

## National Grid NH

### Proposal for Revised 2012 Gas Energy Efficiency Program Budgets

#### 2011 Program Year End Results

As provided by NH PUC Order 25,315 and NH PUC Order 25,286, National Grid NH (the Company) submits its final 2011 energy efficiency natural gas programs report comparing amounts budgeted for these programs with amounts actually spent. Those comparisons are outlined in Table 1.

<b>Table 1.</b>						
<b>2011 Program Budget &amp; Spend</b>	<b>Budget</b>			<b>Actual</b>	<b>Variance</b>	
	As filed on 8/2/10, per DE 10-188	Revised, per 2010 Carryover	Final, per 2011 Program Adjustments	Spend	Spend vs. Final Budget	% to Budget
<b>Residential</b>						
Low Income	\$730,895	\$808,037	\$1,068,037	\$780,919	\$(287,118)	73%
High Efficiency Heating Equip	\$714,464	\$768,645	\$768,645	\$684,163	\$(84,482)	89%
New Home Const. w/ES	\$79,355	\$101,799	\$86,799	\$104,797	\$17,988	121%
Building Practices & Demo	\$25,329	\$25,329	\$20,329	\$627	\$(19,702)	3%
Energy Audit w/Home Performance	\$1,540,631	\$1,767,752	\$1,527,752	\$715,576	\$(812,177)	47%
<b>Residential Total</b>	<b>\$3,090,674</b>	<b>\$3,471,562</b>	<b>\$3,471,562</b>	<b>\$2,286,081</b>	<b>\$(1,185,481)</b>	<b>66%</b>
<b>Commercial &amp; Industrial</b>						
Large Retrofit	\$1,856,294	\$1,856,294	\$1,856,294	\$633,352	\$(1,222,942)	34%
New Equipment & Construction	\$1,032,155	\$1,032,155	\$1,032,155	\$368,273	\$(663,882)	36%
Small Business Energy Solutions	\$286,323	\$286,323	\$286,323	\$240,859	\$(45,464)	84%
<b>C&amp;I Total</b>	<b>\$3,174,772</b>	<b>\$3,174,772</b>	<b>\$3,174,772</b>	<b>\$1,242,484</b>	<b>\$(1,932,288)</b>	<b>39%</b>
<b>Grand Total</b>	<b>\$6,265,446</b>	<b>\$6,646,334</b>	<b>\$6,646,334</b>	<b>\$3,528,565</b>	<b>\$(3,117,769)</b>	<b>53%</b>

For reference, Table 1 includes the 2011 program year gas budgets as originally filed with the Commission on August 2, 2010, an additional amount of \$380,888 from the 2010 program year which was not spent in that program year and which, pursuant to the provisions of NH PUC Order 25,189, was carried over and added to the 2011 budgets. Table 1 also reflects various transfers permitted by NH PUC Order 25,189 among the various 2011 program budgets.

Table 2 compares the Company's savings results for 2011 versus its goals.

<b>Table 2.</b>			
<b>2011 Program Savings</b>	<b>Lifetime MMBTU Savings</b>		
	<b>Goal</b>	<b>Actual</b>	<b>% to Goal</b>
<b>Residential</b>			
Low Income	70,954	63,648	90%
High Efficiency Heating Equip	306,840	183,743	60%
New Home Const. w/ES	20,400	22,440	110%
Building Practices & Demo	-	-	-
Energy Audit w/Home Performance	338,400	285,736	84%
<b>Residential Total</b>	<b>736,594</b>	<b>555,567</b>	<b>75%</b>
<b>Commercial &amp; Industrial</b>			
Large Retrofit	699,027	309,043	44%
New Equipment & Construction	280,381	234,359	84%
Small Business Energy Solutions	111,884	127,145	114%
<b>C&amp;I Total</b>	<b>1,091,292</b>	<b>670,547</b>	<b>61%</b>
<b>Grand Total</b>	<b>1,827,886</b>	<b>1,226,114</b>	<b>67%</b>

### **2011 Unspent Energy Efficiency Program Funds to be Included in 2012 Program Budget**

In its 2011-2012 Winter Cost of Gas (COG) proceeding, the Company sought to credit customers, through the Local Distribution Adjustment Clause (LDAC) rate, for certain unspent Commercial & Industrial (C&I) efficiency funds from the 2010 and 2011 program years. In the NH PUC Order, the Commission allowed the Company to credit customers for the unspent 2010 funds, but directed the Company to partner with The Jordan Institute to attempt to spend the 2011 funds on viable projects that The Jordan Institute asserted existed within the Company's service territory. The Commission also directed the Company to discuss the issue of the underspend in the CORE docket (DE 10-188) and make a recommendation with regard to the unspent C&I funds.

