

February 8, 2010

**VIA HAND DELIVERY & ELECTRONIC MAIL**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

**RE: Docket 4116 – The Narragansett Electric Company, d/b/a National Grid  
Revised Energy Efficiency Program Plan for 2010**

Dear Ms. Massaro:

Enclosed are copies of National Grid's revised Energy Efficiency Program Plan for 2010, per the Commission's decision at its Open Meeting on December 23, 2009.

In this Plan, the DSM charge is kept at 3.2 mills/kWh and the Company builds in an assumption of additional funding from the Regional Greenhouse Gas Initiative ("RGGI") auctions.<sup>1</sup> This so-called RGGI 40% funding could provide approximately \$5.1 million in additional funding. However, the magnitude, timing, and potential limitations on this additional funding are not fully known at this time. Therefore, this Plan presents two tiers of activities. Tier 1, shown in Attachment 5A, presents budgets and goals using only the funding sources that are currently known, i.e, without securing additional funds. Tier 2, shown in Attachment 5B, presents budgets and goals assuming the additional RGGI are used.

The Company has considered many concepts for the use of these additional RGGI funds, noting that a proposal must still be submitted and approved by the Office of Energy Resources. Attachment 5B contains the Company's projection of the maximum amount of savings the Company can achieve based on known funding sources at this time, while maintaining program continuity and equity and complying with the intended use of the additional RGGI 40% funds. Attachment 5B shows that, even with the infusion of RGGI 40% funds, the Company will be able to achieve 96% of the savings targets for 2010 established in the Least Cost Procurement Plan (LCPP) and approved by the Commission in Docket 3931.

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<sup>1</sup> As referenced in the "2009 Plan for the Allocation and Distribution of Regional Greenhouse Gas Initiative Auction Proceeds" (Approved September 30, 2009): "Forty percent shall be allocated to the Innovative Financing and Partnership Account at the Utility for the sole purpose of investing in new partnerships, research, and pilot programs including innovative financing options and partnerships that can drive efficiency program development and enhancements to accelerate and broaden the energy savings for Rhode Islanders."

At a very high level, Tier 1 of this revised Plan embodies the following changes from the Plan considered previously by the Commission:

- Implementation budgets for many programs have been reduced by approximately 16%;<sup>2</sup> savings have been reduced proportionately
- Commercial and Industrial Commitments budget for 2011 reduced by \$2.4 million to \$5.3 million
- HEAT Loan and Deep Energy Retrofit initiatives eliminated because they may be eligible for RGGI 40% funds
- Savings assumptions have been updated for selected programs, based on year end 2009 data
- Expenses for Energy Action/Aquidneck and Jamestown and for on-bill financing carrying charges have been included

Attachment 5B illustrates that the Company can achieve 96% of the 2010 LCPP savings goals through the infusion of \$5.1 million of RGGI 40% funds. Approximately \$4.0 million would be earmarked for a loan fund. This loan fund would handle all loans for the Small Business Program for on-bill financing. This would free up funds in this program's incentives budgets to support additional projects and create more savings. The loan fund would also handle most Large C&I on-bill financing, which is currently funded from Company funds. This shift would not free up additional funds for incentives, but would reduce the expenses for Company financing of loans from the program budgets, and allow those administrative expenses to be reallocated to incentives. Beyond the loan fund, an additional \$1.1 million would be spent on pilots and innovative financing options.

As noted above, there is uncertainty related to the availability and timing of the RGGI 40% funds. Even though the Company alone has the ability to submit a plan to the OER for approval, the eventual approval of that plan is not guaranteed, and the timing for the receipt of the funds, if approved, is not known. For example, through the third quarter of 2009, Rhode Island received approximately \$3.9 million in RGGI auction proceeds designated for use on Company energy efficiency plans.<sup>3</sup> Nevertheless even that directed funding has yet to be distributed. At this point, the details of the Company's submission to the OER to secure the RGGI 40% funds have not been fully developed, and it is

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<sup>2</sup> In the course of updating its calculations of available funding for its 2010 electric energy efficiency programs, the Company performed a similar analysis for its gas programs and found that available gas program funding was about 14% less than in the November Plan because of the carryover of a larger negative fund balance from 2009. C&I gas program commitments were eliminated and sector budgets were reduced by approximately 7% with a comparable impact on savings.

<sup>3</sup> These funds are generally referred to as 60% RGGI funding because, as referenced in the Plan cited in footnote 1, "Sixty percent shall be allocated to the Least Cost Procurement Energy Efficiency Utility Account at the Utility for the sole purpose of supplementing and expanding energy efficiency efforts consistent with the PUC approved Energy Efficiency (EE) Procurement Plan and annual efficiency Program Plans for investment in all cost-effective energy efficiency programs and projects that are lower cost than supply and reduce long-term consumer energy demands and costs."

possible that the plan for RGGI 40% funds for which Company successfully secures OER approval will be different from what is proposed here.

The Company believes that the attached Plan is the best and most comprehensive proposal it can make based on what is currently known. Given the uncertainty about the nature of the final proposals related to securing RGGI funds and the timing of when funds might be received, the plan that is being submitted incorporates assumptions relative to the availability and timing of possible funding. Given these variables, it may be necessary for the Company to file revisions to its Tier 1 goals with the Commission depending on the timing of the receipt of the RGGI 60% funds (with no change expected in program content). Furthermore, the Company anticipates revising its Tier 2 goals with the Commission following OER approval of the Company's proposed plan and actual receipt of that RGGI 40% funding from the OER, including any changes to the current 2010 Energy Efficiency Plan content or savings that were made in order to secure OER approval.

The Company is committed to pursuing additional funding sources, such as ARRA or other funds. At the same time, it is clear that the securing and use of these funds is not guaranteed. Some ARRA funds may not be used for electric efficiency programs and/or are dedicated for 2-3 year time periods, and it is unknown when they will be distributed. Other sources have not even been identified. While the Company will also pursue these additional sources of funds during the year, the Company believes that the uncertainty about availability of these funds for the Company's 2010 programs prevents building a Tier 3 plan relative to ARRA or other funding and requesting Commission approval for it at this time.

Based on our experience surrounding the availability of additional sources of funding during 2010, the Company, the DSM Collaborative, and the EERMC will be examining the challenge of providing sustainable funding under least cost procurement as we prepare the 2011 Energy Efficiency Program Plan. The third year of the Least Cost Procurement Plan, 2011, has higher goals than 2010 and higher projected budgets than 2010, in order to achieve record savings for customers of more than \$100 million. As a group, we will continue to do everything we can to identify additional sources of funds to achieve the legislatively mandated goals of Least Cost Procurement – to lower customers' bills in Rhode Island by investing in energy efficiency resources that are cheaper than supply are to be achieved.

The Company continues to support the objectives of Least Cost Procurement. As seen in this Plan, the cost of this portfolio of proposed programs is 4.5 cents per lifetime MWh in Tier 1 (and 4.3 cents in Tier 2), well below the cost of supply. The benefits of energy efficiency far outweigh the costs – energy efficiency provides citizens and businesses an opportunity to reduce energy bills and those savings stay in Rhode Island instead of paying for electricity produced out of state or foreign oil. For every \$1 invested in our energy efficiency plan, over \$4 is generated in value for the state. We

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believe that this revised plan comports with the guidance of the Commission expressed in its decision regarding the original plan filing while attempting to satisfy the objectives for Least Cost Procurement. We are also confident that the plan also creates a great benefit for the citizens of Rhode Island during these difficult economic times.

In order to deliver these tens of millions of dollars in economic benefits and meet the 2010 goals the revised plan establishes, the Company respectfully requests expedited consideration and approval of this revised plan.

Thank you for your attention to this filing. If you have any questions, please feel free to contact me at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

cc: Docket 4116 Service List  
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Certificate of Service

I hereby certify that a copy of the cover letter and/or any foregoing attachments accompanying this certificate were electronically submitted, hand delivered, and/or mailed to the individuals listed below.



\_\_\_\_\_  
Joanne M. Scanlon

February 8, 2010  
Date

**National Grid - 2010 Energy Efficiency Program Plan – Docket No. 4116**  
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## **ATTACHMENTS**

1. Summary of Proposed Changes to Residential Programs for 2010
2. 2010 Residential Electric and Gas Energy Efficiency Programs
3. Summary of Proposed Changes to the Commercial and Industrial Programs for 2010
4. 2010 Commercial and Industrial Electric and Gas Energy Efficiency Programs
- 5A. 2010 Electric Energy Efficiency Program Tables – Tier 1
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6. 2010 Gas Energy Efficiency Program Tables
7. Measurement and Verification Plan
8. 2010 Electric Energy Efficiency Program Performance Metrics
9. Energy Action: Aquidneck and Jamestown

## **I. Introduction and Summary**

This Revised Energy Efficiency Program Plan (“EE Program Plan”) for 2010 is submitted by The Narragansett Electric Company d/b/a National Grid (“National Grid” or “Company”) in accordance with R.I.G.L. 39-1-27.7 (the Least Cost Procurement provisions of the Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006), R.I.G.L. 39-2-1.2(b), and the Rhode Island Public Utilities Commission’s “Standards for Energy Efficiency and Conservation Procurement” approved in order 19344 in Docket 3931 on July 17, 2008. This Energy Efficiency Program Plan has been developed in collaboration with the Subcommittee of the Energy Efficiency and Resource Management Council (“EERMC”) and is intended to be consistent with the three-year Energy Efficiency Procurement Plan (“EE Procurement Plan”) submitted by National Grid on September 2, 2008 with approval and support of the EERMC, the Office of Energy Resources, the Division of Public Utilities and Carriers, Environment Northeast, and TEC-RI. Furthermore, it is submitted consistent with the Commission’s decision on the initial settlement filing in this docket as recorded in the minutes of the Open Meeting of December 23, 2009.

This Plan is being jointly submitted as a Stipulation and Settlement (“Settlement”), entered into by the Rhode Island Division of Public Utilities and Carriers (“Division”), The Energy Council of Rhode Island (“TEC-RI”), Environment Northeast (“ENE”), and National Grid (together, the “Parties”), and addresses all issues raised by members of the Subcommittee<sup>1</sup> concerning the Company’s electric Demand-Side Management (“DSM”) Programs for the year 2010.

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<sup>1</sup> A DSM collaborative group has been meeting regularly since 1991 to analyze and inform the Company’s electric DSM programs. Members of the Subcommittee presently include the Company, the Division, the Rhode Island Office of Energy Resources (OER), TEC-RI, ENE, and PP&L with engagement from several EERMC members. The Subcommittee functioned as the “DSM Collaborative” until 2008. Given the overlapping responsibilities of the Collaborative and the EERMC in working with National Grid on energy efficiency planning, the Collaborative was made into a subcommittee of the EERMC in 2008. The constitution of the Collaborative has varied since 1991, as some organizations have withdrawn and others have joined.

This plan builds on the experiences and successes of National Grid's implementation of the approved electric and gas energy efficiency programs for all customer segments<sup>2</sup> subject to the budget included in the revised Settlement filing of November 7, 2008, in Docket No. 4000, which was approved by the Commission in Order 19608 on, April 6, 2009.

The Subcommittee has worked to enhance programs for customers by improving the efficiency and quality of energy-efficient products, expanding services to customers, integrating gas and electric energy efficiency offerings, and continuing to be involved in statewide and regional initiatives.

This Plan has been developed with three objectives:

- First, to continue the progress made in 2009 toward the aim of the “The Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006” to secure all cost-effective energy efficiency resources that are lower cost than supply and are prudent and reliable. The Company aims to achieve three-year savings targets for 2010 established in the Least Cost Procurement Plan (LCPP) and approved by the Commission in Docket 3931.
- Second, to reflect the Commission’s decision at its Open Meeting on December 23, 2009 that the DSM charge is kept at 3.2 mills/kWh and the Company builds in an assumption of additional funding from other sources (“outside funding”).
- Third, that all customers will have an opportunity to participate in the cost-effective<sup>3</sup> programs and benefit from the low-cost energy efficiency resource, and that program quality and economic and efficient delivery is maintained even as the programs continue to be ramped up.

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<sup>2</sup> The Commission’s Standards Section 1.3.C.1 requires that the EE Program Plan “shall proceed by building upon what has been learned to date in utility program experience.”

<sup>3</sup> In accordance with the Commission’s Standards Section 1.3.A.4 research and development and pilot initiatives will not be subject to individualized cost-effectiveness considerations. However, the costs of these initiatives shall be included in the assessment of portfolio level cost-effectiveness as required by Section 1.3.A.4.

**In order to meet these objectives, and because the magnitude, timing, and potential limitations of additional funding are not fully known at this time, this Plan presents two tiers of activities for electric programs. Tier 1, shown in Attachment 5A, presents budgets and goals using only the funding sources that are currently known, i.e, without securing additional funds. Tier 2, shown in Attachment 5B, presents budgets and goals assuming additional funding. Attachment 5B shows that, with the current level of DSM funding and additional funding dedicated to innovative finance and pilot programs from the infusion of 40% of the net proceeds from Regional Greenhouse Gas Inc. auctions (“RGGI 40% funds”), the Company will be able to achieve 96% of the savings targets for 2010 established in the Least Cost Procurement Plan (LCPP) and approved by the Commission in Docket 3931.**

National Grid will make a concerted effort in 2010 to secure additional funding and achieve as much savings as possible. Although outside funding may be available, it is not guaranteed and may come with restrictions. Of the outside funding sources that are known, no funds can directly be spent on incentives that will create energy savings. Instead, outside funding sources are typically designated for financing programs or earmarked for innovative pilots. Financing and pilots do not directly increase energy savings in the short term – they are long term investments that target deeper types of savings.

The tables below summarize the goals of this Plan.

**Table 1: 2010 Energy Efficiency Program Plan Summary**

**Tier 1**

<b>Electric Programs by Sector</b>	Proposed Utility Spending in 2010 (\$000)	Annual MWh Savings	Annual kW Savings	Total Benefits (\$000)	B/C Ratio	cents/lifetime kWh
Low Income Residential	\$3,532	2,284	244	\$8,322	2.27	12.9
Non-Low Income Residential	\$9,333	21,984	2,402	\$35,679	3.19	5.7
Commercial and Industrial	\$15,469	51,597	13,761	\$124,714	5.02	3.7
<b>Subtotal</b>	\$28,333	75,866	16,406	\$168,715	4.25	4.5
<b>Gas Programs by Sector</b>	Proposed Utility Spending in 2010 (\$000)	Annual MMBtu Savings		Total Benefits (\$000)	B/C Ratio	
Low Income Residential	\$368	1,515		\$451	1.17	
Non-Low Income Residential	\$1,413	26,065		\$6,459	2.72	
Commercial and Industrial	\$2,621	82,936		\$11,871	2.34	
<b>Subtotal</b>	\$4,402	110,516		\$18,781	2.40	
<b>Total for Plan</b>	\$32,736			\$187,497	4.00	

**Tier 2**

<b>Electric Programs by Sector</b>	Proposed Utility Spending in 2010 (\$000)	Annual MWh Savings	Annual kW Savings	Total Benefits (\$000)	B/C Ratio	cents/lifetime kWh
Low Income Residential	\$3,710	2,408	257	\$8,774	2.28	12.8
Non-Low Income Residential	\$10,225	21,999	2,409	\$35,979	2.96	6.2
Commercial and Industrial	\$17,187	60,674	16,280	\$147,123	5.37	3.5
<b>Subtotal</b>	\$31,122	85,081	18,946	\$191,876	4.42	4.3
<b>Gas Programs by Sector</b>	Proposed Utility Spending in 2010 (\$000)	Annual MMBtu Savings		Total Benefits (\$000)	B/C Ratio	
Low Income Residential	\$368	1,515		\$451	1.17	
Non-Low Income Residential	\$1,413	26,065		\$6,459	2.72	
Commercial and Industrial	\$2,621	82,936		\$11,871	2.34	
<b>Subtotal</b>	\$4,402	110,516		\$18,781	2.40	
<b>Total for Plan</b>	\$35,525			\$210,658	4.17	

Notes:

(1) Electric program projections in this table vary from values included for 2010 in the Energy Efficiency Procurement Plan because this Program Plan uses an updated (lower) sales forecast resulting in lower funding, while savings estimates incorporate the most recent evaluation results not available at the time the LCP Plan was filed, resulting in greater energy savings and benefits. Together, these result in a higher B/C ratio.

(2) Utility spending does not include customer contributions, evaluation cost, shareholder incentive, and commitments

Since demand for energy efficiency program services continues to be strong across all sectors, National Grid is confident that it will meet the gas program goals and the electric Tier 1 goals for 2010. Achievement of the Tier 2 goals will be contingent on the Company's proposal to be developed and submitted to the OER for the use of RGGI 40% funds. The Parties all agree that 2010, the second of three years covered by the Energy Efficiency Procurement Plan, is a time to expand ongoing program efforts and to innovate programs to create greater increases in energy efficiency savings. To that end, the Company commits to make a concerted effort to secure additional funding.

The Company also commits to continue to work on an ongoing basis with the Subcommittee and members of the EERMC's consulting team to explore financing, technological, marketing, integration, and implementation innovations to further advance and deepen energy efficiency for its customers in Rhode Island. The Company will invite the consulting team, Subcommittee, and EERMC members to observe its implementation efforts in the field. The Company will also increase its focus on evaluation efforts that support the energy efficiency programs in Rhode Island.

The Tier 2 plan features levels of electric energy savings and spending not seen before in the Company's programs in Rhode Island. This creates some new dynamics in the achievement of energy savings in Rhode Island, particularly as Rhode Island recovers in 2010 from the economic downturn. On the savings side, it will require overcoming customers' reluctance to spend the money on energy efficiency as well as successful delivery of the innovative program plans that are described herein. On the spending side, it will require that the Company secure funds from new sources, in particular since electric sales and DSM collections are forecasted to be lower in 2010 than in 2009, while gas collections are forecast to remain stable. The American Recovery and Rehabilitation Act (ARRA) has created some opportunities for advancing energy efficiency and may impact the Company's programs. ARRA funds will support state efforts in weatherization, energy efficiency programs in the State Energy Plan, and Community Block Grants (CBGs). However, ARRA funds may not necessarily increase spending budgets and increase energy savings goal in this plan because they are earmarked for certain programs and/or fuels, and have their own timetables. The

Company expects increased interest in its energy efficiency programs from municipalities receiving CBGs.<sup>4</sup> The Company also recognizes that ARRA funded weatherization programs will rely heavily on existing weatherization vendors and program administrators – the competition for weatherization resources may present a challenge for the Company’s low income programs that use the same channels. The Company will continue to play a role in assisting weatherization planners prepare for this ramp up. The Company is also applying for a sub-grant from the state’s Energy Star Energy Efficiency Appliance Rebate grant. The Collaborative supports the Company’s proposal to expand rebates on gas, oil and propane heating equipment.

The Company also intends to leverage some funds to make it easier for customers to finance energy efficiency installations. This is in accordance with Section 1.3.A.8 which requires “the Utility shall explore as part of its plan, new strategies to make available the capital needed to effectively overcome market barriers and implement projects that move beyond traditional financing strategies.”

Subsequent sections highlight the details of the gas and electric programs for 2010.<sup>5</sup>

## **II. Proposed 2010 DSM Programs**

The DSM programs for 2010 build on the momentum and success of prior DSM programs and services, offering energy efficiency opportunities to all customer segments,<sup>6</sup> with a focus on providing needed services to low and moderate income residential consumers as a means of reducing bills. In addition, the Company will continue to integrate the delivery of electric energy efficiency programs with its natural gas efficiency programs where practical. The

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<sup>4</sup> These will fund a portion of efficiency project costs; the Company expects municipalities to participate in the Company’s programs to supplement the CDBG funds.

<sup>5</sup> Section 1.3.B.1 requires “the Utility shall include a detailed budget for the EE Program Plan covering the annual period beginning the following January 1, that identifies the projected costs, benefits, and energy savings goals of the portfolio of each program. The budget shall identify at the portfolio level, the projected cost of efficiency resources in cents/lifetime kWh.

<sup>6</sup> Standards Section 1.3.A.2 requires “the Utility should consistently design programs and strategies to ensure that all customers have an opportunity to benefit comprehensively, where appropriate, from expanded investments in this low-cost resource.”

Parties agree to the Company’s 2010 electric and gas DSM Programs briefly described below:<sup>7</sup>

**A. Residential Programs**

The Parties agree to continue in 2010 the residential programs offered in 2009. The programs are summarized in Table 2 below. A summary of the proposed changes in these programs from 2009 are provided in Attachment 1. Descriptions of these programs are provided in Attachment 2. Highlights of proposed program changes for 2010 include continued integration of gas and electric programs, redesign of the residential lighting program, and the initiation of pilot programs to help identify future savings opportunities in home energy usage.

<b>Table 2. Proposed Residential Energy Efficiency Programs</b>	
Residential Buildings Efficiency Programs	
<b>EnergyWise Program</b> (Funded by Gas and Electric)	The EnergyWise program offers single and multi-family customers free home energy audits of their homes and information on their actual electric and gas usage. Participants in this program receive recommendations and technical assistance as well as financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses base load electric use as well as gas and electric heat in all residential buildings. In Tier 2, a loan buy down initiative is proposed.
<b>Single Family Low Income Services</b> (Funded by Gas and Electric)	The low income program, marketed as the Appliance Management Program, is delivered by the Office Energy Resources and local Community Action agencies. It provides the same services as the EnergyWise program, described below, except it also addresses oil heat in all residential buildings and no customer contribution is required for equipment installation. In Tier 2, a pilot to overcome the landlord/tenant barrier to participation in this program will be considered.
<b>ENERGY STAR® Homes Program</b> (Funded by Gas and Electric)	The ENERGY STAR® Homes Program promotes the construction of energy efficient homes by offering technical and marketing assistance, as well as cash incentives to builders of new energy efficient homes that comply with the program’s performance standards. In Tier 2, a pilot to test ‘Tier 3 standards’ for homes is proposed.
<b>ENERGY STAR® Homes Version III Pilot</b> (Funded by Electric)	Technical assistance as well as an additional \$1000 incentive (above tier 1 incentives) for up to 15 projects to be built to 2011 Version 3 levels in 2010.

<sup>7</sup> Throughout the program year, the Parties may consider additional enhancements beyond those identified herein as more information becomes available to support an informed review of those potential changes. As part of this process of identifying additional enhancements, in addition to continuing to meet with the Subcommittee, the Company has agreed to regular work sessions with the EERMC’s program and policy consultants, the VEIC team.

<b>ENERGY STAR® Homes Vocational Education Program</b> (Funded by Electric)	The Company supports the ENERGY STAR® Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR® certified builders.
<b>Building Practices and Demonstration Program</b> (Funded by Gas)	Participate in funding for demonstration projects that apply to new or underutilized technologies.
<b>Deep Energy Retrofit Pilot</b> (Tier 2 only; Funded by Electric)	The pilot will provide significant financial incentives for deep energy retrofit demonstration projects involving super-insulation upgrades and other measures in conjunction with customer planned projects such as re-siding or roofing. Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.

Residential Efficient Products Programs	
<b>ENERGY STAR® Lighting</b> (Funded by Electric Only)	This is an initiative implemented jointly with other regional utilities. It provides discounts to customers for the purchase of ENERGY STAR® compact fluorescent lamps and fixtures and solid state lighting through instant rebates, special promotions at retail stores, or a mail order catalog.
<b>ENERGY STAR® Products</b> (Funded by Electric Only)	This program includes the ENERGY STAR® Appliance Program that promotes the purchase of high efficiency major appliances (refrigerators, dishwashers, clothes washers, room air conditioners, dehumidifiers and room air cleaners) and electronics (televisions, personal computers and monitors) that bear the ENERGY STAR® Label. It is offered by several utilities throughout the region. Additionally advanced power strips and energy efficient pool pumps will be promoted through this program.
<b>High-Efficiency Heating, Water Heating and Controls Program</b> (Funded by Gas) and <b>ENERGY STAR Heating</b> (Funded by Electric)	The program offers rebates for new energy efficient natural gas related equipment including boilers, furnaces, water heating equipment, thermostats, and boiler reset controls. A rebate is also provided for furnaces equipped with high efficiency fans. The program works with GasNetworks to deliver rebates. Homeowners purchasing or replacing an existing oil or propane heating system with a qualifying high efficiency heating system are also eligible to receive rebates to defray the cost of the higher efficiency system. ENERGY STAR Heating program provides rebates for homeowners purchasing or replacing an existing oil or propane heating systems.
<b>ENERGY STAR® Central Air Conditioning Program</b> (Funded by Electric Only)	This program promotes the installation of high efficiency central air conditioners. The program provides training of contractors in installation, testing of the high efficiency systems, tiered rebates for new ENERGY STAR® systems, and incentives for checking new and existing systems.
<b>Heat Pump Water Heater Pilot</b>	A NEEP organized pilot program to investigate energy savings and product reliability. Six installations are currently planned in RI.
<b>Information and Education</b> (Funded by Electric Only)	The Company promotes energy education in schools through the National Energy Education Development (N.E.E.D) Program. This program provides curriculum materials and training for a comprehensive energy education program.

## **B. Residential Low-Income Programs**

The Company and Subcommittee want customers who have difficulty paying their electric bills to participate in the Company's energy efficiency programs, especially in these times of escalating energy prices. For this reason, in 2010, this segment of the customer base is being designated as a unique sector and funding for this sector will be subsidized by both non-low income residential and commercial and industrial customers using 10% of all available funding for the electric and gas programs, minus commitments. The 10% allocation is new for the gas program. In 2009, it received 20% yet faced several challenges in meeting goals. This year, the Company and Collaborative supported reducing the allocation in order to align it with the electric program proportion. In addition, it is expected that funds from ARRA Weatherization Assistance will also serve the low-income sector.

Several of the Company's proposed programs provide low income customers with services that are designed to help reduce their electric bills, including the Single Family Low Income Services Program, the Energy*Wise* Program, and the ENERGY STAR<sup>®</sup> Homes Program. These budgets for these programs are not included in 10% allocation of available funds to low income programs. The Single Family Low Income Services Program provides qualifying low-income customers in 1-4 unit dwellings with energy efficiency services. Both low income and non low income residential customers receive services through the Energy*Wise* Program and the ENERGY STAR<sup>®</sup> Homes Program. Additional detail about the services offered to economically disadvantaged customers is set forth in Attachment 2.

## **C. Commercial and Industrial Programs**

The Parties agree to continue in 2010 the commercial and industrial programs offered in 2009. The programs are summarized in Table 3 below.

<b>Table 3. Proposed Commercial and Industrial Energy Efficiency Programs</b>	
<b>Small/Medium Business Program</b>	The Small/Medium Business Program provides direct installation of energy efficient lighting and non-lighting retrofit measures. Customers with average monthly demand of less than 200 kW or annual energy usage of less than 300,000 kWh are eligible to participate. The program's lighting measures are delivered through one labor and one product vendor selected through a competitive bidding process. The labor vendor performs lighting analysis, installs measures, and inputs data into a database. Refrigeration measures are performed by a different vendor. These measures include cooler door heaters, fan controls, and freezer door heater controls. The customer pays 30% of the total cost of a retrofit. This amount is discounted 15% for a lump sum payment or the customer has the option of spreading the payments over a two-year period interest free. Gas opportunities will be identified during the audit and referred for further evaluation.
<b>Energy Initiative (Electric Only)</b>	Energy Initiative is a comprehensive retrofit program designed to promote the installation of energy efficient electric equipment such as lighting, motors, and heating, ventilation and air conditioning (HVAC) systems in existing buildings. All commercial, industrial, and institutional customers are eligible to participate. The Company offers technical assistance to customers to help them identify cost-effective conservation opportunities, and pays rebates to assist in defraying part of the material and labor costs associated with the energy efficient equipment.
<b>Design 2000plus (Electric Only)</b>	<p>Promotes energy efficient design and construction practices in new and renovated commercial, industrial, and institutional buildings. The program also promotes the installation of high efficiency equipment in existing facilities during building remodeling and at the time of equipment failure and replacement. Design 2000plus is known as a lost opportunities program because a customer who does not install energy efficient equipment at the time of new construction or equipment replacement will likely never make the investment for that equipment or will make the investment at a much greater cost at a later time.</p> <p>Design 2000plus provides both technical and design assistance to help customers identify efficiency opportunities in their new building designs and to help them refine their designs to pursue these opportunities. The program also offers rebates to eliminate or significantly reduce the incremental cost of high efficiency equipment over standard efficiency equipment. Commissioning or quality assurance is also offered to ensure that the equipment and systems operate as intended.</p>
<b>Commercial Energy Efficiency Program (Gas Only)</b>	Promotes energy efficient gas technologies for commercial, industrial, institutional and large multifamily buildings. Technical assistance services are provided. Gas and electric energy efficiency opportunities are addressed simultaneously through technical assistance. Prescriptive incentives are offered for more common measures such as programmable thermostats, boiler reset controls, steam trap replacements, pipe and/or duct insulation, building shell (walls, roof, floor, crawl space) insulation, and high efficiency windows. Custom incentives are offered for unique energy efficiency opportunities and comprehensive design projects such as high performance buildings and combined heat and power projects

<b>Table 3. Proposed Commercial and Industrial Energy Efficiency Programs</b>	
<b>Commercial High Efficiency Heating Equipment (Gas Only)</b>	Promotes energy efficient gas heating and domestic hot water heating equipment for commercial, industrial, institutional and large multifamily building. Prescriptive incentives are offered for energy efficient heating furnaces, boilers, infrared heaters and domestic hot water systems.

A summary of the proposed changes in these programs from 2009 are provided in Attachment 3. Descriptions of these programs are provided in Attachment 4. Among the highlights of the changes are continued integration of gas and electric energy efficiency, the introduction of gas measures in Small/Medium Business Program and an Industrial Efficiency Initiative.

### **Community Based Initiative**

The Company will continue working with affinity groups, companies, and municipalities in Newport, Middletown, Portsmouth, and Jamestown, to pilot innovative strategies for community based involvement in energy efficiency program implementation, for both residential and commercial and industrial customers. The pilot, named Energy Action: Aquidneck and Jamestown, will run through the end of 2010. This community based effort leverages community involvement in energy efficiency implementation as well as targeted community-oriented marketing of program elements in order to assess how these may support the objectives of least cost procurement. These communities were selected for this effort because of pre-existing community interest and because they overlapped with the targeting of this area as part of the System Reliability Procurement Plan. The Company plans to conduct a process and impact evaluation of this initiative beginning in the first half of 2010. The Company will use preliminary results of this study as a basis of recommending whether and how to target additional communities in 2011. For more information, see Attachment 9.

### **System Reliability Procurement Plan**

On October 24, 2008, the Company proposed an amended System Reliability Procurement Plan in Docket 3931, with the EERMC's endorsement. The

Commission approved this Plan on April 17, 2009, but did not approve the recommended surcharge. The Commission deferred funding for the SRPP “until it is determined whether excess funds have been recovered from the Energy Efficiency Procurement Plan.” As discussed below regarding the fund balance for 2009, there have been no excess funds from energy efficiency. Implementation of the SRPP has been delayed by the lack of funding and by considerations of how this effort would be coordinated with the Company’s larger SmartGrid proposal for Rhode Island, filed in Docket 4075. Activities that had been planned for 2009 have essentially been deferred to 2010. In 2010, the Company has budgeted \$425,000 of energy efficiency funds for “C/I Audit and Automation Demand Response” activities (that had been planned for 2009) as described in the SRPP and shown on page 22 of that plan.

### **III. Funding, Budgets, Goals, and Cost-effectiveness: Electric Programs**

Funding, budgets, goals, and cost-effectiveness information for the proposed electric energy efficiency programs is given in Attachment 5A and 5B. Table references in the following sections refer to tables in Attachment 5A and 5B.

#### **A. 2010 DSM Program Funding Sources**

The sources of funding for the 2010 electric DSM Programs are shown in Table E-1. This funding is consistent with the funding plan contained in the LCP Plan and included the following sources: (1) a statutory-based DSM charge of \$0.0032 per kWh; (2) Large C&I commitments from 2009;<sup>8</sup> (3) carryover of the year end 2009 fund balance including interest earned and funds expected to be received from Commercial and Industrial program financing repayments<sup>9</sup> and from large

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<sup>8</sup> As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

<sup>9</sup> The Company provides Commercial and Industrial customers with the opportunity to finance their share of project costs. “Repayments” refers to the projected amount of funds customers are expected to repay to the Company in calendar year 2010. Because of an accounting change, these repayments are now included as a credit in the fund balance rather than a separate fund source.

Commercial and Industrial technical assistance co-payments<sup>10</sup> in 2010, if any, (4) revenue generated by ISO-New England's (ISO-NE) Forward Capacity Market (FCM), as explained below; and (5) revenue generated through RGGI, Inc. permit auctions, 60% of which is directed for use in the Company's programs as discussed below. The projected funding amounts are also shown in Table E-1. This Table in Attachment 5B also shows the RGGI proceeds to be applied for innovative program related spending. An additional \$4.0 million of RGGI proceeds will be proposed to creating a loan fund for Commercial and Industrial projects.

The Company will be attempting to secure additional funds in 2010 from Federal stimulus grants and outside sources of funding. The proposed treatment of these additional funds, should the Company be successful in securing them, is discussed in Section III.E below.

The 2010 budget for DSM programs is dependent on a number of projections that inform the amount of funding, including projections of kWh sales of electricity, year-end 2009 large commercial and industrial program commitments, capacity payments received from ISO-NE, and year-end 2009 spending. As shown in Table E-1, the fund balance at year end 2009 was \$1,037,400.

### **ISO-NE Capacity Market Revenue**

Consistent with the Commission's Standards for Energy Efficiency and Conservation Procurement, the Energy Efficiency Procurement Plan, and Commission decisions in Dockets 3779, 3892, and 4000, the Company and the Parties recommend that kW demand savings achieved via the electric energy efficiency programs continue to be reported by the Company to ISO-NE as Other Demand Resources (ODR) during the transition period through May 2010. In

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<sup>10</sup> The Company typically pays the full cost of technical assistance studies for Large Commercial and Industrial program participants and then bills the customer for their share of the technical assistance study cost. Because of an accounting change, these copayments are now included as a credit in the fund balance rather than a separate fund source.

addition, the Parties recommend that the Company report demand savings for previously bid projects to the FCM beginning with the opening of the market on June 1, 2010. All ISO-NE capacity payments received during the transition period and the FCM will be used to supplement the energy efficiency program budgets. Capacity market payments in Table E-1 are a combination of projected transition period capacity payments through May 31, 2010 and FCM payments from June 1 through December 31, 2010.

The Parties fully agree that the Company should recover all prudently incurred FCM expenses from ISO-NE capacity payment revenue generated by the demand savings from efficiency programs represented by the Company. The Company expects that capacity payments received from the ISO-NE will exceed its administrative and M&V compliance costs of participation in the FCM and will result in additional funds being made available to fund efficiency programs for customers. If these participation costs exceed the capacity payments, the Parties agree that the Company may recover its prudently incurred costs from the energy efficiency program fund. (The Parties reserve the right to examine the actions and expenses of the Company to ensure that only prudently incurred expenses are deducted from ISO-NE capacity payments or the energy efficiency program fund.)

In addition, as part of the FCM, all qualified auction participants are required to post Financial Assurance to provide security that the promised resource will deliver the promised MW at the promised time.<sup>11</sup> If, as a result of circumstances beyond the control of the Company,<sup>12</sup> the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction

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<sup>11</sup> Since the Company was able to qualify its bid as an existing resource rather than a new resource (because of its activity during the transition period), ISO-NE has notified the Company that it will not be required to post security for Forward Capacity Auction 1. However, the Company will be required to post security for all future capacity auctions.

