

Program Cost-Effectiveness - 2011 PLAN

	Total Resource Benefit/Cost Ratio	Present Value			Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Members Served	
		Benefit (\$000)	Utility Costs	Member						
			(\$000)	Costs (\$000)						
Residential Programs										
ENERGY STAR Homes	4.0	\$ 733.1	\$ 113.5	\$ 69.4	46.1	799.9	11.2	13.0	37	
Home Performance w/Energy Star	2.0	\$ 301.8	\$ 127.8	\$ 21.2	220.0	2,398.2	49.1	126.2	39	
ENERGY STAR Lighting * ¹	4.5	\$ 580.9	\$ 105.1	\$ 25.1	1,548.2	8,070.2	365.5	97.1	35,864	
ENERGY STAR Appliances	1.4	\$ 368.2	\$ 129.8	\$ 127.7	326.5	3,329.8	45.0	40.4	1,735	
Home Energy Assistance	2.1	\$ 338.3	\$ 162.4	\$ -	58.6	717.7	19.7	19.7	50	
High Efficiency Heat Pump	<u>2.1</u>	<u>\$ 400.1</u>	<u>\$ 96.7</u>	<u>\$ 91.8</u>	<u>254.1</u>	<u>6,352.0</u>	<u>139.9</u>	<u>8.5</u>	<u>12</u>	
Subtotal Residential	2.5	\$ 2,722.4	\$ 735.3	\$ 335.2	2,453.5	21,667.7	630.4	304.9	37,737	
Commercial/Industrial Programs										
New Construction / Major Renovation	1.3	\$ 167.1	\$ 107.4	\$ 20.1	149.9	2,248.9	19.8	21.6	5	
Large C&I Retrofit	1.8	\$ 681.3	\$ 122.1	\$ 253.4	705.2	9,167.8	265.5	84.3	22	
Small C&I Retrofit	1.3	\$ 264.1	\$ 122.1	\$ 74.4	253.7	3,298.1	41.9	48.7	32	
Other (Education)	0.0	\$ -	\$ 26.1	\$ -	-	-	-	-	-	
Smart Start	<u>0.0</u>	<u>\$ -</u>	<u>\$ 7.1</u>	<u>\$ -</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Subtotal C&I	1.5	1,112.5	384.8	348.0	1,108.8	14,714.9	327.2	154.6	59	
Total		\$ 3,834.9	\$ 1,120.1	\$ 683.2	3,562.4	36,382.6	957.6	459.5	37,796	

Note 1: Plan included 8,966 members purchasing a total of 35,864 lighting products (4 per member)

Program Cost-Effectiveness - 2010 ACTUAL

	Present Value							
	Total Resource	Benefit (\$000)	Utility Costs (\$000)	Member Costs (\$000)	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Members Served
	Benefit/Cost Ratio							
Residential Programs								
ENERGY STAR Homes	6.53	\$ 1,674.8	\$ 169.1	\$ 87.2	1,392.5	18.0	18.8	53
Home Energy Solutions	2.69	\$ 200.7	\$ 52.1	\$ 22.4	1,241.1	16.9	43.6	15
ENERGY STAR Lighting	3.98	\$ 498.5	\$ 94.8	\$ 30.5	6,937.3	312.9	83.2	32,714
ENERGY STAR Appliances	1.50	\$ 467.7	\$ 136.3	\$ 175.0	4,069.8	53.3	47.7	2,199
Home Energy Assistance	1.16	\$ 231.3	\$ 199.3	\$ -	1,004.0	30.8	30.8	85
EnergyStar Homes (Geothermal)	5.16	\$ 934.1	\$ 71.8	\$ 109.2	15,316.7	356.3	4.3	14
Subtotal Residential	3.49	\$ 4,007.0	\$ 723.4	\$ 424.3	29,961.4	788.2	228.4	35,080
Commercial/Industrial Programs								
New Construction / Major Renovation	1.86	\$ 916.3	\$ 75.1	\$ 417.3	10,746.1	112.0	195.9	10
Large C&I Retrofit	2.33	\$ 1,338.0	\$ 170.5	\$ 403.7	18,936.4	685.5	115.9	18
Small C&I Retrofit	2.15	\$ 671.2	\$ 238.1	\$ 74.4	8,333.3	120.0	125.9	45
Other (Education)	0.00	\$ -	\$ 15.2	\$ -	-	-	-	-
Smart Start	0.00	\$ -	\$ 6.5	\$ -	-	-	-	-
Subtotal C&I	2.09	\$ 2,925.5	\$ 505.4	\$ 895.4	38,015.8	917.5	437.7	73
Total		\$ 6,932.6	\$ 1,228.8	\$ 1,319.6	67,977.2	1,705.7	666.1	35,153

