

Staff Recommended Performance Incentives Methodology

Savings Component:

	First Iteration			Second Iteration (Incl. Perf. Incent.) Second Iteration (adj. for circularity)		
	Residential	C&I	Total	Residential	C&I	Total
Budget Spending (Utility only, excl PI) Per 8-01-10 Filing	\$ 1,054,237	\$ 1,074,486	\$ 2,128,723	\$ 1,054,237	\$ 1,074,486	\$ 2,128,723
Actual Lifetime Savings (kWh)	25,141,176	46,015,224	71,156,400	25,141,176	46,015,224	71,156,400
Planned Lifetime Savings (kWh)	23,213,127	54,146,000	77,359,127	23,213,127	54,146,000	77,359,127
Ratio Actual vs. Planned	1.08	0.85		1.08	0.85	
Baseline Percent	4.00%	4.00%		4.00%	4.00%	
Actual Performance Incentive Percent	4.33%	3.40%		4.33%	3.40%	
Ratio Actual vs. Planned	1.08	0.85		1.08	0.85	
If Ratio < 65% Planned, then zero; otherwise Act. %	4.33%	3.40%		4.33%	3.40%	
Calculated Savings Component	\$ 45,672	\$ 36,525	\$ 82,197	\$ 45,672	\$ 36,525	\$ 82,197

B/C Component:

Budget Spending	\$ 1,054,237	\$ 1,074,486	\$ 2,128,723	\$ 1,054,237	\$ 1,074,486	\$ 2,128,723
Planned B/C Component:						
Total Planned Benefits	\$ 3,270,800	\$ 4,349,200	\$ 7,620,000	\$ 3,270,800	\$ 4,349,200	\$ 7,620,000
Planned Program Cost (excl. Performance Incentives)	\$ 1,054,237	\$ 1,074,486		\$ 1,054,237	\$ 1,074,486	
Planned Participant Cost	\$ 318,200	\$ 788,100		\$ 318,200	\$ 788,100	
Utility and Participant Cost	\$ 1,372,437	\$ 1,862,586	\$ 3,235,023	\$ 1,372,437	\$ 1,862,586	\$ 3,235,023
Planned Performance Incentives:						
Savings Component	\$ -	\$ -		\$ 42,169	\$ 42,979	
B/C Component	\$ -	\$ -		\$ 42,169	\$ 42,979	
Total	\$ -	\$ -	\$ -	\$ 84,339	\$ 85,959	\$ 170,301
Total Planned Costs	\$ 1,372,437	\$ 1,862,586	\$ 3,235,023	\$ 1,456,776	\$ 1,948,545	\$ 3,405,321
Planned B/C Ratio	2.2	2.2		2.2	2.2	
Actual B/C Component:						
Actual Benefits	\$ 3,375,214	\$ 3,616,206		\$ 3,375,214	\$ 3,616,206	
Actual Program Cost (excl. Performance Incentive)	\$ 857,591	\$ 1,061,701	\$ 1,919,292	\$ 857,591	\$ 1,061,701	\$ 1,919,292
Actual Participant Cost	\$ 549,378	\$ 782,187		\$ 549,378	\$ 782,187	
Utility and Participant Cost	\$ 1,406,969	\$ 1,843,888		\$ 1,406,969	\$ 1,843,888	
Actual Performance Incentives:						
Savings Component	\$ -	\$ -		\$ 45,672	\$ 36,525	
B/C Component	\$ -	\$ -		\$ 45,982	\$ 38,314	
Total	\$ -	\$ -		\$ 91,655	\$ 74,839	
Actual Total Costs	\$ 1,406,969	\$ 1,843,888	\$ 3,250,856	\$ 1,498,623	\$ 1,918,727	\$ 3,417,350
Actual B/C Ratio	2.4	2.0		2.3	1.9	
If Actual B/C Ratio < 1.0, then zero; otherwise act. B/C Ratio	2.4	2.0		2.3	1.9	
Ratio Actual vs. Planned B/C Ratio	109%	89%		100%	84%	
Baseline Percent	4.00%	4.00%		4.00%	4.00%	
Actual B/C Performance Incentive Percent (0 if < 1.0)	4.4%	3.57%		4.01%	3.38%	
B/C Performance Incentive Based on Actual Spending	\$ 45,982.49	\$ 38,313.93	\$ 84,296.42	\$ 42,300.54	\$ 36,291.23	\$ 78,591.77
Total Calculated Performance Incentive	\$ 91,655	\$ 74,839	\$ 166,494	\$ 87,972.56	\$ 72,817	\$ 160,789