<sup>12</sup> Such circumstances may include legislative action to alter the DSM charge or discontinue the Company's authority to implement the energy efficiency programs underlying the Qualifications Package, or a Commission decision limiting the Company's role in bidding the demand savings acquired through program efforts into the FCM.

bids, some or all of the financial assurance monies would be forfeited. Accordingly, the Parties agree that the Company should recover all prudently incurred Financial Assurance expenses from ISO-NE capacity payments generated by the demand savings represented by the Company or the energy efficiency program fund,<sup>13</sup> similar to the procedures described above for administrative and M&V compliance costs.

### **Regional Greenhouse Gas Initiative, Inc. Funds**

On February 26, 2009, the Rhode Island Office of Energy Resources (OER) issued rules regarding the distribution of funds generated from Regional Greenhouse Gas Initiative, Inc (RGGI) auction of carbon allowances. The rules indicate that 60% of the proceeds should be allocated to the Company to “supplement and expand energy efficiency efforts consistent with the PUC approved Energy Efficiency (EE) Procurement Plan and annual efficiency Program Plans”<sup>14</sup> and 40% “shall be allocated to the Innovative Financing and Partnership Account at the Utility for the sole purpose of investing in new partnerships, research, and pilot programs including innovative financing options and partnerships that can drive efficiency program development and enhancements to accelerate and broaden the energy savings for Rhode Islanders” (“RGGI 40% funds”). The rules were approved on September 30, 2009. The Company has not yet received any funds from the first six auctions held September 2008 through December 2009 but the Company’s 2010 funding plans, for both Tier 1 and 2, include an estimate of “60% proceeds” expected to be received from all auctions held through 2010; please see Table E-1A in Attachment 5A. Consistent with the intent of the rules, these funds will be used to increase the scope of the electric energy efficiency programs in 2010. Indeed, if these funds are not received in a timely manner, the Company will have to scale back its proposed Tier 1 and 2 programs.

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<sup>13</sup> Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as a contingency fund to cover future Financial Assurance claims that result from the Company’s inability to meet its obligation to deliver demand savings due to circumstances beyond its control.

<sup>14</sup> Since the auctions are related to allowing carbon emission from electric generation, RGGI auction proceeds are applied only to electric energy efficiency programs.

The funding, savings, and budget projections for Tier 1 shown in Attachment 5A are contingent on receiving distribution of RGGI 60% funds from RGGI auctions through year end 2009 by April 1, 2010. The Company may refile its Tier 1 goals with the Commission depending on the timing of the receipt of the RGGI 60% funds.

The Company's Tier 2 programs assume successfully securing the RGGI 40% funds. The Company will apply to the OER for RGGI 40% funds from 2008 – 2010 for several innovative loan and pilot programs including:

- Creating a C&I loan fund
- Initiating a residential HEAT loan program
- Initiating a residential Deep Energy Retrofit pilot
- Considering a ENERGY STAR® Homes Tier 3 Pilot
- Considering a Split Incentive pilot for residential landlords and renters

Preliminary Tier 2 program budgets and savings goals are outlined in Attachment 5B. The increased spending for Tier 2 will result in an increased shareholder incentive. It is possible that the plan for RGGI 40% funds for which Company successfully secures OER approval will be different from what is proposed here. The magnitude, timing, and potential limitations on this additional funding are not fully known at this time. The Company will inform the Commission if and when it successfully obtains RGGI 40% funds, including any changes to the program content or savings that were made in order to secure OER approval or changed due to time constraints.

## **B. Budgets**

The Parties agree that the portfolio of DSM programs and services for 2010 will have an overall projected budget of approximately \$37.6 million for Tier 1 and \$38.6 million for Tier 2. The Parties agree to segment the budget into three sectors:

residential low income, residential non-low income, and commercial and industrial. Proposed sector and program budgets are provided in Table E-2. A comparison of these proposed budgets to the 2009 budget is provided in Table E-3. The efficiency resource is 4.5 cents/lifetime kWh versus 9.2 cents/kWh for electric supply in Tier 1 and 4.3 cents/lifetime kWh in Tier 2.

In Tier 2, a \$4.0 million loan fund is proposed using RGGI 40% funds. This fund will be used to create a kind of revolving loan fund and offer financing for Commercial and Industrial projects. This fund will assist customers pay their portion of project costs and will facilitate the achievement of energy efficiency savings goals. The details of this concept are still being developed and will be provided to the Commission when the funds are secured and the plan is finalized. In the course of developing the RGGI-proceeds loan fund concept, the Company has determined that current on-bill financing is provided by a combination of DSM program incentive funds and Company funds. Company funds include funds for the loans themselves as well as the cost of carrying charges until the loans are repaid and the cost of bad debt if they are not. Because these loans can be for 24 months, the 2010 program funds expended to support customer financing can apply to loans granted in 2009 as well as 2010. Unlike past programs, under the program plan proposed for 2010, in order to make the Company whole, Company funds including loan carrying costs and bad debt are proposed to be recovered through the DSM funding. A weighted average cost of capital is used to calculate carrying costs and historical uncollectible rate for program loans is used to calculate the bad debt value and included as components of administrative costs in both Attachments 5A and 5B, Table E-2. Under the new loan RGGI-proceeds fund concept, as RGGI funding is obtained, it will be used to replace the funds currently used as the source of the loans; however, due to the current constraints of the Company's billing and accounting systems, having on-bill financing means that loans made to customers are seen as a charge to the Company. Therefore, initially, Company funds will continue to be used to provide and finance those loans until such time as accounting

procedures are put in place to reimburse the Company from the loan fund when the loans are made.

To the extent that the RGGI-proceeds loan fund releases DSM funds currently budgeted for on-bill financing programs, it will also increase savings. Because this fund is not proposed for use in program spending, the proposed loan fund is not included in program budgets in Attachment 5B. This fund will be tracked separately from the DSM fund.

The Parties agree that the Company should make every attempt to spend or commit all the funds available for DSM in the year, including any increases in the fund balance due to increased sales or other factors. The Parties also agree to review the status of program budgets regularly to assess whether they are likely to come to a successful completion. If not, the Parties agree to review the advisability of transferring funds to other programs where the money could be more effectively used.

### **C. Transferring of Funds**

The Parties will regularly review the amount of funds needed and available for each program (as well as any changes to the overall fund balance, as discussed in Section III.A above) and will transfer monies as needed. The Parties propose to use the same methodology that was used in 2009 for the transfer of funds from one program to another, or from one sector to another. Transfers during the program year may occur as follows:

1. Transfers within a Sector:
  - a) For transfers of less than 10% of the originating program's budget, the Company can transfer funds from one program to another program within the same sector without prior approval of the Division.

- b) For transfers of 10% or more of the originating program's budget, the Company can transfer funds from one program to another program within the same sector with prior approval of the Division.
  - c) For any transfers in the Commercial and Industrial Sector between large commercial and industrial programs (Design 2000*plus* and Energy Initiative) and Small/Medium Business Services programs,<sup>15</sup> Division approval is required. In addition, if a transfer would reduce the originating program's budget by more than 20% in aggregate (over the course of the program year), the transfer would require Commission approval as well.
2. Transfers between Sectors. The Company can transfer funds from one sector to another sector with prior approval of the Division. If a transfer would reduce the originating sector's budget by more than 20% in aggregate (over the course of the program year), the transfer would require Commission approval as well.

For transfers requiring Division, but not Commission, approval, the Parties will inform the Commission about all the transfers, both between sectors and within sectors, in a timely fashion. The Company will not be permitted to adjust its goals or incentive target calculations for any transfers between sector budgets.

#### **D. Cost-Effectiveness**

The Company has projected cost-effectiveness for the proposed 2010 programs using the Total Resource Cost ("TRC") test. The use of this test was required by the Commission's Standards for Energy Efficiency and Conservation Procurement.<sup>16</sup>

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<sup>15</sup> Prior to 2009, small and large business program were in separate sectors. While they have been combined into a single Commercial and Industrial sector to better align with implementation objectives, Parties wanted to treat them separately for the purposes of budget transfers.

<sup>16</sup> Prior to 2009, the Utility Cost Test was used.

The TRC test requires that the total lifetime savings from the efficiency measures will exceed the total costs of the measures (i.e., program and customers costs).

As is customary in a TRC test, the value of other resource benefits is included in the analysis of expected benefits from program efforts. In this case, the other resource benefits include expected fuel and water savings that are incremental to the electricity savings expected through the electric efficiency programs.

Table E-4 provides the calculation of 2010 program year cost-effectiveness. Table E-5 shows the goals based on the proposed budgets. Table E-6 shows a comparison of the goals with the approved program goals from 2009. Table E-4 shows that the proposed portfolio of programs is expected to have a benefit/cost ratio of 4.25 in Tier 1 and \$4.42 in Tier 2, which means that approximately \$4.25 or \$4.42 in benefits is expected to be created for each \$1 invested in the programs. This increase in efficiency investment moves towards a level that is closer to acquiring all energy efficiency resources that are lower cost than supply.

The savings projections for Tier 2 shown in Table E-5 and E-6 of Attachment 5B are subject to change pending final OER approval of the Company's RGGI 40% proposal. The Company will refile its Tier 2 goals with the Commission following approval of the plan and receipt of RGGI 40% funds from the OER.

The cost-effectiveness analyses of the proposed programs use avoided energy supply costs that were developed by Synapse Energy Economics as part of a 2009 study, "Avoided Energy Supply Costs in New England: 2009 Report," issued August 21, 2009, that was sponsored by all electric DSM program administrators in New England, as well as some gas program administrators. They reflect current and expected market conditions and are highly influenced by the cost of fossil fuels and expectations about ISO-NE's emerging forward capacity market. Company-specific

transmission and distribution capacity values are also included. The avoided costs used for 2010 are shown in Table E-7.

The avoided costs include the demand reduction induced price effect (DRIPE) benefits that are projected to result from the installation of energy efficiency measures in 2010. These benefits occur when the retail price of electricity is reduced as a result of the reduced long term demand for electricity stemming from the installation of energy efficiency measures. Some amount of DRIPE benefits have been counted in Rhode Island since 2006. While some Collaborative members have expressed concern about whether DRIPE represents a real benefit to Rhode Island consumers, the Parties have agreed to include DRIPE in value and cost effectiveness calculations for energy efficiency programs in 2010.

#### **E. Additional Sources of Funds**

During 2010, the Company will be attempting to secure additional funds from sources other than those listed in Section III.A. There are two potential sources of funds, not including the RGGI funds discussed above. The proposed treatment of those funds is described below.

1. ARRA/Stimulus Funds. The Rhode Island Office of Energy Resources is administering the distribution of Federal ARRA grant funds through several programs. The Company plans to apply for grants under the State Energy Program (SEP) and Energy Star Appliance Program requests for proposals. In the event that the Company secures these funds, the funds will be used to increase energy efficiency program scope or rebate levels, as directed by the State of Rhode Island's interpretation of current ARRA guidance.<sup>17</sup> If ARRA funds will only be used as an additional rebate above the Company's existing rebate levels, then savings goals will not be affected. If ARRA

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<sup>17</sup> In the event that DOE energy efficiency savings standards are inconsistent with the Company's standards, the Company will use the higher of the two standards.

funds are used to capture savings, then goals will be adjusted accordingly, and the Company will file a plan for the use of the funds to the PUC.

2. Other Funds. The Company will attempt to secure funds from other sources. These funds will be used to offset DSM charge funds collected from customers, to accelerate participation in 2010, or to increase program scope (or savings) in 2010. In the event that the Company is successful in securing these funds and the funds will be used to increase program scope, then the Company will file a proposal to the PUC regarding the use of the funds to update the plan's spending budget, savings goals, and shareholder incentive for approval by the PUC. If the funds will be used to accelerate participation and will not affect savings, the Company will file a plan for the use of the funds to the PUC. If the funds are not spent in 2010, but are reserved to offset future DSM charges, the Company will file a plan for the use of the funds to the PUC. The timing and magnitude of the available funds will influence the Company's proposal and how it may affect program budgets, savings goals, and incentive calculation.

#### **IV. Funding, Budgets, Goals, and Cost-effectiveness: Gas Programs**

Funding, budgets, goals, and cost-effectiveness information for the proposed electric energy efficiency programs is given in Attachment 6. Table references in the following sections refer to tables in Attachment 6.

##### **A. 2010 DSM Program Funding Sources**

The sources of funding for the 2010 gas DSM Programs are shown in Table G-1. The Parties agree that the 2010 budget should continue to be funded from the following sources: (1) the statutory-based DSM charge of \$0.15 per dekatherm; (2)

Large C&I commitments from 2009;<sup>18</sup> and (3) carryover of the year end 2009 fund balance, including interest. The projected funding amounts are also shown in Table G-1.

The Company will be attempting to secure additional funds in 2010 from Federal stimulus grants and outside sources of funding. The proposed treatment of these additional funds, should the Company be successful in securing them, is discussed in Section IV.F below.

As shown in Table G-1, the Company estimates that the fund balance at year end 2009 was (\$-853,805). This negative fund balance indicates that actual spending in 2009 exceeded available funding compared to levels projected when the 2009 Settlement filing was prepared. This is greater than expected spending at year end 2008, which carried into 2009, as well as spending in excess of sources of funds in 2009. Because the negative fund balance must be “paid off” using 2010 collections, available funding for 2010 programs is less than funding for 2009.<sup>19</sup>

The projected 2010 budget for DSM programs depends on a number of projections that inform the amount of funding, including projections of sales of natural gas, year-end 2009 large commercial and industrial program commitments, and a projection of year-end 2009 spending.

## **B. Exceptions to the Energy Efficiency Surcharge**

1. The Parties agree that gas used for distributed generation (excluding natural gas used by emergency generators) will not be subject to the energy efficiency

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<sup>18</sup> The Company encumbered funds in 2009 to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

<sup>19</sup> The Parties note that recent experience with the gas energy efficiency programs indicates that supplemental funding may be needed in order to meet customer demand and better achieve further integration of gas and electric programs.

surcharge when gas used for that purpose can be clearly identified through uniquely metered use and when so requested in writing by the customer.

2. The 2006 Act allows the Commission to exempt gas used for manufacturing processes from the energy efficiency surcharge where the customer has established a self-directed program to invest in and achieve best effective energy efficiency in accordance with a plan approved by the Commission and subject to periodic review and approval by the Commission. Consistent with prior Commission decisions, the Parties have developed recommendations for a process whereby a manufacturer who so chooses may submit its self-directed program and the required annual reports for approval. The Parties recognize that this process may need to be reviewed and modified after the Commission has accumulated sufficient experience with these programs.

### **C. Budgets**

The Parties agree that the portfolio of gas DSM programs and services for 2010 will have an overall projected budget of approximately \$4.8 million. The Parties agree to segment the budget into three sectors: low-income residential, non-low income residential, and commercial and industrial. Proposed sector and program budgets are provided in Table G-2. A comparison of these proposed budgets to the 2009 budget filed with the Commission is also provided in Table G-3.

The Parties agree that the Company should make every attempt to spend or commit all the funds available for gas DSM in the year, including any increases in the fund balance due to increased sales or other factors. The Parties also agree to review the status of program budgets regularly to assess whether they are likely to come to a successful completion. If not, the Parties agree to review the advisability of transferring funds to other programs where the money could be more effectively used.

#### **D. Transferring of Funds**

The Parties will regularly review the amount of funds needed and available for each program and will transfer monies as needed. The Parties propose to use the same rules that are proposed regarding transfers in the electric programs, with the exception that there are no distinct large business and small business programs and, therefore, no applicable transfer rules. Transfers during the program year may occur as follows:

1. Transfers within a Sector:
  - a) For transfers of less than 10% of the originating program's budget, the Company can transfer funds from one program to another program within the same sector without prior approval of the Division.
  - b) For transfers of 10% or more of the originating program's budget, the Company can transfer funds from one program to another program within the same sector with prior approval of the Division.
- 2) Transfers between Sectors. The Company can transfer funds from one sector to another sector with prior approval of the Division. If a transfer would reduce the originating sector's budget by more than 20% in aggregate (over the course of the program year), the transfer would require Commission approval as well.

For transfers requiring Division, but not Commission, approval, the Parties will inform the Commission about all the transfers, both between sectors and within sectors, in a timely fashion. The Company will not be permitted to adjust its goals or incentive target calculations for any transfers between sector budgets.

**E. Cost-Effectiveness**

The Company proposes to continue to use the Total Resource Cost Test for determining the cost effectiveness of the 2010 gas energy efficiency programs. This would treat gas and electric programs comparably and contribute to the Standards for Energy Efficiency and Conservation Procurement's requirement for program integration. The TRC test requires that the total lifetime savings from the efficiency measures will exceed the total costs of the measures (i.e., program and customers costs).

As is customary in a TRC test, the value of other resource benefits is included in the analysis of expected benefits from program efforts. In this case, the other resource benefits include expected fuel and water savings that are incremental to the electricity savings expected through the electric efficiency programs.

Table G-4 provides the calculation of 2010 program year cost-effectiveness. Table G-5 shows the benefits and goals based on the proposed budgets. Table G-6 shows a comparison of the goals with the approved program goals from 2009, annualized to allow for an effective comparison. Table G-4 shows that the proposed portfolio of programs is expected to have a benefit/cost ratio of 2.40 which means that \$2.40 in benefits is expected to be created for each \$1 invested in the programs.

The cost-effectiveness analyses of the proposed programs use the avoided energy supply costs developed by Synapse Energy Economics as part of a 2009 study, "Avoided Energy Supply Costs in New England: 2009 Report," issued August 21, 2009, that was sponsored by all electric DSM program administrators in New England, as well as some gas program administrators. They reflect current and expected market conditions and are highly influenced by the cost of fossil fuels. The avoided gas costs are shown in Table G-7.

**F. Additional Sources of Funds**

During 2010, the Company will be attempting to secure additional funds from sources other than those listed in Section IV.A. There are two potential sources of funds. The proposed treatment of those funds is described below.

1. ARRA/Stimulus Funds. The Rhode Island Office of Energy Resources is administering the distribution of Federal ARRA grant funds through several programs. The Company plans to apply for grants under the State Energy Program (SEP) and Energy Star Appliance Program requests for proposals. In the event that the Company secures these funds, the funds will be used to increase energy efficiency program scope or rebate levels, as directed by the State of Rhode Island's interpretation of current ARRA guidance.<sup>20</sup> If ARRA funds will only be used as an additional rebate above the Company's existing rebate levels, then savings goals will not be affected. If ARRA funds are used to capture savings, then goals will be adjusted accordingly, and the Company will file a plan for the use of the funds to the PUC.
2. Other Funds. The Company will attempt to secure funds from other sources. These funds will be used to offset DSM charge funds collected from customers, to accelerate participation in 2010, or to increase program scope (or savings) in 2010. In the event that the Company is successful in securing these funds and the funds will be used to increase program scope, then the Company will file a proposal to the PUC regarding the use of the funds to update the plan's spending budget, savings goals, and shareholder incentive for approval by the PUC. If the funds will be used to accelerate participation and will not affect savings, the Company will file a plan for the use of the funds to the PUC. If the funds are not spent in 2010, but are reserved

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<sup>20</sup> In the event that DOE energy efficiency savings standards are inconsistent with the Company's standards, the Company will use the higher of the two standards.

to offset future DSM charges, the Company will file a plan for the use of the funds to the PUC. The timing and magnitude of the available funds will influence the Company's proposal and how it may affect program budgets, savings goals, and incentive calculation.

## **V. Measurement and Verification Plan**

The Measurement and Verification Plan for 2010 is presented in tabular form in Attachment 7, accompanied by a brief description of each of the proposed studies. The areas proposed for study in 2010 have been chosen based on a number of factors: the relative amount of savings in that program or end use, the vintage of the most recent evaluation study, the relative precision of the recent evaluation study, the available evaluation budget. In addition, some new program areas are designated for both impact (savings) and process evaluations. This list may be added to as the year progresses and different evaluation priorities are identified. In particular, the parties will consider adding Rhode Island-specific impact or process evaluations, as appropriate, that will help inform the Company's efforts towards achieving the goals of least cost procurement.

## **VI. Reporting Obligations**

### **A. Summary of Reporting Obligations**

1. During 2010, the Company will provide quarterly reports to the EERMC, the Division, and the Commission on the most currently available program performance for both gas and electric efficiency programs. These reports will include a comparison of budgets and goals by program to actual expenses and savings on a year-to-date basis, as well as information about the number of customers who may be waiting for energy efficiency program services.
2. The Company will provide to the Parties and file with the Commission its 2010 Year-End Report no later than May 31, 2011. This report will include achieved gas and electric energy savings in 2010, metric results, and earned incentives for 2010.

3. The Company will provide to the Parties a summary of evaluation results obtained since October 1, 2009, together with a memorandum summarizing the impact of those results in planning the Company's 2011 programs no later than September 30, 2010.

## **VII. Incentive**

The proposed shareholder incentive mechanism applicable to Company DSM efforts in 2010 follows the incentive mechanism structure applicable to the 2009 electric energy efficiency programs in Docket No. 4000, with a few changes that are described below.<sup>21</sup>

For electric programs, the shareholder incentive mechanism will continue to include two components: (1) kWh savings targets by sector and (2) performance-based metrics. For gas programs, the incentive will be based on MMBtu savings alone.

### **A. kWh Savings**

The Parties have agreed to retain a target base incentive rate of 4.40% in 2010 applied to the eligible spending budget for 2010. In Tier 1, the projected spending budget for 2010 is approximately \$28.8 million (see Attachment 5A, Table E-8). The total target incentive for 2010 is 4.40% of the proposed spending budget, or approximately \$1.3 million (see Attachment 5A, Table E-9). In Tier 2, the projected spending budget for 2010 is approximately \$31.4 million (see Attachment 5B, Table E-8). The total target incentive for 2010 is 4.40% of the approved spending budget, or approximately \$1.4 million (see Attachment 5B, Table E-9). In both tiers, \$150,000 will be the target incentive for the performance-based metrics and the remainder will be for the kWh savings target.

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<sup>21</sup> The parties recognize the interplay between the shareholder incentive mechanism and the manner in which savings are estimated, measured, and verified, and will with the participation of the EERMC and the OER, explore this in 2010.

The savings target is based on a set of assumptions of savings per measure and other impact factors in each program, as well as the proposed budget. The determination of achieved savings will be based on the same set of savings and impact assumptions as is used to develop the savings target in this EE Program Plan.<sup>22</sup>

The threshold performance level for energy savings by sector will be set at 60% of the annual energy savings goal for the sector. The Company must attain at least this threshold level of savings in the sector before it can earn an incentive related to achieved energy savings in the sector. The Company will have the ability to earn an incentive for each kWh saved, once threshold savings for the sector are achieved. The incentive per kWh saved by sector is provided in Table E-9. The cap for the target incentive amount of energy savings will remain at 125%.

If the Company achieves a high level of savings performance, Rhode Island consumers will realize additional savings. Given budget control requirements, this feature will provide the Company with an incentive to improve the efficiency of its program implementation efforts while providing Rhode Island consumers with value in excess of the incremental incentive that may be earned by the Company. That is, the Company will have an incentive to increase consumers' savings and consumers will realize an overwhelming majority of the savings.

Table E-8 provides the derivation of the eligible spending budget that is used to determine the amount of the incentive that the Company may earn if it is successful in achieving its goals for both energy savings and performance metrics. Table E-9 provides a summary of the incentive related to performance metrics and the incentive related to annual energy savings goals by sector. Energy savings goals by sector reflect the expected cost of savings in each sector informed by evaluation

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<sup>22</sup> In prior years, both the target and achieved savings were adjusted at year end to reflect updated savings and other impact factors that reflected the most recent evaluation studies. Since both target and achieved savings were similarly adjusted, there was little impact on the Company's earned incentive. However, the adjustment of goals often caused confusion among field implementation personnel and for that reason this change is recommended.

studies and have been adjusted to take into account changing rebate policies and the changing market being served. These goals have been carefully reviewed by the Collaborative to ensure that they represent reasonable and challenging goals for the year.

## **B. MMBtu Savings**

For gas efficiency programs, the proposed target base incentive is equal to 4.40% of the eligible budget. The eligible budget includes all program expenses shown in Table G-2, except for the commitments budget and the amount budgeted for the target shareholder incentive. Therefore, the total target incentive for 2010 is 4.40% of approximately \$4.5 million, or \$200,000, as shown in Table G-8.

The savings target is based on a set of assumptions of savings per measure and other impact factors in each program, as well as the proposed budget. The determination of achieved savings will be based on the same set of savings and impact assumptions as is used to develop the savings target in this EE Program Plan.<sup>23</sup>

The threshold performance level for energy savings by sector will be set at 60% of the annual energy savings goal for the sector. The Company must attain at least this threshold level of savings in the sector before it can earn an incentive related to achieved energy savings in the sector. The Company will have the ability to earn an incentive for each MMBTU saved, once threshold savings for the sector are achieved. The incentive per MMBTU saved by sector is provided in Table G-8. The cap for the target incentive amount of energy savings will remain at 125%.

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<sup>23</sup> In prior years, both the target and achieved savings were adjusted at year end to reflect updated savings and other impact factors that reflected the most recent evaluation studies. Since both target and achieved savings were similarly adjusted, there was little impact on the Company's earned incentive. However, the adjustment of goals often caused confusion among field implementation personnel and for that reason this change is recommended.

Energy savings goals by sector reflect the expected cost of savings in each sector informed by results achieved by other gas EE providers in other New England jurisdictions. These goals have been carefully reviewed by the Collaborative to ensure that they represent reasonable goals for the year.

### **C. Adjustments**

There are two potential adjustments to the calculation of the incentive.

1. If the actual spending of funds in a sector at year end from the sources listed in Tables E-1 (for electric programs) or G-1 (for gas programs) is greater than or less than<sup>24</sup> the original spending budgets by more than five percent, the savings goal for that sector will be adjusted by the ratio of actual spending to the spending budget.
2. If the Company secures funding from sources listed in Sections III.E or IV.F and uses those funds to offset some DSM charges in future years, the target incentive rate for 2010 will be adjusted by the ratio of the original spending budget divided by the original spending budget minus the funds from outside sources obtained but reserved for future years. Only funds obtained from other sources and not spent in 2010 are eligible for this adjustment. Funds used to increase rebates or accelerate participation in 2010 (such as Federal stimulus grants) are not eligible for this adjustment.

None of these changes will affect the target incentive dollars associated with performance metrics. The Company will report final program results and earned incentive in its Year-End Report regarding 2010 DSM Program efforts.

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<sup>24</sup> If spending is less than five percent, the savings must exceed 100%.

**D. Electric Program Performance Metrics**

The Parties have agreed to the inclusion of five performance-based metrics for 2010. These metrics include one that relates to the Non-Low Income Residential sector, three that relate to the Commercial and Industrial sector, and one integrated metric. Each of the proposed performance-based metrics is described in Attachment 8. The Parties agree that the Company will have the ability to earn \$30,000 for each performance metric it successfully achieves in 2010 with an opportunity to earn a portion of the incentive for partially achieving goals for four of the metrics as shown in Attachment 8. The total potential incentive for performance metrics is capped at \$150,000.

Attachment 8 establishes the goals for the proposed metrics based on information available at year end 2009. If outside funding becomes available, as in Tier 2, any affected performance metrics will be updated based on the approved plan used to secure funding. Updating the numeric performance targets at a later date will have no impact on the shareholder incentives established for these performance-based metrics.

**VIII. Miscellaneous Provisions**

**A. Other Miscellaneous Provisions**

1. Other than as expressly stated herein, this Settlement establishes no principles and shall not be deemed to foreclose any Party from making any contention in future proceeding or investigation.
2. This Settlement is the product of settlement negotiations. The content of those negotiations is privileged and all offers of settlement shall be without prejudice to the position of any Party.
3. Other than as expressly stated herein, the approval of this Settlement by the Commission shall not in any respect constitute a determination as to the merits of any issue in any other proceeding.

4. The Parties agree that the Subcommittee shall meet no less than six times in 2010 to review the status and performance of the Company's 2010 DSM programs and advise on potential energy efficiency programs for 2011.

The Parties respectfully request the Commission approve this Stipulation and Settlement as a final resolution of all issues in this proceeding.

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY D/B/A  
NATIONAL GRID



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Thomas Teehan, Esq.

Date

RHODE ISLAND DIVISION OF PUBLIC UTILITIES AND  
CARRIERS



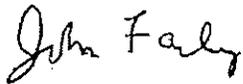
By its Attorney

Date *February 5, 2010*

Jon G. Hagopian, Special Assistant Attorney General

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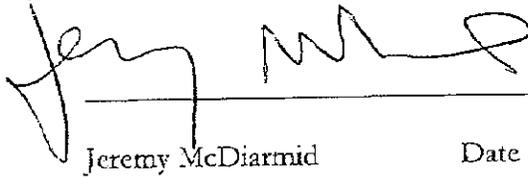
THE ENERGY COUNCIL OF RHODE ISLAND


2 / 5 / 2010  
 John Farley Date

National Grid 2010 Revised Energy Efficiency Program Plan

Post-It* Fax Note	7671	Date	2/5/10	# of pages	▶ 1
To	Joanne Scanlon	From	John Farley		
Co./Dept.	N Grid	Co.	TEC-RI		
Phone #		Phone #	(401) 621-2240		
Fax #	(401) 784-4321	Fax #			

ENVIRONMENT NORTHEAST



Jeremy McDiarmid

Date 2/5/10



**SUMMARY OF PROPOSED CHANGES TO  
 RESIDENTIAL PROGRAMS FOR 2010**

Program	Changes
<b>Residential Buildings Efficiency Programs</b>	
EnergyWise	<ul style="list-style-type: none"> <li>• Continue to offer BPI training to bring more weatherization contractors into the program.</li> <li>• Increase incentives for weatherization measures installed in gas and electrically heated home and facilities to 75%, up to \$2000, per gas or electric heating account. Measures include insulation, duct insulation and duct sealing in single family homes.</li> <li>• Increase frequency of CFLs and fixtures installed in single family homes.</li> <li>• Issue an RFP for third party QA/QC verification services by the second quarter of 2010 with the goal of informing 2011 program planning.</li> <li>• Issue an RFP for program delivery vendor(s) in conjunction with National Grid's EnergyWise program in Massachusetts and the Home Performance with ENERGY STAR® program in New Hampshire by the end of the second quarter in 2010.</li> <li>• Tier 2 introduces the HEAT Loan program that will offer low interest loans for customers who live in one to two unit facilities. Loans will assist with additional weatherization measures or upgrades in heating equipment.</li> </ul>
Low Income Services	<ul style="list-style-type: none"> <li>• Issue an RFP for Lead Administrator Vendor in early 2010.</li> <li>• Evaluate ARRA impacts throughout the year, and recommend programmatic changes as needed.</li> <li>• Establish a best practices working team with stakeholders that meets quarterly.</li> <li>• Tier 2 includes a Split Incentive pilot to examine ways to overcome a renter/landlord barrier for participation.</li> </ul>
ENERGY STAR® Homes	<ul style="list-style-type: none"> <li>• Offer rebates for two tiers.</li> <li>• Pilot program to build 15 Version 3 ENERGY STAR® homes for research purposes, and the creation of a next steps guide.</li> <li>• Tier 2 includes a Tier 3 standards pilot.</li> </ul>
Energy Efficiency Education Programs	<ul style="list-style-type: none"> <li>• Offer ENERGY STAR® Homes Vocational Schools Initiative.</li> </ul>
Building Practices and Demonstration	<ul style="list-style-type: none"> <li>• No changes.</li> </ul>
Deep Energy Retrofit Pilot (Tier 2 only)	<ul style="list-style-type: none"> <li>• Significant financial incentives for demonstration projects involving super-insulation upgrades.</li> <li>• Additional measures in conjunction with customer planned projects such as re-siding or roofing.</li> <li>• Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.</li> </ul>

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<b>Residential Efficient Products Programs</b>	
High Efficiency Heating, Water Heating, and Controls and ENERGY STAR® Heating Systems	<ul style="list-style-type: none"> <li>• Enhance rebates for energy efficient oil and propane heating systems</li> <li>• Incentive for a new gas saving measure, combined high efficiency boiler and water heating units</li> <li>• Propose to assist the ARRA-funded State Energy Efficiency Star Rebate Program.</li> </ul>
COOL SMART ENERGY STAR® Central Air Conditioning and Heat Pumps	<ul style="list-style-type: none"> <li>• A \$2 per CFM duct leakage reduction incentive for contractors when making duct sealing repairs in attics with a combined heating and air conditioning unit up to a maximum amount of 300 CFM.</li> <li>• A \$450 contractor incentive for early replacement of 9 or 10 SEER equipment with replacement of new equipment of ENERGY STAR 14.5 SEER and 12.0 EER or greater for CS Tier 1 installations.</li> <li>• A \$100 contractor incentive for early replacement of 9 or 10 SEER equipment with replacement of new equipment of ENERGY STAR 14.5 SEER and 12.0 EER or greater for non participating CS Tier 1 installations</li> <li>• A \$225 incentive for the contractor when they perform QIV tests for CS Tier 1 and Tier 2 installations</li> <li>• A \$300 contractor incentive when a Manual J is completed for 2009 ENERGY STAR® CS Tier 1 and-Tier 2 equipment</li> <li>• A \$100 contractor incentive when a Manual J is completed for Energy STAR equipment that is not installed under CS Tier 1 or Tier 2</li> <li>• Decrease downsizing incentive to \$250 per ½ ton and pay 100% to contractor.</li> <li>• Heat Pump Water Heater pilot will be offered and evaluated.</li> <li>• Incentive for ECM motors</li> </ul>
ENERGY STAR® Lighting	<ul style="list-style-type: none"> <li>• Program redesign to include more aggressive marketing strategy, new retail channels, and increased goals; lower program savings based on free-ridership, spillover participant rate, and in-service rate.</li> <li>• Increase and rebates for specialty bulbs to \$6, increase the unit goal for specialty bulbs to 40,000.</li> <li>• Introduce a program for hard-to-reach customers with a unit goal of 60,000 bulbs.</li> </ul>
ENERGY STAR® Products	<ul style="list-style-type: none"> <li>• Introduce a \$50 freezer retail rebate.</li> <li>• Extend refrigerator recycling program to include primary refrigerators.</li> <li>• Increase rebates to \$250 for 2 speed and to \$600 for variable speed pumps.</li> <li>• Introduce a \$10 rebate for personal computers and \$20 for televisions (between tiers 3 and 4), monitors, and room air cleaners.</li> <li>• Propose to assist the ARRA-funded State Energy Efficiency Star Rebate Program.</li> </ul>



### **2010 RESIDENTIAL PROGRAMS**

The Company proposes a comprehensive set of residential energy efficiency programs for implementation in 2010. Proposed program changes for 2010 are summarized in Attachment 1. The depth of the programs will expand for 2010. Paramount to this are two objectives: 1) ensuring that the programs are capable of ramping up energy savings in order to address the goal of least cost procurement and 2) integrating the gas and electric programs so that delivery will be seamless to customers.

The Company proposes to continue a broad range of gas and electric energy efficiency programs for its residential customers. Residential programs fall into two types of business categories: efficient buildings and efficient products. Programs focused on creating efficient buildings include EnergyWise, Low Income Services, Energy Star Homes and the Deep Energy Retrofit Pilot. These programs offer customers a single point of contact for a variety of both gas and electric services and products, and potentially lead to participation in one or more of the products programs. These programs are designed to provide energy efficiency opportunities to the diverse segments of residential customers in the state, including homeowners and renters, low-income and moderate income consumers, and those constructing new homes. These programs all include a component of consumer education to help the customer to better understand how to control and manage energy costs. National Grid also offers education programs including the ENERGY STAR<sup>®</sup> Home Vocational Education Program that works tangentially with developing the efficient buildings business.

Programs focused on creating efficiency through product selection include High Efficiency Heating Equipment, Water Heating and Controls, ENERGY STAR<sup>®</sup> Heating Equipment, ENERGY STAR<sup>®</sup> Central Air Conditioning, Heat Pump Water Heater Pilot, ENERGY STAR<sup>®</sup> Lighting, and ENERGY STAR<sup>®</sup> Products. Programs focused on products use various distribution channels, including installation vendors and retail stores, in order to

influence customer selection. They also use different marketing strategies that work in concert with distribution channels. The Company will review these delivery channels to make sure that they are as effective as possible, and whether lessons learned in the delivery of one product can be applied to other product groups.