Prior to the COG hearing, Company representatives held a number of meetings with The Jordan Institute to identify potential qualifying C&I energy efficiency projects in an effort to spend the remaining 2011 C&I funds. This communication continued over the last quarter of 2011 and into 2012. These efforts, unfortunately, have yielded only one qualifying project to date.

In addition to its discussions with The Jordan Institute, during the last quarter of 2011 and the beginning of 2012, the Company took additional steps in an effort to increase its marketing of the C&I programs in order to increase participation. Those efforts included: a telemarketing campaign, periodic direct mail and electronic mail campaigns, attendance at customer events, and street canvassing. These initiatives resulted in more than 600 leads and the installation of more than 250 qualifying product savings

measures. In addition, the Company has been aggressively targeting key businesses, trade associations, builders, contractors, installers, architects and engineers.

Despite these increased marketing efforts, and based on historical and current trends in the market, the Company has concluded that it will be unable to spend the approximately \$1.9 million dollars of 2011 funds that remain available as well as the funds already budgeted for 2012 for C&I energy efficiency projects. Accordingly, with respect to its unspent 2011 funds, the Company proposes to credit customers for the remaining 2011 uncommitted budget for C&I customers in the amount of \$1,932,288 and for Residential customers in the amount of \$898,362 through the LDAC in its 2012-2013 Winter COG rate, in accordance with NH PUC Order 25,286 and NH PUC Order 25,315. The Company further proposes to carry over \$287,118 of uncommitted budget from the 2011 Residential Low Income program into the 2012 Residential Low Income program budget.

Exhibit A outlines the Company's updated program budgets and goals for 2012 reflecting these adjustments. For reference, Exhibits A, B, & D detailed in this submission are updates to the corresponding National Grid Exhibits A, B & D submitted as part of the gas utilities' joint energy efficiency plan filed on August 2, 2010 in Docket No. DE 10-188. National Grid's Exhibit C in DE 10-188 details program savings input assumptions; since there are no updates to that Exhibit, it is not included in this filing.

<b>Exhibit A.</b>	<b>2012 Program Budget &amp; Goals - Revised</b>									
	<b>Internal Admin</b>	<b>External Admin</b>	<b>Rebates/ Services</b>	<b>Internal Impl.</b>	<b>Market-ing</b>	<b>Evalu-ation</b>	<b>Total</b>	<b>Partici-pants</b>	<b>Lifetime MMBTU Savings</b>	<b>Annual MMBTU Savings</b>
<b>Residential</b>										
Low Income	\$23,583	\$93,755	\$1,005,678	\$0	\$0	\$0	\$1,123,016	377	102,544	5,127
High Efficiency Htg Equip	\$15,119	\$135,200	\$521,475	\$30,284	\$29,847	\$874	\$732,799	1,314	254,045	14,249
New Home Const. w/ES	\$1,824	\$30,004	\$49,844	\$3,661	\$3,213	\$80	\$88,546	34	23,120	925
Building Practices & Demo	\$471	\$4,243	\$14,600	\$942	\$2,191	\$307	\$22,754	10	0	0
Energy Audit w/Home Performance	\$34,655	\$138,114	\$1,408,000	\$69,420	\$21,981	\$8,363	\$1,680,533	1,408	389,115	19,456
<b>Residential Total</b>	<b>\$75,652</b>	<b>\$401,316</b>	<b>\$2,999,597</b>	<b>\$104,307</b>	<b>\$57,232</b>	<b>\$9,544</b>	<b>\$3,647,647</b>	<b>3,143</b>	<b>768,824</b>	<b>39,756</b>
<b>Commercial &amp; Industrial</b>										
Large Retrofit	\$61,672	\$101,701	\$1,477,775	\$118,357	\$22,413	\$25,161	\$1,807,079	259	725,869	49,388
New Equipment & Construction	\$103,868	\$164,586	\$778,514	\$208,073	\$37,676	\$42,296	\$1,335,013	372	397,227	20,754
Small Business Energy Solutions	\$19,027	\$49,934	\$233,731	\$38,115	\$6,008	\$7,665	\$354,480	27	131,342	8,756
<b>C&amp;I Total</b>	<b>\$184,567</b>	<b>\$316,221</b>	<b>\$2,490,020</b>	<b>\$364,545</b>	<b>\$66,097</b>	<b>\$75,122</b>	<b>\$3,496,571</b>	<b>658</b>	<b>1,254,438</b>	<b>78,898</b>
<b>Grand Total</b>	<b>\$260,219</b>	<b>\$717,536</b>	<b>\$5,489,617</b>	<b>\$468,852</b>	<b>\$123,329</b>	<b>\$84,666</b>	<b>\$7,144,218</b>	<b>3,801</b>	<b>2,023,262</b>	<b>118,655</b>