Present Value Benefits - 2011 PLAN

	Total Benefits (\$000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Off		Summer Off		
						Winter Peak	Peak	Summer Peak	Peak	
Residential Programs										
ENERGY STAR Homes	\$733	\$8,712	\$0	\$2,404	\$7,803	\$14,478	\$17,670	\$9,185	\$9,416	\$663,467
Home Performance w/Energy Star	\$302	\$33,164	\$0	\$14,902	\$48,383	\$47,941	\$58,777	\$23,846	\$28,122	\$46,630
ENERGY STAR Lighting **1	\$581	\$14,587	\$0	\$5,894	\$19,136	\$166,586	\$198,907	\$81,286	\$94,510	\$0
ENERGY STAR Appliances	\$368	\$9,843	\$0	\$4,388	\$14,245	\$66,212	\$81,023	\$34,269	\$39,195	\$118,985
Home Energy Assistance	\$338	\$5,759	\$0	\$2,576	\$8,363	\$14,183	\$17,461	\$7,072	\$8,369	\$274,511
High Efficiency Heat Pump	\$400	\$8,416	\$0	\$1,939	\$6,295	\$127,661	\$237,914	\$9,886	\$8,005	\$0
Subtotal Residential	\$2,722	\$80,481	\$0	\$32,103	\$104,225	\$437,061	\$611,752	\$165,544	\$187,617	\$1,103,593
Commercial/Industrial Programs										
New Construction / Major Renovation	\$167	\$7,824	\$0	\$3,331	\$10,816	\$41,736	\$54,899	\$21,807	\$26,700	\$0
Large C&I Retrofit	\$681	\$25,962	\$0	\$11,561	\$37,534	\$226,952	\$258,400	\$75,218	\$45,707	\$0
Small C&I Retrofit	\$264	\$14,996	\$0	\$6,678	\$21,681	\$81,746	\$64,113	\$43,345	\$31,522	\$0
Other (Education)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Smart Start	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal C&I	\$1,113	\$48,782	\$0	\$21,570	\$70,031	\$350,434	\$377,412	\$140,370	\$103,929	\$0
Total	\$3,835	\$129,263	\$0	\$53,673	\$174,256	\$787,495	\$989,164	\$305,914	\$291,546	\$1,103,593

Present Value Benefits - 2011 Actual

	Total Benefits (\$000)	CAPACITY				ENERGY				Non Electric Resource
		Summer Generation	Winter Generation	Transmission	Distribution	Winter Off Peak	Winter Off Peak	Summer Peak	Summer Off Peak	
Residential Programs										
ENERGY STAR Homes	\$1,675	\$15,034	\$0	\$3,813	\$12,379	\$25,590	\$31,254	\$14,447	\$16,149	\$1,556,098
Home Performance w/Energy Star	\$201	\$18,327	\$0	\$7,198	\$23,369	\$23,976	\$29,450	\$12,043	\$14,352	\$71,981
ENERGY STAR Lighting ^{*1}	\$499	\$12,430	\$0	\$4,970	\$16,136	\$143,171	\$170,805	\$69,819	\$81,184	\$0
ENERGY STAR Appliances	\$468	\$11,895	\$0	\$5,314	\$17,252	\$80,561	\$98,675	\$42,367	\$47,960	\$163,657
Home Energy Assistance	\$231	\$8,148	\$0	\$3,662	\$11,889	\$20,053	\$24,593	\$9,974	\$11,769	\$141,189
High Efficiency Heat Pump	<u>\$934</u>	<u>\$4,278</u>	<u>\$0</u>	<u>\$986</u>	<u>\$3,200</u>	<u>\$313,363</u>	<u>\$594,701</u>	<u>\$6,683</u>	<u>\$6,913</u>	<u>\$3,996</u>
Subtotal Residential	\$4,007	\$70,112	\$0	\$25,942	\$84,226	\$606,713	\$949,478	\$155,332	\$178,325	\$1,936,921
Commercial/Industrial Programs										
New Construction / Major Renovation	\$916	\$70,995	\$0	\$30,228	\$98,139	\$245,146	\$167,160	\$180,824	\$123,811	\$0
Large C&I Retrofit	\$1,338	\$35,713	\$0	\$15,903	\$51,631	\$426,587	\$639,224	\$98,060	\$70,930	\$0
Small C&I Retrofit	\$671	\$38,745	\$0	\$17,251	\$56,009	\$215,192	\$160,580	\$111,463	\$71,951	\$0
Other (Education)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Smart Start	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Subtotal C&I	\$2,926	\$145,452	\$0	\$63,382	\$205,780	\$886,926	\$966,965	\$390,347	\$266,692	\$0
Total	\$6,933	\$215,565	\$0	\$89,324	\$290,006	\$1,493,638	\$1,916,442	\$545,679	\$445,017	\$1,936,921