A brief description of each proposed residential program is provided in the following table. The residential programs planned for implementation in 2010 are described in further detail following the table.

<b>Table 1. Proposed Residential Energy Efficiency Programs</b>	
Residential Buildings Efficiency Programs	
<b>Energy Wise Program</b> (Funded by Gas and Electric)	The EnergyWise program offers single and multi-family customers free home energy audits of their homes and information on their actual electric and gas usage. Participants in this program receive recommendations and technical assistance as well as financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses base load electric use as well as gas and electric heat in all residential buildings. Tier 2 includes a Heat Loan program.
<b>Single Family Low Income Services</b> (Funded by Gas and Electric)	The low income program, marketed as the Appliance Management Program, is delivered by the Office Energy Resources and local Community Action agencies. It provides the same services as the EnergyWise program, described below, except it also addresses oil heat in all residential buildings and no customer contribution is required for equipment installation. Tier 2 includes a Split Incentive pilot program.
<b>ENERGY STAR® Homes Program</b> (Funded by Gas and Electric)	The ENERGY STAR® Homes Program promotes the construction of energy efficient homes by offering technical and marketing assistance, as well as cash incentives to builders of new energy efficient homes that comply with the program's performance standards. Tier 2 includes the Homes Program Tier 3 Pilot for 10 participants.
<b>ENERGY STAR® Homes Version III Pilot</b> (Funded by Electric)	Technical assistance as well as an additional \$1000 incentive (above tier 1 incentives) for up to 15 projects to be built to 2011 Version 3 levels in 2010.
<b>ENERGY STAR® Homes Vocational Education Program</b> (Funded by Electric)	The Company supports the ENERGY STAR® Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR® certified builders.
<b>Building Practices and Demonstration Program</b> (Funded by Gas)	Participate in funding for demonstration projects that apply to new or underutilized technologies.
<b>Deep Energy Retrofit Pilot</b> (Tier 2 only; Funded by Electric)	The pilot will provide significant financial incentives for deep energy retrofit demonstration projects involving super-insulation upgrades and other measures in conjunction with customer planned projects such as re-siding or roofing. Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.

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Residential Efficient Products Programs	
<b>ENERGY STAR® Lighting</b> (Funded by Electric Only)	This is an initiative implemented jointly with other regional utilities. It provides discounts to customers for the purchase of ENERGY STAR® compact fluorescent lamps and fixtures and solid state lighting through instant rebates, special promotions at retail stores, or a mail order catalog.
<b>ENERGY STAR® Products</b> (Funded by Electric Only)	This program includes the ENERGY STAR® Appliance Program that promotes the purchase of high efficiency major appliances (refrigerators, dishwashers, clothes washers, room air conditioners, dehumidifiers and room air cleaners) and electronics (televisions, personal computers and monitors) that bear the ENERGY STAR® Label. It is offered by several utilities throughout the region. Additionally advanced power strips and energy efficient pool pumps will be promoted through this program.
<b>High-Efficiency Heating, Water Heating and Controls Program</b> (Funded by Gas) and <b>ENERGY STAR Heating</b> (Funded by Electric)	The program offers rebates for new energy efficient natural gas related equipment including boilers, furnaces, water heating equipment, thermostats, and boiler reset controls. A rebate is also provided for furnaces equipped with high efficiency fans. The program works with GasNetworks to deliver rebates. Homeowners purchasing or replacing an existing oil or propane heating system with a qualifying high efficiency heating system are also eligible to receive rebates to defray the cost of the higher efficiency system. ENERGY STAR Heating program provides rebates for homeowners purchasing or replacing an existing oil or propane heating systems.
<b>ENERGY STAR® Central Air Conditioning Program</b> (Funded by Electric Only)	This program promotes the installation of high efficiency central air conditioners. The program provides training of contractors in installation, testing of the high efficiency systems, tiered rebates for new ENERGY STAR® systems, and incentives for checking new and existing systems.
<b>Heat Pump Water Heater Pilot</b>	A NEEP organized pilot program to investigate energy savings and product reliability. Six installations are currently planned in RI.
<b>Information and Education</b> (Funded by Electric Only)	The Company promotes energy education in schools through the National Energy Education Development (N.E.E.D) Program. This program provides curriculum materials and training for a comprehensive energy education program.

## RESIDENTIAL BUILDING EFFICIENCY PROGRAMS

### 1. Energy *Wise* Program (Gas and Electric)

#### Overview

First offered in 1998, this program provides efficiency improvements in existing multifamily and single-family homes to the customer of record. The program provides a free comprehensive assessment of a customer's energy use and recommends various ways customers can improve their home's energy electric and gas efficiency. These assessments will be funded by either gas or electric energy efficiency funds. The Energy *Wise* program seeks to encourage program participants to install cost-effective recommended improvements. Beginning with the audit itself, the process is designed to continually reinforce the benefits and convenience of implementing recommended measures.

An important element of this strategy is follow-up contact with program participants, since most do not enter into agreements to proceed with installations at the time of their audit. Each audit staff person maintains records on each participant where the results of such contacts are noted. These logs are frequently referenced, especially when a program offering or market conditions change that would lead the staff person to believe that a past participant may be interested in moving forward in light of the changed conditions or offerings.

Participants in this program are offered financial incentives for cost effective measures to replace inefficient lighting fixtures and lamps, appliances, thermostats, and insulation levels with models that are more energy efficient. Customers will also receive the free installation of water saving devices (low flow showerheads and aerators) for water heated by gas and electric.

## **Program Delivery**

The program is delivered in three steps: energy assessments, installation, and quality assurance/quality control.

### ***Energy Assessments***

A typical single family home energy audit includes the following:

- Gathering and analysis of energy usage data
- Description of overall program to the customer
- Confirmation and/or determination of customer primary concerns
- Gathering and analysis of energy usage data and relevant demographic information
- Definition of the thermal envelope of the home
- Investigation of thermal envelope air leakage paths by visual inspection of the home's specific architectural features that are the most common leakage points
  - Attic and knee wall inspection of top plates, plumbing & wiring penetrations, chimney chase, framing transitions, etc.
  - Basement/crawl space inspection of exterior perimeter leaks and interior vertical bypasses
  - Exterior overhangs or cantilevered areas
- Evaluation of the existing insulation levels of the thermal envelope
- Evaluation of the adequacy of ventilation of unconditioned spaces
- Assessment of the type, efficiency, and condition of windows and doors
- Identification of type and efficiency of existing heating, cooling, and domestic hot water equipment
- Assessment of heating distribution system for insulation and/or sealing needs
- Performance of a combustion efficiency test of the heating equipment as conditions allow
- Visual evaluation of potential health & safety concerns
  - Inspection for signs of potential combustion safety issues

- Adequate combustion air
- Condition of combustion gas venting components
- Evidence of back drafting
- Potential effects of exhaust appliances and distribution systems on appliance draft
- Identification of existing or potential moisture concerns from both internal and external sources
- Identification of high use and/or inefficient appliances and lighting
- Installation of immediate savings measures such as compact fluorescent bulbs, water saving devices and air sealing for electrically and gas heated facilities.
- Motivation of customer to implement energy efficiency improvements
- Computer modeling of the home using approved audit software
- Presentation of a customized report with detailed recommendations for improvements including costs, energy savings, payback
- Presentation of Company information packet
  - Appliance rebate information
  - Financing information including 0% interest loans through the HEAT Loan program

### ***Installations***

The Company advocates a program design which incorporates appropriate roles for independent contractors allowing customers a choice of who will install their follow-up measures. Choice is essential for National Grid customers, when selecting energy efficiency measures, especially when it is an investment by the customer.

The Company's single-vendor energy assessment model has been approved by the Environmental Protection Agency (EPA) and Department of Energy (DOE) for the Home Performance with EnergyStar® national initiative. This model minimizes administrative costs, and guarantees customer equity. The Company has established several rules for the

single-vendor that guarantee a competitive market for follow up measures. During the energy assessment, all auditors are required by the Company to provide a complete weatherization contractor list to all customers. They are not allowed to compare their services to those of other contractors in any way. They are not allowed to disparage the work of others or promote their company over others. They must also do follow-up measures at a fixed price. These fixed rates are determined during the competitive bidding process. The fixed price cannot be increased, regardless of the difficulty or complexity of an installation job. The fixed price can also not be decreased to compete with weatherization contractors who are at liberty to offer customers less expensive quotes.

In addition, the Company promotes all participating contractors by posting the complete list on [www.powerofaction.com](http://www.powerofaction.com). The Company also allows each participating contractor, to use the National Grid logo on their company website if they choose. The Company also provides all contractors with EnergyWise marketing materials.

Contractors wishing to become pre-qualified as a National Grid approved weatherization contractor must provide proof of insurance in amounts and coverage acceptable to National Grid. National Grid will perform a background check to verify the contractor's good standing, and determine if there have been complaints or other issues that would render the contractor ineligible. Additional quality control will be required as contractors work in the program, including third party verification.

Contractors performing follow up measures must be accredited by the Building Performance Institute (BPI). BPI credentialed companies are trained to take into account the complex interactions that affect health, safety, comfort, energy performance, and the durability of homes. BPI standards include comprehensive diagnostic testing, measurement and verification that the work is completed properly, and quality assurance.

The Company plans to continue reaching out to the contractor community to increase the number of participating weatherization contractors. To ensure that the number of BPI certified contractors increases, the Company supports Community College of Rhode Island (CCRI) BPI training courses and field examinations. In 2009, 51 contractors enrolled in the CCRI program; 33 contractors took the BPI exam; 27 contractors passed.

It is the responsibility of the installation contractor to complete and submit all Company required data with proper supporting documentation. Do-it-yourself work is not permitted through the program. Work completed through the program must meet all applicable state and local code requirements and BPI protocols. All measures installed will meet ENERGY STAR<sup>®</sup> guidelines, where applicable.

For facilities that have greater than twenty units, major weatherization measures are put out to competitive bid. Major measures include lighting upgrades, electric heat thermostats, replacement of inefficient refrigerators, heat pump testing and tune ups, duct sealing and insulation for electrically and gas heated facilities.

***Quality Assurance / Quality Control***

In the interest of achieving high quality installations, the Company, subject to contract terms and available trained personnel, will work toward a system where, when verification is done, the contractor that does the installation is from a different organization than the contractor doing the verification. Therefore, the Company will go out to competitive bid for third party verification services by the second quarter of 2010. In addition to third party quality assurance, the Company will closely monitor the audit and installation processes. The Company will do this to ensure that all program protocols are being adhered to by the auditing vendor, as well as the installation contractors. The Company will track the amount of follow up work being conducted by all parties.

## Complaint Resolution

Any issues or complaints from customers or contractors will be addressed on a case by case basis throughout the year. The Company will track the issues and resolutions.

## Eligible Population

All residential customers in 1-4 unit buildings are eligible to participate. Multifamily facilities of five or more units are eligible if they have not previously participated in the program in the past five years. The Company proposes to serve 9,801 gas and electric customers (dwelling units) through the Energy*Wise* program in 2010.

## Program Design

The Company will go out to competitive bid for program delivery vendor(s) in Rhode Island by the end of second quarter in 2010. This will be accomplished in conjunction with National Grid's Energy*Wise* multifamily program in Massachusetts and New Hampshire's Home Performance with ENERGY STAR<sup>®</sup> program.

## *Rebates*

The program will provide incentives covering up to 75% with a maximum of \$2,000 to cover the cost of installing certain weatherization measures in electric and gas heating single family homes. Multifamily facilities of 5 or greater dwelling units can receive an incentive covering 75% of the cost to install insulation, duct insulation and duct sealing.

In 2010, the incentive structure will be the same whether a facility is gas-heated or electric-heated. The maximum incentive offered through this program is \$2,000 per gas or electric heating account for single family homes. Measures eligible for this incentive through the program include: attic insulation, wall insulation, basement/crawl space insulation, rim joist

insulation, duct insulation, gas heating system pipe insulation, ductwork leakage testing, ductwork leakage sealing. Air infiltration sealing where applicable will be performed at no charge to the customer. The maximum incentive offered through this program is \$750 per gas or electric heating account for single family homes. Customers will also receive the free installation of water saving devices (low flow showerheads and aerators) for water heated by gas or electricity. These measures will be funded by either electric or gas energy efficiency funds depending on the heating fuel type. Other measures may be added to the program menu, upon demonstration of cost-effectiveness.

All homes or facilities are eligible to receive lighting upgrades and refrigerator replacement measures as identified through the energy assessment. The Company will provide incentives of \$200-\$300 to encourage customers to replace inefficient refrigerators. The Company does not require a co-payment for lighting fixtures or lamps installed in single family homes nor the living units of multifamily facilities in order to avoid lost opportunities.

The Company will begin using a more simplified approach for customer rebates. Contractors will no longer be required to list the incentive in their customer contract. Therefore, customers will see a simplified contract with an overall lower net cost. The contractor will complete all Company paperwork and the incentive will be given directly to the contractor.

Multifamily properties will receive either a prescriptive or custom audits depending on the size of the property or complexity of the project. Incentives described in the Residential High-Efficiency Heating program apply to multifamily facilities and condominiums which contain gas heating systems and/or domestic hot water systems that serve individual dwelling units. Incentive levels for these prescriptive measures may vary for income qualified facilities. Copayments are typically required for insulation, common area lighting, refrigerators, and heat pump tune-ups. The Company will continue to study ways to overcome the split-incentive barrier for multifamily facilities.

***HEAT Loan Program (Tier 2 Only)***

If RGGI 40% funding is successfully secured, then the program will offer low interest loans for customers who live in one to two unit facilities to install additional weatherization, including insulation and air sealing. The HEAT Loan program will provide electric and gas customers in single family homes (up to four units) a 0 percent interest loan up to \$15,000 with terms up to seven years and can be applied towards the following energy efficiency upgrades:

- Insulation/air sealing
- Duct System Improvements
- High-efficiency heating systems
- High-efficiency DHW systems
- ENERGY STAR<sup>®</sup> -labeled thermostats
- ENERGY STAR<sup>®</sup> -labeled water heaters

The HEAT Loan Program will be publicized to recently audited consumers in single family homes through the EnergyWise Program. A portion of the HEAT Loan may be used to finance the mitigation of barriers preventing the installation of energy efficient measures. In the past, safety barriers have been a significant obstacle in maximizing energy savings. Using HEAT Loan funds to manage safety issues will allow the Company to access a broader spectrum of efficiency in the future. The Company will continually look to address “new” financing options that would allow customers the ability to go deeper.

The Company will make an up-front payment to write down the interest on an unsecured loan. It will plan to provide funds to lower the interest rate to approximately six percent. The Company may adjust the loan rate during the year to respond to market conditions and customer demand. The participating bank will determine loan approval. In 2010 the Company will look to expand the funding options to our Customers.

### ***Gas and Electric Integration***

For single family households, customers are presented with a seamless energy assessment, regardless of their heating fuel. After the assessment is completed, the energy audit vendor and the Company complete necessary follow up actions regarding billing and tracking. For multifamily buildings, the comprehensive building analysis will be funded by either gas or electric energy efficiency funds but not both. Electric or gas funds will be used to provide funding for electric or gas weatherization measures including, insulation, showerheads, aerators, air sealing, duct insulation and duct sealing.

### ***Marketing***

The program is certified by the Environmental Protection Agency as a “Home Performance with ENERGY STAR<sup>®</sup>” program in the single family sector. This allows the program to use the ENERGY STAR<sup>®</sup> name for marketing purposes, and ensures that the program meets high health and safety standards.

The program is marketed through direct contact with interested customers and owners, property owners’ associations, bill inserts, customer newsletters, the National Grid website, as part of the Gas Energy Efficiency programs, and other methods. There is often a waiting list for multifamily program services, though the program is usually able to serve customers within the year the participation request is made. For multifamily facilities the program will target both public housing authorities and privately-owned properties.

### ***Low Income Services through the Multifamily EnergyWise Program***

EnergyWise Multifamily Program also services Public Housing Authority properties and other low income multifamily facilities containing five or greater dwelling units. Depending on income eligibility of the tenants, co-payments may be reduced or waived for these larger facilities. If the facility contains at least 50% or more low income dwelling units, co-

payments are usually waived on all measures except refrigerators. All customer co-payments are waived for any measure installed in Public Housing Authorities and other low income state and federally funded multifamily facilities. Over the last five years, Narragansett Electric has served over 7,555 low income multifamily dwelling units through the EnergyWise Program. These conditions apply to National Grid electric and gas customers.

## **2. Single Family Low Income Services (Gas and Electric)**

### **Overview**

An increasing number of the Company's customers may become eligible for low income efficiency services during 2010. During 2009, Rhode Island witnessed some of the highest unemployment statistics in the nation. Heating and electricity bills frequently pose a difficult burden to income-strapped customers who often pay a high percentage of their income to cover their energy costs. To help control energy use, the Company's residential Income Eligible Program provides eligible income customers with a variety of energy savings measures installed in their homes at no cost.

### **Eligible Population**

Both the Collaborative and the Company want customers who have difficulty paying their energy bills to take full advantage of the Company's efficiency programs. Customers who are eligible for the Low Income Heating Assistance Program (LIHEAP),<sup>1</sup> also known as "fuel assistance," and who live in 1-4 unit buildings, are eligible for the Income Eligible program.<sup>2</sup>

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<sup>1</sup>The federal government has set an income level, tied to the median income of each state, which defines the uppermost income boundary for LIHEAP participation. Individual states have some flexibility in defining income eligibility as long as it is not set above the federally defined maximum. Eligibility in this program will track the eligibility for LIHEAP set by the State of Rhode Island.

<sup>2</sup> In previous years, this program was known as the Appliance Management Program (AMP).

Unlike other efficiency programs, no co-payment fees are required to take advantage of energy savings in this program.

### **Program Design**

The services of this program will continue to be administered using a lead administrator. The lead administrator manages the work conducted by participating Community Action Programs (CAPS) for the delivery of energy efficiency services.

Local agencies are the primary link between program eligibility and the customers who can take advantage of the program. Once eligibility is determined by the local agency, the customer is informed of what steps are involved in gleaning maximum energy savings in their homes. Customers are also informed of the process to receive energy saving services, including the scheduling of any visits from local agencies, or any approved energy professionals, who install energy savings measures where they live.

Energy saving measures selected for a participant are identified through a comprehensive review of the customer's electric and gas bills, existing appliances, and energy use patterns through the initial home energy audit. Instant savings measures that can be installed during the energy audit may include water saving devices, such as faucet and shower aerators, room air conditioner timers, and the replacement of any incandescent bulbs with ENERGY STAR<sup>®</sup> compact florescent replacements, up to 45 per home. Furthermore, this program provides for the installation of ENERGY STAR<sup>®</sup> refrigerators, and water heating efficiency measures to help lower customers' electric bills. Eligible gas measures include heating system replacement (on a qualifying basis), safety inspections, and funding the installation of CO detectors in cases where Department of Energy (DOE) funds are not available. Hot water and air heating systems are required to meet Federal weatherization program guidelines. Thermal measures for all participants are installed with a whole-house perspective, to ensure maximum and cost effective savings. These weatherization measures include attic, wall, floor and/or pipe insulation, air sealing, as well basic health and safety

inspections to ensure proper ventilation and indoor air quality in the home. Rhode Island CAPs will continue to be responsible for providing energy saving services to eligible participants on behalf of the Company.

Local agencies keep detailed records of any installed measures, the costs, the quantity, when installed, and they report participation and fees regularly to the lead administrator. This data is routinely reported to the Company to track program production, and savings.

Any agencies representing the Company in this program will work directly with installation contractors to ensure that program guidelines are met. Agencies will continue to allow regular and random inspections of work performed to be conducted both by the Lead Administrator, as well as any state inspection officials, to meet quality installation standards set by the State of Rhode Island, and by the Federal Government where applicable.

The Company will market the program through direct contact with eligible customers via Company brochures, bill inserts, and the National Grid website. Local agencies are also able to market this program to eligible customers who are interested, or who qualify through other similar programs. It is the local CAP agencies which can capitalize on their service networks to link customers of state, federal, or local low income programs to this program.

The Company is considering a Split Incentive Pilot, included in Tier 2 that will examine ways to overcome a renter/landlord barrier for participation.

### **Program Development**

With the incorporation of the InDemand data tracking in 2009, the Company has “live data” on electric customers being served through this program, as well as what energy savings measures installations are installed in their home. This data is then used for local agencies to quickly gather job totals to bill electronically to the lead administrator. The lead then has the

ability to review jobs, fees, and production rates on-line – a system that is much faster than in previous years. Both the lead and the local agencies can be paid more quickly using InDemand compared to systems used in 2008 and prior years. Data from InDemand allows the Company to monitor program production while tracking current energy savings. Using InDemand allows the Company to better examine the program's progress.

In early 2010, The Company will issue a "request for proposal" to provide the services of the Lead Administrative Vendor. The Company will seek bids from experienced and qualified contractors and/or organizations throughout the region that can offer training and support to the energy technicians and directors that work with eligible clients. Bidding contractors must demonstrate their experience to report regularly on program participation, spending, and savings, as well as a dedicated willingness to work with local agencies to help income eligible customers learn about energy efficiency in their homes. Collaboration between the lead Vendor and local agencies is essential in order for the Company to continue serving program's participants. Collaboration between the current lead vendor and a new one, if selected, will also be necessary. A "hand-off" production schedule would be crafted in order to ensure successful transition of a new vendor, while minimizing impacts on program participation.

With the pending arrival of considerable Federal American Recovery & Reinvestment Act (ARRA) funding into Rhode Island for low income weatherization, and the increase in CAP agency demands to meet those federal weatherization goals, the Company would like the opportunity to explore options where additional qualified energy professionals might also serve eligible customers in 2010. The Company would like this option in the event that ARRA funds create conditions where the local agencies are not able to sufficiently meet Company goals. Production rates will be closely watched in 2010 because of ARRA impacts. Decisions to make us of additional weatherization professionals would be need Collaboration agreement.

To help enlist eligible customers into the program in 2010, the Company will work closely with the Lead Administrator to explore additional venues for customers to take advantage of the program; from including the eligibility of the Company’s discount rate, to ensuring that state median and/or federal poverty guidelines are also considered.

The Company would also like to incorporate increased collaboration of the program team by establishing a best practice working group during 2010. A best practices working group would be developed with local agencies, the lead administrator, a Council representative, and the Company, to determine how to maximize energy savings using new technologies, while helping to ensure quality installations for all customers.

Meeting on a quarterly basis, a best practices working team could also develop ways for local agencies to leverage all available funding for homes in order to optimize savings while minimizing the financial impacts of any one funding source.

***Summary of Low-Income Services through all programs***

The table below summarizes the participation by low-income customers in the Company’s program.

**Table 2**

**Tier 1 Projected Low-Income Participation in 2010 Programs**

Program (Gas and Electric)	2010 projected participants	Percentage of Total Residential Participants in 2010
Single Family Low Income	2,136	18%
EnergyWise (Multifamily)	955	8%
ENERGY STAR <sup>®</sup> Homes	140	1%

**Tier 2 Projected Low-Income Participation in 2010 Programs**

Program (Gas and Electric)	2010 projected participants	Percentage of Total Residential Participants in 2010
Single Family Low Income	2,136	18%
EnergyWise	955	8%
ENERGY STAR <sup>®</sup> Homes	140	1%

**Table 3**

**Tier 1 Projected Low-Income Expenditures in 2010 Programs**

Program (Gas and Electric)	2010 Proposed Low Income Expenditures	Percentage of Total Budget
Single Family Low Income	\$3,617,434	32%
EnergyWise	\$665,653	6%
ENERGY STAR <sup>®</sup> Homes	\$110,000	1%

**Tier 2 Projected Low-Income Expenditures in 2010 Programs**

Program (Gas and Electric)	2010 Proposed Low Income Expenditures	Percentage of Total Budget
Single Family Low Income	\$3,617,434	32%
EnergyWise	\$665,653	6%
ENERGY STAR <sup>®</sup> Homes	\$110,000	1%

**3. ENERGY STAR<sup>®</sup> Homes (Gas and Electric)**

**Overview**

The ENERGY STAR<sup>®</sup> Homes Program is part of the national energy efficiency campaign first developed in 1998 by the EPA and United States Department of Energy (DOE). Rhode Island was one of the first states to adopt this program. The homes are designed, site inspected, and performance-tested to achieve a home energy rating which helps consumers differentiate between efficient homes and standard homes.

### **Eligible Population**

Anyone building a home in Rhode Island can participate, regardless of type of heating fuel. All units in multi-family buildings three-stories or less can qualify for ENERGY STAR.

Units in four- and five-story multi-family buildings may qualify for ENERGY STAR if: 1) the units are permitted as residential structures by the local building department; and 2) each residential unit has its own heating, cooling, and hot water systems, separate from other units. The phrase, “permitted as residential structures”, is intended to represent units that either fall within the scope of the residential building energy code or are permitted as having a residential use-group, even under conditions where the commercial building energy code applies.

Multi-family units that are located on top of commercial spaces (e.g., retail, restaurant, etc.) may be qualified as ENERGY STAR even if the structure is permitted as commercial, as long as: 1) the entire structure is five stories or less; and 2) each residential unit has its own heating, cooling, and hot water systems, separate from other units. The Company plans to serve 300 customers through this program in 2010.

### **Program Design**

In 2010, National Grid will continue to offer three program options that builders/homeowners can choose. The first option, the “Performance Path,” is similar to the previous program and requiring a Maximum Home Energy Rating System (HERS) rating of 85 or less to qualify, A HERS score of 60 or less will qualify for a tier 2 incentive. Any builder hoping to access the \$2,000 Federal tax incentive must use this path. The second option is the “Builder Option Package” (BOPs) that allows a builder to qualify as ENERGY STAR<sup>®</sup> by agreeing to install specific equipment and meeting certain measured performance standards. For both these options, incentives of \$325 to \$1000 will be available to builders depending on the new house characteristics, level of efficiency achieved and tier level. The

third option is called “Codes Plus.” In this option, the builder will receive specific incentives for energy efficiency improvements above code requirements.

The “Codes Plus” option is for builders who are learning how to achieve new, more rigorous, ENERGY STAR<sup>®</sup> standards and may not be able to achieve the ENERGY STAR<sup>®</sup> standards immediately. The Codes Plus option ensures that homeowners will receive energy efficiency upgrades above the code during the transition period of the new program. The incentives will be in two categories: Thermal Measures/Practices and Heating/Ventilation/Air Conditioning (HVAC). The incentives are designed to ensure that a builder will not receive more money through this path than through the other two paths. Typically, the builder would only be eligible for one of these; otherwise, the house would meet ENERGY STAR<sup>®</sup> standards. Incentives will be available for the Thermal Measures including compact florescent lights (CFLs) (Installed by the rater and paid for by the company), Air Sealing, Insulation, ENERGY STAR<sup>®</sup> windows, and mechanical ventilation. Incentives will also be available for HVAC upgrades including, Duct Sealing, High Efficiency Heating Systems, ECM Motors, Indirect Water Heating, High Efficiency Air Conditioning, and Quality Installation Verification.

National Grid will provide training and technical assistance to builders to help them meet these standards. Additionally, to help builders with the program transition, the Company plans to offer rebates for specific energy measure upgrades including duct sealing, high efficiency furnaces, blower door verified air tightness and mechanical ventilation, high efficiency air conditioning, and lighting upgrades. Though the existing training structure, National Grid will continue to support the further needs to improve code, as well as promoting current code awareness. A minimum of 6 state wide builder training and outreach sessions will be offered in 2010

National Grid will continue the existing program and examine opportunities to realign the funding mechanisms for 2011. In 2010, National Grid will look to drive builders towards greater savings. Beginning in 2010, an additional tier (tier2) will also be offered for the first

time in 2010 requiring a minimum HERS score of 60 or less to qualify for an incentive of \$1000. In addition a minimum of 75% of all available sockets are now required to utilize CFL's provided by National Grid at no charge to the builder.

Tier 2 includes an ENERGY STAR Homes Tier 3 pilot for 10 participants.

***Low Income participation in the ENERGY STAR® Homes Program***

The Company works closely with Rhode Island Housing and developers of affordable housing in Rhode Island to encourage participation in the ENERGY STAR® Homes program. Currently Rhode Island Housing encourages developers to receive ENERGY STAR® Home certification. About 45% of the homes completed each year through the ENERGY STAR® Homes program are for low income families. The Company also plans to continue to work with Rhode Island Housing and the OER to support the energy efficiency of Rhode Island's affordable housing programs.

**4. Energy Star Homes Version III Pilot**

**Overview**

Due to the pending changes of both codes and ENERGY STAR® standards in Rhode Island, National Grid will launch a pilot program offering additional technical assistance and incentives (above tier 1 incentives) for projects to be built to 2011 Version 3 levels in 2010. The purpose of the pilot is to create additional experience and understanding in 2010 for ENERGY STAR® Version 3 levels slated to begin in January 2011.

**Eligible Population**

The Pilot program will be available for any builder who has previously participated in building an ENERGY STAR® home to current Version 2 standards.

### **Pilot Design**

Pilot will offer additional technical assistance as well as an additional \$1000 incentive (above tier 1 incentives) for up to 15 projects to be built to 2011 Version 3 levels in 2010. Further technical assistance and support will also be provided to each project including additional visits as well as more in-depth plans review of each project. Through this pilot, additional training techniques will be developed as well as producing a “next steps” guide for preparing builders for version 3 of Energy Star in 2011.

## **5. ENERGY STAR® Homes Vocational Schools Initiative**

### **Overview**

As part of the Energy Efficiency Education Programs that National Grid implements annually, a new educational outreach program will be offered in 2010, targeting the next generation of builders and contractors studying at Rhode Island based technical and comprehensive high schools and colleges. The main goals of this initiative are to introduce participating Rhode Island students to energy efficient building practices that are consistent with the ENERGY STAR® Homes Program, to assist in the development of cross-curricular ties between technical schools, professional organizations and post secondary school anchors within the community; and to support the development a state-wide energy efficiency educational infrastructure which supports national efforts to expand energy and building science related education.

### **Program Design**

The ENERGY STAR REDUX (ESR) Technical School Outreach Program is designed to support recent revisions to the ENERGY STAR® Homes Program and regional building code standards such as the pending adoption of the energy efficiency provisions found in the 2009 International Residential Code (IRC) and the 2009 International Energy Conservation Code (IECC) that will affect new construction and substantially renovated buildings.

Students and teachers participating in the Technical School Outreach (TSO) program will learn valuable knowledge and skills required for today's workplace.

The program's core components include a series of on-site workshops administered at selected schools, regional group learning events for students, state-wide professional development training for technical educators and assistance with selected school building projects. The goal of the ESR Program is to expose students, teachers and administrators to energy efficiency construction best practices through a variety of hands-on activities that engage today's visually oriented culture and empower them as they pursue the next steps in their educational or professional careers. The Company will continue this outreach effort because it will improve Rhode Island's energy efficiency for years to come.

## **6. Building Practices and Demonstration Program**

### **Overview**

The Company plans continue its Building Practices and Demonstration Program for residential markets, which began in 2007. The purpose of the Building Practices and Demonstration Program is to explore and demonstrate new and/or underutilized energy efficient procedures and equipment, including renewable energy system processes. The Building Practices and Demonstration Program will work to identify which technologies or home building techniques would be well suited for use and installation.

Input for this program will be drawn from the expertise gathered by the Company's Commercial & Industrial Building Practices & Demonstration Program, as well as input from other utilities, program vendors, energy groups and interested business partners.

### **Eligible Population**

Eligible participants in this program will include homeowners, landlords, as well as home builders. Each participant may be asked to allow monitoring of the installation and/or results, provide historical data, provide tours of the installation by potential users or other interested stakeholders, and share the results in case study format.

### **Program Design**

Examples of potential projects include new insulation and weatherization products, advanced heating and water heating products, solar thermal installations, new construction techniques, green homes or very low energy use homes. Specific projects will depend on interest and participation by customers, builders, vendors and manufacturers. Marketing of the program will rely on working with industry vendors developing and/or offering new or underutilized natural gas energy efficiency technologies, as well as other interested organizations.

## **7. Deep Energy Retrofit Pilot (Tier 2 Only)**

### **Overview**

The Company plans launch a Deep Energy Retrofit Pilot to; a) investigate the potential for energy savings of at least 50 percent of total on-site energy use through deep retrofits of existing residential buildings, b) demonstrate the potential for deep carbon reductions in existing homes and c) identify how to reduce the costs and challenges associated with deep retrofits. The pilot will target 5 residential projects in RI in order to learn about the state's specific market actors, their capabilities, and existing and potential level of customer interest.

### **Eligible Population**

Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible to propose projects in conjunction with contractors who have sufficient relevant prior experience.

## **Pilot Design**

The Company will draw on experience, lessons learned, and resources developed from a similar 2009 pilot in Massachusetts. The Company has budgeted for this pilot based on deploying the same incentive structure for 1 to 4 family building as the planned 2010 statewide pilot in Massachusetts. The core element is super-insulation level building shell measures designed to be very durable and yield approximately 70% heating savings for many decades to come. The intention in this approach is to provide a long term foundation for these demonstration households to be climate neutral or Net Zero energy when supplemented with renewables, water heating efficiency measures and actions and lifestyle actions.

Pilot outreach will be targeted to; home owners and residential property owners considering renovations and willing to invest in extensive carbon reductions as well as; architect\designers, advanced builders and companies involved in renovation or restoration of residential buildings. Outreach and marketing to identify and interest potential pilot candidates will be performed through internet outreach, pilot website [www.powerofaction.com/der](http://www.powerofaction.com/der), contractor outreach through new homes program, and potentially through home energy raters and other professionals with appropriate skills. Successful outreach and marketing are essential to the success of the pilot, and so a marketing strategy will be developed to ensure that customers who have the greatest likelihood of pursuing a Deep Energy Retrofit are systematically identified and approached about pilot participation. Project selection will be by the Company, based on property owner proposals to participate utilizing a qualified project team with a design that meets program defined criteria for optimal energy performance, health, safety and durability, and other criteria (examples include approaching R-value for walls of R40, Ceiling of R60, windows R5 and appropriate building tightness and mechanical ventilation levels.) The building shell measures, if not implemented to a climate sustainable depth at the time of re-siding, become a relative lost opportunity for the next 20 to 100 years once siding is re-applied.

A listing of contractors and designers with appropriate pre-requisite deep energy retrofit related experience as per criteria defined by the Company will be maintained to assist building owners in forming project teams to propose projects.

Homes and small apartment buildings on which renovations are planned (e.g., siding and/or window replacements) will be targeted. Homeowner investments will be leveraged to maximize the effectiveness of the deep energy retrofits.

High levels of incentives will be offered to ensure that deep retrofits are completed on the targeted number of existing homes and to achieve the desired mix of multifamily and single family demonstrations. Incentives may be tiered based on the number of units in a building. Basic incentives to move the market will be a maximum of \$42,000 per single family unit. A higher tier of incentive levels up to an additional \$10,000 may be offered for deep energy retrofit projects that approach the highest energy performance standards, for example Net Zero energy, Passive House or Thousand Home Challenge standards. Actual incentives will be finalized to be the same for Massachusetts and Rhode Island based collaboration with energy efficiency program administrators in Massachusetts and on lessons learned from the 2009 pilot.

Staged and partial projects will be considered for inclusion in the pilot, and incentives will be scaled accordingly. A 'staged' project is one in which the participant plans to pursue deep energy retrofit levels (over 50% energy use reduction) in stages over a period of time. A 'partial' project is one in which the participant will deploy deep energy retrofit measures to a substantial portion of the building such that when the next building component is remodeled, even by the next owner it can be super-insulated and thereby reach the (70% heating) 50% whole total energy savings target over time. This relates to a key goal of the pilot to understand how best to implement deep retrofits technically and in timed synchronization with the renovation market. Timing which is largely driven by the fact that siding, windows, heating systems and roofs don't typically all need replacement at the same time.

