PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
NHPUC Docket No. DE 10-188
Attachment F (2011)
Page 1a of 7

Program Cost-Effectiveness - 2011 ACTUAL

			Pre	sent Value							
	Total										
	Resource				C	ustomer	Annual			Summer	Number of
	Benefit/Cos	Benefit	Ut	ility Costs		Costs	MWh	Lifetime MWh	Winter kW	kW	Customers
	t Ratio	(\$000)		(\$000)		(\$000)	Savings	Savings	Savings	Savings	Served
Residential Programs						· · · · · · · · · · · · · · · · · · ·					
Home Energy Assistance	1.18	\$ 2,094.7	\$	1,780.4	\$	_	800.0	10,223.4	29.5	75.8	786
Home Performance w/ES (Electric)	1.34	\$ 561.0	\$	305.4	\$	112.3	562.6	8,407.5	207.1	21.2	499
ENERGY STAR Homes	4.94	\$ 11,711.2	\$	1,268.2	\$	1,101.6	1,897.9	39,595.3	235.8	128.1	652
ENERGY STAR Appliances	1.58	\$ 3,275.7	\$	726.6	\$	1,347.3	2,407.3	26,716.5	336.2	285.0	15,691
ENERGY STAR Lighting	3.26	\$ 3,788.1	\$	915.9	\$	247.6	10,185.2	52,735.2	2,354.0	625.5	244,534
EnergyStar Homes (Geothermal)	1.28	\$ 1,018.6	\$	333.0	\$	462.5	663.6	16,588.9	389.7	9.3	37
Other		\$ · -	\$	_	\$		-		-	-	
Subtotal Residential	2.61	\$ 22,449.4	\$	5,329.637	\$	3,271.3	16,516.5	154,266.8	3,552.3	1,145.0	262,199
Commercial/Industrial Programs											
New Construction / Major Renovation	3.62	\$ 8,076.3	\$	1,731.3	\$	499.3	5,975.9	85,783.4	842.3	2,513.7	126
Large C&I Retrofit	2.06	\$ 13,067.4	\$	2,172.1	\$	4,183.9	12,048.4	148,368.0	2,275.9	3,736.0	183
Small Business Energy Solutions	1.71	\$ 9,748.7	\$	2,748.0	\$	•	9,076.8	119,159.6	1,606.6	1,897.1	550
C&I RFP Pilot	3.53	\$ 3,734.0	\$	437.5	\$	621.1	3,406.2	42,257.5	842.6	1,108.4	3
Other (Education)		\$, <u>-</u>	\$	121.3	\$	-	-,	-,	-	-	_ ~
CI Partnerships			\$	2.4	7						_
Subtotal C&I	2.24	\$ 34,626.4	\$	7,212.6	\$	8,251.5	30,507.4	395,568.6	5,567.5	9,255.1	862
Smart Start		\$ -	\$	14.9	\$	-	_	_			_
HES Fuel Neutral Pilot (Fossil)	2.85	\$ 6,022.6	\$	1,315.7	\$	797.9	-	-	_	_	395
		\$ 6,022.6	\$	1,330.5	\$	797.9	•	•	-	-	395
Total	2.41	\$ 63,098.4	\$	13,872.8	\$^	12,320.7	47,023.9	549,835.4	9,119.7	10,400.0	263,456