Exhibit B outlines the Company's updated 2012 Total Resource Benefit Cost Analysis based on the revised 2012 program budgets set forth in Exhibit A. The Company identified a formula error in the computations of its previously submitted and approved 2012 Program Total Resource Benefit Cost Analysis. The values in Exhibit B incorporate the corrections to the previous formula error. As a result of the error, participation levels according to planned incentive levels were not properly calculated. Accordingly, adjustments to the budget, participation, and savings levels have been made in the attached exhibit.

After applying these corrections, the Low Income program benefit cost ratio ("BCR") falls below 1.0. The primary contributing factor to the Low Income program BCR falling below 1.0 is the change to avoided gas supply costs resulting from the "Avoided Energy Supply Costs in New England: 2011 Report." Specifically, in 2011, the lifetime benefit for the Low Income program was \$218.07 per MMBTU, but in 2012 that figure has been revised downward to \$169.37 per MMBTU. Total benefits in 2011 were \$2,965.71 but have also declined, and in 2012 are now \$2,303.39. The average project costs for 2011 was \$2,668 per project.

For reference, National Grid NH applies deemed savings to its Gas Low Income program benefit cost model based on the NH Residential Low Income Gas Weatherization Impact Evaluation, performed by Cadmus and submitted to National Grid and Unitil on February 16, 2010.<sup>1</sup>

Although the Company's Low Income program BCR is below 1.0, the Company's Residential sector-level BCR is at 1.0, meeting the minimum sector-level requirement.

<b>Exhibit B</b> <b>January 1, 2012 - December 31, 2012 TRC BENEFIT COST TEST - REVISED</b> <b>National Grid</b> <b>Gas Energy Efficiency Programs      Summary of Benefit, Costs Program Year 2012 (January 1, 2012 - December 31, 2012)</b> <b>Total Resource Cost Test</b>								
<b>BCR Activity</b>	<b>TRC Benefit/ Cost</b>	<b>TRC Net Benefits</b>	<b>Total Benefits (\$000)</b>	<b>Total Costs (\$000)</b>	<b>PA Costs (\$000)</b>	<b>Participant Costs (\$000)</b>	<b>Participant Goal</b>	<b>Lifetime MMBTU Savings</b>
<b>Residential</b>								
Low Income	0.77	-\$255	\$868	\$1,123	\$1,123	\$0	377	102,544
Energy Audit with Home Performance and Weatherization	1.07	\$207	\$3,295	\$3,089	\$1,681	\$1,408	1,408	389,115
Residential High-Efficiency Heating, Water-Heating, Controls Program	1.15	\$271	\$2,062	\$1,791	\$733	\$1,058	1,314	254,045
New Home Construction with Energy Star	1.79	\$87	\$197	\$110	\$89	\$22	34	23,120
Res Building Practices and Demo	NA	-\$23	\$0	\$23	\$23	\$0	10	-
Shareholder Incentive					\$292			
<b>Subtotal: Residential</b>	<b>1.00</b>	<b>\$287</b>	<b>\$6,422</b>	<b>\$6,427</b>	<b>\$3,939</b>	<b>\$2,487</b>	<b>3,143</b>	<b>768,824</b>
<b>Commercial &amp; Industrial</b>								
Large C & I Retrofit Program	1.23	\$1,076	\$5,742	\$4,665	\$1,807	\$2,858	259	725,869
New Equipment and Construction Program	1.50	\$1,072	\$3,237	\$2,164	\$1,335	\$829	372	397,227
Small Business Energy Solutions Program	1.77	\$452	\$1,040	\$588	\$354	\$234	27	131,342
Shareholder Incentive					\$280			
<b>Subtotal: Commercial &amp; Industrial</b>	<b>1.30</b>	<b>\$2,600</b>	<b>\$10,018</b>	<b>\$7,698</b>	<b>\$3,776</b>	<b>\$3,921</b>	<b>658</b>	<b>1,254,438</b>
<b>Grand Total</b>	<b>1.16</b>	<b>\$2,888</b>	<b>\$16,441</b>	<b>\$14,125</b>	<b>\$7,716</b>	<b>\$6,409</b>	<b>3,801</b>	<b>2,023,262</b>