Pilot program services will consist of outreach through a variety of channels to customers including through Energy*Wise* to homeowners and to contractors through the residential new construction program. Project design details and assistance to the DER contractors doing the work will be handled through technical specialist organizations under contract and/or utilizing ARRA funds. In order for these projects to succeed it will be essential to have extensive technical support and training, since the challenges of retrofitting a building to this degree in a manner that enhances rather than degrades the durability of the structure and the health and safety of the occupants, exceeds to a considerable degree what is involved in Energy*Wise* or new home construction.

In depth lifestyle education workshops and comprehensive lighting retrofits will also be used to achieve maximum household energy reductions.

Given the economy and scale of total investment for building owners, full development of a deep energy retrofit market may only be achieved if considerable additional financing options become available through a wider group effort. Even customers who are most passionate about climate and deep energy retrofit have expressed worries about the economy and not being able to recoup their investment in energy savings over time or at time of resale of the property. Financing which is extensive, long term (so as to maintain positive cash-flow) and replicable or is transferable to the next owner is seen by many involved as essential for this market to grow.

## RESIDENTIAL EFFICIENT PRODUCTS PROGRAMS

### 1. ENERGY STAR® Lighting (Electric only)

#### Overview

This program is designed to support the development, introduction, sales, promotion, and use of ENERGY STAR® residential lighting products. The Company has provided rebates and actively promoted energy efficient residential lighting since 1991. In 1998, Narragansett Electric joined with other electric utilities in the region through the NEEP to offer a common residential lighting program to its customers.

Historically, the ENERGY STAR Lighting Program has been successful in moving large quantities of ENERGY STAR-qualified spiral bulbs through large retail distribution channels using negotiated cooperative promotions (NCP). This is no longer the case for several reasons. First, recent studies in states other than Rhode Island suggest that the market for plain spiral CFLs (as opposed to specialty CFLs) may be in the process of being transformed. This means that the effectiveness of the current program design and its heavy emphasis on sales through negotiated cooperative promotion (NCP) participants may be diminishing. Additionally, federal lighting efficiency standards will begin in 2012 and it is unclear how industry will respond. Finally, solid state lighting (SSL) technology is innovating rapidly and the lighting program needs to be prepared for additional changes in product availability.

While the market is changing, the Company still believes there are significant opportunities for customers to install CFLs in their homes. A 2007 impact evaluation found program participants from 2002 had a socket penetration of 16%. The 2009 goal for the CFL distribution was 260,000 bulbs, equivalent to 0.61 bulbs per household – one of the lowest bulbs per household ratios in New England. In the past, limited marketing budgets and participating retailers have made the Rhode Island program less aggressive than neighboring states. The Company is committed to taking on these challenges and increasing the bulbs per household ratio to 0.88 in 2010.

To address changing market factors and the need to improve socket penetration in Rhode Island, the program will take the following steps in 2010:

- Use an aggressive marketing budget to attract new and various types of retailers including medium and small-sized stores. The company will also look for new distribution channels including community venues and corporate events.
- Increase the depth of the program with existing retailers, the Company will work with large retailers to offer lighting promotions over longer periods of time and may request additional tracking information.
- Expand the product options beyond spirals. In 2010, rebates for specialty bulbs will be increased significantly to make more of an impact in this market (goal of 40,000 specialty bulbs). The change broadens the focus of the program from being almost exclusively on plain CFLs to other bulb types, of which we have had less participation.
- Broaden the customer base by focusing on hard-to-reach lighting customers for the first time, as described below. Hard-to-reach customers are defined as those who have never tried a CFL.
- Evaluate the lighting program processes and study the state's socket penetration in order to shift program design to meet the state's changing needs in 2011.

### **Eligible Customers**

All residential customers are eligible to participate in this program. The Company proposes to serve about more than 110,000 lighting customers.

### **Program Design**

The program offers customers the opportunity to purchase ENERGY STAR® qualified CFL, fixtures and solid state lighting at substantial discounts. Customers have several

options for program participation, including redeeming instant rebate coupons for qualifying products purchased in participating retail stores, purchasing reduced price products at retailers where the manufacturer has received a rebate from the Company and passed on the discount directly to retailers and consumers, using the mail order catalog, and making website purchases.

The Company plans to expand lighting product rebates to include specialty bulbs and to increase unit goals in 2010. CFL rebates or buy-downs will be offered in the \$2 - 30 range, depending on the style and technology of the bulb (standard, dimmable, 3-way, etc.). The Company plans to increase the specialty bulb rebate to \$6 in order to further encourage customer to broaden their purchasing habits with specialty products. The Company also plans to aggressively increase the specialty bulb goal to 40,000 units.

The Company plans to continue using NCPs to reach a goal 273,000 bulbs. However, we are committed to expanding the number of retail offerings and working with manufacturers and retailers to modify the NCP process to maximize savings for customers. Active promotions in 2009 included the following retailers: Rocky's, Benny's, Wal-Mart, BJ's, Sears, CVS and Walgreens and Home Depot. Manufacturers who have participated in NCPs include: TCP, Maxlite, Feit, Greenlite and Globe. We will work on modifying the NCP process by exploring various options with industry partners in New England and across the county. Our goal is to improve the NCP process for spiral bulbs by the end of the first quarter in 2010. In 2010, the Company will continue to expand mercury recycling efforts in RI by working with retailers.

The Company proposes to continue rebates for ENERGY STAR<sup>®</sup> fixtures and torchieres. Rebates will be \$10 for exterior fixtures and \$15 for interior fixtures, table lamps, and floor lamps and torchieres and continue with \$30 rebates for Light Emitting Diode (LED) lighting and \$25 rebates for higher end lighting fixtures to help move the market. Rebates on fixtures and bulbs may be adjusted to ensure coordination with regional and national

program efforts and to reflect changing Rhode Island market conditions. The Company will also continue to work directly with lighting showrooms to encourage the promotion of high efficiency, high fashion residential CFL fixtures.

The Company as part of the regional collaborative will work with manufacturers to encourage them to improve product quality of their solid state lighting products in order to increase the number of products that are ENERGY STAR<sup>®</sup> qualified. Currently, the only solid state lighting with the ENERGY STAR<sup>®</sup> label are recessed, cove and under cabinet, and a limited number of products are eligible within these categories. Additionally, the Company will encourage showrooms and other larger retailers to stock eligible solid state lighting products. Additionally, the Company plans to work with lighting showrooms and distributors and integrate the residential SSL rebate process with the commercial and industrial side. Streamlining the process for both residential and C&I promotions will encourage distributors to stock the product and encourage increased promotion of SSL products. The Company will continue to support local retailers with promotional materials (signs, coupons, displays) training, and regular sales visits.

Finally, the Company will introduce a new program focused on hard-to-reach populations. The rebate for hard-to-reach bulbs will be \$3, and the unit goal is 60,000 bulbs in the first year. Preliminarily, we consider hard-to-reach populations as elderly, foreign language speakers, and marginalized populations. The Company work to identify hard-to-reach populations and understand why they do not use CFLs. Based on the findings, the Company will create strategies to overcome identified barriers. These strategies may include direct-mail marketing to retirement communities or neighborhoods with a high concentration of foreign language speakers, specialized NCPs for high impact retailers, finding new channels for distribution including food pantries, community organizations, community or corporate events.

## 2. ENERGY STAR® Products (Electric only)

### Overview

ENERGY STAR® is the national program sponsored by the DOE and EPA to promote energy efficient products to help reduce energy use and prevent air pollution. Energy efficient choices can save families about a third on their energy bill with similar savings of greenhouse gas emissions, without sacrificing features, style or comfort. Earning the ENERGY STAR® means products meet strict energy efficiency guidelines set by the EPA and DOE.

This program is part of a regional joint effort by utilities and energy efficiency organizations to encourage the purchase of ENERGY STAR® rated major appliances and electronics. The appliances include clothes washers, dishwashers, refrigerators, dehumidifiers, room air conditioners (RAC) and room air purifiers. The electronics include televisions, personal computers and monitors. Manufacturers build their products to meet or exceed energy efficiency performance specifications established by ENERGY STAR®. Together with manufacturers, local retailers, the DOE, and EPA, the Company works to help identify and promote the purchase of these high efficiency appliances to its customers. Additionally, the Company will promote advanced power strips and energy efficient pool pumps which currently do not have ENERGY STAR® specifications.

### Eligible Population

All residential customers are eligible to participate. The Company proposes to serve about 11,300 customers in 2010.

### Program design

The program provides retailer support, training, advertising, consumer education, codes and standards review and advocacy, and manufacturer labeling. For 2010 the Company proposes

to continue to provide consumer education on these products and continue to offer rebates on a variety of ENERGY STAR® products. Specifically, the Company proposes to continue to offer an ENERGY STAR® refrigerator retail rebate of \$50 and add a \$50 rebate for ENERGY STAR® qualified freezers and \$20 for an ENERGY STAR® qualified room air cleaner.

The Company also proposes to continue offer a room air conditioner rebate of \$30 for those units which are 15% more efficient than ENERGY STAR®. This rebate may be paid directly to industry partners rather than to consumers. The Company, and other sponsors in Vermont and Massachusetts, plans to issue a request for proposal to work with manufacturers and retailers directly to encourage increased stocking of these more efficient ENERGY STAR® room air conditioners relative to less efficient models on retail shelves. Customer purchase behavior is largely influenced by what air conditioners are available for purchase at local retailers. National Grid plans to continue to work directly with industry partners to increase the market share of the more efficient ENERGY STAR® room air conditioners. The rebates may be adjusted to ensure coordination with regional and national program efforts and to reflect changing Rhode Island market conditions.

The Company is proposing to continue its program which seeks to remove second refrigerators and freezers from its residential customer's homes; whereby customers will be given a \$50 bounty for doing so. In MA and RI, the company was the first in the region to begin this program in 2009. This program encourages customers who have second refrigerators or freezers in operation, to have them removed by the program vendor. New for the program in 2010, the Company also proposes to remove primary refrigerators being replaced, so as to prevent them from becoming secondary which would require future removal. The program vendor is responsible for having the refrigerator or freezer recycled properly.

For pool pumps, the Company plans to offer a tiered incentive rebate in 2010: \$250 for 2-speed pool pumps and \$600 for variable speed pool pumps. The change in rebates was

made given the initially slow start of this program in 2009 and additional information on the costs to installing the two-speed and variable speed units. The rebate will be divided between the consumer and the contractor. The Company is working on a CEE working group to help direct the specifications for an ENERGY STAR label for pool pumps.

Also, for electronics, a \$10 rebate will continue for advanced power strips which allow some electronics to automatically be turned off while others stay on. Advanced power strips are a good way to teach customers to turn off appliances as well as save energy. Electronics account for up to 15% of a home's electric usage and is growing as a percentage of household usage. Other electronics rebates will include a \$10 for personal computers and \$20 rebate for monitors and highly efficient (CEE Tier 4) televisions. These electronics rebates may be offered as a midstream incentive to retailers to stock and sell these ENERGY STAR products.

An important part of the program is educating customers about ENERGY STAR®. The Company sponsors media advertising that promotes ENERGY STAR® and specific ENERGY STAR® promotions. Additionally, the retail stores are an integral channel for promoting ENERGY STAR®. The Company prints and distributes a wide variety of point-of-purchase materials and signs for display in retail stores. The Company also supports cooperative advertising with retailers in various print and newspaper channels. The Company also develops media stories and public relations opportunities about ENERGY STAR®.

A nationwide study of consumers' awareness of ENERGY STAR® labeling is conducted annually. The most recent study, "National Awareness of ENERGY STAR® for 2006 – Analysis of CEE Household Survey" indicates that the existence of utility sponsored programs increases the awareness of ENERGY STAR® products. National recognition of the ENERGY STAR® label in high-publicity areas (areas with an active local ENERGY STAR® program sponsored by a utility, state agency, or other organization for two or more

continuous years) was 69% compared to 49% in low-publicity areas. When the ENERGY STAR<sup>®</sup> label is shown, the aided recognition in high-publicity areas rises to 79% and in low-publicity areas the value increases to 65%. The Company will inform the Collaborative about future awareness study results.

### **3. High Efficiency Heating, Water Heating & Controls Program (Gas and Electric)**

#### **Overview**

A typical residential customer spends approximately two thirds of their energy budget on heating and hot water. To address this expense, the Company will continue to offer incentives for customers to purchase high efficiency heating equipment, water heating equipment, and controls. The Company may also offer an incentive to installation contractors to further stimulate the installation of high-efficiency heating equipment. The Company will continue to provide training to installation contractors to make them aware of the benefits of high-efficiency heating/water heating equipment and controls, and to raise quality installation standards.

#### **Eligible Population**

The eligible population includes residential customers who purchase high efficiency heating equipment, water heating equipment, and controls fueled by gas, or high efficiency heating equipment fueled by oil or propane. The Company proposes to serve 2,175 by customers in 2010 through the program.

#### **Program Design**

The Program offers incentives that encourage customers to choose a high-efficiency model by influencing the consumer in two ways: by drawing attention to the value of high-efficiency equipment, and by offsetting a portion of the higher initial cost.

The program is jointly sponsored and managed with GasNetworks™, a regional gas utility collaborative. The program is marketed and promoted through various channels. The program is marketed via air conditioning/heating equipment contractors, and through the Company's and the GasNetworks™ websites. The National Grid and GasNetworks websites provide consumers and contractors with incentive applications and program information. The program is also marketed by direct outreach to product retailers, a method that allows for training of sales personnel and ongoing distribution of program brochures/rebate applications. The program is also marketed through direct mail campaigns, bill inserts, trade ally events, and sponsorships. The program is also promoted by EnergyWise program auditors.

**Program goals include, but are not limited to:**

- Increasing market sector awareness of high-efficiency heating/ water heating equipment and controls
- Increasing customer and trade ally contractor awareness of program offerings, equipment efficiency enhancements, and maintenance for high efficiency heating and water heating equipment.
- Providing product and program training to trade allies such as plumbing and heating contractors

Overall, a strong emphasis is placed on working with builders and contractors who install heating equipment. Target markets for the program include both new construction and retrofit. The retrofit market is seen as the primary driver of high-efficiency forced hot water and steam heating system opportunities, whereas the new construction market is seen as the primary driver for high-efficiency furnaces.

Subject to evaluation screening for cost-effectiveness and budgetary considerations, other measures may be incorporated into the incentive portfolio. GasNetworks periodically makes changes to the incentive levels offered for high efficiency equipment. Factors taken into

account include market penetration information, changes in incremental costs, current program year participation, and budget levels. National Grid proposes to adopt this practice. See Table 4 for a listing of proposed eligible equipment and incentive levels.

Equipment Type	Efficiency Requirement	Incentive Amount
Furnaces (forced hot air)	AFUE 92% or greater	\$100 Incentive
Furnaces (forced hot air with ECM or equivalent for systems fueled by natural gas or propane)	AFUE 92% or greater	\$400 Incentive
Furnaces (forced hot air with ECM or equivalent for systems fueled by oil or propane)	AFUE 85% or greater	\$200 Incentive
Boilers (forced hot water)	AFUE 85% or greater	\$500 Incentive
Boilers (forced hot water)	AFUE 90% or greater	\$1000 Incentive
Boilers (steam with electronic ignition)*	AFUE 82% or greater	\$200 Incentive
Combined high efficiency boiler and water heating unit	AFUE 90% or greater with domestic hot water storage of 2 gallons or less	\$1300 Incentive
Indirect Water Heater	Attached to an ENERGY STAR® rated natural gas forced hot water boiler	\$300
Tankless/On-Demand Water Heater	Energy Factor of 0.82 or greater with an electronic ignition	\$300
Stand Alone Water Heaters	Energy Factor of 0.62 or greater	\$50
Programmable thermostats		\$25
Boiler reset controls		\$100

In 2010, the Company will continue offering the rebate for energy efficient oil and propane heating systems; and to offer an incentive for combined high efficiency boiler and water heating units.

The program will work collaboratively with the CoolSmart program to jointly advertise, market, and work with contractors. Areas of proposed cooperation are collateral material, trade show participation, and contractor training. We will explore implementation of an electronic, on-line rebate application submission process.

#### **4. 2009 ENERGY STAR® Central Air Conditioning Program (Electric only)**

##### **Overview**

As noted previously, a typical residential customer spends approximately 44% of his or her energy budget on heating and cooling. To address cooling costs, the ENERGY STAR® Central Air Conditioning Program provides funding to offer ENERGY STAR® central air conditioning system rebates.

In 2002, the Company participated in a joint study of HVAC market conditions and efficiency potential in Rhode Island, Connecticut, and Massachusetts. The study identified several key target markets including residential customers who are in the market to purchase central air conditioning (AC) or heat pump systems, residential customers with existing air conditioning systems, and HVAC technicians responsible for servicing and installing this equipment. The market research estimates that approximately 4,200 Rhode Island customers are purchasing replacement or new central air conditioners each year. Recent customer surveys by the Company indicate that about 23% of Rhode Island residences, or about 95,000 customers, have central air conditioning.

The market research documented that energy savings opportunities exist due to the improper design and installation practices of residential AC contractors. Inadequacies documented include over-sizing of systems overall, undersizing of the air distribution system, failure to obtain proper refrigerant charge, and inadequate duct sealing. Significant savings are also available from existing air conditioning systems in customers' homes, where the same conditions of improper refrigerant charge and airflow are common.

### **Eligible customers**

Any residential customer installing, servicing or replacing a central air conditioning or heat pump system in an existing home is eligible to participate. Incentives for ENERGY STAR<sup>®</sup> heating and cooling are included in the ENERGY STAR<sup>®</sup> Homes program for new construction. The Company plans to continue ENERGY STAR<sup>®</sup> equipment rebates, ENERGY STAR<sup>®</sup> Quality Installation and further expand the scope of program measures to include installation of BFM motors. We plan to serve 882 unique customers in 2010.

### **Program design**

The Company began the program in the fall of 2002. The Company has provided rebates to customers for properly installed ENERGY STAR<sup>®</sup> central air conditioning and heat pump systems in existing homes in 2003 throughout 2006. In February of 2006 the program merged with the COOL SMART program in Massachusetts in order to reduce administrative and marketing costs. This also provides consistency for HVAC contractors and distributors which operate in both states.

The ENERGY STAR<sup>®</sup> specification requires 14.5 Seasonal Energy Efficiency Ratio (SEER) and 12 EER as of January 1, 2009. The Company offers an incentive of \$300 to contractors when a Manual J sizing is properly completed for Tier 1 and Tier 2 installations and \$ 100 when completed individually (See Tables).

The Company plans to offer rebates that are consistent with those offered throughout the region. The following is a summary of the Company's proposed tiers and rebate levels for 2009, which are subject to change to be consistent with the regional program:

- Add ENERGY STAR<sup>®</sup> Quality Installation Verification (QIV) component for replacement systems including systems replaced within the past 3 years old with an EPA certificate and \$100 customer incentive through participating program QIV

contractors. The EPA requires sizing, duct sealing, and airflow and charge adjustments to specific American National Standards Institute (ANSI) Air Conditioning Contractors of America (ACCA) standards.

- The duct sealing requirement will be funded through a contractor incentive of \$2 per CFM duct leakage reduction up to maximum of 300 CFM.
- Contractors will receive a \$250 incentive for verification and advanced airflow measurement and an additional \$50 for the installation of a CO detector if needed for safety purposes.
- If duct modifications (i.e., adding return ducts and/or turning vanes) are needed to meet airflow requirements, contractors may receive an additional \$400 incentive.
- Expanded Negotiated Cooperative Promotion opportunities in cooperation with Northeast Energy Efficiency Partnerships (NEEP) and other interested program administrators.
- A standard early replacement contractor rebate component that requires an existing system replacement with a SEER of 9 or 10 replaced with a 14.5 SEER and 12.0 EER or greater (See Tables for Incentive Information).
- A \$300 customer rebate for eligible equipment that meet the minimum ENERGY STAR<sup>®</sup> standard rating of 14.5 SEER, 12.0 EER.
- A \$400 customer rebate for higher CEE-tier 2 equipment (SEER of 15, EER of 12.5 or higher).
- A \$250 per ½ ton downsizing contractor incentive. (See Table)
- A \$500 customer incentive for a SEER of 14.5 or greater, and an HSPF of 8.2 for split ductless air conditioning or air to air heat pumps that use Inverter Technology.
- A \$300 contractor incentive when a Manual J is completed for ENERGY STAR<sup>®</sup> CS Tier 1 or Tier 2 equipment is sold. A \$100 dollar contractor incentive for contractors not participating in CS Tier 1 or Tier 2. (See Table)
- Third party verification of optimal refrigerant charge and system air flow can be performed for any new equipment installation regardless of SEER. The contractor

incentive for this “system commissioning” is \$175. If this service is performed under CS Tier 1 or CS Tier 2 a \$225.00 rebate is paid to the performing contractor.

- Customers receive a \$100 instant credit on their bill from the HVAC contractor for the digital check-up when it is part of work done associated with a tune-up or repair of an eligible unit from a participating contractor who must be QIV listed.
- A contractor incentive of up to \$175 will be provided to cover the \$100 customer instant credit and \$75 to cover contractor cost associated with the digital check-up provided the unit passes or meets exception condition where at least charge with respect to airflow is within acceptable parameters.
- Provide a customer incentive worth \$450 for the installation and provision of a BFM fan motor on installations with low supply duct static of less than .07” external static pressure.
- Provide a \$200 rebate in partnership with Gas Networks who also contributes \$200 toward the installation of a gas furnace with an AFUE of 92 percent or greater, equipped with an ECM or equivalent energy-saving furnace fan (blower) motor (Tentative on evaluations).

**Contractor Incentives Available:**

CS Tier 1 (Early Replacement of 9 or 10 SEER equipment with replacement equipment of ENERGY STAR 14.5 SEER and 12.0 or greater):

**Required to qualify for CS Tier 1**

QIV Pre and Post Installation – Must pass QIV and airflow	\$ 225.00
Manual J	\$ 300.00
Early Replacement	\$ 450.00
<b>Total Incentive for required components</b>	<b>\$ 1000.00</b>

**Optional Incentives for CS Tier 1**

Downsizing per 1/2 ton reduction	\$ 250.00
ESQI with CO Detector	\$ 125.00
Duct modifications to pass QIV or ESQI	Up to \$ 400.00
Duct Sealing in attic spaces that have air conditioning and heat in connected ductwork	\$ 2.00 per CFM of duct leakage reduction up to \$ 600.00 max

CS Tier 2 (Standard Replacement of existing equipment with replacement of ENERGY STAR 14.5 SEER and 12.0 EER or greater)

**Required to qualify for CS Tier 2**

QIV Post Installation – System must pass QIV charge and airflow – If duct modifications are claimed, require pre and post installation of ductwork	\$ 225.00
Manual J	\$ 300.00
<b>Total Incentive for required components</b>	<b>\$ 525.00</b>

**Optional Incentives for CS Tier 2**

Downsizing per 1/2 ton reduction	\$ 250.00
ESQI with CO detector	\$ 125.00
Duct modifications to pass QIV or ESQI	Up to \$ 400.00
Duct sealing in attic spaces that have air conditioning and heat in connected ductwork	\$ 2.00 per CFM of duct leakage reduction up to \$ 600.00 max.

**Contractor individual incentive for 2010 (No Tier Participation)**

**Non – Participation in Tier – Contractor Incentives**

Manual J	\$ 100.00
QIV	\$ 175.00

ESQI with CO detector (QIV included)	\$ 300.00
Downsizing: ½ ton reduction	\$ 250.00
Early Replacement	\$ 100.00
Duct Sealing in attic (Heating and air conditioning)	\$ 2.00 per CFM reduction up to 300 CFM
Duct modifications to pass QIV or ESQI airflow requirements	Up to \$ 400.00 max.

**Customer Incentives:**

Air Conditioning or Heat Pump installation of ES 14.5 EER of 12.0 or greater	\$ 300.00
Air Conditioning or Heat Pump installation of ES 15.0, EER of 12.5 or greater	\$ 400.00
Ductless mini split heat pump with inverter technology. 14.5 SEER, 12.0 EER, HSPF 8.2 or greater	\$ 500.00
Brushless Fan Motor	Fund installation of motor and installation (\$450.00)
92% AFUE furnace with ECM Motor in partnership with Gas Networks	\$ 400.00 (50% paid by CoolSmart and 50% paid by Gas Networks)
Energy Star QIV with certificate	\$ 100.00

Recent program recommendations from the EPA and ACCA include ensuring that the air flow across the indoor coil has been measured and set to correct levels, that ducts are sealed and sized directly, and that the refrigerant charge is at correct levels. For homes where the duct system is currently not operating properly, fixing the ductwork provides additional kW savings. Our BFM pilot in 2009 proved that acceptable kW savings will be obtained by installing BFM motors in low static supply duct applications.

These measures are proposed to further support market transformation towards ENERGY STAR® and recently adopted ACCA Quality Installation standard. The extra incentive for duct modifications is to offset costs involved in a particularly difficult aspect of that

standard. It is critical to provide incentives directly to contractors to reimburse them for the additional costs associated with this work, and also to underline the importance of these advanced installation practices. We have also implemented a Tier program so that contractors will be compensated in a manner that will encourage high quality installation and commissioning of systems. This is not a required component for 2010, but in future years this may become a required component depending on how fast the contractor base moves and integrates to the new model. We will offer technical and educational training to expedite the move toward the “CS Tier Installations.”

The Company has focused its efforts on both customer education and outreach via bill inserts, fact sheets, and targeted mailings to high users in summer months; contractors’ education and outreach via phone calls, mailings, one-on-one meetings, trainings on technical issues, usage of sizing software, and up-selling to high efficiency equipment; and working closely with contractors to encourage participation in the program and installing the air conditioning systems properly. The company will promote whenever possible utilizing manufacturer/distributor training infrastructure as a platform to further educate contractors and wholesalers. These opportunities will be in conjunction with gas programs when possible.

Although new central air conditioning equipment that is properly sized and operating is critical to the energy efficiency of the equipment, HVAC technicians do not, as a standard practice, perform all the needed calculations and tests. The Company has assisted technicians by providing hands-on training and technical support on third party verification of charge and airflow of systems. We have provided training on proper installation and set-up of Brushless Fan Motor (BFM) motors for the replacement of PSC motors. Technicians have also received training on duct work repair and sealing.

We are offering a Heat Pump Water Heater pilot in Massachusetts for 2010; and we plan on offering a pilot in RI. We will be able to use the combined data to establish whether Heat Pump Water Heaters are a viable technology for the northeast.

In 2010, the Company proposes to continue activities to educate customers and contractors, to promote installation quality, and to offer the third party verification of the results for central air conditioning tune-ups, including incentives for customers and contractors. We will continue to work closely with HEHE (Gas Networks) for cross promotion and other related activities, and to provide cost effective controls and integration whenever applicable. An example of integration and transformation will include joint marketing, training and outreach to groups of contractors at meetings and promotional events. Areas of cross training and integration will be accomplished in the areas of duct sealing and BFM motor installations. We plan on working across all areas of energy efficiency in a collaborative effort to promote all programs. We will also search for new emerging technologies and perform due diligence as they become commercially available.

## **5. Heat Pump Water Heaters Pilot**

### **Overview**

The company plans on offering a Heat Pump Water Heater pilot in RI to investigate the impact of new water heater models being released by three major suppliers in October 2009. The company plans on offering this pilot through a larger regional pilot program organized by NEEP. Under the current plan, the regional pilot program will include six installations in Rhode Island.

### **Eligible Population**

To be determined by NEEP.

### **Pilot Design**

Pilot will offer no cost or low cost (\$250) installations of heat pump water heaters in six Rhode Island homes. During the pilot the following points of interest will be monitored: flow rate, power consumed by the electric elements, power consumed by the heat pump, space temperature, humidity, and cycling times. Other data points may also be measured. The information gathered through this pilot will be used to determine if Heat Pump Water Heaters save energy and are a dependable appliance for RI consumers.

### **6. National Energy Education Development (NEED) Project**

As part of the Energy Efficiency Education Programs that National Grid offers, the Company will continue to offer the NEED Project. NEED is a nonprofit education association that works with thousands of schools nationwide to promote an energy conscious education. NEED is a strategic partner of Rebuild America and EnergySmart Schools, programs of the DOE. NEED creates networks of students, educators, business, government and community leaders to design and implement objective energy education programs.

The Rhode Island EnergySmart Schools program includes educational materials for kindergarten through high school, that provide comprehensive objective information about energy production and consumption, the major energy sources, and their impact on the environment, economy, and society.

Services offered include kits and curriculum for students, student/teacher training programs, workshops, and conferences, a summer camp program; as well as scholarships to national energy educational conferences, and youth awards.



**SUMMARY OF PROPOSED CHANGES TO THE  
COMMERCIAL & INDUSTRIAL PROGRAMS  
FOR 2010**

**Electric Programs**

Category	Large Commercial Retrofit (formerly Energy Initiative)	Commercial New Construction (formerly Design 2000 <i>plus</i> )
<b>General</b>	<ul style="list-style-type: none"> <li>• Gas and electric programs have been re-branded. The programs formerly called Energy Initiative, High Efficiency Heating Equipment and Commercial Energy Efficiency program are now called Large Commercial Retrofit.</li> </ul>	<ul style="list-style-type: none"> <li>• Gas and electric programs have been re-branded. The programs formerly called Design 2000plus, High Efficiency Heating Equipment and Commercial Energy Efficiency program are now called Commercial New Construction</li> <li>• We hope to develop an upstream incentive for distributors which will capture more savings from smaller, harder to reach new construction and major renovation projects. We are currently piloting a program with a lighting equipment distributor in Rhode Island.</li> </ul>
<b>Municipal</b>	<ul style="list-style-type: none"> <li>• On-bill financing is planned on continuing. Incentives will be reduced to the levels already in place for Large Commercial New Construction</li> </ul>	
<b>Lighting</b>	<ul style="list-style-type: none"> <li>• Prescriptive incentives for LED interior downlighting and vapor tight fluorescent parking lights were added midway through 2009</li> <li>• A prescriptive incentive will be added for reach-in cooler LED lighting</li> <li>• An approach will be developed that will help customers understand and take advantage of federal tax deductions.</li> </ul>	<ul style="list-style-type: none"> <li>• Prescriptive incentives for LED interior downlighting and vapor tight fluorescent parking lights were added midway through 2009</li> <li>• A prescriptive incentive will be added for reach-in cooler LED lighting</li> <li>• An approach will be developed that will help customers understand and take advantage of federal tax deductions.</li> </ul>
<b>Motors</b>	<ul style="list-style-type: none"> <li>• N/A – prescriptive rebates are not offered under Energy Initiative</li> </ul>	<ul style="list-style-type: none"> <li>• Still to be determined</li> </ul>
<b>HVAC</b>	<ul style="list-style-type: none"> <li>• Still to be determined</li> </ul>	<ul style="list-style-type: none"> <li>• Still to be determined. Possibly add a prescriptive incentive for turbo-core chiller technology.</li> </ul>

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d/b/a National Grid  
R.I.P.U.C. Docket No. 4116  
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<b>Category</b>	<b>Large Commercial Retrofit (formerly Energy Initiative)</b>	<b>Commercial New Construction (formerly Design 2000<i>plus</i>)</b>
<b>Compressed Air</b>	<ul style="list-style-type: none"> <li>• Changes to prescriptive incentives to be determined. Compressed air system assessment will be incorporated into the Industrial Initiative. See description under gas programs below</li> </ul>	<ul style="list-style-type: none"> <li>• Changes to prescriptive incentives to be determined. Compressed air system assessment will be incorporated into the Industrial Initiative. See description under gas programs below</li> </ul>
<b>Custom</b>	<ul style="list-style-type: none"> <li>• We will offer an Industrial Initiative targeted at process improvement.</li> <li>• Other changes to custom are still being discussed</li> </ul>	<ul style="list-style-type: none"> <li>• We will offer an Industrial Initiative targeted at process improvement</li> <li>• Other changes to custom are still being discussed</li> </ul>
<b>Advanced Buildings and Comprehensive Design Approach (CDA)</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• A revised “Core Performance” manual is under development.</li> </ul>

These proposed enhancements continue to reflect the Company’s objectives to improve the way buildings are designed, constructed and operated.

<b>Small Business Direct Installation Program</b>	The name of the program has been changed to the Small Business Direct Installation program. We intend on offering a “Customer Directed” option should the customer prefer to use their own installation contractors and equipment distributors. Also, gas measures will be installed as part of this service
<b>C&amp;I Loan Fund</b>	Tier 2 only will create a revolving loan fund for C&I programs.

## Gas Programs

<b>Commercial New Construction (formerly CEEP)</b>	<ul style="list-style-type: none"> <li>• An Industrial Initiative will be launched in 2010 under the company's existing Large Commercial Retrofit and Commercial New Construction programs. The initiative will be designed to incorporate measures like heat recovery and process improvements that bring energy savings. It will also incorporate the existing steam assessment and saving program. Non-gas/electric energy benefits or additional costs related to improvements will be quantified to the extent possible. Examples of additional benefits might be; raw material, scrap and increased thru-put</li> <li>• Prescriptive incentives will continue in 2010 for commercial kitchen equipment. <ul style="list-style-type: none"> <li>• Rebate for high efficiency commercial fryers and commercial steamers will be reduced from \$2,000 to \$1,000.</li> <li>• Convection ovens and high efficiency combination ovens <math>\geq 40\%</math> efficiency) at \$1,000 will be added.</li> <li>• Conveyor ovens (<math>\geq 40\%</math> efficient) and rack ovens (<math>\geq 50\%</math> efficiency) will be added at \$1,000 rebates.</li> <li>• Griddles will be added at \$500 rebates.</li> </ul> </li> </ul>	
<b>Large Commercial Retrofit Program (formerly the High Efficiency Heating Program)</b>  <b>The following changes are proposed for 2010:</b>	<b>Product</b>	<b>Change</b>
	Hydronic Boilers (under 300 MBtuh)	Incentive has been changed from \$700 (< 175MBtuh) and \$1,000 (175 to 300MBtuh) to \$750
	Condensing stand alone water Heater ( $>95\%$ TE, $>75,000$ but $<300,000$ BTUh)	Added to program at \$500 rebate
	Integrated water heater/condensing boiler (0.9 EF, 90% AFUE)	Added to program at \$1,600 rebate
	Integrated water heater/condensing boiler (0.86 EF, 85% AFUE)	Added to program at \$1,000 rebate

These proposed enhancements continue to reflect the Company's objectives to improve the way buildings are designed, constructed and operated.



## 2010 COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY PROGRAMS AND INITIATIVES

The proposed electric and natural gas energy efficiency programs for commercial and industrial (“C&I”) customers described herein reflect the Company’s plans to offer integrated energy efficiency solutions to its commercial and industrial C&I customers. The depth of the programs will significantly expand for 2010. We continue to focus on two objectives: 1) ensuring that the programs are capable of ramping up energy savings in order to address the goal of least cost procurement and 2) proactively looking for all cost effective gas and electric energy saving opportunities in a customer’s facility. We have added features that will ensure deeper and broader treatment of all energy saving opportunities while providing customers an experience that will enhance their ability to maximize energy savings in their business through efficient and flexible energy efficiency services provided by the company.