Program Cost-Effectiveness - 2011 PLAN

	T-4-1		Pr	esent Valu	9						
	Total Resource Benefit/Co st Ratio	Benefit (\$000)	Ut	ility Costs (\$000)		Sustomer	Annual MWh Savings	Lifetime MWh Savings	Winter kW Savings	Summer kW Savings	Number of Customers Served
Residential Programs											
Home Energy Assistance	1.70	\$ 6,053.6	\$	1,917.4	\$	1,652.3	643.7	8,946.9	80.3	21.3	679
Home Performance w/ES (Electric)	0.84	\$ 402.9	\$	402.9	\$	74.1	609.6	5,860.1	180.5	30.1	485
ENERGY STAR Homes	4.76	\$ 6,031.3	\$	948.7	\$	317.4	561.1	9,644.8	128.5	83.1	378
ENERGY STAR Appliances	1.42	\$ 2,057.8	\$	721.1	\$	730.2	1,780.1	18,253.1	252.2	238.1	12,170
ENERGY STAR Lighting	2.38	\$ 2,389.1	\$	774.3	\$	231.0	6,366.3	33,222.0	1,492.3	396.6	149,628
EnergyStar Homes (Geothermal)	2.62	\$ 1,677.2	\$	361.4	\$	279.9	1,088.2	27,205.1	734.2	19.8	54
Other		\$ -	\$	~	\$	-	0.0	-	-	-	-
Subtotal Residential	2.21	\$ 18,612.0	\$	5,125.8	\$	3,285.0	11,048.9	103,131.9	2,867.9	788.9	163,393
Commercial/Industrial Programs						,					
New Construction / Major Renovation	3.13	\$ 6,962.3	\$	1,605.1	\$	618.5	5,254.8	73,895.9	1,053.1	2.078.6	144
Large C&I Retrofit	1.93	\$ 10,458.6	\$	2,113.5	\$	3,302.4	9,543.2	119,762.0	1,736.0	2,796.2	136
Small Business Energy Solutions	1.67	\$ 7,356.4	\$	2,508.6	\$	1,900.4	7,164.1	89,551.1	1,268.0	1,497.3	573
C&I RFP Pilot	3.16	\$ 2,658.8	\$	475.5	\$	367.1	2,451.4	29,295.5	451.3	874.9	6
Other (Education)	0.00	\$ -	\$	113.3	\$	~	0.0		_	-	-
CI Partnerships		\$ -	\$	28.1	\$	-	0.0	-	-	-	_
Subtotal C&I	2.11	27,436.0	\$	6,844.1	\$	6,188.3	24,413.5	312,504.4	4,508.5	7,247.0	859
Smart Start		\$ -	\$	30.0	\$	_	0.0	_	-	0	_
HES Fuel Neutral Pilot (Fossil)	2.72	\$ 5,922.5	\$	1,223.5	\$	953.7	-	-	-	-	680
, ,		\$ 5,922.5	\$	1,253.5	\$	953.7	0.0	•	-	0	680
Total	2.20	51,970.5	\$	13,223.4	\$	10,427.0	35,462.5	415,636.3	7,376.4	8,036.0	164,932

Note: Energy Star Lighting Program plan included 37,407 customers purchasing a total of 149,628 lighting products (4 per customer)

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE NHPUC Docket No. DE 10-188 Attachment F (2011) Page 2 of 7

Present Value Benefits - 2011 ACTUAL

			CAP	ACITY			ENER	GY		
	Total	Summer	Winter	Transmissio			Winter Off	Summer	Summer	Non Electric
	Benefits	Generation	Generation	n	Distribution	Winter Peak	Peak	Peak	Off Peak	Resource
Residential Programs										
Home Energy Assistance	\$2,094,728	\$21,627	\$0	\$9,691	\$31,463	\$201,309	\$247,849	\$100,487	\$119,007	\$1,363,295
Home Performance w/ES (Electric)	\$561,013	\$8,487	\$0	\$3,338	\$10,837	\$169,534	\$253,314	\$52,728	\$62,775	
ENERGY STAR Homes	\$11,711,230	\$95,626	\$0	\$24,523	\$79,617	\$741,327	\$904,819	\$376,579	\$454,193	\$9,034,546
ENERGY STAR Appliances	\$3,275,691	\$74,854	\$0	\$33,569	\$108,989	\$525,362	\$644,700	\$281,403	\$315,105	
ENERGY STAR Lighting	\$3,788,138	\$94,216	\$0	\$37,696	\$122,387	\$1,087,765	\$1,298,227	\$530,670	\$617,175	
EnergyStar Homes (Geothermal)	\$1,018,639	\$9,210	\$0	\$2,122	\$6,889	\$338,024	\$634,923	\$18,124	\$9,348	
Other	<u>\$0</u>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Subtotal Residential	\$22,449,439	\$304,020	\$0	\$110,939	\$360,183	\$3,063,322	\$3,983,831	\$1,359,991		\$11,689,551
Commercial/Industrial Programs										
New Construction / Major Renovation	\$8,076,345	\$843,366	\$0	\$369,961	\$1,201,139	\$1,082,464	\$1,132,551	\$1,912,050	\$1,534,815	\$0
Large C&I Retrofit	\$13,067,427	\$1,088,003	\$0	\$486,321		\$2,693,610	\$2,558,202		\$1,990,714	
Small Business Energy Solutions	\$9,748,654	\$589,761	\$0	\$262,283	\$851,546	\$3,207,436	\$2,090,339		\$1,038,598	
C&I RFP Pilot	\$3,734,005	\$330,177	\$0	\$147,432	\$478,664	\$506,327	\$871,079	\$769,421	\$630,904	1
Other (Education)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	. 1
CI Partnerships	\$0	<u>\$0</u>	<u>\$0</u>	\$0	<u>\$0</u>	\$0	\$0	\$0	<u>\$0</u>	
Subtotal C&I	\$34,626,431		\$0	\$1,265,997	\$4,110,270		\$6,652,171		\$5,195,033	
HES Fuel Neutral Pilot (Fossil)	\$6,022,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,022,571
Total	\$63,098,441	\$3,155,327	\$0	\$1,376,936	\$4,470,454	\$10,553,159	\$10,636,002	\$8,421,808	\$6,772,635	\$17,712,122