<sup>1</sup>The Company's New Hampshire gas Low Income program design and implementation is consistent with its Low Income program offerings to Massachusetts (MA) and Rhode Island (RI) gas customers. The Company's MA and RI programs include non-energy benefits in the benefit cost ratio calculation. These non-energy benefits account for nearly \$500 of benefits per participant, with benefits including health and safety and arrearage reduction. Because of this difference, the Company's MA and RI programs currently pass the BCR threshold requirement.

Exhibit D outlines the Company's updated 2012 Shareholder Incentive and Benefit-Cost Ratio targets based on the revised 2012 program budgets.

**Exhibit D – Shareholder Incentive Page 1 of 2**  
**National Grid NH Energy Efficiency**  
**Target Shareholder Incentive**  
**Year TWO – January 1, 2012 – December 31, 2012**

**Commercial/Industrial Incentive**

1. Target Benefit/Cost Ratio	1.30
2. Threshold Benefit/Cost Ratio	1.00
3. Target lifetime MMBTU	1,254,438
4. Threshold MMBTU	815,384
5. Budget	\$3,496,571
6. CE Percentage	4.00%
7. Lifetime MMBTU Percentage	4.00%
<b>8. Target C/I Incentive</b>	<b>\$279,726</b>
<b>9. Cap</b>	<b>\$419,589</b>

**Residential Incentive**

10. Target Benefit/Cost Ratio	1.00
11. Threshold Benefit/Cost Ratio	1.00
12. Target lifetime MMBTU	768,824
13. Threshold MMBTU	499,736
\$5.49/therm based on 50% of project cost	\$3,647,647
\$3.08/therm based on 50% of project cost	4.00%
16. Lifetime MMBTU Percentage	4.00%
<b>17. Target</b>	<b>\$291,812</b>
<b>18. Cap</b>	<b>\$437,718</b>
<b>19. Total Target Incentive</b>	<b>\$571,537</b>

**Line No. Notes:**

- 1, 3, 5, 10, 12, and 14. See Exhibit B
- 2, 6, 7, 11, 15, and 16. Report to the New Hampshire Public Utilities Commission on Rate Payer-Funded Energy Efficiency Issues in New Hampshire, Docket No. DR 96-150, page 21.
- 4. 65% of line 3.
- 8. 8% of line 5.
- 9. 12% of line 5.
- 13. 65% of line 12.
- 17. 8% of line 14.
- 18. 12% of line 14.
- 19. Line 8 plus line 17.

**Exhibit D – Shareholder Incentive Page 2 of 2**  
**National Grid NH Energy Efficiency**  
**Target Benefit-Cost Ratio by Sector**  
**Year TWO – January 1, 2012 – December 31, 2012**

<b>Commercial/Industrial:</b>	<b><u>Planned</u></b>
1. Benefits (Value) From Eligible Programs	\$10,018,382
2. Implementation Expenses	\$3,496,571
3. Customer Contribution	\$3,921,475
4. Shareholder Incentive	\$279,726
5. Total Costs Including Shareholder Incentive	<b>\$7,697,771</b>
6. Benefit/Cost Ratio – C&I Sector	<b>1.30</b>
<b>Residential:</b>	
7. Benefits (Value) From Eligible Programs	\$6,422,485
8. Implementation Expenses	\$3,647,647
9. Customer Contribution	\$2,487,388
10. Shareholder Incentive	\$291,812
11. Total Costs Including Shareholder Incentive	<b>\$6,426,847</b>
12. Benefit/Cost Ratio – Residential Sector	<b>1.00</b>

**Line No. Notes:**

1-4 and 7-11. See Exhibit B.

5. Sum of lines 2-4.

6. Line 1 divided by line 5. The shareholder incentive mechanism described by the New Hampshire Energy Efficiency Working Group and approved by the Commission in Order No. 23,574 includes a circular calculation. A portion of the earned shareholder incentive is related to the benefit/cost ratio (BCR). However, the shareholder incentive is supposed to be included as an EE cost in determining the BCR. For the purpose of calculating the shareholder incentive, the Company has calculated the planned BCR including the shareholder incentive for one iteration and will compare the actual BCR including the shareholder incentive to the planned BCR including shareholder incentives when determining the earned incentive.