**Increasing Savings Targets.** Least cost procurement in Rhode Island is a great opportunity to expand and accelerate energy efficiency programs in Rhode Island. While the programs as they are currently structured will meet some increased demand, the Company will enhance the programs in 2010 to increase the programs’ appeal and penetration. Some of these enhancements are:

- Gas and electric programs are now fully integrated, being brought under one portfolio of commercial, municipal and industrial programs to provide customers with a more seamless experience as they examine energy efficiency opportunities from both better performing electric and gas equipment and systems. Formerly the company had separate programs for gas and electric customers to include: Commercial Energy Efficiency Program (gas), High Efficiency Heating Program (gas), Energy Initiative (electric), Design 2000*plus* (electric) and Small Business Services (electric). By organizing these programs and services under Large Commercial Retrofit, Commercial New Construction and Small Business Direct

Installation programs, we anticipate being able to provide more efficient, flexible and comprehensive treatment for customers that builds on one solution for incorporating their energy efficiency goals and objectives in their operations. There are still two integration issues that will be resolved over the next year. First, an integrated gas and electric screening model will need to be released; for now gas and electric program elements will be screened separately. Second, the gas programs (formerly CEEP and HEHE) will appear as two budget line items in 2010 to conform to existing accounting. Budgets for the former electric energy efficiency programs will still appear under their original names: Energy Initiative, Design 2000plus and Small Business Services. These issues will not affect the customer's overall experience with the programs.

- An Industrial Initiative will be launched in 2010 under the company's gas and electric energy efficiency programs. The program is aimed at treating industrial energy savings opportunities comprehensively and quantifying all costs and savings streams possible. The initiative will target heat recovery, process improvements, steam assessment and savings as well as other industrial application measures that will provide significant energy savings from this industrial sector. Non-gas/electric energy benefits or additional costs related to improvements will be quantified to the extent possible. Examples of additional benefits might be; raw material, scrap and increased thru-put. While this is not really a program change, we plan to target industrial opportunities more aggressively and quantify the non-energy benefits of EE measures compared to the past. In addition customers will be educated about these benefits.
- The Industrial Initiative is an example of a segmented approach to certain customer types. Other segments we are addressing include schools, commercial laboratories, data centers and economically challenged areas.
- New technologies will be addressed that offer enhanced potential for energy savings as well as support for furthering market transformation. In addition LED lighting, advance whole building controls, plug load controls, condensing water heaters and

additional kitchen equipment will be offered to customers to expand their achievable energy savings potential.

- The company will develop an initiative that targets commercial offices at the time a space is leased and fitted out to a new tenant. This is a market sector that traditionally has been a challenge to transform. However with a new targeted approach we believe we will be able to maximize energy efficiency addressed by this initiative through the application of advanced lighting design, controls, re-commissioning of key HVAC system elements and working closely with tenants and owners.
- A combined gas and electric cost effectiveness screening tool will be developed that will aid in assessing energy efficiency opportunities in equipment and systems that save both gas and electric energy. This will be important for both industrial systems as well as HVAC.
- The Small Business Direct Installation program will now be expanded to create more depth and appeal for customers by installing a number gas measures appropriate for retrofit applications.
- The Company will explore more opportunities to work with distributors through incentives applied “upstream” to manufacturers and distributors so that energy efficient equipment is stocked. This ensures that energy efficient equipment is available for smaller unplanned projects where the smaller quantities are involved and projects occur on a shorter schedule.

**1. Commercial New Construction (formerly Design 2000*plus*, Commercial Energy Efficiency Program and High Efficiency Heating Program)**

**Overview**

The Commercial New Construction program encourages energy efficiency in new construction, renovations, remodeling, planned replacement of aging equipment and replacement of failed equipment through financial incentives and technical assistance to developers, manufacturers, vendors, customers and design professionals. Financial incentives reduce the incremental cost barrier to investing in efficiency. Technical assistance reduces barriers to more efficient design by providing education and information to participants in the use of energy-efficient engineering practices, including identifying and analyzing potential efficiency opportunities. This program is the integration of what was formerly called Design 2000*plus* (electric), Commercial Energy Efficiency program (gas) and High Efficiency Heating Equipment (gas) program that serve time dependent opportunities to provide a seamless experience to customers.

Newly constructed buildings in particular offer the greatest opportunity to explore comprehensive gas and electric energy efficiency options, as these projects need to purchase all new equipment. However, even within existing buildings, the program is able to address multiple measures across energy types, including combined heat and power systems as part of a single project. The new Industrial Initiative will ensure that we are also treating opportunities in manufacturing processes comprehensively as well This will be discussed in more detail later.

### **Eligible Population**

The Commercial New Construction program is available to all non-residential customers. It is available for new construction and remodeling projects such as a new building, expansion or renovation of an existing building, change in the use or function of the building space, new equipment or systems for a new process or expanded operation, replacement of failed equipment, or planned replacement of equipment or systems.

### **Program Design**

Commercial New Construction provides technical consulting to identify better practices in the design and construction of new and renovated facilities and incentives for the installation of many different mechanical, electrical and thermal energy efficient equipment and systems. Energy efficiency measures which are eligible for incentives include premium efficiency lighting and controls, motors, variable speed drives, heating, ventilating and air conditioning systems (HVAC), efficient boiler and domestic hot water systems, heat recovery systems, digital energy management systems, process efficiency improvement projects, refrigeration, compressed air, combined heat and power, or any other qualifying efficiency improvement.

#### Incentives

There are three specific types of incentives. (1) Prescriptive incentives are standardized in terms of incentive level and minimum efficiency criteria, and address specific equipment measures addressing lighting, motors, DHW (gas), compressed air, and HVAC. Incentives for high efficiency alternative equipment and systems are offered to customers on a per unit basis. (2) Custom incentives are offered for any qualifying cost-effective efficiency opportunity, based on the unique energy savings and cost criteria of a project. (3) Comprehensive incentives are based upon evaluation of the whole building and the benefits that come from examining an integrated engineering approach. The latter are primarily, but not solely, applicable to new construction and major renovation among large (>75,000 sq. ft.) buildings.

The structure of incentives for electric and gas measures varies. However, all projects will be presented to customers as a single package of measures with a single incentive offer, simplifying the process for customers. The differing incentive structures are explained in the following.

#### Electric incentives

In general, incentives for electric energy saving opportunities are designed either to cover 60 to 75% of the incremental cost between standard and premium efficiency equipment and systems or to buy down the cost of equipment to the customer to a one and a half year

payback, whichever is less. For Comprehensive Design Approach and Comprehensive Chiller projects (described below), incentives cover up to 80% of the incremental cost or buy the cost of the equipment and systems down to a one year payback, whichever is less. Core Performance is a comprehensive track under Commercial New Construction but for smaller buildings. Core performance is described later in this section.

Most incentives will be unchanged in 2010. Attachment 3 details specific changes to measure incentives. The Company will continue to offer upstream incentives to design professionals which will be designed to foster more comprehensive projects sooner in the design process. The Company will work with distributors through an upstream incentive aimed at ensuring that smaller new construction projects have access to eligible energy efficiency equipment. We expect to start with an effort to work with lighting equipment distributors.

#### Gas Incentives

Prescriptive incentives are available to institutional, hospitality and restaurants for high efficient gas steamers, gas fryers and convection ovens. These offerings may be expanded as new technologies are identified.

Custom incentives will be limited to no more than 50% of the eligible installed project costs, and the Company's contribution will be capped at \$100,000 per site and/or project, up to \$250,000 for new construction comprehensive and up to \$150,000 per eligible CHP project.

Custom Incentives for most gas efficiency projects are based on \$1.50 per first year of estimated therm savings. Examples of custom gas energy saving projects are redesigns of HVAC systems, energy recovery ventilation, moist heat recovery applications, building automation/energy management systems, and advanced technology burners and/or burner controls.

Solar heating technologies will receive incentives based on \$3.00 per first year of estimated therm savings. Few applications are expected to reach this threshold. In 2010 the Company will build upon its experiences in other jurisdictions and offer customers the opportunity to incorporate solar thermal technologies such as solar DHW heating, solar pool heating, and solar space heating into the program. Incentives may not be applied toward normal maintenance costs and must offset existing or potential gas usage.

There are also prescriptive incentives for natural gas fired, low intensity infrared heaters, high efficiency condensing unit heaters and direct fired make-up air systems that are appropriate for the larger commercial and industrial segments. Boiler incentives will be available both for high-efficiency non-condensing boilers and high-efficiency fully condensing boilers.

In some cases, a particular measure may save both gas and electric energy (e.g. demand control ventilation). For these cases, the Company will pay no more than 100% of the incremental cost of the measure.

### Marketing

The Company markets the Commercial New Construction program through extensive personal communication by account managers with customers, vendors, contractors, design professionals, seminars, training sessions and other direct marketing approaches. For 2010 the Company will continue to build on this marketing effort by implementing a broader communications plan to customers to underscore the value of implementing energy efficiency solutions in their facilities to control their electricity costs and reduce their building operating costs. It is anticipated that circuit riders will be called on to actively educate and train large segments of these trade ally groups to ensure higher levels of participation and savings. The ceiling for achieving greater results has been raised and the

necessity of increasing the number of trade allies through increased direct contact will be critical to success. Development of these approaches coupled with direct mail and response campaigns will be part of the overall communications and outreach initiatives planned for 2010.

In 2010, the Company will also be targeting specific customer segments and building types that might have both unique needs and significant opportunity to reduce energy consumption. With greater need for improved processing of information, it is expected that data centers furnishing this information will offer chances to reduce energy use through improved ventilation and cooling. The Company has already established a program that targets laboratories and hopes to have an initiative in place during 2010 that serves data centers. We will add to these target markets as new programs and initiatives are identified.

The proposed changes to the Commercial New Construction program for 2010 are summarized in Attachment 3.

A. Technical Assistance Services Initiatives

For new construction and major renovation, the earlier in the design process the Company becomes involved, the more likely it is that a comprehensive solution will be possible. For example, if the customer begins participation in the Commercial New Construction program before making final design decisions, one advantage comes from investigating reduced cooling requirements through improved lighting systems design. This improvement may lead to selecting smaller HVAC equipment and contributing to greater efficiency and lower building operating costs. Once the Company identifies an appropriate Commercial New Construction project, the Company offers technical assistance services, integrated with the customer's design team if they have one.

The Company will focus on developing a marketing and outreach plan as previously discussed in order to significantly increase our penetration of the new construction and equipment replacement market. It is expected that aside from direct account management contact that a host of media approaches including direct advertising and solicitations will be used to stimulate even more activity and participation by a larger cross section of commercial and municipal customers.

These technical assistance services evaluations cover all gas and electric opportunities that support best practices in building design and consider energy efficient measure identification, equipment metering or monitoring, improved technical design solutions, customer presentations, and design and construction assistance. Technical assistance provides customers and their design professionals, if any, with detailed engineering studies that identify alternative energy systems that support lower operating costs in the buildings and the operational benefits that come from this selection. The costs of these energy efficiency studies are usually shared 50% with customers. Technical assistance (TA) is available for all customers. While the focus is often early engagement with customers and their design teams for new construction and major renovation, TA studies are also done for customers with existing buildings that focus on specific equipment or systems.

To ensure that energy savings features are installed and operated as designed, the Company provides a commissioning service. This service is an independent third party verification that complex building systems, such as HVAC projects involving energy management systems or other controls, are operating as designed.

In some circumstances customers may wish to use their own engineer in lieu of a TA vendor supplied by the Company. In these cases, these companies must adhere to the same standards and criteria for a technical analysis as engineers supplied by National Grid and their work will be reviewed and approved by the Company's technical support consultant.

The Commercial New Construction program provides free ballast recycling to customers installing energy efficient lighting. The purpose of this service is to ensure that all ballasts (some of which may contain polychlorinated biphenyls or PCBs) are disposed of in an environmentally sound manner.

The Company offers the Project Expediter service, which uses pre-qualified contractors to market efficiency services to customers, provides energy assessments of customers' facilities and arranges for the purchase and installation of energy efficient equipment. Under this service, Project Expeditors are authorized by the Company to analyze projects and offer customers incentives without Company pre-approval. Project Expeditors are firms that have proven to the Company they do quality work, understand Company programs, and make accurate offers and promises to customers. The Company maintains lists of qualified Project Expeditors and refers customers as appropriate, as well as provides a list on its website. These firms are selected through a competitive bidding process.

As with most of the other services listed here, Project Expediter is available for both the Commercial New Construction and Large Commercial Retrofit program (described below). Usually, these installations are retrofits, however, and therefore qualify under Energy Initiative.

The Company's Key Account Executives, Energy Efficiency Consultants and Technical Representatives will assist customer in identifying opportunities. In addition, a vendor is available to provide scoping studies to help identify gas savings opportunities at no charge. This service, referred to as "Energy Assessment/Custom Assessment" is provided to customers interested in evaluating energy efficiency measures but who require assistance estimating savings and incentive levels. If these assessments determine that a more detailed

analysis is needed, this will be done through the Technical Assistance program described previously.

B. Best Practices Initiatives

a. Advanced Buildings, LEED and Sustainable Design

The Company is supporting Core Performance developed by the New Buildings Institute (NBI) in cooperation with US EPA, ASHRAE, the US Green Buildings Council and the National Building Operators and Managers Association. Core Performance is a suite of technical resources and design guides that help design professionals create commercial buildings that are energy efficient and provide a healthy work environment for occupants. Core Performance complements the Comprehensive Design Approach with a special emphasis on smaller buildings. Core Performance also serves to promote better commercial design practices such that advancements in the Rhode Island building code can be implemented at an accelerated rate. The Company has played a lead role nationally in the development and refinement of Advance Buildings along with other stakeholders and utilities.

Core Performance uses a prescriptive approach to new building design elements aimed at achieving energy savings that are at least 20% better than the Rhode Island state energy code.

For 2010, the Company will continue to build on the success of the Core Performance we have been promoting for four years in Rhode Island to address the gas and electric efficiency needs of new construction projects for commercial buildings less than 75,000 sq. ft. National Grid launched this effort in 2006 in Rhode Island with several training programs on the topic. Numerous projects have been designed in the state using Core Performance and we expect the number to grow as architects and their clients realize that buildings designed this way are practical and cost effective.

The program will continue to be expanded in 2010 to reach more projects and more design firms with additional staff and through further training and promotional efforts. Also, National Grid continues to work closely with the New Buildings Institute, the national organization that manages and promotes and maintains Advanced Buildings across the country to continually add powerful new features to the program that will increase its appeal and market penetration. New for 2010 is a revised Advanced Lighting Design Guide that complements Core Performance.

National Grid will support customers with designs that incorporate the U.S. Green Building Council's "Leadership in Energy and Environmental Design (LEED) Green Building Rating System™" in their new construction projects using our staff LEED Accredited professionals. For many this will include providing a basic understanding of LEED requirements and guiding them through the process of assembling a qualified design team. Beyond this we will guide customers to the best path for achieving LEED points for Energy and Atmosphere, by providing technical support along with financial incentives.

The Company will implement a major outreach effort to architects and other trade allies in its marketing plan under development. This will be necessary to ramp up penetration of Core Performance into the new construction market. This outreach will include relying on both in-house and outsourced professionals calling on architectural and engineering firms directly as well as providing support materials that identify the value of better performing buildings and the practices necessary to achieve these cost reduction results.

b. Trade Ally Training Initiative

Energy efficiency awareness by the Company's trade allies is crucial to reducing barriers to energy efficiency and increasing acceptance of new technologies. Marketing activities to this segment will be a critical piece of the Company's promotion efforts.

The Company will support and undertake a wide range of training events in collaboration with GasNetworks<sup>1</sup>, the ENERGY STAR® Homes Joint Management Committee, Northeast Energy Efficiency Partnerships (NEEP), RI Chapter of the US Green Building Council, manufacturing training representatives and other trade allies as well as regular visits by company personnel to area distributors. Outreach will extend to contractors, engineers, builders, landlords, realtors, facility managers and housing authorities.

Training activities will be promoted via Company newsletters and direct mail campaigns to contractors, in addition to meeting with trade allies at public events. The GasNetworks website ([www.gasnetworks.com](http://www.gasnetworks.com)) will also be used as a vehicle for promotion, offering trade allies a central source of information on special event training efforts, in addition to joint energy efficiency programs.

The budget for the Trade Ally Training Initiatives will be included within each program's budget

c. Industrial Initiative

An Industrial Initiative will be launched in 2010. Opportunities found through this initiative may be served under the Commercial New Construction or Large Commercial

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<sup>1</sup> GasNetworks is a regional collaborative of natural gas distribution companies that coordinate natural gas energy efficiency programs throughout Rhode Island, Maine, Massachusetts, and New Hampshire. The benefit of GasNetworks membership is that it allows each participating company to offer regional programs at a lower overall cost to its customers. The GasNetworks programs have received several national awards from the American Council for an Energy Efficient Economy as exemplary examples of natural gas energy efficiency programs.

Retrofit programs. This initiative is discussed in more detail under the Large Commercial Retrofit program description.

d. Comprehensive Chiller Initiative

The Commercial New Construction program also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may optimize the performance of their existing older building systems, such as retrofitting existing lighting systems, while receiving technical guidance and recommendations regarding the proper size and efficiency for a replacement chiller plant. This program component, called the Comprehensive Chiller Initiative, also helps to reduce peak summer generation demand.

e. Commercial / Industrial Economic Development Initiatives

**Stimulating Business Growth in Rhode Island**

The Commercial New Construction program offers a significant opportunity for economic development in Rhode Island by helping businesses save on their electric costs while at the same time supporting them in their investments in new energy efficient equipment and system improvements to their facilities. To this end, for 2010 the Company will continue to work closely with various economic development groups in the state, including the Rhode Island Economic Development Corporation (RIEDC), to seek ways the Company may provide focused efficiency services. This effort builds on the relationships first established in 2005, and may create a more favorable climate for doing business in Rhode Island. In addition, this effort has afforded the opportunity to coordinate with the gas Economic Development effort. Businesses moving to Rhode Island and businesses that might be expanding, for example, are referred to the Company by the RIEDC.

The Company will explain its energy efficiency programs and offer to provide technical assistance and other services.

Another economic development initiative the Company started in 2009 is to help expand the capability of businesses that serve the energy efficiency industry in Rhode Island. This will be necessary in order to meet ever increasing demand for our energy efficiency programs. The Company has partnered with New England Technical Institute, the RI Chapter of the US Green Buildings Council and others to develop a green workforce development plan for Rhode Island under the Governor's work force development effort.

This is an effort that will look at the energy efficiency services industry serving both residential and commercial/industrial customers. This workforce development effort will:

- Identify commercial and residential companies, agencies and not-for-profit organizations that are actively performing energy efficiency services in Rhode Island.
- Provide an estimate of additional companies, agencies and not-for-profit organizations that are in industry categories that could potentially perform energy efficiency services in Rhode Island.
- Estimate the size and composition of Rhode Island's commercial and residential "energy efficiency workforce" (based on returned employer surveys).

- Identify specific job titles/professions which employers report are "in demand" and a shortage of which might serve as a barrier to Rhode Island's efforts to achieve energy efficiency objectives.
  
- Provide recommendations to utilities, energy efficiency companies, state agencies and the state's education/job training system re: meeting identified workforce needs.

### **Economic Redevelopment Program for Communities**

The Economic Redevelopment Program for Communities is designed to improve energy efficiency and reduce energy costs while also helping to foster the rehabilitation of buildings, storefronts and neighborhoods in areas that are in need. Additionally, the program can provide financial incentives and resources to help community based organizations and non-profits increase the energy efficiency of their facilities and reduce their operating costs. Through the program, the Company will work with Chambers of Commerce, economic redevelopment organizations, non-profit organizations, as well as private development corporations and businesses to facilitate the installation of eligible building shell and other measures that increase the energy efficiency of business districts, K-12 public school systems, and public and private subsidized housing. One of the program's objectives is to leverage energy efficiency funds with other investments that are being made for community development purposes.

Funding through the Economic Redevelopment Program for Communities will focus on projects that demonstrate a strong community impact. A project has a strong community impact when it provides for site rehabilitation, creates jobs, provides housing solutions or is integral in providing community based programs.

The program will be open to all Company multifamily, commercial and industrial customers that meet the program's intent. Incentives for all cost effective gas and electric energy efficiency measures will be provided through the Commercial New Construction, Large Commercial Retrofit and Small Business Direct Installation programs. Recognizing the need to save on heating energy use and depending on the comprehensiveness of gas energy efficiency projects, incentives offered for gas measures may be as high as \$3.00 per annual therm saved (vs. \$1.50 for typical C&I gas measures). For gas measures, maximum funding per project will still be \$100,000, with a minimum of 50% matching funds required by the customer. Applications for funding must include a description of the redevelopment project, information on the sponsoring organization, identification of additional funding sources, types of energy conserving measures to be installed, estimated energy savings and project schedule. Each application for funding will be evaluated and an analysis will be performed to identify cost-effective opportunities for reducing a customer's energy usage. The analysis performed will lead to a report summary of recommendations and a detailed description of the alternatives evaluated, including: total installation costs, annual energy costs, annual savings and simple payback periods.

C. Market Transformation Initiatives

The Commercial New Construction program has a large market transformation component that supports the program toward better performance. By familiarizing the large commercial and industrial segment with higher energy efficiency standards, the Commercial New Construction program creates new efficiency standards for construction. The Company actively supports regional and national market transformation programs designed to transform markets for a broad range of energy efficient equipment and services. These activities are discussed below.

a. *Regional Energy Efficient Motors and Unitary HVAC initiatives*

As a feature of the Commercial New Construction program, the Company has supported the MotorUp premium efficiency motor initiative since 1998, a regional market transformation initiative that promotes motor management of high efficiency motors and quality repair of motors to maintain high efficiency. In the past, the MotorUp program was delivered through a joint effort by participating utilities and energy efficiency agencies in New England, New York and New Jersey through the Northeast Energy Efficiency Partnerships. This extended regional group has decided to end the joint delivery of MotorUp. In its place for 2007, a Motors program was developed by a group that encompasses a smaller region consisting of Massachusetts and Rhode Island utilities. The regional program also called MotorUp has continued to offer consistent equipment efficiency requirements for qualifying “NEMA Premium” motors. Uniform rebates and application forms are used throughout the region. For 2010, Massachusetts and Rhode Island utilities will continue to coordinate the use of a contracted circuit rider to provide outreach to motor dealers, trade allies, vendors and distributors. Since 2003, the regional initiative has provided instant rebates at motor dealer sites through participation in MotorUp. The Company expects to continue with this approach in 2010. Additionally, the Company is continuing an effort that was initiated in 2006 and expanded in 2007 for smaller businesses, through the vendors that provide Project Expeditor services, to transform their purchasing practices through motor management best practices, to include larger C&I customers. The Company will work with the customer to facilitate audits of their motor inventory and to develop a motor management plan and purchasing policy to optimize energy efficiency by replacing new or failed motors with a NEMA Premium™ motor.

The Company has participated in Cool Choice since 1999, a regional program that focuses on promoting the installation of energy efficient unitary HVAC equipment through Commercial New Construction. In 2007, the Company (as well as other regional sponsors) decided to withdraw from Cool Choice. Since then, the Company has coordinated with utilities in Massachusetts in their effort to operate a joint state-wide program, sharing a

rebate worksheet form, a single circuit rider, and a 1-800 information line, similar to what is described above for motors. The program features consistent efficiency rebate levels revised to follow CEE's new Tier 2 specifications for >5.4 Ton to <63 Ton units. Incentives are also offered for dual enthalpy economizer controls, demand control ventilation and electronically commutated motors (ECM fan motors) in packaged air conditioners and gas furnaces. The rebates are expected to remain unchanged in 2010.

The budgets for these initiatives are included in the overall Commercial New Construction program budget.

b. High Performance Commercial Lighting Design / DesignLights™ Consortium

In an attempt to continue to promote high quality, high performance lighting with commercial and industrial customers the Company will utilize a series of specialized tools, under development by the USDOE Commercial Lighting Design initiative. For 2010 the Company will continue to provide additional outreach on the benefits of high quality lighting design to various lighting equipment vendors throughout Rhode Island. The Company proposes to accomplish this through visits, workshops and breakfast meetings with these vendors and with lighting specifiers. These meetings will be educational but also provide an opportunity for these market players to promote high quality, energy efficient lighting that qualifies for rebates to their customers. As part of this outreach, the Company will also promote best design practices under development by the Advanced Energy Office collaboration and design tools being developed by the USDOE's Commercial Lighting Initiative. Office of the Future is targeted at opportunities that arise at the time leased office space is fitted out for a new tenant. In addition to lighting, plug load controls, advanced energy management controls and retro-commissioning of HVAC distribution systems will be promoted. Standard incentives for new equipment will apply.

In 2010, the Company will continue to seek out and promote emerging technologies for energy efficient lighting technologies. For example, the Company is following advances in LED lighting technology and is already granting rebates for LED lighting in grocery store refrigeration units. As more of this technology emerges, the Company will promote this to customers.

The company has been offering a “performance lighting” option which offers an incentive based on the ability of a project to achieve lighting power densities (watts per sq. ft.) more efficient than what’s required by the Rhode Island State Energy Code. This option targets architects, building design engineers and lighting equipment suppliers who have to ensure that installed lighting meets the code. Performance lighting achieves two things: 1. makes the practitioner more aware of lighting power density requirements in the code and 2. Introduces them to technologies and design that will help their project deliver a lighting power density 15% or more less than code. The Company will continue to offer “performance lighting” option in 2010 but expand its penetration in the new construction market by offering expanded technical assistance and outreach to lighting practitioners.

The Company is very active in USDOE/EPA’s Energy Star Solid State Lighting (LED) Initiative. In addition, through the DesignLights™ Consortium, the company is working with other energy efficiency program administrators across the region to identify and list LED lighting products that meet Energy Star requirements.

c. High Performance Schools

The Company proposes to continue offering a special initiative targeted to public schools through the Commercial New Construction program. While Commercial New Construction has been effective in reaching public schools, a majority of schools have not participated due to a broad range of market barriers including limited funding and competitive bidding requirements. This program's intent is to help schools minimize the hurdles posed by these

market barriers during a time when Rhode Island is seeing an unprecedented level of investment in new and renovated schools.

The Company proposes to fund the full cost for technical assistance studies for new construction or renovation under Commercial New Construction. All qualifying cost-effective electric and gas energy saving measures would be addressed through comprehensive treatment. It is anticipated that most projects will involve lighting. A key requirement for this initiative is that projects follow the Comprehensive Design Approach (CDA) track which entails an interactive analysis of proposed measures utilizing whole building simulation tools and that the building is at least 20% more efficient than code. As an alternative to CDA, smaller school projects may follow the New Buildings Institute Core Performance standards described previously.

The Company will also continue to participate in the Rhode Island High Performance Schools working group. Its mission is to promote “green” schools design elements to districts considering new schools and to the design community that serves Rhode Island. A circuit rider, funded through a grant from the Henry P. Kendall Foundation and the Company, will work with prospective districts that are considering a high performance school.

The RI Department of Education (RIDE) has a major “asset protection” effort underway that ensures that schools are maintaining equipment that was funded through state housing aid. Building Operator Certification Training and Whole Building Assessment, discussed in the next section, are two examples of where we will help RIDE.

Funding for this initiative is included in the overall Design2000*plus* program budget.

d. *Building Codes and State Standards*

The Parties agree to support work at national and local levels to develop codes and standards that continue to upgrade building energy efficiency. In cooperation with the codes community, including the Building Code Commission, the Company will work with this and other agencies to offer continued improvement on proposed building codes and standards that lead to the future revisions of the Rhode Island State Building Code. This will address cost-effective electric and gas revisions to the code.

Continually refining these codes and standards, which complement existing programs such as Commercial New Construction and Large Commercial Retrofit, has a significant impact on institutionalizing progress made through utility programs. Therefore, this initiative focuses on (1) working with national code development organizations such as ASHRAE to upgrade building efficiency codes and (2) working at the local level with Rhode Island and other states in the development of state efficiency codes and standards. The Company will offer support to this effort which will be coordinated primarily through the Northeast Energy Efficiency Partnerships (NEEP) and the New Buildings Institute (NBI), organizations with the goal of assisting states and others with the development of codes and standards that are practical and enforceable. For instance, in 2007 Rhode Island upgraded its state energy code to the “2006 International Energy Conservation Code” (IECC-2006) with amendments drafted by NBI. The Company will continue to pursue additional upgrades to the present code through NBI. Part of this effort includes facilitating and supporting the training and education efforts for code enforcers, designers and builders.

e. *Federal Standards*

Ultimately, markets are transformed towards higher efficiency when newer efficient equipment supplants older inefficient equipment to an extent that the latter is either no longer produced, becomes unattractive to end users or is excluded from the marketplace as the result of various standard-setting processes. Some of these standard-setting processes

are industry-driven and voluntary; others produce mandatory codes or standards promulgated by federal or state governments.

The Company agrees to actively track and participate in USDOE's standard-setting process for electric and gas equipment standards. USDOE's standard-setting process involves multiple stakeholder workshops and a public hearing for each standard. These workshops typically seek input on all aspects of the standard-setting process. By participating in these workshops and using our experience with energy efficient equipment, the Company feels it will be able to most effectively communicate its support for appropriate standards.

As Federal standards are raised, participation requirements for Commercial New Construction and Large Commercial Retrofit will be elevated accordingly, pulling the market toward successively higher efficiency strata. The Company believes that active participation in the elevation of energy efficiency standards is an integral part of any transition strategy in respect to ratepayer funded market transformation initiatives.

Associated costs for this initiative are included in the Commercial New Construction program budget.

f. Combined Heat and Power

The Company has been promoting CHP in RI for a number of years through its gas division. Incentives have been based on \$/therm saved, based on the overall primary btu energy savings assuming gas-fired central power plants on the NE ISO grid are being offset by the CHP electric output. The Company has also been tracking the gas btu savings as if it were direct savings to its system under this approach. Further, some project and total spending caps have been in place. This is both because the gas program funding has been limited, and also because the Advanced Gas Technology (AGT) program promotes larger CHP systems with separate financial incentives. By leveraging this effort, the Company has generally focused on either supplementing these incentives or targeting smaller systems on

the order of less than a MW. All CHP projects are currently screened under the Company's benefit/cost model.

2010 will represent a transition year for CHP. While the program offering starting January 2010 will continue the practices discussed above, the Company, EERMC and its Consultants, and other parties will work during 2010 as a continuation of the "CHP Task Force" to substantially modify the CHP effort. This process will begin after this filing and, depending on timing, some changes may go into effect in early 2010, while others may not be completed until the beginning of 2011. The CHP Task Force will consider all aspects of the CHP initiative including but not limited to: program design, monitoring and verification, free ridership, funding and leveraging of non-ratepayer funds, data tracking, efficiency criteria, and program eligibility. Some specific priority areas the CHP Task Force will address are:

- **Funding allocations.** Based on a traditional view of DSM, CHP is fundamentally an electric efficiency fuel switching measure. CHP typically results in a large electric savings on the Company's system, while increasing the net retail sales on the gas system. In addition, the electric program funds are much larger than the gas funds. Further, legislation calls for investment of all cost-effective electric efficiency including CHP. The CHP Task Force will consider issues related to funding allocations, including whether electric ratepayers should contribute some or all of costs of CHP promotion.
- **Eligible measures.** The Task Force will consider the availability and cost-effectiveness of residential CHP systems, as well as C&I small packaged and large custom systems. It will also consider program funding abilities, the opportunities to leverage funds from the AGT program, as well as other sources. Based on this review, additional products or eligibility criteria may be developed. Special attention will be paid to issues such as monitoring and verification of system performance, and the sufficiency of funding levels to ensure low free ridership among very large CHP systems. The Task Force will also consider the limits of promoting cost-effective on-

site generation, if any, from equipment or situations that diverge from traditional CHP. For example, CHP fired by other fuels, customers producing greater than 100% of their electric needs, cost-effective alternative fuel generation units that do not provide thermal benefits, merchant systems designed for sale directly to the power grid, etc.

- **Cost-effectiveness.** Currently, CHP measures are screened considering net natural gas usage and net electric energy usage. This approach supports traditional RI DSM analysis guidelines, in that adopted electric avoided costs are used to value electric impacts. The Task Force will further investigate this methodology and determine if it needs changes. The framework for screening will also serve as guidelines for other fuel switching measures.
- **Data Tracking.** The Task Force will work to treat CHP on an equal footing with all other efficiency measures in the Company's programs, properly reflecting the actual estimated net impacts of gas and electric sales at the customer's meter from adoption of a CHP measure. This may or may not impact future goals and rather than modify 2010's agreed upon goals, performance incentives, and other related numbers, the Company will continue to evaluate CHP projects for 2010 using its current methodology.
- **Incentives.** The Task Force will review and modify the existing incentive structure, as well as project and total spending caps. This will likely include recognizing CHP as an electric efficiency measure and the mandate for the Company to pursue all cost-effective electric efficiency measures. For 2010, the CHP program will be offered as described below, consistent with the historic offering and that for which the CHP market is currently accustomed and expecting in 2010. The Task Force will also address the timing and communication of any changes to the CHP initiatives to these market actors, to ensure an orderly transition.

The Company will offer a modified custom incentive for eligible CHP installations. Under this application, CHP systems will receive incentives based upon \$0.75 per first year of

estimated therm savings with a project cap of \$100,000. Higher efficiency CHP systems will receive an incentive of \$1.50 per first year of estimated therm savings with a project cap of \$150,000.

In 2008, a CHP Task Force made up of outside parties and the Company was convened to develop eligibility criteria for CHP projects.

In order to qualify for Tier 1, the project must meet the following requirements:

- The project must be cost effective
- The project must lead to improvements in energy efficiency or reduction in energy consumption in comparison to a typical facility using New England grid power and an average new boiler (this requirement will be implemented when more data becomes available from studies on the regional power grid that will be published later this year.)
- The system must be designed to demonstrate that a minimum of 10% of the thermal energy output is utilized in an effective manner and optimized to increase the efficiency beyond what it would be under a standard design with separate heating system and electric utility distribution.

In order for a project to qualify for Tier 2, Tier 1 requirements must be met in addition to the following:<sup>2</sup>

- Sum of all usable thermal energy products must constitute at least 20% of the technology's total usable energy output
- Sum of all usable electric energy must constitute at least 20% of the technology's total usable energy output.

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<sup>2</sup> From: USCHPA and ACEEE, Proposed Legislation for Combined Heat and Power: Introduction and Legislative Language.

- The project must be an application of technologies that achieve an average annual fuel conversion efficiency meeting or exceeding the following levels:
  - For systems with a total usable energy output of less than 1 MWt+e (thermal plus electric) per hour, an efficiency of 60%
  - For systems with a total usable energy output of 1 MWt+e, but less than 100 MWt+e, and efficiency of 63%
  - For systems with a total usable energy output of 100 MWt+e or greater, an efficiency of 66%

The company will spend no more than \$300,000 per year in incentives for all CHP projects in Rhode Island.

## **2. Large Commercial Retrofit Program (formerly Energy Initiative, Commercial Energy Efficiency Program and High Efficiency Heating Program)**

### **Overview**

The Large Commercial Retrofit Program encourages the replacement of existing equipment and systems with energy efficient alternatives when the customer is not otherwise planning any investments in the equipment and systems (the Commercial New Construction program addresses planned investments in equipment). Its structure is very similar to the Commercial New Construction Program, offering financial incentives, technical assistance, and other technical assistance services such as commissioning, gas Energy Assessments, comprehensive chiller assistance, assessment of industrial process improvements, and ballast disposal.

### **Eligible Population**

The Large Commercial Retrofit program is available to all non-residential customers, although customers with demand below 200 kW are also eligible to participate in the Small Business Direct Installation program.

## **Program Design**

The large Commercial Retrofit program provides incentives in addition to technical solutions for the installation of many different types of energy efficient equipment and building systems including lighting, motors, gas burner controls, steam traps, energy management systems, programmable thermostats, variable speed drives, refrigeration, industrial process, compressed air, and process cooling. The Company's delivery of Large Commercial Retrofit is similar to its delivery of Commercial New Construction. Large Commercial Retrofit offers two types of incentives, prescriptive and custom. Prescriptive incentives are fixed and offered on a per unit basis. Custom incentives are based on the unique energy savings criteria of projects. There are differences in the way gas and electric incentives are defined as described herein.