Unitil Energy System, Inc.
Energy Efficiency Program Cost-Effectiveness - 2011 Actual

	Total Resource Benefit/Cost Ratio	Net Present Value			Lifetime MWh Savings	Number of Cust. Served
		Benefit (\$000)	Utility Costs ⁽¹⁾ (\$000)	Customer Costs (\$000)		
Res Non-Low Income Programs						
ENERGY STAR® Homes	2.1	695.0	179.2	159.74	1,121	59
Home Energy Solutions (Electric)	0.3	48.2	100.5	76.52	648	19
ENERGY STAR® Lighting	2.1	571.3	173.9	115.11	7,508	52,024 ⁽²⁾
ENERGY STAR® Appliances	1.4	487.7	156.1	198.02	3,909	2,385 ⁽²⁾
Other (4)	-	n/a	7.9	n/a	n/a	n/a
ISO-Related Expenses Res Non-LI	-	n/a	3.6	n/a	n/a	n/a
Subtotal Residential	1.5	\$ 1,802.2	\$ 621.31	549.38	13,186	
Residential Low Income Program						
Home Energy Assistance Program	2.6	799.4	312.2	-	11,955 ⁽³⁾	62
ISO-Related Expenses Res LI	-	n/a	1.1	n/a	n/a	n/a
Subtotal Residential LI	2.6	\$ 799.4	\$ 313.32	-	11,955	62
Commercial/Industrial Programs						
C&I Lost Opportunity	1.3	258.0	177.9	17.29	3,080	8
Large C&I Retrofit	2.6	2,379.3	540.4	376.22	29,883	24
Small C&I Retrofit	1.3	1,049.8	414.9	388.67	12,002	51
Other (4)	-	n/a	8.311	n/a	n/a	n/a
ISO-Related Expenses C&I	-	n/a	5.5	n/a	n/a	n/a
Subtotal C&I	1.9	\$ 3,687.2	\$ 1,146.95	782.19	44,965	
Home Energy Solutions (Pilot)	5.2	\$ 773.7	\$ 148.2	\$ 34.7	-	26
Total	1.8	\$ 6,288.7	\$ 2,081.6	1,331.56	70,106	

Notes:

(1) Utility Costs include direct program costs plus Shareholder Incentive

(2) Target number of products purchased.

(3) The Home Energy Assistance (HEA) program is offered as a fuel-blind program. Estimated lifetime non-electric savings have been converted into kWh as follows to establish UES' HEA program savings

[33675.85 MMBtu ÷ 0.003413] ÷ 1,000 = Lifetime MWh.

(4) Includes costs related to the Company's web-based Home Energy Suite® and Commercial Energy Suite® in addition to educational activities.