Member Incentive Calculation

2011

	<u>Planned</u>	<u>Actual</u>
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	1.52	2.09
2. Threshold Benefit / Cost Ratio ¹	1.00	
3. Lifetime kWh Savings	14,714,884	38,015,837
4. Threshold Lifetime kWh Savings (65%) ²	9,564,675	
5. Budget	\$384,776	\$308,042
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Member Incentive	\$30,782	\$46,173
9. Cap (12%)	\$46,173	
Residential Incentive		
10. Benefit / Cost Ratio	2.54	3.49
11. Threshold Benefit / Cost Ratio ¹	1.00	
12. Lifetime kWh Savings	21,667,690	29,961,360
13. Threshold Lifetime kWh Savings (65%) ²	14,083,999	
14. Budget	\$735,341	\$526,051
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	\$58,827	\$57,986
18. Cap (12%)	\$88,241	
19. TOTAL INCENTIVE EARNED		\$104,159

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.

Planned Versus Actual Benefit / Cost Ratio by Sector
2011

	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
1. Benefits (Value) From Eligible Programs	\$ 1,112,528	\$ 2,925,543
2. Implementation Expenses ¹	\$ 384,776	\$ 308,042
3. Member Contribution	<u>\$ 347,953</u>	<u>\$ 895,352</u>
4. Total Costs Excluding Member Incentive	\$ 732,729	\$ 1,400,744
5. Benefit/Cost Ratio - C&I Sector	1.52	2.09
Residential:		
6. Benefits (Value) From Eligible Programs	\$ 2,722,376	\$ 4,007,048
7. Implementation Expenses ²	\$ 735,341	\$ 526,051
8. Member Contribution	<u>\$ 335,197</u>	<u>\$ 424,273</u>
9. Total Costs Excluding Member Incentive	\$ 1,070,538	\$ 1,147,674
10. Benefit/Cost Ratio - Residential Sector	2.54	3.49

1. Actual commercial implementation expenses of \$505,392 reduced by 2010 carryover amount of \$197,350.

2. Actual residential implementation expenses of \$723,401 reduced by 2010 carryover amount of \$134,100.

Actual Lifetime Energy Savings by Sector and Program 2011

	Lifetime kWh Savings	
	<u>Planned</u>	<u>Actual</u>
Commercial & Industrial:		
New Equipment & Construction	2,248,898	10,746,105
Large C&I Retrofit	9,167,837	18,936,430
Small Business Energy Solutions	3,298,149	8,333,302
Education	0	0
Other	<u>0</u>	<u>0</u>
Total Commercial & Industrial Included for Incentive Calculation	14,714,884	38,015,837
Residential:		
Home Energy Assistance Program	717,727	1,003,965
Home Energy Solutions Program	2,398,242	1,241,106
ENERGY STAR Homes Program	799,852	1,392,529
ENERGY STAR Appliance Program	3,329,756	4,069,783
ENERGY STAR Lighting Program	8,070,159	6,937,277
High Efficiency Heat Pump Program	<u>6,351,954</u>	<u>15,316,700</u>
Total Residential Included for Incentive Calculation	21,667,690	29,961,360

2011 End of Year Reconciliation

	<u>2011</u>
Carry Forward Balance	\$ 576,201
Funding:	
System Benefit Charge	\$ 1,223,287
Forward Capacity Market	\$ 46,283
Interest	24,305
Total Funding for 2011 Energy Efficiency Programs	<u>\$ 1,293,876</u>
Expenses:	
Energy Efficiency Expenditures	\$ 1,222,658
FCM Expenses	\$ 10,377
Member Incentive - 2010 ¹	\$ 67,758
Member Incentive - 20011 ²	\$104,159
Total 2011 Program Expenses	<u>\$ 1,404,952</u>
Carry Forward Balance	<u><u>\$ 465,126</u></u>

2. 2010 member incentive accrued in 2010 and booked in 2011

3. 2011 member incentive accrued in 2011 and booked in 2012