### Electric incentives

Electric equipment incentives are based on average at 40% of the total installed cost (including labor and equipment) or at a level that buys the equipment down to a two-year payback to the customer, whichever is less.

### Gas Incentives

For the most part, many of the same incentives under Commercial New Construction apply to gas retrofit projects as well.

Custom incentives will be limited to no more than 50% of the eligible installed project costs, and the Company's contribution will be capped at \$100,000 per site and/or project and up to \$150,000 per eligible CHP project.

Custom Incentives for cost effective gas technologies will be based upon \$1.50 per first year of estimated therm savings. Examples of typical custom projects are redesigns of

HVAC systems, energy recovery ventilation, most heat recovery applications, building automation/energy management systems, and advanced technology burners and/or burner controls.

Solar heating technologies will receive incentives based upon \$3.00 per first year of estimated therm savings. Few applications are expected to reach this threshold. In 2010 the Company will build upon its experiences in other jurisdictions and offer customers the opportunity to incorporate solar thermal technologies such as solar DHW heating, solar pool heating, and solar space heating into the program. Incentives may not be applied toward normal maintenance costs and must offset existing or potential gas usage.

In some cases, a particular measure may save both gas and electric energy (e.g. demand control ventilation). For these cases, the Company will pay no more than 100% of the total cost of the measure.

As stated under Commercial New Construction, the Company will look at targeting opportunities for specific market segments and building types. The Company will implement programs targeting opportunities in laboratories and data centers where there is potential to achieve significant energy savings.

The Office of Energy Resources (RIOER) continues to promote an Energy Services Company (ESCO) initiative to encourage efficiency improvements in Rhode Island's state and municipal facilities. The Rhode Island Department of Education (RIDE) is also promoting this as a way to help cities and towns fund the balance of school improvements and new schools partially funded through state housing aid. The Company will continue to support the delivery of this service by coordinating its Large Commercial Retrofit program services (including incentives) with the ESCOs as they develop technical assessments for these customers. Incentives provided for gas and electric equipment will help the

municipality buy down their obligation to the ESCO. For 2010, the RIOER, RIDE and the Company will continue to help municipalities participate in this initiative.

The Company will continue an on-bill finance option for cities and towns. Through this finance option, customers are able to pay their balance for the cost of their work for up to 24 month period in equal monthly installments on their bill. This is similar to the on-bill financing and incentives provided by the Small Business Direct Installation program. Municipal facilities with an average monthly demand of 200 kW or less will still be treated under the Small/Medium Business program. The Company is exploring the potential to partner with outside lending institutions to support this intended on-bill payment option that enables municipalities to more easily manage their customer costs and achieve energy savings in their operations.

The proposed changes to Large Commercial Retrofit program for 2010 are shown in Attachment 3.

A. Services

Technical Assistance services are also available to participants in the Large Commercial Retrofit program. These Technical Assistance services include engineering evaluations of unique or complex process and system improvements for both gas and electric efficiency. Technical Assistance provides customers with detailed engineering studies that identify cost effective energy efficient improvements that can be made to building systems and industrial processes.

The Company's Key Account Executives, Energy Efficiency Consultants and Technical Representatives will assist customer in identifying opportunities. In addition, a vendor is available to provide scoping studies to help identify gas savings opportunities at no charge.

This service is provided to customers interested in evaluating energy efficiency measures but who require assistance estimating savings and incentive levels. If these assessments determine that a more detailed analysis is needed, this will be done through the Technical Assistance program described previously.

B. Best Practices Initiatives

Large Commercial Retrofit offers a significant opportunity for economic development in Rhode Island by helping businesses save on their electric costs while at the same time supporting them in their investments in new energy efficient equipment and system improvements to their facilities. To this end, for 2010 the Company intends to continue to work closely with various economic development groups in the state including the Rhode Island Economic Development Corporation in an attempt to provide focused efficiency services. This effort may lead to fostering a more favorable business climate in Rhode Island to retain businesses in the state. This effort is being coordinated closely with the Economic Development initiative offered under the gas energy efficiency programs.

The Company also will continue a public education campaign to promote energy efficiency, especially during peak periods. In 2009 the Company developed a comprehensive marketing campaign that includes new brochures and other informational literature. This material is used by vendors and account managers to market our services and programs. Some of this literature has originated from E Source and the American Council for an Energy Efficient Economy, organizations that feature the benefits to customers available from improving their energy use practices.

Industrial Initiative

An Industrial Initiative will be launched in 2010. The program is aimed at treating industrial energy savings opportunities comprehensively and quantifying all costs and savings streams possible. The initiative will incorporate measures like heat recovery and process

improvements that bring energy savings. It will also incorporate the Steam Assessment and Savings Initiative. Non-gas/electric energy benefits or additional costs related to improvements will be quantified to the extent possible. Examples of additional benefits might be; raw material, scrap and increased thru-put. Opportunities found through this program may be served under the Commercial New Construction or Large Commercial Retrofit program

C. Market Transformation Initiatives

Similar to Commercial New Construction, the Company's retrofit program includes a strong market transformation component to include the following activities.

a. Steam Assessment and Savings Initiative

Over 45% of all the fuel burned by U.S. manufacturers is consumed to raise steam. Steam is used to heat raw materials and treat semi-finished products. It is also a power source for equipment, as well as for building heat and electricity generation. Many of these facilities can recapture energy through the installation of more efficient steam equipment and processes. The Steam Assessment and Savings Initiative has been developed to help these facilities manage their utility expenses through capital improvements via incentives on high efficiency equipment as well as through proper maintenance "best practices" by providing incentives for steam system assessments and steam trap surveys.

b. Compressed Air Challenge

The Company will continue its active sponsorship of the national Compressed Air Challenge (CAC). The CAC is a broad based collaborative of government agencies, compressed air specialists, equipment manufacturers, end-use consumers and utilities whose objective is to promote the substantial energy savings improvements available by means of a comprehensive, systems approach to compressed air system design and operation. The CAC educational and technical materials being disseminated by the Company are intended to

increase customer awareness of, and demand for, products and services that encompass a comprehensive, “systems optimization” approach. Coupled with this increased demand for enhanced services from customers, regional compressed air equipment and service vendors will be exposed in depth to the technical approaches promoted by the CAC.

Over the past few years the Company has been actively coordinating local workshops that have been developed by the CAC. These workshops reflect consensus approaches to a variety of technical issues associated with the comprehensive system approach to compressed air quality, reliability, and efficiency. The first workshop, entitled “Fundamentals of Compressed Air Systems,” has been very well received by industrial customers and vendors who have attended to date. The second is a more advanced two-day workshop entitled “Advanced Management of Compressed Air Systems.” This complementary workshop is primarily targeted at larger, more sophisticated customers as well as regional vendors and engineering consultants. The Company anticipates that these workshops will result in an increased number of applications under the Company’s programs that address more comprehensive solutions to system efficiency. The Company expects to hold one Level 1 workshop in Rhode Island. We will also target Rhode Island Customers and compressed air vendors for Level 1 and Level 2 classes that are offered in Eastern Massachusetts.

In addition to promoting the two levels of CAC training currently available, the Company will also be providing comprehensive compressed air system O&M initiative for large industrial compressed air users as described below, as well as identify cost-effective compressed air efficiency opportunities in Technical Assistance studies. The Company will offer customers incentives to implement the measures once they have been identified.

The budget for this initiative is included in the overall budget for Large Commercial Retrofit

c. Compressed Air Operations & Maintenance Improvement Program

The Company will continue to offer an O&M program targeted at industrial customers with compressed air systems with a goal of helping them reduce compressed air costs and to promote long term reliability and efficiency in the future. One of the key elements of the O&M program is the repair of widespread compressed air leakage in distribution systems. Experience indicates that air leakage typically wastes 25% of total compressed air produced by a system, wasting significant electric energy. Energy cost savings resulting from the repair of leakage typically produce paybacks as short as 5 months.

This program will provide participating customers with financial and technical assistance in making low cost system improvements and help customers establish a long term leak management program at their facilities. Participation in the program will include: a compressed air system survey, identification of leakage and other potentially low cost O&M improvements, staff training in leak repairs and planning for continuous system monitoring. Eligible customers must have a minimum of 100 horsepower of compressed air load in their facility. The customer will sign a memorandum of understanding with the Company detailing the responsibilities of both parties.

One measure that might be identified during a compressed air assessment is the opportunity to recover heat generated by the compressor that could be applied to an industrial process that heats with gas.

The budget for this initiative is included in the overall budget for Large Commercial Retrofit.

d. Building Operator Training and Certification (BOTC)

The Building Operator Training and Certification (BOTC) initiative is a collaborative effort among gas and electric utilities in the region. Through this effort a training and certification

program is administered and conducted by a third party and offered to commercial and industrial customers. The Company has offered Level 1 of the BOTC initiative for the past six years.

As stated previously, the Rhode Island Department of Education is requiring BOTC training for all districts that receive state housing aid for capital and O&M projects at schools. In support of this, the Company hosted a class in Cranston for schools building operators in 2009 and will start other classes in Rhode Island or near Rhode Island for 2010.

The BOTC's objectives include:

- Increasing O&M personnel knowledge and skills in operating and maintaining commercial and industrial buildings for efficiency, comfort, and safety.
- Expanding market awareness of the benefits of improved building performance.
- Building market demand for resource-efficient O&M services.
- Distinguishing resource-efficient practices, service providers, and knowledgeable building operators in the marketplace.
- Establishing a Training and Certification program that will become financially self-sustaining in the future.

In 2007, the Northeast Energy Efficiency Partnerships decided not to renew its license for BOC. In 2009 a variant of the BOC training has been developed and offered through energy efficiency program providers across the region including National Grid. Classes will continue to be offered in 2010.

e. *Whole Building Assessment and Retro-Commissioning*

For 2010, the Company will continue to benchmark the gas and electric energy use of large commercial and municipal customers through the Whole Building Assessment Initiative to assist them in setting priorities and promote the installation of energy efficiency measures in their facilities. In addition, the Company will continue offering a retro-commissioning initiative to help commercial and industrial customers understand how their equipment is operating and make adjustments to improve performance and efficiency.

Whole Building Assessment starts by “benchmarking” the customer’s energy use and comparing it to their peers’ or their own historic consumption characteristics. By gathering their current and historical energy use from the Company’s billing data systems and presenting it in an insightful manner, new energy efficiency strategies may be readily identified, and an action plan leading to an installation can be developed. This initiative provides the opportunity to promote this service in Rhode Island, with the focus on the creation of applications for energy efficiency incentives directly resulting from the findings of the benchmarking exercise.

As companies become more aware of how and when they use energy in their facilities, they are in a position to assess where the best opportunities lie to develop better operating and maintenance practices. Through benchmarking, building owners and operators achieve a better understanding of the energy related cost of their buildings. Moreover it leads them to reduce operating costs, increase energy efficiency and promote environmentally-friendly operations.

There are two primary tools the Company will use to accomplish the benchmarking objective. The combination of these approaches and services determined by the Company’s Account Managers should help to stimulate greater efficiency savings and reach those customers who may not have taken advantage of the program and services to date.

- The Company's *Energy Profiler On-Line (EPO)*. This is a tool that is used effectively to identify energy use patterns within large commercial or industrial facilities. It helps to identify energy and demand savings potential by offering detail on current load duration as well as daily and historical building energy use. EPO can provide an account manager an accurate snapshot of the facility before meeting with the customer. The service can frame discussions to influence better energy use practices and /or further technical assistance to validate the potential of new energy efficient strategies and opportunities.
  
- *Commercial and Municipal Benchmarking Services* available through the EPA's Energy Star Portfolio Manager. This is a tool that provides a comparison of the level of annual energy consumption for commercial or institutional customers to that of other facilities with the same function. The buildings are ranked in comparison to the other buildings in a national database, corrected for climate and other key variables. The analysis considers all purchased energy types used in the facility. The customer will be responsible for providing the utility data, and tracking resource consumption and costs. The EPA's Energy Star Benchmarking system utilizing Portfolio Manager is used for this effort. The Company utilizes the benchmarking data to qualify the customer and access the energy intensity of the building. The Company then arranges a lighting and mechanical walk through of the building. The Company then furnishes a written action plan identifying efficiency cost and savings opportunities resulting from the benchmarking. The process recognizes that a customer may be motivated by a comparison to peers as well as the comparison to previous period's consumption. The Company will use the services of a Project Expediter and Technical Assessment vendor to generate opportunity assessment, analysis and follow up services to steer the customer toward an installation of efficiency measures.

Retro-commissioning is a process of testing, troubleshooting, and adjusting systems in an existing building with the expectation to raise existing performance standards. The retro-commissioning process can significantly reduce energy consumption with little financial investment. Experience suggests that the cost of retro-commissioning can be paid back through improved system performance, reduced energy costs, and improved occupant comfort.

The Retro-commissioning Initiative is best suited for the following:

- Commercial and industrial buildings that have an electric demand greater than 500 kW, although smaller facilities may be good candidates for this service.
- HVAC and process systems
- Desire to reduce operating costs
- Use an energy management system

The objective of the Retro-commissioning Initiative is to:

- Reduce operating costs during peak and off peak periods
- Develop a comprehensive and acceptable operation and maintenance plan
- Identify capital projects that can lead to substantial energy savings
- Educate the building personnel how to operate the building efficiently

Retro-commissioning will entail an assessment of the major building systems effecting energy used. Data is collected on how the systems operate presently and how they were originally designed to operate. Recommendations on where changes should be made to set points, maintenance practices or new energy efficient equipment are presented in a report. Incentives will be paid to encourage customers to implement the operations and maintenance (O&M) measures that have a simple payback of less than 2 years.

The Company will continue to review the results of the Retro-commissioning Initiative with the Collaborative. We will consider forming a sub-committee of the Collaborative to follow retrocommissioning projects and look at how to expand this offering.

The expected cost of these retro-commissioning projects is \$40,000. These funds will pay for technical assistance on retro-commissioning studies. Where hardware efficiency opportunities are identified in the studies, they will be processed through the appropriate rebate programs in a seamless way for the customer.

Experience gained by the company over the past several years in offering these expanded services to over 50 customers across New England suggests that continuing to develop and enhance Whole Building Assessment and retro-commissioning services to help identify more efficiency options will provide additional savings that may be missed without a targeted whole building effort. Many of the measures identified offer immediate to six month paybacks, are low cost and generally involve some degree of control strategies for the buildings. To build on these early results the company plans to continue to offer customers incentives for Whole Building Assessment and retro-commissioning measures that may have less than a 2 year simple payback- a threshold that is currently in place to be eligible for incentives. In addition we believe it makes sense to also include a demand response evaluation to see if we can bundle both Whole Building Assessment and retro-commissioning services with demand response opportunities in the facility studies. We will also work the with customer's controls company that would combine a full assessment that includes gas and electrical savings and demand response. This approach will bundle services under one project working with a controls vendor.

D. Small Business Direct Installation Program (formerly Small and Medium Business Program)

## **Overview**

For over ten years, this program has provided direct retrofit installation of energy efficient lighting, refrigeration and other energy efficient measures to small commercial and industrial customers, including houses of worship and other smaller non-profit organizations. For 2010 direct installation of cost-effective and widely applicable gas saving measures will be added such as, but not limited to, thermostats, hot water reset and insulation.

## **Eligible Population**

Any customer with an average monthly demand of less than 200 kW or annual energy usage of less than 483,600 kWh is eligible for this program. These same customers will be offered gas savings measures if they are on a qualifying commercial gas rate.

## **Program Design**

The Small Business Direct Installation program offers incentives for the installation of energy efficient fluorescent ballasts, lamps, and fixtures; hard-wired and screw-in compact fluorescent systems; high intensity discharge systems; LED lighting, occupancy sensors; energy management systems; thermostats, insulation, hot water reset and other gas measures to be determined; and refrigeration measures such as evaporator fan controls, efficient evaporator fan motors, automatic door closers and door heater control devices for walk-in coolers. The Company arranges the equipment purchase through a material vendor and installation with an administrative contractor. Continuing for 2010, the Small Business Direct Installation program creates broader program depth and appeal to customers by offering comprehensive energy efficiency opportunities intended to install all cost-effective gas and electric opportunities through a turn-key direct installation process. As stated previously, select cost-effective gas saving measures will be added to the program, both a set of “standard” measures as well as installation of “custom” gas measures that are deemed cost-effective for a particular customer. This expansion provides customers the benefit to build on their potential energy savings by examining a broader array of energy efficient

opportunities outside the current available measures. For example, LED lighting measures are being offered for customers with case/display refrigeration units as a custom option which will be continued in 2010.

Rebates cover up to 70% of both labor and material costs. Customers may finance the remainder for up to 24 months interest-free through their electric bill. If customers pay their portion up front, they receive a 15% discount off the amount due (i.e. 15% off of the 30% co-pay amount).

The Small Business Direct Installation program leverages the audit conducted as part of the former electric energy efficiency program to identify opportunities for customer participation in what was previously the gas energy efficiency program. Program staff have been trained to identify opportunities for gas efficiency. The customer may be referred to other gas energy efficiency offerings, such as through the Commercial New Construction program, if their needs cannot be satisfied through this program.

In 2010, the Small Business Direct Installation program will continue to offer a broad selection of comprehensive measures, as well as the ability to install any site-specific custom measures that are cost-effective. While potential for significant energy savings in small/medium business rests on improving lighting energy use, the proposed improvements to the program support more comprehensiveness in customers' facilities and build on the experience gained from delivering these services in prior years. These additional energy efficiency measures will include but not be limited to non-prescriptive lighting measures, motor and drive power improvements and other custom energy efficiency opportunities.



**Table E-1  
National Grid  
Electric DSM Funding Sources in 2010 by Sector**

	<b>Projections by Sector</b>			
	<b>Low Income Residential</b>	<b>Non-Low Income Residential</b>	<b>Commercial &amp; Industrial</b>	
<b>Projected kWh Sales:<sup>1</sup></b>	220,730,591	2,816,251,537	4,530,622,566	7,567,604,695
<b>DSM Revenue per kWh</b>		\$0.0032		
<b>Projected DSM Revenues (\$000)</b>	<b>\$706.3</b>	<b>\$9,012.0</b>	<b>\$14,497.9</b>	<b>\$24,216.2</b>
<b>Other Sources of DSM Revenues (\$000):<sup>2</sup></b>	<b>Low Income</b>	<b>Residential</b>	<b>Comm &amp; Industrial</b>	<b>Total</b>
Projected DSM Commitments at Year-End 2009:	\$0.0	\$0.0	\$3,324.4	\$3,324.4
Year-End 2009 Fund Balance and Interest: <sup>3</sup>	\$0.0	(\$1,063.1)	\$2,100.5	\$1,037.4
Projected Payments from ISO-NE During Transition Period and FCA1:	\$40.6	\$517.8	\$833.1	\$1,391.5
Projected Payments from RGGI (60%) in 2010:	<u>\$228.4</u>	<u>\$2,816.4</u>	<u>\$4,567.1</u>	<u>\$7,611.8</u>
Subtotal - Other Sources of DSM Revenues:	<b>\$269.0</b>	<b>\$2,271.0</b>	<b>\$10,825.1</b>	<b>\$13,365.1</b>
<b>Total funding available in 2010 minus commitments coming in</b>	\$975.3	\$11,283.0	\$21,998.6	\$34,256.9
<b>Projected Total Funding Available in 2010:</b>	<b>\$975.3</b>	<b>\$11,283.0</b>	<b>\$25,323.0</b>	<b>\$37,581.3</b>

**Notes:**

<sup>1</sup> Projected streetlighting and sales for resale kWh sales have been allocated to each sector based on the percentage of sales in each sector excluding expected streetlighting sales.

<sup>2</sup> Copayments are no longer shown as a funding source because of a 2009 accounting change

<sup>3</sup> Projected Fund Balance and Interest includes interest paid during 2009. The Low Income sector has historically been included in the Residential Fund Balance, these projections correct the historical contributions to the Low-Income sector. A projected negative fund balance at year end indicates that projected spending and commitments for 2009 are greater than the actual funding available in 2009.

<sup>4</sup> The total projection of FCM revenue is allocated by kWh sales to each sector.

<sup>5</sup> Projected RGGI Payments in 2010 are based on 60% of the proceeds, detailed information is available on Table E-1a RGGI Projections

**Table E-1a**  
**RGGI Projections**

	Auction	Year	Gross Proceeds	RGGI Admin Costs	OER Admin Costs	Net Proceeds	60%	40%
Actual Proceeds	1	2008	\$1,347,036	\$46,150	\$0	\$1,300,886	\$780,532	\$520,354
	2	2008	\$1,483,056	\$1,809	\$141,505	\$1,339,743	\$803,846	\$535,897
	3	2009	\$1,640,469	\$0	\$0	\$1,640,469	\$984,281	\$656,188
	4	2009	\$1,485,033	\$0	\$0	\$1,485,033	\$891,020	\$594,013
	5	2009	\$1,022,455	\$0	\$207,398	\$815,057	\$489,034	\$326,023
	6	2009	\$944,535	0	\$47,227	\$897,308	\$538,385	\$358,923
<b>2008 - 2009 Total</b>			<b>\$7,922,584</b>	<b>\$47,959</b>	<b>\$396,129</b>	<b>\$7,478,496</b>	<b>\$4,487,098</b>	<b>\$2,991,398</b>
Projected Proceeds	7	2010	\$1,375,730	\$20,000	\$0	\$1,355,730	\$813,438	\$542,292
	8	2010	\$1,375,730	\$0	\$0	\$1,375,730	\$825,438	\$550,292
	9	2010	\$1,375,730	\$0	\$0	\$1,375,730	\$825,438	\$550,292
	10	2010	\$1,375,730	\$0	\$275,146	\$1,100,584	\$660,350	\$440,234
<b>2010 Total</b>			<b>\$5,502,920</b>	<b>\$20,000</b>	<b>\$275,146</b>	<b>\$5,207,774</b>	<b>\$3,124,664</b>	<b>\$2,083,110</b>
<b>2010 Plan Funding Source</b>			<b>\$13,425,504</b>	<b>\$67,959</b>	<b>\$671,275</b>	<b>\$12,686,270</b>	<b>\$7,611,762</b>	<b>\$5,074,508</b>

Notes

- (1) Actual proceed data from [http://www.rggi.org/docs/RI\\_Proceeds\\_by\\_Auction.pdf](http://www.rggi.org/docs/RI_Proceeds_by_Auction.pdf)
- (2) Projected 2010 proceeds based on 658,000 vintage allowances and 33,000 future allowances at Auction 6 prices
- (3) National Grid 2010 Budget includes any carryover from previous RGGI auctions
- (4) RGGI, Inc. actual Costs are based on invoices received by OER, projections based on RI's cost-share of 1.41% in 990 forms, available: <http://www.rggi.org/rggi/legal>
- (5) Based on OER Guidance, 5% of annual proceeds have been deducted for administrative costs

**Table E-2**  
**National Grid 2010 Electric Energy Efficiency Program Budget (\$000)**

	Program Planning & Administration					Grand Total
	External	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	
<b>Non-Low Income Residential</b>						
ENERGY STAR <sup>®</sup> Homes	\$58.8	\$65.5	\$29.4	\$670.0	\$14.7	\$838.4
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$23.4	\$9.5	\$45.0	\$604.9	\$5.2	\$688.0
ENERGY STAR <sup>®</sup> Heating	\$0.0	\$76.5	\$33.0	\$100.0	\$0.0	\$209.5
EnergyWise	\$442.0	\$123.8	\$100.0	\$3,307.6	\$0.0	\$3,973.4
ENERGY STAR <sup>®</sup> Lighting	\$237.0	\$101.0	\$329.3	\$1,010.0	\$164.7	\$1,842.1
ENERGY STAR <sup>®</sup> Appliances	\$240.3	\$94.8	\$334.3	\$940.3	\$64.8	\$1,674.5
EERMC - Residential	\$194.4	\$0.0	\$0.0	\$0.0	\$0.0	\$194.4
Energy Efficiency Educational Programs	\$50.0	\$0.7	\$0.0	\$0.0	\$0.0	\$50.7
Pilots	\$0.0	\$18.0	\$0.0	\$61.0	\$56.0	\$135.0
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$435.8
<b>Subtotal - Non-Low Income Residential</b>	<b>\$1,245.9</b>	<b>\$489.8</b>	<b>\$871.0</b>	<b>\$6,693.7</b>	<b>\$305.4</b>	<b>\$10,041.7</b>
<b>Low Income Residential</b>						
Single Family - Low Income Services	\$51.0	\$125.9	\$85.8	\$3,269.5	\$0.0	\$3,532.1
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$126.3
<b>Subtotal - Low Income Residential</b>	<b>\$51.0</b>	<b>\$125.9</b>	<b>\$85.8</b>	<b>\$3,269.5</b>	<b>\$0.0</b>	<b>\$3,658.4</b>
<b>Commercial &amp; Industrial</b>						
Design 2000plus <sup>1</sup>	\$409.7	\$601.8	\$28.2	\$5,997.0	\$248.5	\$7,285.1
Energy Initiative <sup>1</sup>	\$456.1	\$632.1	\$37.6	\$5,822.3	\$132.9	\$7,081.0
Small and Medium Business Program	\$312.5	\$283.7	\$65.0	\$7,023.2	\$35.7	\$7,720.1
Energy Action: Aquidneck & Jamestown <sup>3</sup>	\$300.0	\$0.0	\$0.0	\$0.0	\$75.0	\$375.0
EERMC - C&I	\$290.0	\$0.0	\$0.0	\$0.0	\$0.0	\$290.0
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$704.9
<b>Subtotal - Commercial &amp; Industrial</b>	<b>\$1,768.3</b>	<b>\$1,517.6</b>	<b>\$130.7</b>	<b>\$18,842.6</b>	<b>\$492.1</b>	<b>\$23,456.2</b>
<b>SRPP<sup>2</sup></b>						<b>\$425.0</b>
<b>Grand Total</b>	<b>\$3,065.1</b>	<b>\$2,133.3</b>	<b>\$1,087.5</b>	<b>\$28,805.8</b>	<b>\$797.5</b>	<b>\$37,581.3</b>

**Notes:**

(1) Includes Total Commitments for 2010, expected to be \$5,000,000. The allocation between Energy Initiative and Design 2000plus is

Design 2000plus Commitments: \$3,570.0

Energy Initiative Commitments: \$1,430.0

These commitments reflect agreements with customers to provide funding for approved energy efficiency projects that will be completed after year-end 2009. The split of commitments between the large C&I programs reflects the thinking that more of the commitments will be made in Design 2000plus as projects become more comprehensive. This assumption will be re-assessed through the year.

(2) System Reliability Procurement Plan (SRPP) budget is for the C/I Audit and Automation Demand Response activities described in Docket 3931, page 22. For more information, please see page 10 in this plan.

(3) Energy Action: Aquidneck & Jamestown is a multi-sector initiative, it is considered a C&I program for convenience.

**Table E-3**  
**Proposed 2010 Budget Compared to Approved 2009 Budget (\$000)**

	<b>Proposed Budget (2010)</b>	<b>Approved Budget (2009)</b>	<b>Change Compared to 2009</b>
<b>Non-Low Income Residential</b>			
ENERGY STAR <sup>®</sup> Homes	\$823.7	\$860.6	(\$36.8)
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$682.8	\$429.0	\$253.8
ENERGY STAR <sup>®</sup> Heating	\$209.5	\$209.9	(\$0.4)
EnergyWise	\$3,973.4	\$3,050.1	\$923.3
ENERGY STAR <sup>®</sup> Lighting	\$1,677.4	\$980.0	\$697.4
ENERGY STAR <sup>®</sup> Appliances	\$1,609.6	\$1,472.6	\$137.0
EERMC - Residential <sup>1</sup>	\$194.4	\$125.1	\$69.3
Energy Efficiency Educational Programs	\$50.7	\$100.9	(\$50.2)
Pilots	\$79.0	NA	NA
<b>Subtotal - Non-Low Income Residential</b>	<b>\$9,300.5</b>	<b>\$7,228.2</b>	<b>\$2,072.3</b>
<b>Low Income Residential</b>			
Single Family - Low Income Services	\$3,532.1	\$2,628.3	\$903.8
<b>Commercial &amp; Industrial</b>			
Design 2000plus	\$7,036.6	\$7,440.2	(\$403.6)
Energy Initiative	\$6,948.1	\$6,896.4	\$51.6
Small and Medium Business Program	\$7,684.5	\$6,252.1	\$1,432.4
Energy Action: Aquidneck & Jamestown	\$300.0	\$0.0	\$300.0
EERMC - C&I	\$290.0	\$189.9	\$100.1
<b>Subtotal Commercial &amp; Industrial</b>	<b>\$22,259.2</b>	<b>\$20,778.6</b>	<b>\$1,480.6</b>
<b>OTHER EXPENSE ITEMS</b>			
Company Incentive	\$1,267.0	\$1,036.0	\$231.1
Program Design, Evaluation and Planning	\$797.5	\$700.2	\$97.3
SRPP <sup>2</sup>	\$425.0	\$0.0	\$425.0
<b>Subtotal Other Items</b>	<b>\$2,489.6</b>	<b>\$1,736.2</b>	<b>\$753.4</b>
<b>TOTAL BUDGET</b>	<b>\$37,581.3</b>	<b>\$32,371.2</b>	<b>\$5,210.0</b>

<sup>1</sup> Includes EERMC allocation for Low Income Residential

<sup>2</sup> See notes on E-2

**Table E-4**  
**Calculation of 2010 Program Year Cost-Effectiveness**  
Summary of Benefit, Expenses, Evaluation Costs (\$000)

	TRC Benefit/ Cost (2)	Total Benefit	Program Implementation Expenses	Evaluation Cost	Shareholder Incentive (4)	¢/Lifetime kWh
<b>Commercial &amp; Industrial</b>						
Design 2000 <i>plus</i>	7.51	\$31,838.8	\$3,466.6	\$248.5	NA	2.4
Energy Initiative	5.28	\$62,154.7	\$5,518.1	\$132.9	NA	3.5
Small and Medium Business <sup>1</sup>	4.12	\$30,721.1	\$5,894.0	\$35.7	NA	4.9
Energy Action: Aquidneck & Jamestown			\$300.0	\$75.0	NA	
Energy Efficiency and Resources Management Council - Large C&I			\$290.0	\$0.0	NA	
<b>SUBTOTAL</b>	<b>5.02</b>	<b>\$124,714.5</b>	<b>\$15,468.7</b>	<b>\$492.1</b>	<b>\$704.9</b>	<b>3.7</b>
<b>Low Income Residential</b>						
Single Family - Low Income Services	2.27	\$8,321.7	\$3,532.1	\$0.0	\$126.3	12.9
<b>Non-Low Income Residential</b>						
ENERGY STAR <sup>®</sup> Homes	2.58	\$3,191.1	\$823.7	\$14.7	NA	20.9
ENERGY STAR <sup>®</sup> Central Air Conditioning	1.98	\$1,420.0	\$682.8	\$5.2	NA	9.8
ENERGY STAR <sup>®</sup> Heating	3.38	\$712.8	\$209.5	\$0.0	NA	169.4
EnergyWise	2.62	\$10,502.2	\$3,973.4	\$0.0	NA	5.5
ENERGY STAR <sup>®</sup> Lighting	6.68	\$15,007.3	\$1,677.4	\$164.7	NA	2.8
ENERGY STAR <sup>®</sup> Products	2.49	\$4,845.4	\$1,609.6	\$64.8	NA	6.7
Energy Efficiency Education Programs			\$50.7	\$0.0	NA	NA
Energy Efficiency and Resources Management Council - Residential			\$194.4	\$0.0	NA	NA
Pilots			\$111.0	\$23.9	NA	
<b>SUBTOTAL</b>	<b>3.19</b>	<b>\$35,678.9</b>	<b>\$9,332.5</b>	<b>\$273.3</b>	<b>\$435.8</b>	<b>5.7</b>
<b>TOTAL</b>	<b>4.25</b>	<b>\$168,715.0</b>	<b>\$28,333.3</b>	<b>\$765.4</b>	<b>\$1,267.0</b>	<b>4.5</b>

Notes:

(1) Small Business program expenses are net of the projected customer co-pay for 2010 installations.

These costs are included in the Customer Contribution column.

(2) TRC B/C Test = (Energy + Capacity + Resource Benefits) /

(Program Implementation + Evaluation Costs + Customer Contribution + Shareholder Incentive)

Also includes effects of free-ridership and spillover

**Table E-5**  
**2010 Program Year Goals**  
**Summary of Benefits, kW, and kWh by Program**

	Benefits (000's)													Load Reduction in kW			MWh Saved		
	Total	Capacity			Energy					Non Electric		Summer	Winter	Lifetime	Maximum Annual	Lifetime			
		Generation		Trans	MDC	DRIPE	Winter		Summer		DRIPE						Resource	Non Resource	
		Summer	Winter				Peak	Off Peak	Peak	Off Peak									
<b>Commercial &amp; Industrial</b>																			
Design 2000plus	\$31,839	1,848	\$0	\$1,617	\$3,818	\$1,388	\$6,271	\$2,957	\$3,211	\$1,397	\$4,641	\$0	\$50	3,926	2,212	61,498	11,558	179,909	
Energy Initiative	62,155	2,388	0	2,156	5,091	2,352	11,646	5,545	5,919	2,611	10,870	1,022	1,686	6,651	3,826	80,443	27,368	333,543	
Small and Medium Business	30,721	1,138	0	1,028	2,428	1,126	6,633	1,515	3,369	713	5,329	0	2,113	3,184	1,682	38,352	12,671	152,635	
<b>SUBTOTAL</b>	<b>\$124,714</b>	<b>\$5,374</b>	<b>\$0</b>	<b>\$4,801</b>	<b>\$11,337</b>	<b>\$4,866</b>	<b>\$24,550</b>	<b>\$10,017</b>	<b>\$12,500</b>	<b>\$4,721</b>	<b>\$20,839</b>	<b>\$1,022</b>	<b>\$3,848</b>	<b>13,761</b>	<b>7,720</b>	<b>180,293</b>	<b>51,597</b>	<b>666,086</b>	
<b>Low Income Residential</b>																			
Single Family - Low Income Services	7,539	109	\$0	\$84	\$199	\$84	\$641	\$749	\$316	\$354	\$782	\$2,809	\$1,411	244	478	3,194	2,284	28,440	
<b>SUBTOTAL</b>	<b>\$7,539</b>	<b>\$109</b>	<b>\$0</b>	<b>\$84</b>	<b>\$199</b>	<b>\$84</b>	<b>\$641</b>	<b>\$749</b>	<b>\$316</b>	<b>\$354</b>	<b>\$782</b>	<b>\$2,809</b>	<b>\$1,411</b>	<b>244</b>	<b>478</b>	<b>3,194</b>	<b>2,284</b>	<b>28,440</b>	
<b>Non-Low Income Residential</b>																			
ENERGY STAR® Homes	3,043	235	\$0	\$125	\$296	\$80	\$133	\$156	\$66	\$74	\$148	\$1,705	\$25	226	166	4,983	448	5,937	
ENERGY STAR® Central Air Conditioni	1,248	147	\$0	\$116	\$274	\$100	\$289	\$77	\$158	\$49	\$172	-\$149	\$15	297	89	4,438	421	7,292	
ENERGY STAR® Heating	710	0	\$0	\$0	\$0	\$0	\$4	\$3	\$1	\$1	\$3	\$697	\$0	0	2	7	7	125	
EnergyWise	8,550	234	\$0	\$187	\$441	\$193	\$1,582	\$1,935	\$867	\$891	\$1,952	\$152	\$117	547	1,361	7,046	5,506	72,714	
ENERGY STAR® Lighting	11,555	309	\$0	\$239	\$564	\$422	\$1,840	\$2,121	\$897	\$998	\$3,453	\$0	\$713	1,194	2,389	8,703	11,173	81,042	
ENERGY STAR® Appliances	3,559	36	\$0	\$29	\$69	\$40	\$650	\$748	\$341	\$360	\$1,286	\$0	\$0	138	139	1,061	4,430	28,925	
<b>SUBTOTAL</b>	<b>\$28,665</b>	<b>\$961</b>	<b>\$0</b>	<b>\$696</b>	<b>\$1,644</b>	<b>\$834</b>	<b>\$4,498</b>	<b>\$5,039</b>	<b>\$2,330</b>	<b>\$2,373</b>	<b>\$7,014</b>	<b>\$2,406</b>	<b>\$870</b>	<b>2,402</b>	<b>4,144</b>	<b>26,237</b>	<b>21,984</b>	<b>196,035</b>	
<b>TOTAL</b>	<b>\$160,918</b>	<b>\$6,444</b>	<b>\$0</b>	<b>\$5,581</b>	<b>\$13,179</b>	<b>\$5,784</b>	<b>\$29,690</b>	<b>\$15,805</b>	<b>\$15,146</b>	<b>\$7,449</b>	<b>\$28,636</b>	<b>\$6,238</b>	<b>\$6,128</b>	<b>16,406</b>	<b>12,342</b>	<b>209,725</b>	<b>75,866</b>	<b>890,561</b>	

**Table E-6**  
**Comparison of Goals to Prior Year**

Program	Proposed 2010		2009		Difference	
	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh)	Participants
<b>Commercial &amp; Industrial</b>						
Design 2000 <i>plus</i>	11,558	209	8,496	239	3,062	(29)
Energy Initiative	27,368	347	26,388	245	980	102
Small and Medium Business	12,671	1,312	10,432	835	2,239	477
<b>SUBTOTAL</b>	<b>51,597</b>	<b>1,868</b>	<b>45,316</b>	<b>1,319</b>	<b>6,281</b>	<b>549</b>
<b>Low Income Residential</b>						
Single Family - Low Income Services	2,284	2,053	1,187	1,439	1,097	614
<b>SUBTOTAL</b>	<b>2,284</b>	<b>2,053</b>	<b>1,187</b>	<b>1,439</b>	<b>1,097</b>	<b>614</b>
<b>Non-Low Income Residential</b>						
ENERGY STAR® Homes	448	300	586	380	(138)	(80)
ENERGY STAR® Central Air Conditioning	421	974	97	546	324	428
ENERGY STAR® Heating	7	201	83	250	(76)	(49)
Energy <i>Wise</i>	5,506	8,232	4,723	6,194	783	2,038
ENERGY STAR® Lighting	11,173	110,330	14,496	68,548	(3,323)	41,782
ENERGY STAR® Appliances	4,430	11,300	4,419	7,600	11	3,700
<b>SUBTOTAL</b>	<b>21,984</b>	<b>131,337</b>	<b>24,403</b>	<b>83,518</b>	<b>-2,420</b>	<b>47,819</b>
<b>TOTAL</b>	<b>75,866</b>	<b>135,258</b>	<b>70,905</b>	<b>86,276</b>	<b>4,961</b>	<b>48,982</b>

Notes:

- (1) Net Savings calculated under Total Resource Cost Test.
- (2) 2009 Annual Energy Savings from 2009 Updated Savings Goals, Docket 4000, Filed October 9, 2009
- (3) Lower MWh per participant for Energy Star Heating due to a correction in measure mix.
- (4) Lower MWh per participant for Energy Star Lighting due to lower inputs for free-ridership, spillover rate, and in-service rate.