**Unitil Energy Systems, Inc.
2011 Earned Shareholder Incentive Calculation**

Programs		Planned	Actual
Residential Programs			
1. Benefit/Cost Ratio (BC_{PRE} , BC_{ACT})		2.2	2.3
2. Threshold B/C Ratio	(1)	1.00	
3. Lifetime kWh Savings (kWh_{PRE} , kWh_{ACT})		23,213,127	25,141,176
4. Threshold Lifetime kWh Savings (65%)	(2)	15,088,533	
5. Budget		\$1,138,576	
6. Less Shareholder Incentive (SHI_{PRE})		<u>\$84,339</u>	
7. Total Budget ($Budget_{TOT}$) excluding SHI	(4)	\$1,054,237	\$857,591
8. Benefit/Cost Percentage of Budget		4.0%	
9. Lifetime kWh Percentage of Budget		4.0%	
10. Sector Incentive	(3)	\$84,339	\$87,973
11. Sector Incentive Cap (12%)		\$126,508	
Commercial & Industrial Programs			
12. Benefit/Cost Ratio (BC_{PRE} , BC_{ACT})		2.2	1.9
13. Threshold B/C Ratio	(1)	1.00	
14. Lifetime kWh Savings (kWh_{PRE} , kWh_{ACT})		54,146,000	46,015,224
15. Threshold Lifetime kWh Savings (65%)	(2)	35,194,900	
16. Total Budget (includes SHI)		\$1,160,445	
17. Less Shareholder Incentive (SHI_{PRE})		<u>\$85,959</u>	
18. Total Budget ($Budget_{TOT}$) excluding SHI		\$1,074,486	\$1,061,701
19. Benefit/Cost Percentage of Budget		4.0%	
20. Lifetime kWh Percentage of Budget		4.0%	
21. Sector Incentive	(3)	\$85,959	\$72,817
22. Sector Incentive Cap (12%)		\$128,938	
Total Earned Shareholder Incentive		\$170,298	\$160,789

Notes:

1. The 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. $Shareholder\ Incentive_{ACT} = [4\% \times Budget_{TOT}] \times [(BC_{ACT} \div BC_{PRE}) + (kWh_{ACT} \div kWh_{PRE})]$
4. Excludes HPwES Pilot (i.e.: the non-electric portion).

Unitil Energy Systems, Inc.
Planned vs. Actual Benefit / Cost Ratio by Sector

Programs	Planned	Actual
Residential Programs		
1. Program Benefits	\$3,270,800	\$3,375,214
2. Direct Program Costs (excl SHI)	\$1,054,237	\$857,591
3. Customer Contribution	\$318,214	\$584,039
4. Shareholder Incentive	<u>\$84,339</u>	<u>\$87,973</u>
5. Total Costs	\$1,456,790	\$1,441,630
6. Residential - Total Resource Cost Test	2.2	2.3
Commercial & Industrial		
7. Program Benefits	\$4,349,200	\$3,616,206
8. Direct Program Costs (excl SHI)	\$1,074,486	\$1,061,701
9. Customer Contribution	\$788,046	\$782,187
10. Shareholder Incentive	<u>\$85,959</u>	<u>\$72,817</u>
11. Total Costs	\$1,948,491	\$1,916,704
12. C&I - Total Resource Cost Test	2.2	1.9

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

Programs	Planned Lifetime kWh	Actual Lifetime kWh
Residential Programs		
1. Home Performance w/ Energy Star	496,000 (1)	648,343 (1)
2. Home Energy Assistance	8,863,127 (2)	11,955,231 (2)
3. ENERGY STAR® Lighting	9,019,000	7,508,333
4. ENERGY STAR® Appliances	3,433,000	3,908,693
5. ENERGY STAR® Homes	1,402,000	1,120,576
6. Total Residential	23,213,127	25,141,176
Commercial & Industrial		
7. Large Business New Construction	8,431,000	3,080,022
8. Large Business Retrofit	31,108,000	29,882,834
9. Small Business Solutions	14,607,000	13,052,368
10. Total Commercial & Industrial	54,146,000	46,015,224

Notes:

1. Pursuant to Order 24,974, Docket No. DE 08-120, only the projected and achieved electric lifetime savings are included in the performance incentive calculation for the Home Performance with Energy Star Pilot.
2. The Home Energy Assistance Program is offered to eligible low-income residential participants on a fuel-blind basis. Lifetime savings include electric kWh savings (1,424,312 lifetime kWh) plus non-electric MMBtu savings converted to kWh ($67,364 \text{ MMBtu} \div 0.003413 = 21,161,800 \text{ Lifetime kWh}$).