11. Sum of lines 7-10.

12. Line 7 divided by line 11. The shareholder incentive mechanism described by the New Hampshire Energy Efficiency Working Group and approved by the Commission in Order No. 23,574 includes a circular calculation. A portion of the earned shareholder incentive is related to the benefit/cost ratio. However, the shareholder incentive is supposed to be included as an EE cost in determining the benefit/cost ratio. For the purpose of calculating the shareholder incentive, the Company has calculated the planned benefit/cost ratio including the shareholder incentive for one iteration and will compare the actual benefit/cost ratio including the shareholder incentive to the planned benefit/cost ratio including shareholder incentives when determining the earned shareholder incentive.

## Key Factors Influencing Proposal

The Company is proposing to carry over available low income program funds from 2011 to 2012, but credit customers for unspent funds from the 2011 C&I and residential customer programs based on the following factors affecting its programs across its gas portfolio:

- With respect to its Residential Low Income program, in November of 2011 the Company reallocated program funds from the Energy Audit with Home Performance program, Building Practices and Demo program and New Home Construction with Energy Star program to Low Income. This reallocation of funds was based on feedback from the Communication Action Agencies (CAAs) that sufficient opportunities and customer demand existed to fully leverage such additional funds. However, due to timing of the transfer of those funds so close to the end of the calendar year, the CAAs were unable to complete all the work before year end and were thus unable to fully utilize the available budget in 2011. The CAAs have indicated they have sufficient customer demand and project opportunities to leverage these 2011 carryover funds as well as the existing 2012 Residential Low Income program budget in 2012.
- The Energy Audit with Home Performance program experienced the largest spending shortfall versus budget within the residential programs in 2011, leveraging 47% of its program budget and realizing 84% of its savings target. While efficient from a spend-to-savings ratio, the program experienced significant challenges primarily with residential multi-family units, which represented approximately 82% of the program's unit and savings participation targets. The Company's lead vendor cited difficulties in capturing multi-family unit commitments because the existing incentive levels of 75% of the cost up to a maximum of \$750 was insufficient to drive customer participation. This was compounded by the fact that natural gas prices have been low, reducing the incentive for customers to undertake energy efficiency measures. For 2012, the incentive for multi-family units has been modified to 50% of the cost up to a maximum of \$4,000 which, the Company and its lead vendor anticipate, when coupled with more aggressive marketing will result in stronger performance in 2012. Even with these changes, the Company believes meeting the existing program targets will still be a challenge.
- The Residential High Efficiency Heating equipment program utilized 89% of its program budget in 2011. The New Hampshire gas utilities offer the same equipment rebate levels as the member companies of the GasNetworks collaborative. Beginning in 2012 a number of previously eligible high efficiency furnace and boiler models were eliminated from eligibility for the program. Also, several equipment model rebate levels have been reduced. Based on these changes, the Company believes meeting its existing 2012 targets will be a challenge.
- The New Home Construction with Energy Star program exceeded its spending and savings targets in 2011. While performing strongly last year, the Company anticipates a much more difficult year for the program in 2012. As seen with National Grid's electric-territory ENERGY STAR Homes program in 2011, which experienced several building project cancellations and lack of customer demand, the continued slow recovery of the housing market is dampening expectations for the Company's program performance in 2012.
- As previously noted, the Company believes the recent low natural gas prices have lessened non-residential customer interest in its program, particularly with the large natural gas users. Beginning in September of 2011, the Company began several aggressive direct customer marketing efforts including direct mail, email and outbound calling to all of its 10,400 C&I gas customers. These efforts generated more than 600 customer leads and helped play a key role in the Company substantially increasing its Small Business program performance at the end of the year, finishing at 84% of budget and 114% of its savings target. However, the Company lost several large-scale C&I gas customer project opportunities during the fourth quarter of 2011 due to incentive levels that were inadequate to drive participation. Since neither of these factors is likely to change, the Company projects having another challenging year in 2012 relative to meeting its goals. The Company's increased marketing outreach has continued into 2012 and it has been working more closely with various trade partners and business associations to increase



awareness of its energy efficiency programs and helping customers identify qualifying energy efficiency measures. The Company has explored offering enhancements to its current incentive offerings and has engaged in preliminary discussion of these potential concepts with the business community as well as with the NH PUC Staff. Because of the Company's difficulties in securing C&I customer energy efficiency project commitments, it believes the existing 2012 program budgets are more than sufficient to meet any customer demand.