**Table E-7**  
**Annual Electric Avoided Costs for Rhode Island**

Units: Period:	Rhode Island					DRIPE for Installations in 2010				
	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value
	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr
2009	0.000	0.000	0.000	0.000						
2010	0.072	0.056	0.075	0.055	65.84	0.076	0.054	0.074	0.046	
2011	0.078	0.061	0.080	0.058	50.58	0.078	0.056	0.075	0.047	
2012	0.086	0.066	0.084	0.061	35.74	0.086	0.061	0.079	0.050	
2013	0.081	0.065	0.079	0.061	16.85	0.039	0.029	0.036	0.024	110.00
2014	0.080	0.066	0.080	0.062	16.85	0.033	0.024	0.031	0.021	135.00
2015	0.080	0.066	0.082	0.061	18.14	0.028	0.021	0.028	0.018	81.00
2016	0.080	0.067	0.083	0.062	19.44	0.025	0.019	0.024	0.016	0.00
2017	0.084	0.070	0.086	0.065	19.44	0.022	0.016	0.021	0.014	
2018	0.086	0.071	0.088	0.068	20.74	0.018	0.013	0.018	0.012	
2019	0.087	0.072	0.089	0.068	20.74	0.014	0.011	0.014	0.009	
2020	0.086	0.070	0.087	0.067	22.03	0.010	0.008	0.010	0.007	
2021	0.083	0.069	0.085	0.065	23.33	0.007	0.005	0.007	0.004	
2022	0.083	0.070	0.086	0.065	24.62	0.003	0.003	0.003	0.002	
2023	0.084	0.070	0.088	0.067	25.92					
2024	0.088	0.072	0.093	0.070	27.22					
2025	0.089	0.073	0.094	0.070	40.18					
2026	0.089	0.073	0.095	0.071	53.14					
2027	0.090	0.074	0.096	0.072	66.10					
2028	0.091	0.075	0.097	0.072	79.06					
2029	0.092	0.076	0.098	0.073	92.02					
2030	0.093	0.076	0.099	0.074	103.68					
2031	0.094	0.077	0.100	0.075	103.68					
2032	0.095	0.078	0.101	0.075	103.68					
2033	0.096	0.079	0.102	0.076	103.68					
2034	0.097	0.079	0.103	0.077	103.68					
2035	0.098	0.080	0.104	0.078	103.68					
2036	0.099	0.081	0.105	0.078	103.68					
2037	0.100	0.082	0.106	0.079	103.68					
2038	0.101	0.083	0.107	0.080	103.68					
2039	0.102	0.083	0.108	0.081	103.68					

From the 2009 Avoided Cost Study

**Table E-8**  
**Derivation of the 2010 Spending Budget for Shareholder Incentive Calculation**

	<b>Proposed 2010 Budget (\$000)</b>	<b>Commitments and Copays (\$000)</b>	<b>Other Funding Excluded From the Eligible Spending Budget</b>	<b>Eligible Sector Spending Budget (\$000)</b>
<b>Non-Low Income Residential</b>				
ENERGY STAR <sup>®</sup> Homes	\$838.4			
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$688.0			
ENERGY STAR <sup>®</sup> Heating	\$209.5			
EnergyWise	\$3,973.4			
ENERGY STAR <sup>®</sup> Lighting	\$1,842.1			
ENERGY STAR <sup>®</sup> Appliances	\$1,674.5			
EERMC - Residential	\$194.4		\$194.4	
Energy Efficiency Educational Programs	\$50.7			
Pilots	\$135.0			
Shareholder Incentive	\$435.8		\$435.8	
<b>Subtotal - Residential</b>	<b>\$10,041.7</b>	<b>\$0.0</b>	<b>\$630.2</b>	<b>\$9,411.5</b>
<b>Low Income Residential</b>				
Single Family - Low Income Services	\$3,532.1			
Shareholder Incentive	\$126.3		\$126.3	
<b>Subtotal - Low Income Residential</b>	<b>\$3,658.4</b>	<b>\$0.0</b>	<b>\$126.3</b>	<b>\$3,532.1</b>
<b>Commercial &amp; Industrial</b>				
Design 2000plus	\$7,285.1	\$3,570.0		
Energy Initiative	\$7,081.0	\$1,430.0		
Small and Medium Business <sup>1</sup>	\$7,720.1	\$1,608.4		
Energy Action: Aquidneck & Jamestown	\$375.0			
EERMC - C&I	\$290.0		\$290.0	
Shareholder Incentive	\$704.9		\$704.9	
<b>Subtotal - Commercial &amp; Industrial</b>	<b>\$23,456.2</b>	<b>\$6,608.4</b>	<b>\$994.9</b>	<b>\$15,852.9</b>
<b>SRPP</b>	<b>\$425.0</b>		<b>\$425.0</b>	
<b>Grand Total</b>	<b>\$37,581.3</b>	<b>\$6,608.4</b>	<b>\$2,176.4</b>	<b>\$28,796.4</b>

<sup>1</sup> \$1,608,400 is an estimate of copayments to be received in 2010.

**Table E-9**  
**Target 2010 Shareholder Incentive**

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector	Spending Budget	Incentive Rate	Target Incentive	Target Incentive for Performance Metrics	Target Incentive - Annual kWh Savings	Annual kWh Savings Goal	Threshold kWh Savings	Target Incentive Per kWh	Incentive Cap Annual kWh Savings
Low Income Residential	\$3,532,066		\$137,012	\$0	\$137,012	2,284,319	1,370,591	\$0.060	\$171,265
Non-Low Income Residential	\$9,411,494		\$425,081	\$60,000	\$365,081	21,984,314	13,190,588	\$0.017	\$456,351
Commercial & Industrial	\$15,852,864		\$704,949	\$90,000	\$614,949	51,596,914	30,958,149	\$0.012	\$768,686
Total	\$28,796,423	4.40%	\$1,267,043	\$150,000	\$1,117,043	75,865,547	45,519,328		\$1,396,303

Notes:

- (1) Sector budget net of projected commitments and copays. See Table E-8
- (2) 4.40% of the sector spending budget.
- (3) Target Incentive Total = Incentive Rate x Spending Budget Total (Column (1)).
- (4) \$30,000 per proposed performance metric.
- (5) Total for Column (3) - Total for Column (4) allocated to sectors based on the relative size of the spending budget in the sector.
- (6) Goal for annual kWh savings by sector. This may be adjusted at year end for actual spending relative to the spending budget.  
If goal is adjusted, values in columns (7), (8), and (9) will be adjusted as well.
- (7) 60% of Column (5). No incentive is earned on annual kWh savings in the sector unless the Company achieves at least this threshold level of
- (8) Column (5)/Column (6). Applicable to all annual kWh savings up to 125% of target savings if at least 60% of target savings have been achieved.
- (9) Column (5) x 1.25.



**Table E-1  
National Grid  
Electric DSM Funding Sources in 2010 by Sector**

	<u>Projections by Sector</u>			Total
	<b>Low Income Residential</b>	<b>Non-Low Income Residential</b>	<b>Commercial &amp; Industrial</b>	
<b>Projected kWh Sales:<sup>1</sup></b>	<b>220,730,591</b>	<b>2,816,251,537</b>	<b>4,530,622,566</b>	<b>7,567,604,695</b>
<b>DSM Revenue per kWh</b>		\$0.0032		
<b>Projected DSM Revenues (\$000)</b>	\$706.3	\$9,012.0	<u>\$14,497.9</u>	\$24,216.2
<b>Other Sources of DSM Revenues (\$000):<sup>2</sup></b>	Low Income	Residential	Comm & Industrial	Total
Projected DSM Commitments at Year-End 2009:	\$0.0	\$0.0	\$3,324.4	\$3,324.4
Year-End 2009 Fund Balance and Interest: <sup>3</sup>	\$0.0	(\$1,063.1)	\$2,100.5	\$1,037.4
Projected Payments from ISO-NE During Transition Period and FCA <sup>4</sup> :	\$40.6	\$517.8	\$833.1	\$1,391.5
Projected Payments from RGGI (60%) in 2010 <sup>5</sup> :	\$228.4	\$2,816.4	\$4,567.1	\$7,611.8
<b>Projected Payments from RGGI (40%) in 2010<sup>6</sup>:</b>	<u><b>\$32.0</b></u>	<u><b>\$395.3</b></u>	<u><b>\$641.0</b></u>	<u><b>\$1,068.3</b></u>
<b>Subtotal - Other Sources of DSM Revenues:</b>	<b>\$301.0</b>	<b>\$2,666.3</b>	<b>\$11,466.1</b>	<b>\$5,753.3</b>
<b>Total potential funding available, minus commitments coming in</b>	\$1,007.3	\$11,678.3	\$22,639.6	\$35,325.2
<b>Potential Total Funding Available in 2010:</b>	<b>\$1,007.3</b>	<b>\$11,678.3</b>	<b>\$25,964.0</b>	<b>\$38,649.6</b>
<b>Projected Payments from RGGI (40%) to be used for Loan Fund</b>				\$4,006.2

**Notes:**

<sup>1</sup> Projected streetlighting and sales for resale kWh sales have been allocated to each sector based on the percentage of sales in each sector excluding

<sup>2</sup> Copayments are no longer shown as a funding source because of a 2009 accounting change

<sup>3</sup> Projected Fund Balance and Interest includes interest paid during 2009. The Low Income sector has historically been included in the Residential Fund Balance, these projections correct the historical contributions to the Low-Income sector. A projected negative fund balance at year end indicates that projected spending and commitments for 2009 are greater than the actual funding available in 2009.

<sup>4</sup> The total projection of FCM revenue is allocated by kWh sales to each sector.

<sup>5</sup> Projected RGGI Payments in 2010 are based on 60% of the proceeds, detailed information is available on Table E-1a RGGI Projections

<sup>6</sup> Projected RGGI 40% Payments in 2010 total \$4,423,092 as shown in Table E-1a. \$1,000,000 will be used for program related spending shown here.

Balance to be used for loan fund, separate from program spending.

**Table E-1a**  
**RGGI Projections**

	Auction	Year	Gross Proceeds	RGGI Admin Costs	OER Admin Costs	Net Proceeds	60%	40%
Actual Proceeds	1	2008	\$1,347,036	\$46,150	\$0	\$1,300,886	\$780,532	\$520,354
	2	2008	\$1,483,056	\$1,809	\$141,505	\$1,339,743	\$803,846	\$535,897
	3	2009	\$1,640,469	\$0	\$0	\$1,640,469	\$984,281	\$656,188
	4	2009	\$1,485,033	\$0	\$0	\$1,485,033	\$891,020	\$594,013
	5	2009	\$1,022,455	\$0	\$207,398	\$815,057	\$489,034	\$326,023
	6	2009	\$944,535	0	\$47,227	\$897,308		
<b>2008 - 2009 Total</b>			<b>\$7,922,584</b>	<b>\$47,959</b>	<b>\$396,129</b>	<b>\$7,478,496</b>	<b>\$4,487,098</b>	<b>\$2,991,398</b>
Projected Proceeds	7	2010	\$1,375,730	\$20,000	\$0	\$1,355,730	\$813,438	\$542,292
	8	2010	\$1,375,730	\$0	\$0	\$1,375,730	\$825,438	\$550,292
	9	2010	\$1,375,730	\$0	\$0	\$1,375,730	\$825,438	\$550,292
	10	2010	\$1,375,730	\$0	\$275,146	\$1,100,584	\$660,350	\$440,234
<b>2010 Total</b>			<b>\$5,502,920</b>	<b>\$20,000</b>	<b>\$275,146</b>	<b>\$5,207,774</b>	<b>\$3,124,664</b>	<b>\$2,083,110</b>
<b>2010 Plan Funding Source</b>			<b>\$13,425,504</b>	<b>\$67,959</b>	<b>\$671,275</b>	<b>\$12,686,270</b>	<b>\$7,611,762</b>	<b>\$5,074,508</b>

Notes

- (1) Actual proceed data from [http://www.rggi.org/docs/RI\\_Proceeds\\_by\\_Auction.pdf](http://www.rggi.org/docs/RI_Proceeds_by_Auction.pdf)
- (2) Projected 2010 proceeds based on 658,000 vintage allowances and 33,000 future allowances at Auction 6 prices
- (3) National Grid 2010 Budget includes any carryover from previous RGGI auctions
- (4) RGGI, Inc. actual Costs are based on invoices received by OER, projections based on RI's cost-share of 1.41% in 990 forms, available: <http://www.rggi.org/rggi/legal>
- (5) Based on OER Guidance, 5% of annual proceeds have been deducted for administrative costs

**Table E-2**  
**National Grid 2010 Electric Energy Efficiency Program Budget (\$000)**

	Program Planning & Administration				Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
	External	Internal	Marketing				
<b>Non-Low Income Residential</b>							
ENERGY STAR <sup>®</sup> Homes	\$58.8	\$65.8	\$29.4	\$735.3	\$14.7	\$904.0	
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$23.4	\$9.0	\$45.0	\$604.9	\$5.2	\$687.5	
ENERGY STAR <sup>®</sup> Heating	\$0.0	\$76.4	\$33.0	\$100.0	\$0.0	\$209.4	
EnergyWise	\$479.5	\$127.3	\$100.0	\$3,738.8	\$0.0	\$4,445.6	
ENERGY STAR <sup>®</sup> Lighting	\$237.0	\$99.9	\$329.3	\$1,010.0	\$164.7	\$1,841.0	
ENERGY STAR <sup>®</sup> Appliances	\$240.3	\$93.8	\$347.0	\$940.3	\$64.8	\$1,686.2	
EERMC - Residential	\$194.4	\$0.0	\$0.0	\$0.0	\$0.0	\$194.4	
Energy Efficiency Educational Programs	\$50.0	\$0.7	\$0.0	\$0.0	\$0.0	\$50.7	
Pilots	\$15.0	\$21.9	\$6.8	\$337.3	\$56.0	\$436.9	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$453.7	
<b>Subtotal - Non-Low Income Residential</b>	<b>\$1,298.4</b>	<b>\$494.8</b>	<b>\$890.5</b>	<b>\$7,466.5</b>	<b>\$305.4</b>	<b>\$10,909.3</b>	
<b>Low Income Residential</b>							
Single Family - Low Income Services	\$51.0	\$125.6	\$85.8	\$3,447.5	\$0.0	\$3,709.9	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$131.7	
<b>Subtotal - Low Income Residential</b>	<b>\$51.0</b>	<b>\$125.6</b>	<b>\$85.8</b>	<b>\$3,447.5</b>	<b>\$0.0</b>	<b>\$3,841.5</b>	
<b>Commercial &amp; Industrial</b>							
Design 2000plus <sup>1</sup>	\$409.7	\$570.5	\$28.2	\$6,718.0	\$248.5	\$7,974.9	
Energy Initiative <sup>1</sup>	\$456.1	\$597.9	\$37.6	\$6,374.2	\$132.9	\$7,598.7	
Small and Medium Business Program	\$312.5	\$172.5	\$65.0	\$5,855.1	\$35.7	\$6,440.7	
Energy Action: Aquidneck & Jamestown <sup>3</sup>	\$300.0	\$0.0	\$0.0	\$0.0	\$75.0	\$375.0	
EERMC - C&I	\$290.0	\$0.0	\$0.0	\$0.0	\$0.0	\$290.0	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$794.4	
<b>Subtotal - Commercial &amp; Industrial</b>	<b>\$1,768.3</b>	<b>\$1,340.9</b>	<b>\$130.7</b>	<b>\$18,947.3</b>	<b>\$492.1</b>	<b>\$23,473.7</b>	
<b>SRPP<sup>2</sup></b>						<b>\$425.0</b>	
<b>Grand Total</b>	<b>\$3,117.6</b>	<b>\$1,961.3</b>	<b>\$1,107.0</b>	<b>\$29,861.3</b>	<b>\$797.5</b>	<b>\$38,649.6</b>	

**Notes:**

(1) Total Commitments for 2010 are expected to be \$5,000,000. The allocation between Energy Initiative and Design 2000plus is:

Design 2000plus Commitments: \$3,650,000

Energy Initiative Commitments: \$1,350,000

These commitments reflect agreements with customers to provide funding for approved energy efficiency projects that will be completed after year-end 2009. The split of commitments between the large C&I programs reflects the thinking that more of the commitments will be made in Design 2000plus as projects become more comprehensive. This assumption will be re-assessed through the year.

(2) System Reliability Procurement Plan (SRPP) budget is for the C/I Audit and Automation Demand Response activities described in Docket 3931, page 22. For more information, please see page 10 in this plan.

(3) Energy Action: Aquidneck & Jamestown is a multi-sector initiative, it is considered a C&I program for convenience.

**Table E-3**  
**Proposed 2010 Budget Compared to Approved 2009 Budget (\$000)**

	<b>Proposed Budget (2010)</b>	<b>Approved Budget (2009)</b>	<b>Change Compared to 2009</b>
<b>Non-Low Income Residential</b>			
ENERGY STAR <sup>®</sup> Homes	\$889.3	\$860.6	\$28.8
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$682.3	\$429.0	\$253.3
ENERGY STAR <sup>®</sup> Heating	\$209.4	\$209.9	(\$0.5)
EnergyWise	\$4,445.6	\$3,050.1	\$1,395.5
ENERGY STAR <sup>®</sup> Lighting	\$1,676.2	\$980.0	\$696.2
ENERGY STAR <sup>®</sup> Appliances	\$1,621.3	\$1,472.6	\$148.7
EERMC - Residential <sup>1</sup>	\$194.4	\$125.1	\$69.3
Energy Efficiency Educational Programs	\$50.7	\$100.9	(\$50.2)
Pilots	\$380.9	NA	NA
<b>Subtotal - Non-Low Income Residential</b>	<b>\$10,150.2</b>	<b>\$7,228.2</b>	<b>\$2,922.0</b>
<b>Low Income Residential</b>			
Single Family - Low Income Services	\$3,709.9	\$2,628.3	\$1,081.6
<b>ENERGY STAR<sup>®</sup> Central Air Conditioning</b>			
Design 2000plus	\$7,726.4	\$7,440.2	\$286.2
Energy Initiative	\$7,465.7	\$6,896.4	\$569.3
Small and Medium Business Program	\$6,405.1	\$6,252.1	\$153.0
Energy Action: Aquidneck & Jamestown	\$300.0	\$0.0	\$300.0
EERMC - C&I	\$290.0	\$189.9	\$100.1
<b>Subtotal Commercial &amp; Industrial</b>	<b>\$22,187.2</b>	<b>\$20,778.6</b>	<b>\$1,408.6</b>
<b>OTHER EXPENSE ITEMS</b>			
Company Incentive	\$1,379.9	\$1,036.0	\$343.9
Program Design, Evaluation and Planning	\$797.5	\$700.2	\$97.3
SRPP <sup>2</sup>	\$425.0	\$0.0	\$425.0
<b>Subtotal Other Items</b>	<b>\$2,602.4</b>	<b>\$1,736.2</b>	<b>\$866.2</b>
<b>TOTAL BUDGET</b>	<b>\$38,649.6</b>	<b>\$32,371.2</b>	<b>\$6,278.4</b>

<sup>1</sup> Includes EERMC allocation for Low Income Residential

<sup>2</sup> See notes on E-2

**Table E-4**  
**Calculation of 2010 Program Year Cost-Effectiveness**  
Summary of Benefit, Expenses, Evaluation Costs (\$000)

	TRC Benefit/ Cost (2)	Total Benefit	Program Implementation Expenses	Customer Contribution (3)	Evaluation Cost	Shareholder Incentive (4)	¢/Lifetime kWh
<b>Commercial &amp; Industrial</b>							
Design 2000 <i>plus</i>	8.07	\$40,287.9	\$4,076.4	\$664.5	\$248.5	NA	2.2
Energy Initiative	5.38	\$71,183.8	\$6,115.7	\$6,990.8	\$132.9	NA	3.5
Small and Medium Business <sup>1</sup>	4.63	\$35,651.7	\$6,405.1	\$1,256.5	\$35.7	NA	4.3
Energy Action: Aquidneck & Jamestown			\$300.0	\$0.0	\$75.0	NA	
Energy Efficiency and Resources Management Council - Large C&I			\$290.0	\$0.0	\$0.0	NA	
<b>SUBTOTAL</b>	<b>5.37</b>	<b>\$147,123.4</b>	<b>\$17,187.2</b>	<b>\$8,911.8</b>	<b>\$492.1</b>	<b>\$794.4</b>	<b>3.5</b>
<b>Low Income Residential</b>							
ENERGY STAR® Central Air Conditioning	2.28	\$8,773.7	\$3,709.9	\$0.0	\$0.0	\$131.7	12.8
<b>Non-Low Income Residential</b>							
ENERGY STAR® Homes	2.50	\$3,294.2	\$889.3	\$413.5	\$14.7	NA	21.5
ENERGY STAR® Central Air Conditioning	1.98	\$1,420.0	\$682.3	\$29.0	\$5.2	NA	9.8
ENERGY STAR® Heating	4.32	\$910.2	\$209.4	\$1.5	\$0.0	NA	145.7
EnergyWise	2.34	\$10,502.2	\$4,445.6	\$38.0	\$0.0	NA	6.2
ENERGY STAR® Lighting	6.68	\$15,007.3	\$1,676.2	\$404.4	\$164.7	NA	2.8
ENERGY STAR® Products	2.47	\$4,845.4	\$1,621.3	\$274.9	\$64.8	NA	6.8
Energy Efficiency Education Programs			\$50.7	\$0.0	\$0.0	NA	NA
Energy Efficiency and Resources Management Council - Residential			\$194.4	\$0.0	\$0.0	NA	NA
Pilots			\$380.9	\$0.0	\$56.0	NA	
<b>SUBTOTAL</b>	<b>2.98</b>	<b>\$35,979.3</b>	<b>\$10,150.2</b>	<b>\$1,161.3</b>	<b>\$305.4</b>	<b>\$453.7</b>	<b>6.2</b>
<b>TOTAL</b>	<b>4.43</b>	<b>\$191,876.4</b>	<b>\$31,047.2</b>	<b>\$10,073.2</b>	<b>\$797.5</b>	<b>\$1,379.9</b>	<b>4.3</b>

Notes:

(1) Small Business program expenses are net of the projected customer co-pay for 2010 installations.

These costs are included in the Customer Contribution column.

(2) TRC B/C Test = (Energy + Capacity + Resource Benefits) /

(Program Implementation + Evaluation Costs + Customer Contribution + Shareholder Incentive)

Also includes effects of free-ridership and spillover

**Table E-5**  
**2010 Program Year Goals**  
**Summary of Benefits, kW, and kWh by Program**

	Benefits (000's)													Load Reduction in kW			MWh Saved	
	Total	Capacity			Energy					Non Electric		Summer	Winter	Lifetime	Maximum Annual	Lifetime		
		Generation		Trans	MDC	DRIPE	Winter		Summer		DRIPE						Resource	Non Resource
		Summer	Winter				Peak	Off Peak	Peak	Off Peak								
<b>Commercial &amp; Industrial</b>																		
Design 2000plus	\$40,288	2,338	\$0	\$2,046	\$4,831	\$1,757	\$7,935	\$3,742	\$4,063	\$1,768	\$5,873	\$0	\$63	4,968	2,799	77,817	14,626	227,651
Energy Initiative	71,184	2,735	0	2,469	5,830	2,693	13,337	6,350	6,779	2,990	12,449	1,171	1,930	7,617	4,382	92,129	31,344	381,996
Small and Medium Business	35,652	1,321	0	1,193	2,818	1,306	7,698	1,758	3,910	828	6,184	0	2,452	3,695	1,952	44,508	14,704	177,132
<b>SUBTOTAL</b>	<b>\$147,123</b>	<b>\$6,394</b>	<b>\$0</b>	<b>\$5,708</b>	<b>\$13,479</b>	<b>\$5,757</b>	<b>\$28,971</b>	<b>\$11,850</b>	<b>\$14,752</b>	<b>\$5,586</b>	<b>\$24,505</b>	<b>\$1,171</b>	<b>\$4,445</b>	<b>16,280</b>	<b>9,133</b>	<b>214,454</b>	<b>60,674</b>	<b>786,780</b>
<b>Low Income Residential</b>																		
Single Family - Low Income Services	7,949	115	\$0	\$89	\$209	\$89	\$676	\$790	\$333	\$374	\$825	\$2,962	\$1,488	257	504	3,367	2,408	29,986
<b>SUBTOTAL</b>	<b>\$7,949</b>	<b>\$115</b>	<b>\$0</b>	<b>\$89</b>	<b>\$209</b>	<b>\$89</b>	<b>\$676</b>	<b>\$790</b>	<b>\$333</b>	<b>\$374</b>	<b>\$825</b>	<b>\$2,962</b>	<b>\$1,488</b>	<b>257</b>	<b>504</b>	<b>3,367</b>	<b>2,408</b>	<b>29,986</b>
<b>ENERGY STAR® Central Air Conditioning</b>																		
<b>Non-Low Income Residential</b>																		
ENERGY STAR® Homes	3,141	243	\$0	\$129	\$305	\$82	\$137	\$160	\$68	\$76	\$153	\$1,761	\$26	233	171	5,147	462	6,122
ENERGY STAR® Central Air Conditioning	1,248	147	\$0	\$116	\$274	\$100	\$289	\$77	\$158	\$49	\$172	-\$149	\$15	297	89	4,438	421	7,292
ENERGY STAR® Heating	907	0	\$0	\$0	\$0	\$0	\$5	\$3	\$2	\$1	\$3	\$892	\$0	0	3	7	8	145
EnergyWise	8,550	234	\$0	\$187	\$441	\$193	\$1,582	\$1,935	\$867	\$891	\$1,952	\$152	\$117	547	1,361	7,046	5,506	72,714
ENERGY STAR® Lighting	11,555	309	\$0	\$239	\$564	\$422	\$1,840	\$2,121	\$897	\$998	\$3,453	\$0	\$713	1,194	2,389	8,703	11,173	81,042
ENERGY STAR® Appliances	3,559	36	\$0	\$29	\$69	\$40	\$650	\$748	\$341	\$360	\$1,286	\$0	\$0	138	139	1,061	4,430	28,925
<b>SUBTOTAL</b>	<b>\$28,960</b>	<b>\$969</b>	<b>\$0</b>	<b>\$700</b>	<b>\$1,653</b>	<b>\$836</b>	<b>\$4,503</b>	<b>\$5,044</b>	<b>\$2,332</b>	<b>\$2,376</b>	<b>\$7,019</b>	<b>\$2,656</b>	<b>\$870</b>	<b>2,409</b>	<b>4,150</b>	<b>26,401</b>	<b>21,999</b>	<b>196,240</b>
<b>TOTAL</b>	<b>\$184,032</b>	<b>\$7,478</b>	<b>\$0</b>	<b>\$6,497</b>	<b>\$15,342</b>	<b>\$6,682</b>	<b>\$34,150</b>	<b>\$17,684</b>	<b>\$17,418</b>	<b>\$8,335</b>	<b>\$32,349</b>	<b>\$6,789</b>	<b>\$6,803</b>	<b>18,946</b>	<b>13,787</b>	<b>244,223</b>	<b>85,081</b>	<b>1,013,006</b>

**Table E-6  
Comparison of Goals to Prior Year**

Program	Proposed 2010		2009		Difference	
	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh)	Participants
<b>Commercial &amp; Industrial</b>						
Design 2000 <i>plus</i>	14,626	265	8,496	239	6,130	26
Energy Initiative	31,344	397	26,388	245	4,956	152
Small and Medium Business	14,704	1,523	10,432	835	4,272	688
<b>SUBTOTAL</b>	<b>60,674</b>	<b>2,184</b>	<b>45,316</b>	<b>1,319</b>	<b>15,358</b>	<b>866</b>
<b>Low Income Residential</b>						
Single Family - Low Income Services	2,408	2,165	1,187	1,439	1,221	726
<b>SUBTOTAL</b>	<b>2,408</b>	<b>2,165</b>	<b>1,187</b>	<b>1,439</b>	<b>1,221</b>	<b>726</b>
<b>Non-Low Income Residential</b>						
ENERGY STAR® Homes	462	310	586	380	(124)	(70)
ENERGY STAR® Central Air Conditioning	421	974	97	546	324	428
ENERGY STAR® Heating	8	201	83	250	(75)	(49)
Energy <i>Wise</i>	5,506	8,232	4,723	6,194	783	2,038
ENERGY STAR® Lighting	11,173	110,330	14,496	68,548	(3,323)	41,782
ENERGY STAR® Appliances	4,430	11,300	4,419	7,600	11	3,700
<b>SUBTOTAL</b>	<b>21,999</b>	<b>131,347</b>	<b>24,403</b>	<b>83,518</b>	<b>-2,405</b>	<b>47,829</b>
<b>TOTAL</b>	<b>85,081</b>	<b>135,696</b>	<b>70,905</b>	<b>86,276</b>	<b>14,176</b>	<b>49,421</b>

Notes:

- (1) Net Savings calculated under Total Resource Cost Test.
- (2) 2009 Annual Energy Savings from 2009 Updated Savings Goals, Docket 4000, Filed October 9, 2009
- (3) Lower MWh per participant for Energy Star Heating due to a correction in measure mix.
- (4) Lower MWh per participant for Energy Star Lighting due to lower inputs for free-ridership, spillover rate, and in-service rate.

**Table E-7**  
**Annual Electric Avoided Costs for Rhode Island**

Units: Period:	Rhode Island					DRIPE for Installations in 2010				
	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value	Winter Peak Energy	Winter Off-Peak Energy	Summer Peak Energy	Summer Off-Peak Energy	Annual Market Capacity Value
	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kW-yr
2009	0.000	0.000	0.000	0.000						
2010	0.072	0.056	0.075	0.055	65.84	0.076	0.054	0.074	0.046	
2011	0.078	0.061	0.080	0.058	50.58	0.078	0.056	0.075	0.047	
2012	0.086	0.066	0.084	0.061	35.74	0.086	0.061	0.079	0.050	
2013	0.081	0.065	0.079	0.061	16.85	0.039	0.029	0.036	0.024	110.00
2014	0.080	0.066	0.080	0.062	16.85	0.033	0.024	0.031	0.021	135.00
2015	0.080	0.066	0.082	0.061	18.14	0.028	0.021	0.028	0.018	81.00
2016	0.080	0.067	0.083	0.062	19.44	0.025	0.019	0.024	0.016	0.00
2017	0.084	0.070	0.086	0.065	19.44	0.022	0.016	0.021	0.014	
2018	0.086	0.071	0.088	0.068	20.74	0.018	0.013	0.018	0.012	
2019	0.087	0.072	0.089	0.068	20.74	0.014	0.011	0.014	0.009	
2020	0.086	0.070	0.087	0.067	22.03	0.010	0.008	0.010	0.007	
2021	0.083	0.069	0.085	0.065	23.33	0.007	0.005	0.007	0.004	
2022	0.083	0.070	0.086	0.065	24.62	0.003	0.003	0.003	0.002	
2023	0.084	0.070	0.088	0.067	25.92					
2024	0.088	0.072	0.093	0.070	27.22					
2025	0.089	0.073	0.094	0.070	40.18					
2026	0.089	0.073	0.095	0.071	53.14					
2027	0.090	0.074	0.096	0.072	66.10					
2028	0.091	0.075	0.097	0.072	79.06					
2029	0.092	0.076	0.098	0.073	92.02					
2030	0.093	0.076	0.099	0.074	103.68					
2031	0.094	0.077	0.100	0.075	103.68					
2032	0.095	0.078	0.101	0.075	103.68					
2033	0.096	0.079	0.102	0.076	103.68					
2034	0.097	0.079	0.103	0.077	103.68					
2035	0.098	0.080	0.104	0.078	103.68					
2036	0.099	0.081	0.105	0.078	103.68					
2037	0.100	0.082	0.106	0.079	103.68					
2038	0.101	0.083	0.107	0.080	103.68					
2039	0.102	0.083	0.108	0.081	103.68					

From the 2009 Avoided Cost Study

**Table E-8**  
**Derivation of the 2010 Spending Budget for Shareholder Incentive Calculation**

	<b>Proposed 2010 Budget (\$000)<sup>2</sup></b>	<b>Commitments and Copays (\$000)</b>	<b>Other Funding Excluded From the Eligible Spending Budget</b>	<b>Eligible Sector Spending Budget (\$000)</b>
<b>Non-Low Income Residential</b>				
ENERGY STAR <sup>®</sup> Homes	\$904.0			
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$687.5			
ENERGY STAR <sup>®</sup> Heating	\$209.4			
EnergyWise	\$4,445.6			
ENERGY STAR <sup>®</sup> Lighting	\$1,841.0			
ENERGY STAR <sup>®</sup> Appliances	\$1,686.2			
EERMC - Residential	\$194.4		\$194.4	
Energy Efficiency Educational Programs	\$50.7			
Pilots	\$436.9			
Shareholder Incentive	\$453.7		\$453.7	
<b>Subtotal - Residential</b>	<b>\$10,909.3</b>	<b>\$0.0</b>	<b>\$648.1</b>	<b>\$10,261.2</b>
<b>Low Income Residential</b>				
ENERGY STAR <sup>®</sup> Central Air Conditioning	\$3,709.9			
Shareholder Incentive	\$131.7		\$131.7	
<b>Subtotal - Low Income Residential</b>	<b>\$3,841.5</b>	<b>\$0.0</b>	<b>\$131.7</b>	<b>\$3,709.9</b>
<b>Commercial &amp; Industrial</b>				
Design 2000plus	\$7,974.9	\$3,650.0		
Energy Initiative	\$7,598.7	\$1,350.0		
Small and Medium Business <sup>1</sup>	\$6,440.7	\$0.0		
Energy Action: Aquidneck & Jamestown	\$375.0			
EERMC - C&I	\$290.0		\$290.0	
Shareholder Incentive	\$794.4		\$794.4	
<b>Subtotal - Commercial &amp; Industrial</b>	<b>\$23,473.7</b>	<b>\$5,000.0</b>	<b>\$1,084.4</b>	<b>\$17,389.3</b>
<b>SRPP</b>	<b>\$425.0</b>		<b>\$425.0</b>	
<b>Grand Total</b>	<b>\$38,649.6</b>	<b>\$5,000.0</b>	<b>\$2,289.3</b>	<b>\$31,360.3</b>

<sup>1</sup> \$1,608,400 is an estimate of copayments to be received in 2010.

