciled with 2014 CORE Electric Energy Efficiency Program funds.

**Unitil Energy Systems, Inc.  
 Actual Lifetime Energy Savings by Sector and Program**

<b>Programs</b>	<b>Actual Lifetime kWh</b>	<b>Actual Lifetime MMBtu</b>	<b>Number of Customers Served</b>
<b>Residential Programs</b>			
1. ENERGY STAR® Homes	0	0	0
2. Home Performance w/ ENERGY STAR® (Electric)	0	0	0
3. ENERGY STAR® Lighting	0	0	0
4. ENERGY STAR® Appliances	0	0	0
5. Home Energy Assistance Program	430,904	26,753	48
<b>6. Total Residential</b>	<b>430,904</b>	<b>26,753</b>	<b>48</b>
<b>Commercial &amp; Industrial</b>			
7. Large Business New Construction	5,933,078	0	4
8. Large Business Retrofit	7,837,531	0	4
9. Small Business Solutions	0	0	0
<b>10. Total Commercial &amp; Industrial</b>	<b>13,770,609</b>	<b>0</b>	<b>8</b>
<b>12. Total All Sectors</b>	<b>14,201,513</b>	<b>26,753</b>	<b>56</b>

**Notes:**

There was no planned kWh goal for the RGGI funds that were distributed pursuant to PUC Order 25,425.

**Northern Utilities d/b/a Unitil**

**2013-2014 Core Energy Efficiency Plan  
NHPUC Docket No. DE 12-162**

**2013 Gas Annual Report & Performance Incentive**

Program Cost-Effectiveness - 2013 ACTUAL

	Total Resource Benefit/Cost Ratio (1)	PRESENT VALUE (2013 \$'s)				Annual MMBtu Savings	Lifetime MMBtu Savings	Number of Customers Served
		Benefit (\$000)	Implementation Costs (\$000)	Performance Incentive (\$000)	Customer Costs (\$000)			
<b>Residential Programs</b>								
ENERGY STAR Homes	2.7	\$ 279.6	\$ 82.8	\$ 5.9	\$ 14.2	675	15,541	8
Home Performance w ENERGY STAR	1.9	\$ 197.9	\$ 76.0	\$ 5.4	\$ 24.7	584	13,302	11
Residential Gas Networks	1.0	\$ 934.5	\$ 357.9	\$ 25.3	\$ 589.9	3,635	68,590	410 (2)
Residential Education	0.0	\$ -	\$ 1.3	\$ 0.1	\$ -	-	-	-
Residential Energy Code Training	-	\$ -	\$ -	\$ -	\$ -	-	-	-
Residential Building Practice & Demo	-	\$ -	\$ -	\$ -	\$ -	-	-	-
Low Income Home Energy Assistance	1.7	\$ 273.3	\$ 147.5	\$ 10.4	\$ -	982	17,946	32
<b>Subtotal Residential</b>	<b>1.3</b>	<b>\$ 1,685.2</b>	<b>\$ 665.4</b>	<b>\$ 47.1</b>	<b>\$ 628.7</b>	<b>5,875.9</b>	<b>115,379</b>	<b>461</b>
<b>Commercial/Industrial Programs</b>								
Large Business	4.5	\$ 3,394.1	\$ 284.9	\$ 26.8	\$ 446.9	16,332	271,137	6
Small Business	3.7	\$ 1,153.8	\$ 167.2	\$ 15.7	\$ 132.7	4,004	87,801	30
Codes Audits & Education	-	\$ -	\$ -	\$ -	\$ -	-	-	-
<b>Subtotal C&amp;I</b>	<b>4.2</b>	<b>\$ 4,548.0</b>	<b>\$ 452.1</b>	<b>\$ 42.6</b>	<b>\$ 579.7</b>	<b>20,336</b>	<b>358,938</b>	<b>36</b>
<b>Total</b>	<b>2.6</b>	<b>\$ 6,233.2</b>	<b>\$ 1,117.5</b>	<b>\$ 89.7</b>	<b>\$ 1,208.4</b>	<b>26,212</b>	<b>474,317</b>	<b>497</b>

Notes:

- (1) Total Resource Cost Ratio = PV Benefits ÷ [PV Implementation Costs + PV Performance Incentives + PV Customer Costs]  
 (2) Number of products purchased.