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE NHPUC Docket No. DE 10-188 Attachment F (2011) Page 3 of 7

Shareholder Incentive Calculation

2011

	<u>Planned</u>	<u>Actual</u>
Commercial/Industrial Incentive		
1. Benefit/Cost Ratio	2.02	2.15
2. Threshold Benefit / Cost Ratio ¹	1.00	
3. Lifetime kWh Savings	312,504,380	395,568,565
4. Threshold Lifetime kWh Savings (65%) ²	203,127,847	
5. Budget ³	\$6,844,100	\$6,769,488
6. Benefit / Cost Percentage of Budget	4.00%	
7. Lifetime kWh Percentage of Budget	4.00%	
8. C/I Shareholder Incentive	\$547,528	\$631,092
9. Cap (12%)	\$821,292	
Residential Incentive		
10. Benefit / Cost Ratio	2.11	2.61
11. Threshold Benefit / Cost Ratio ¹	1.00	
12. Lifetime kWh Savings	103,131,947	154,266,831
13. Threshhold Lifetime kWh Savings (65%) ²	67,035,765	
14. Budget ⁴	\$5,125,814	\$5,570,591
15. Benefit / Cost Percentage of Budget	4.00%	
16. Lifetime kWh Percentage of Budget	4.00%	
17. Residential Incentive	\$410,065	\$608,942
18. Cap (12%)	\$615,098	· · · · · · · · · · · · · · · · · · ·
19. TOTAL INCENTIVE EARNED		\$1,240,034

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. Actual \$ Spent of \$7,212,590 was decreased by \$443,102 as this amount earned an incentive in 2010.
- 4. Actual \$ Spent of \$5,329,637 was increased by \$240,954 as this amount had not earned an incentive in 2010.
- 4. Did not include HPwES Fuel Neutral portion of the budget (\$1,315,668) per NHPUC Order No. 24,974.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
NHPUC Docket No. DE 10-188
Attachment F (2011)
Page 4 of 7

Planned Versus Actual Benefit / Cost Ratio by Sector 2011

		<u>Planned</u>	Actual
Co	mmercial & Industrial:		
1.	Benefits (Value) From Eligible Programs	\$ 27,436,028	\$ 34,626,431
2.	Implementation Expenses	\$ 6,844,100	\$ 7,212,590
3.	Customer Contribution	\$ 6,188,313	\$ 8,251,525
4.	Estimated Shareholder Incentive	\$ 547,528	\$ 631,092
5.	Total Costs (including shareholder incentive)	\$ 13,579,941	\$ 16,095,208
6.	Benefit/Cost Ratio - C&I Sector	2.02	2.15
Res	sidential:		
7.	Benefits (Value) From Eligible Programs	\$ 18,611,961	\$ 22,449,439
8.	Implementation Expenses	\$ 5,125,814	\$ 5,329,637
9.	Customer Contribution	\$ 3,284,991	\$ 3,271,335
10.	Estimated Shareholder Incentive	\$ 410,065	\$ 608,942
11.	Total Costs (including shareholder incentive)	\$ 8,820,869	\$ 8,600,972
12.	Benefit/Cost Ratio - Residential Sector	2.11	2.61

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
NHPUC Docket No. DE 10-188
Attachment F (2011)
Page 5 of 7

Actual Lifetime Energy Savings by Sector and Program 2011

	Lifetime kW	h Savings
	Planned	Actual
Commercial & Industrial:		
New Construction / Major Renovation	73,895,868	85,783,390
Large C&I Retrofit	119,761,974	148,368,050
Small Business Energy Solutions	89,551,078	119,159,612
C&I RFP Pilot	29,295,460	42,257,513
Other (Education)	0	0
CI Partnerships	<u>0</u>	<u>0</u>
Total Commercial & Industrial Included for Incentive Calculation	312,504,380	395,568,565
Residential:		
Home Energy Assistance	8,946,884	10,223,431
Home Performance w/ES (Electric)	5,860,084	8,407,501
ENERGY STAR Homes	9,644,760	39,595,344
ENERGY STAR Appliances	18,253,113	26,716,522
ENERGY STAR Lighting	33,221,995	52,735,184
EnergyStar Homes (Geothermal)	27,205,110	16,588,850
Other	<u>0</u>	<u>0</u>
Total Residential Included for Incentive Calculation	103,131,947	154,266,831

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE NHPUC Docket No. DE 10-188 Attachment F (2011) Page 6 of 7

2011 End of Year Reconciliation

	<u>2011</u>
Carry Forward Balance	\$ 895,372
Funding:	
System Benefit Charge	\$ 12,816,877
FCM Payments ¹	1,583,822
Interest	102,159
Total Funding for Energy Efficiency Programs	\$ 14,502,858
Expenses:	
Energy Efficiency Expenditures	\$ 13,909,019
Shareholder Incentive - Preliminary Estimate	1,240,034
2% for PSNH Facilities ²	230,791
Total Program Expenses	\$ 15,379,844
Carry Forward Balance	\$ 18,386

Notes

- FCM Payments net of expenses per the NHPUC Audit of 2009
 FCM Payments for 2011 \$1,671,546
 FCM Expenses for 2011 87,724
 FCM Net Amount \$1,583,822
- 2. This amount will bring the balance at 12/31/2011 to \$600,000, PSNH's balance cap on total accumulation of RSA 125-0 funds, per Commission Letter dated November 4, 2010 (Docket 09-170)

Reconciliation 2011 General Ledger Transactions vs Energy Efficiency Program Transactions

General Ledger Balance - 01/01/2011 General Ledger Balance - 12/31/2011 \$3,401,279 3,231,357

2011 Net General Ledger Activity

(\$169,922)

				Add 2011	777777777777777777777777777777777777777
		Deduct	Deduct 2010	Transactions	
	General	Impact of	Transactions	not Yet	2011
	Ledger	Prior Year GL	Included in	Recorded on	Program
	Transactions	Transactions	2011 GL	GL	Year
BEGINNING BALANCE - CARRYFORWAR	D				\$895,372
FUNDING:					
SBC Funding	\$12,816,877				12,816,877
FCM Payments - Net	1,583,822				1,583,822
2011 Interest: GL Jan-Nov, EE YTD	91,019			11,140	102,159
Dec 2010 Interest: Jan 11	9,506		(9,506)		-
Total Funding	\$14,501,224		(\$9,506)	11,140	14,502,858
EXPENSES:					
EE Expenses: Jan-Dec 11	\$11,923,217				\$11,923,217
SmartStart EE Expenses: Jan-Dec 11			(153)	(87,276)	(87,429)
Usage of 2% PSNH Facilities Set-aside	134,060	(134,060)		-	-
2% PSNH Facilities Set-aside				230,791	230,791
2011 EE Expenses: Jan-Apr 12				2,073,232	2,073,232
2010 EE Expenses: Jan-Apr 11 (Note 1)	1,507,827		(1,507,827)		_
2011 Shareholder Incentive	901,000			339,034	1,240,034
2010 SI Incentive True-up	205,042		(205,042)		_
Total Expenses	\$14,671,146	(\$134,060)	(1,713,022)	2,555,780	\$15,379,844
Net: Funding less Expenses	(\$169,922)	\$134,060	\$1,703,516	(2,544,640)	\$18,386

Notes:

⁽¹⁾ Reflects Adjusments due to NHPUC audit of 2010 Program Year.