**Performance Incentive Calculation  
 2013**

	<u>Planned</u>	<u>Actual</u>
<b>Commercial/Industrial Incentive</b>		
1. Benefit/Cost Ratio	3.5	4.2
2. Threshold Benefit / Cost Ratio <sup>1</sup>	1.0	
3. Lifetime MMBtu Savings	312,867	358,938
4. Threshold Lifetime MMBtu Savings (65%) <sup>2</sup>	203,363	
5. Budget / Actual Costs Excluding PI <sup>3,4</sup>	\$495,639	\$454,617
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime Savings Percentage of Budget	4.00%	
<b>8. C/I Performance Incentive <sup>3</sup></b>	<b>\$39,651</b>	<b>\$42,794</b>
<b>9. Cap (12%)</b>	<b>\$59,477</b>	
<b>Residential Incentive <sup>4</sup></b>		
10. Benefit / Cost Ratio	1.4	1.3
11. Threshold Benefit / Cost Ratio <sup>1</sup>	1.0	
12. Lifetime MMBtu Savings	131,209	115,379
13. Threshold Lifetime MMBtu Savings (65%) <sup>2</sup>	85,286	
14. Budget / Actual Costs Excluding PI <sup>3</sup>	\$724,362	\$669,067
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime Savings Percentage of Budget	4.00%	
<b>17. Residential Performance Incentive <sup>3</sup></b>	<b>\$57,949</b>	<b>\$47,383</b>
<b>18. Cap (12%)</b>	<b>\$86,923</b>	
<b>19. TOTAL PLANNED / EARNED INCENTIVE <sup>3</sup></b>	<b>\$97,600</b>	<b>\$90,176</b>

**Notes**

1. Actual Benefit / Cost Ratio for each sector must be greater than or equal to 1.0.
2. Actual Lifetime kWh Savings for each sector must be greater than or equal to 65% of projected savings.
3. Nominal dollars (i.e.: current year dollars unadjusted for inflation).
4. Adjusted per PUC Order 25,593 on November 8, 2013

**Planned Versus Actual Benefit / Cost Ratio by Sector  
 2013**

<b>Commercial &amp; Industrial:</b>	<b>PRESENT VALUE (2013 \$s)</b>	
	<b>Planned</b>	<b>Actual</b>
1. Benefits (Value) From Eligible Programs	\$ 4,014,227	\$ 4,547,982
2. Implementation Expenses	\$ 495,639	\$ 452,130
3. Customer Contribution	\$ 609,074	\$ 579,678
4. Performance Incentive	\$ 39,651	\$ 42,560
5. Total Costs	\$ 1,144,364	\$ 1,074,367
6. Benefit/Cost Ratio - C&I Sector	<b>3.5</b>	<b>4.2</b>

<b>Residential:</b>	<b>PRESENT VALUE (2013 \$s)</b>	
	<b>Planned</b>	<b>Actual</b>
7. Benefits (Value) From Eligible Programs <sup>1</sup>	\$ 1,901,630	\$ 1,685,238
8. Implementation Expenses	\$ 724,362	\$ 665,408
9. Customer Contribution	\$ 563,894	\$ 628,707
10. Performance Incentive	\$ 57,949	\$ 47,123
11. Total Costs	\$ 1,346,205	\$ 1,341,239
12. Benefit/Cost Ratio - Residential Sector	<b>1.4</b>	<b>1.3</b>

**Notes**

1. Adjusted per PUC Order 25,593 on November 8, 2013

**Actual Lifetime Energy Savings by Sector and Program  
 2013**

	<b>Lifetime MMBtu Savings</b>	
	<b><u>Planned</u></b>	<b><u>Actual</u></b>
<b>Commercial &amp; Industrial:</b>		
Large Business	231,888	271,137
Small Business	80,979	87,801
Codes Audits & Education	0	0
<b>Total Commercial &amp; Industrial Included for Incentive Calculation</b>	<b>312,867</b>	<b>358,938</b>
<b>Residential:</b>		
ENERGY STAR Homes	14,202	15,541
Home Performance w ENERGY STAR <sup>1</sup>	24,791	13,302
Residential GasNetworks <sup>1</sup>	71,506	68,590
Residential Education	0	0
Residential Energy Code Training	0	0
Residential Building Practice & Demo	0	0
Low Income Home Energy Assistance	20,710	17,946
<b>Total Residential Included for Incentive Calculation</b>	<b>131,209</b>	<b>115,379</b>

**Notes**

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1. Adjusted per PUC Order 25,593 on November 8, 2013

**Unitil Energy Systems, Inc.**  
**2013 Energy Efficiency Charge Fund Reconciliation** <sup>(Note 1)</sup>

		<u>Total</u>	
<b>Beginning Balance: 1/1/2013</b>	\$	3,055	(Over) / Under Collection
<b>Funding</b>			
2. Energy Efficiency Charge Revenue	\$	1,411,863	
3. Interest	\$	6,040	
4. Total Funding	Σ Lines 2 - 3	<u>\$ 1,417,903</u>	
<b>Expenses</b>			
5. Program Expenses	\$	1,282,418	
6. Performance Incentive	Note 2	<u>\$ 89,879</u>	
7. Total Expenses	Σ Lines 5 - 6	<u>\$ 1,372,297</u>	
<b>Ending Balance: 12/31/2013</b>	Lines 1 - 4 + 7	<u>\$ (42,551)</u>	(Over) / Under Collection

**Notes**

1. Includes actuals through December 31, 2013.
2. Includes accrual of estimated 2013 performance incentive as approved in Docket DE 12-262, plus reconciliation for prior year(s) earned performance incentives.