**Table E-9  
Target 2010 Shareholder Incentive**

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector	Spending Budget	Incentive Rate	Target Incentive	Target Incentive for Performance Metrics	Target Incentive - Annual kWh Savings	Annual kWh Savings Goal	Threshold kWh Savings	Target Incentive Per kWh	Incentive Cap Annual kWh Savings
Low Income Residential	\$3,709,852		\$145,489	\$0	\$145,489	2,408,186	1,444,912	\$0.060	\$181,861
Non-Low Income Residential	\$10,261,201		\$462,412	\$60,000	\$402,412	21,999,420	13,199,652	\$0.018	\$503,015
Commercial & Industrial	\$17,389,294		\$771,954	\$90,000	\$681,954	60,673,509	36,404,106	\$0.011	\$852,443
Total	\$31,360,347	4.40%	\$1,379,855	\$150,000	\$1,229,855	85,081,115	51,048,670		\$1,537,319

Notes:

(1) Sector budget net of projected commitments and copays. See Table E-8

(2) 4.40% of the sector spending budget.

(3) Target Incentive Total = Incentive Rate x Spending Budget Total (Column (1)).

(4) \$30,000 per proposed performance metric.

ENERGY STAR® Central Air Conditioning

(6) Goal for annual kWh savings by sector. This may be adjusted at year end for actual spending relative to the spending budget.

If goal is adjusted, values in columns (7), (8), and (9) will be adjusted as well.

(7) 60% of Column (5). No incentive is earned on annual kWh savings in the sector unless the Company achieves at least this threshold level of

(8) Column (5)/Column (6). Applicable to all annual kWh savings up to 125% of target savings if at least 60% of target savings have been achieved.

(9) Column (5) x 1.25.



**Table G-1  
Funding Sources by Sector  
2010**

	2010
Gas Energy Efficiency Surcharge per Dth	\$0.150
<b>Forecasted Use (Dth):</b>	
<b>TOTAL THROUGHPUT</b>	
Low Income Residential Non-Heating	44,195
Low Income Residential Heating	1,382,587
<b>Low-Income subtotal</b>	<b>1,426,782</b>
Residential Non-Heating	463,155
Residential Heating	15,995,481
<b>Residential subtotal</b>	<b>16,458,636</b>
Small C&I	2,780,332
Medium C&I	6,290,351
Large LLF	3,080,326
Large HLF	1,199,817
Extra Large LLF	1,399,621
Extra Large HLF	5,742,484
Opt out eligible	-1,384,356
Non Firm	1,625,906
<b>C&amp;I Subtotal</b>	<b>19,108,574</b>
<b>TOTAL THROUGHPUT</b>	<b>36,993,991</b>
<b>Collections by Sector:</b>	
Uncollectible percentage (from Gas Rate Case)	2.46%
Residential Low Income Surcharge Collections	\$208,700
Low Income Weatherization in Base Rates	\$200,000
<b>Total Collections - Low-Income Residential</b>	<b>\$408,700</b>
<b>Total Collections - Non-Low Income Residential</b>	<b>\$2,408,000</b>
<b>Total Collections - Commercial and Industrial</b>	<b>\$2,795,700</b>
<b>TOTAL PROJECTED COLLECTIONS</b>	<b>\$5,612,400</b>
<b>OTHER SOURCES OF FUNDING</b>	
<b>Prior Year Fund Balance by Sector<sup>1</sup></b>	
Low Income Residential	\$0
Non-Low Income Residential	(\$2,391,839)
Commercial and Industrial	\$1,538,034
<b>Projected DSM Commitments at Prior Year-End</b>	
Low Income Residential	\$0
Non-Low Income Residential	\$0
Commercial and Industrial	\$23,438
<b>SUBTOTAL OTHER SOURCES</b>	
Low Income Residential	\$0
Non-Low Income Residential	(\$2,391,839)
Commercial and Industrial	\$1,561,472
<b>POTENTIAL TOTAL FUNDING AVAILABLE MINUS COMMITMENTS</b>	
Low Income Residential	\$408,700
Non-Low Income Residential	\$16,161
Commercial and Industrial	\$4,333,734
	<b>\$4,758,595</b>
<b>POTENTIAL TOTAL FUNDING AVAILABLE</b>	
Low Income Residential	\$408,700
Non-Low Income Residential	\$16,161
Commercial and Industrial	\$4,357,172
<b>Total</b>	<b>\$4,782,033</b>

<sup>1</sup> Fund Balance currently tracked by Residential and Commercial and Industrial Sectors; Low-income fund balance and interest not separated out. Fund balance data from January 2010. Includes Interest.

**Table G-2  
National Grid Gas Energy Efficiency Program Budget  
2010**

<b>Program</b>	<b>External</b>	<b>Internal</b>	<b>Marketing</b>	<b>Rebates and Other Customer Incentives</b>	<b>Evaluation &amp; Market Research</b>	<b>Grand Total</b>
<b>NON LOW-INCOME RESIDENTIAL:</b>						
ENERGY STAR® Homes	0	26,362	0	0	14,769	41,131
Building Practices and Demonstration Program	0	5,012	0	24,072	0	29,084
Residential High-Efficiency Heating Program	10,691	98,704	36,451	334,004	28,401	508,251
EnergyWise	9,760	23,561	33,250	759,180	0	825,751
EERMC - Residential	52,300					52,300
Shareholder Incentive						62,668
<b>Subtotal - Non-Low Income Residential</b>	<b>72,751</b>	<b>153,639</b>	<b>69,701</b>	<b>1,117,256</b>	<b>43,170</b>	<b>1,519,184</b>
<b>LOW-INCOME RESIDENTIAL:</b>						
Single Family Low Income Services	0	20,186	0	347,970	0	368,156
Shareholder Incentive						17,461
<b>Subtotal - Low Income Residential</b>	<b>0</b>	<b>20,186</b>	<b>0</b>	<b>347,970</b>	<b>0</b>	<b>385,616</b>
<b>COMMERCIAL AND INDUSTRIAL:</b>						
Commercial High Efficiency Heating Program	27,948	119,620	50,568	365,467	25,245	588,848
Commercial Energy Efficiency Program	264,695	298,050	151,167	1,287,373	111,585	2,112,870
Building Practices & Demonstration Program	0	0	0	0	0	0
EERMC - C&I	55,900	0	0	0	0	55,900
Commitments				0		0
Shareholder Incentive						119,615
<b>Subtotal - Commercial &amp; Industrial</b>	<b>348,543</b>	<b>417,669</b>	<b>201,735</b>	<b>1,652,840</b>	<b>136,830</b>	<b>2,877,232</b>
<b>Grand Total</b>	<b>421,294</b>	<b>591,494</b>	<b>271,436</b>	<b>3,118,066</b>	<b>180,000</b>	<b>4,782,033</b>

**Table G-3**  
**Proposed 2010 Budget Compared to Approved 2009 Budget (\$000)**  
2010

	<b>Proposed Budget (2010)</b>	<b>Approved Budget (2009)</b>	<b>Change Compared to 2009</b>
<b>Non-Low Income Residential</b>			
Residential High-Efficiency Heating, Water-Heating, Controls Program	\$480	\$912	-\$432
EnergyWise	\$826	\$1,032	-\$206
Building Practices and Demonstration Program	\$29	\$38	-\$9
ENERGY STAR <sup>®</sup> Homes	\$26	\$15	11
EERMC - Residential	\$52	54	-2
<b>Subtotal - Non-Low Income Residential</b>	<b>\$1,413</b>	<b>2,052</b>	<b>-638</b>
<b>Low Income Residential</b>			
Low Income	\$368	1,341	-973
<b>Subtotal - Low Income Residential</b>	<b>\$368</b>	<b>1,341</b>	<b>-973</b>
<b>Commercial &amp; Industrial</b>			
Commercial High Efficiency Heating Equipment	\$564	381	182
Commercial Energy Efficiency Program	\$2,001	2,053	-52
Comm Building Practices & Demonstration Program	\$0	73	-73
EERMC - C&I	\$56	48	8
<b>Subtotal Commercial &amp; Industrial</b>	<b>\$2,621</b>	<b>2,555</b>	<b>65</b>
<b>OTHER EXPENSE ITEMS</b>			
Company Incentive	\$197	\$267	-\$70
Program Design, Evaluation and Planning	\$180	\$221	-\$41
<b>Subtotal Other Items</b>	<b>\$377</b>	<b>\$488</b>	<b>-\$111</b>
<b>TOTAL BUDGET</b>	<b>\$4,779</b>	<b>\$6,437</b>	<b>-\$1,658</b>

**Table G-4**  
**Calculation of Program Year Cost-Effectiveness**  
2010  
Values in \$000

	Rhode Island Benefit/ Cost	Total Benefit	Program Implementation Expenses	Customer Contribution	Evaluation Cost	Shareholder Incentive
<b>Residential Programs</b>						
Residential High-Efficiency Heating, Water-Heating, Controls Program	3.50	\$3,857.8	\$479.8	\$594.6	\$28.4	NA
Energy Wise	2.40	\$2,601.4	\$825.8	\$260.3	\$0.0	NA
Energy Star Homes	NA	NA	\$26.4	\$0.0	\$14.8	NA
Building Practices and Demonstration Program	NA	NA	\$29.1	\$0.0	\$0.0	NA
EERMC Assessment-Residential	0.00	\$0.0	\$52.3	\$0.0	\$0.0	NA
<b>SUBTOTAL</b>	<b>2.72</b>	<b>\$6,459.2</b>	<b>\$1,413.3</b>	<b>\$855.0</b>	<b>\$43.2</b>	<b>\$62.7</b>
<b>Low Income Programs</b>						
Low Income	1.17	\$451.3	\$368.2	\$0.0	\$0.0	\$17.5
<b>Large Commercial &amp; Industrial</b>						
Commercial Energy Efficiency Program	2.48	\$10,131.5	\$2,001.3	\$1,979.9	\$111.6	NA
Commercial High Efficiency Heating Equipment	2.14	\$1,739.4	\$563.6	\$222.9	\$25.2	NA
EERMC Assessment-C&I	0.00	\$0.0	\$55.9	\$0.0	\$0.0	NA
<b>SUBTOTAL</b>	<b>2.34</b>	<b>\$11,870.9</b>	<b>\$2,620.8</b>	<b>\$2,202.7</b>	<b>\$136.8</b>	<b>\$119.6</b>
<b>TOTAL</b>	<b>2.40</b>	<b>\$18,781.5</b>	<b>\$4,402.3</b>	<b>\$3,057.7</b>	<b>\$180.0</b>	<b>\$199.7</b>

Notes:

- (1) The TRC Test is equal to the expected dollar value of lifetime resource benefits divided by the sum of Implementation Expenses, Customer Contribution, Evaluation Expenses, and the target shareholder incentive.
- (2) Equal to the Net Present Value of the budget amounts provided in Table G-2 excluding Commitments. Subtotal and Total rows include expenses for all line items except Commitments whether or not benefits have been quantified.
- (3) Energy Star Homes savings are captured in the Electric benefit cost test, Table E-4.

**Table G-5  
Summary of Benefits and Savings by Program  
2010**

	Benefits (\$000)			MMBTU Gas Saved	
	Total(1)	Natural Gas(2)	Non-Gas Benefit(3)	Annual(4)	Lifetime(5)
<b>Commercial &amp; Industrial</b>					
Commercial Energy Efficiency Program	\$10,131.5	\$10,131.5	\$0.0	75,148	901,776
Commercial High Efficiency Heating Equipment	\$1,739.4	\$1,739.4	\$0.0	7,788	155,751
EERMC - C&I	NA	NA	NA	NA	NA
<b>SUBTOTAL</b>	<b>\$11,870.9</b>	<b>\$11,870.9</b>	<b>\$0.0</b>	<b>82,936</b>	<b>1,057,527</b>
<b>Low Income Residential</b>					
Low Income	\$451.3	\$413.2	\$38.2	1,515	30,306
<b>SUBTOTAL</b>	<b>\$451.3</b>	<b>\$413.2</b>	<b>\$38.2</b>	<b>1,515</b>	<b>30,306</b>
<b>Non Low Income Residential</b>					
Energy Star Homes	\$0.0	\$0.0	\$0.0	0	0
Energy Wise	\$2,601.4	\$2,601.4	\$0.0	9,541	190,812
Residential High-Efficiency Heating, Water-Heating, Controls Program	\$3,857.8	\$3,857.8	\$0.0	16,524	287,501
Building Practices and Demonstration Program	\$0.0	\$0.0	\$0.0	0	0
EERMC - Residential	NA	NA	NA	NA	NA
<b>SUBTOTAL</b>	<b>\$6,459.2</b>	<b>\$6,459.2</b>	<b>\$0.0</b>	<b>26,065</b>	<b>478,313</b>
<b>TOTAL</b>	<b>\$18,781.5</b>	<b>\$18,743.3</b>	<b>\$38.2</b>	<b>110,516</b>	<b>1,566,146</b>

Notes:

- 1) Equal to the sum of Natural Gas benefits and Participant Resource benefits.
- 2) The value of lifetime natural gas savings valued using the avoided gas costs quantified in "Avoided Energy Supply Costs in New England," August, 2009, prepared by Synapse Energy Economics for the Avoided-Energy-Supply-Component Study Group. This is also the source of the electric avoided costs that have been used to assess electric energy efficiency program cost-effectiveness.
- 3) Non-Gas Benefits are equal to the dollar value of expected electricity savings and non-resource savings that have not been included in National Grid's electric energy efficiency plans for 2010.
- 4) The projection of annual savings reflects results attained for similar programs in other jurisdictions.
- 5) Lifetime savings are equal to annual savings multiplied by the expected life of measures expected to be installed in each program.

**Table G-6**  
**Comparison of Goals with Prior Year**  
2010

Program	Proposed 2010		2009 Plan		Difference	
	Annual Energy Savings (MMBTU Natural Gas)	Participants	Annual Energy Savings (MMBTU Natural Gas)	Participants	Annual Energy Savings (MMBTU Natural Gas)	Participants
<b>Commercial &amp; Industrial</b>						
Commercial Energy Efficiency Program	75,148	400	82,198	305	-7,050	95
Commercial High Efficiency Heating Equipment	7,788	226	5,683	150	2,104	76
Comm Building Practices & Demonstration Program	0	0	1,451	1	-1,451	-1
EERMC - C&I						
<b>SUBTOTAL</b>	<b>82,936</b>	<b>626</b>	<b>89,333</b>	<b>456</b>	<b>-6,397</b>	<b>170</b>
<b>Low Income Residential</b>						
Low Income	1,515	83	13,690	319	-12,175	-236
<b>SUBTOTAL</b>	<b>1,515</b>	<b>83</b>	<b>13,690</b>	<b>319</b>	<b>-12,175</b>	<b>-236</b>
<b>Non-Low Income Residential</b>						
Energy Star Homes	0	0	0	0	0	0
Energy Wise	9,541	1,368	15,020	2,243	-5,479	-875
Residential High-Efficiency Heating, Water-Heating, Controls Progr	16,524	1,844	22,641	2,370	-6,117	-526
Building Practices and Demonstration Program	0	10	0	10	0	0
EERMC - Residential						
<b>SUBTOTAL</b>	<b>26,065</b>	<b>3,222</b>	<b>37,660</b>	<b>4,623</b>	<b>-11,596</b>	<b>-1,401</b>
<b>TOTAL</b>	<b>110,516</b>	<b>3,931</b>	<b>140,683</b>	<b>5,398</b>	<b>-30,168</b>	<b>-1,467</b>

**Note:**

1) MMBtu savings from Table G-5 for 2010.

**Table G-7  
Avoided Costs  
2010**

Used in B/C Model for Rhode Island

	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL
	Heating		Hot Water annual	All 6-mon.	Non Heating annual	Heating 5-mon.	All 6-mon.	
Year								5-mon.
2007								
2008								
2009	11.74		8.55	10.71	7.02	9.05	8.41	9.46
2010	13.03		9.91	12.02	8.38	10.34	9.72	10.76
2011	13.72		10.58	12.70	9.04	11.03	10.40	11.45
2012	14.21		11.15	13.21	9.61	11.52	10.91	11.96
2013	14.23		11.16	13.24	9.62	11.55	10.93	11.98
2014	14.32		11.24	13.32	9.70	11.63	11.02	12.06
2015	14.42		11.33	13.42	9.80	11.74	11.12	12.17
2016	14.57		11.47	13.57	9.93	11.89	11.26	12.31
2017	14.78		11.66	13.77	10.12	12.09	11.46	12.51
2018	15.01		11.88	13.99	10.35	12.32	11.69	12.74
2019	15.11		12.04	14.11	10.50	12.42	11.81	12.86
2020	14.93		11.87	13.94	10.34	12.24	11.63	12.68
2021	14.78		11.68	13.78	10.15	12.09	11.47	12.52
2022	14.88		11.77	13.87	10.23	12.19	11.57	12.61
2023	15.10		11.94	14.08	10.40	12.41	11.77	12.82
2024	15.51		12.34	14.49	10.81	12.82	12.18	13.23
2025	15.64		12.46	14.61	10.92	12.95	12.31	13.35
2026	15.76		12.58	14.73	11.04	13.08	12.43	13.48
2027	15.89		12.70	14.86	11.17	13.21	12.56	13.60
2028	16.02		12.82	14.98	11.29	13.34	12.69	13.73
2029	16.15		12.94	15.11	11.41	13.47	12.82	13.86
2030	16.28		13.06	15.24	11.54	13.60	12.95	13.99
2031	16.41		13.19	15.37	11.66	13.74	13.08	14.12
2032	16.55		13.31	15.50	11.79	13.87	13.21	14.25
2033	16.68		13.44	15.63	11.92	14.01	13.35	14.39
2034	16.81		13.57	15.77	12.05	14.15	13.48	14.52
2035	16.95		13.70	15.90	12.18	14.29	13.62	14.66
2036	17.09		13.83	16.04	12.31	14.43	13.76	14.79
2037	17.23		13.96	16.17	12.45	14.57	13.90	14.93
2038	17.37		14.09	16.31	12.58	14.72	14.04	15.07
2039	17.51		14.23	16.45	12.72	14.86	14.18	15.21
2040								

From 2009 Avoided Costs Study

**Table G-8**  
**Target 2010 Shareholder Incentive**  
2010

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)
Sector	Budget	Target Incentive	Annual Savings Goal (MMBTU)	Threshold Savings (MMBTU)	Target Incentive Per MMBTU
Low Income Residential	\$368,156	\$17,461	1,515	909	\$11.523
Non-Low Income Residential	\$1,404,217	\$62,668	26,065	15,639	\$2.404
Commercial & Industrial	\$2,701,717	\$119,615	82,936	49,761	\$1.442
Total	4,474,090	199,743	110,516	66,309	

**Notes:**

- (1) Sector budget excluding the EERMC Assessment, Shareholder Incentives, and Commitments. See Table G-2
- (2) Equal to the incentive rate (4.40%) x Column (1).
- (3) See Table G-5
- (4) 60% of Column (3). No incentive is earned on annual MMBTU savings in the sector unless the Company achieves at least this threshold level of performance.
- (5) Column (2)/Column (3)



## **2010 Measurement and Verification Plan**

The table at the end of this section lists the measurement and verification studies planned for 2010. Below are descriptions of these planned studies.

**Energy Star Homes- Baseline Market Assessment Study-Gas and Electric.** The Joint Management Committee of the ENERGY STAR® Homes program plans to do comprehensive assessment of the baseline characteristics of new homes being built today. The study will involve telephone and on-site surveys. A portion of those studied will be in Rhode Island. Results will be used to help assess the programs effectiveness at transforming the market for energy efficiency in new homes.

**Residential Lighting - Market Analysis/Net to Gross Estimates.** The market for high efficiency residential lighting has changed dramatically over the last few years and will be changing even more as a result of federal legislation going into effect in 2012 which increases the minimum required efficiency of stand light bulbs. This study seeks to quantify the effects of the residential lighting program the company has been running in and determine the state of the overall lighting market in Rhode Island. A similar study was completed in other New England states in 2009 and showed some surprising results which may or may not be applicable to the Rhode Island market.

**Refrigerator Turn In- Process Evaluation.** Will assess the Company's new refrigerator turn in program that began in 2009. It will include surveys of customer satisfaction and an assessment of program operations through interviews with Company staff and contractors. It may include an impact evaluation of program savings.

**SBS Lighting Metering.** Will be conducted with jointly with other states, It will involve using lighting loggers to assess the peak demand impacts of lighting projects installed through the SBS Program.

**Custom Studies.** The Custom HVAC, Process and Comprehensive Design Approach(CDA)and Sample Design Data Analysis studies all involve impact evaluation of the Custom component of the Energy Initiative and Design 2000 large commercial and industrial efficiency programs. The studies involve on-site engineering and end-use metering of a statistically drawn random sample of participants. These studies are assumed to be done with other National Grid affiliates and or PAs in other states. The specific details of how these studies will be conducted are still under development and may change.

**C&I Process Evaluation Market Characterization.** The specific details of what is to be studied will be determined after an evaluation “charette” has been conducted with the Council and the Collaborative. This budget has been set aside for Commercial and Industrial process and market evaluations that have been identified as needed to develop new program offerings, specific measures or new delivery and marketing approaches.

**Portfolio Level Precision and Confidence.** This study will develop estimates of the precision of the energy and demand savings using all latest evaluation results. These estimates are needed to assure that the saving estimates comply with the ISO FCM precision requirements.

**Aquidneck Island/Community Evaluation.** Will be a process evaluation of the Aquidneck Island community pilot to determine effectiveness of this new approach for marketing and delivering energy efficiency using social marketing.

**Free ridership and spillover - C&I.** An assessment of free-ridership and spillover of commercial and industrial program using telephone surveys of participants, vendors and design professionals.

**Pilots -- Deep Energy Retrofit, Energy Star Homes V3, Heat Pump Hot Water Heaters.** Evaluation studies of new pilot programs to be started in 2010. These will include

process and impact evaluations if programs have served enough customers to make the studies worthwhile.

**NEEP EM&V Forum.** Includes studies to be done in conjunction with other states in the Northeast with the goals of reducing costs and providing results using more common methodologies. The studies include: assessment of commercial and industrial lighting persistence through on-site surveys; collection of lighting and HVAC load shape data through metering and data sharing; development of common evaluation techniques for gas and electric technologies and programs; development of improved estimates of measure incremental costs for common measures; and various miscellaneous planning studies.

**Commercial Energy Efficiency Program (CEEP)/Custom.** Impact evaluation of Custom gas efficiency measures such as boiler controls and larger process boilers.

**Residential High Efficiency Heating Equipment (HEHE).** Impact evaluation of the residential heating and water heating equipment using billing analysis. This project will be done in conjunction with the GasNetworks consortium. An RFP for this project has already gone out. Results are expected in the second quarter of 2010.

**Combined Heat and Power (CHP).** Includes the metering of combined heat and power projects. The metering will include gas consumption, electric output and measurement of useful heat recovered. An RFP has been sent out for the first site.

**C&I High Efficiency Heating Equipment.** Impact evaluation of the large commercial heating equipment using billing analysis and possibly end-use metering.

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<b>Program</b>	<b>Study</b>	<b>RI</b>	<b>Joint (Partners Other Than NGRID Affiliates)</b>
<b>Residential Electric</b>			
ES Homes	Baseline Market Assessment Study	<b>\$11,300</b>	All MA PAs
ES Homes	ES Homes Evaluation Market Progress Report	<b>\$0</b>	All MA PAs
ES Homes	ES Homes Evaluation Misc Studies	<b>\$0</b>	All MA PAs
ES Lighting	NH - Process/ Impact Evaluation - metering	<b>\$0</b>	
RCS	Process, pilot evaluation, new measure screening	<b>\$0</b>	All MA PAs
Residential Lighting	RI Market Analysis/Net to Gross Estimates	<b>\$80,000</b>	
Refrigerator Turn In	Process Evaluation	<b>\$50,000</b>	
<b>C&amp;I Electric</b>			
SBS	SBS Lighting Metering study	<b>\$16,500</b>	EM&V members
EI	Large C&I Retrofit Lighting Metering Study	<b>\$16,500</b>	EM&V members
Custom	CDA Complete 2006 sites and finish new 2008 sites	<b>\$23,100</b>	
Custom	Process -complete 2008 sites and begin 2009 sites	<b>\$55,000</b>	
Custom	Custom HVAC- 15 2009 sites	<b>\$22,000</b>	
Custom	Sample Design/Data Analysis	<b>\$5,500</b>	
SBS	Plug Load Study	<b>\$11,000</b>	NSTAR, CLC
All End Uses	C&I Process Evaluation Market Characterization TBD	<b>\$150,000</b>	
<b>Other Electric</b>			
	Portfolio Level Precision and Confidence	<b>\$10,000</b>	
	Aquidneck Island/Community Evaluation	<b>\$75,000</b>	
	Free ridership and spillover - C&I	<b>\$22,000</b>	
	Pilots -- Energy Star Homes V3, HPWH	<b>\$26,000</b>	
	Residential On Bill Financing	<b>\$10,000</b>	MA
	Non Electric Benefits	<b>\$10,000</b>	MA
<b>NEEP EM&amp;V Forum</b>			
All End Uses	EM&V Forum Support	<b>\$18,000</b>	EM&V members
Lighting	Lighting Persistence (EM&V Forum)	<b>\$7,000</b>	EM&V members
HVAC/Lighting	Load Shape Study-Lighting/Unitary	<b>\$4,000</b>	EM&V members
All End Uses	Common Methods Evaluation Methods for Emerging Technologies	<b>\$4,000</b>	EM&V members
All End Uses	Common Incremental Cost Assumptions	<b>\$7,000</b>	EM&V members
All End Uses	Misc Planning Assumption Studies	<b>\$9,000</b>	EM&V members
Gas	Gas Evaluation Methods	<b>\$4,000</b>	EM&V members
<b>Gas</b>			
ES Homes	see above under electric	<b>\$11,700</b>	All MA PAs + RI
CEEP	Commercial Energy Efficiency Program (CEEP) Custom	<b>\$52,000</b>	
HEHE	Res High Eff Heating Equipment (HEHE)	<b>\$32,500</b>	GasNetworks
CEEP	Combined Heat and Power (CHP)	<b>\$43,800</b>	
HEHE	C&I High Eff Heating Equipment	<b>\$26,000</b>	Gas Networks
	<b>Total</b>	<b>\$846,900</b>	
	Electric Subtotal	\$642,900	
	Gas Subtotal	\$170,000	



**2010 PERFORMANCE METRICS**

**Introduction**

Since 2004, a portion of the incentive under the shareholder incentive mechanism for the DSM programs has been reserved for incentivized performance metrics. These performance metrics are established for initiatives offered in Rhode Island for market transformation objectives or for significant improvements in program offerings. In all cases, the metrics are designed to be straightforward measures of progress for initiatives believed worthy of a special targeted focus.

For 2010, the Company proposes five performance targets for 2010 described on the following pages. The proposed targets reflect current market conditions and will require significant Company effort to achieve desired results. They fall into categories shown in the following table.

	Repeated from 2009	New for 2010
Partial credit	C&I #2: Core Performance*	Res #1: Energy Wise  Integrated #1: Outside funding  C&I #3: Integrated Industrial Commitments
No Partial Credit	C&I #1: Non Lighting Savings*	

\* Targets described below are not final

Where a metric is repeated from 2009, it reflects the Parties' agreement that the metrics are still valid as well as the fact that, for many such initiatives, progress is achieved over time and that it is worthwhile to maintain the focus of program implementation on the policy objective defined by the metric over more than one year.

Where partial credit is recommended, the Parties agree that, partial credit will be awarded for performance that does not meet the specific numeric target, in recognition of the Company's

effort and in recognition that Rhode Island consumers benefit from even partial progress toward the metric's objective. No extra incentive will be awarded for exceeding the numeric target.

The performance level at which partial achievement will be credited is the "threshold." For the one metric structured with partial credit in 2010 that is continuing from 2009, the threshold will be greater than or equal to final 2009 performance after consideration of the unique attributes of the metric. This provides continuity in the structure of the metric at the same time as creating a clear standard for the Company from which it must improve in order to receive an incentive.

The performance level at which the full incentive will be credited is the "target." The incentive for two metrics will be linearly scaled between the threshold and the target. For the Industrial metric that does not allow for this kind of scaling, the incentive will be credited for incremental levels of performance.

### **Residential Metric 1: ENERGYWISE FOLLOW UP MEASURES**

Metric: In 2010, the Company will calculate the number of follow-up measures, defined as weatherizations, installed by EnergyWise Single Family household customers divided by the number of measures recommended in the Energy Wise audit. The Company will increase the percentage of customers installing follow-up measures by 10% over the 2008-2009 baseline penetration of 31%.

Objective: The metric supports acquiring deeper savings from EnergyWise Single Family participants.

Discussion: The EnergyWise Program began in 1998. In 2007, it became an integrated gas and electric program. From 2008 - 2009, 31% of recommended follow-up measures were installed by customers. The following chart illustrates baseline data:

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Measure	Recommended	Installed	Percent
2008 Electric Heat Weatherization	41	33	
2008 Gas Heat Weatherization	1246	405	
2009 Electric Heat Weatherization	91	68	
2009 Gas Heat Weatherization	1576	421	
2 Year Total	2954	927	31%

In 2010, the Company proposes to audit 3,605 electric and non-electric Single Family households.

Partial Performance: The following is proposed for partial achievement toward the target of a 10% percentage increase in installed follow up measures that were recommended. The incentive for performance between the threshold and the target will be scaled proportionately.

ENERGYWISE FOLLOW UP MEASURES			
	Penetration %	Incentive	% of Incentive
Threshold	36% (baseline + 5%)	\$10,000	33%
Target	41% (baseline +10%)	\$30,000	100%

**Integrated Metric 1: Residential and Commercial Outside Funding Sources**

Metric: The Company will secure \$2 million dollars in outside funding for application in some combination of residential, commercial, and low-income, gas and electric programs in 2010. This funding will only be used to increase loan and financing funds relative to 2009. Funding counted toward success in this metric can not be funds used to increase overall savings or the shareholder incentive. Funding counted toward success in this metric can also not be funds that will be used to offset future DSM charges. The funds need to be secured in 2010, but need not be spent in 2010 to fulfill the objective of the metric (funds secured but not allocated in 2010 will be used in 2011).

Objective: The metric supports expanding and transforming the ways the Company secures energy efficiency funding. The Company shall be incentivized for raising funds from outside sources because these funds help diminish the rate at which the DSM Charge increases. Additionally, creating sustainable loan funds can diminish DSM increases over a long term period.

Discussion: Eligible outside sources of funding may be sources of funding other than the DSM Charge, Forward Capacity Market, or Regional Greenhouse Gas Funds.

Partial Performance: Securing at least 40% of the \$2 million dollars in outside funding is the proposed threshold. The incentive for performance between the threshold and the target will be scaled proportionately.

RESIDENTIAL AND COMMERCIAL OUTSIDE FUNDING			
Performance	Funding	Incentive	% of Incentive
Threshold	\$800,000	\$10,000	33%
Target	\$2,000,000	\$30,000	100%

**C&I Metric 1: Savings Other Than Prescriptive Lighting Savings in the Energy Initiative Program**

Metric: The Company will achieve a target amount of MWh savings from subprograms other than prescriptive lighting in the Energy Initiative program in 2010. The target will be calculated as the net annual MWh savings from all other subprograms<sup>1</sup> estimated as part of the planned savings for the Energy Initiative program in 2010.

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<sup>1</sup> For the 2009 Energy Initiative Program, subprograms include Compressed Air, Custom, HVAC, Lighting, Motors, and VSDs.

Objective: This metric encourages the Company to seek comprehensive retrofit projects in existing Commercial and Industrial customer facilities that go beyond prescriptive lighting.

Discussion: The percentage of savings from prescriptive lighting in the Energy Initiative Program has been increasing over the past few years. This type of measure distribution has helped the Company achieve savings goals but this has perhaps been achieved at the expense of measure diversity. This metric complements and reinforces the overall program savings goals by establishing a performance metric focusing on other subprogram savings. The metric incentive will only be earned only if other subprogram savings meets or exceeds 100% of the kWh savings built into the savings goals.

As mentioned above, the proposed target is 100% of the MWh savings from all Energy Initiative subprograms except prescriptive lighting consistent with the savings goals for 2010. The goal is set as a MWh target for savings, rather than a percentage of program savings, because this provides a clearer target than a percentage, which would be affected by how much prescriptive lighting savings are achieved. There is no threshold for this metric. Without a threshold, this becomes an “all-or-nothing” performance metric. The parties propose this treatment because it efficiently complements the MWh savings incentive for this sector. The Company will share quarterly subprogram MWh savings information with the Collaborative to track metric performance.

Metric Performance: The following is for achievement of the target savings from Energy Initiative other than prescriptive-lighting for Tier 1. If outside funding becomes available, as in Tier 2, the performance metric will be updated based on the approved plan used to secure funding.

ENERGY INITIATIVE OTHER SUBPROGRAM SAVINGS			
Performance	MWh Savings	Incentive	% of Incentive
Target	6,970 MWh	\$30,000	100%

There is no threshold for this metric.

**C&I Metric 2: Comprehensive Industrial Integration of Gas and Electric Measures**

Metric: The Company target will be to work with 5 industrial customers to sign a comprehensive agreement that includes both a gas and an electric measure. Qualifying customers will be customers that have a completed TA study that identifies at least three gas and three electric energy efficiency measures, and commit in 2010 to installing at least one gas and one electric measure. A commitment will be in the form of a signed rebate application; installation need not be in 2010.

Objective: Demonstrate the Company is integrating gas and electric industrial programs.

Discussion: For 2010, the Company is proposing a focus on integrated gas and electric industrial energy efficiency. The Company will develop a technical assistance (TA) study for large industrial clients interested in energy efficiency initiatives. The TA study will identify both gas and electric measures. After the technical analysis study is completed, the Company will offer rebates to the customer for potential projects. If the customer commits to the energy efficiency projects, they will sign the rebate application, making a commitment to install the selected measures.

At year-end 2009, the Company signed 3 comprehensive TA studies; this will be the threshold for 2010 performance. The target will be 5. This metric will track only those commitments which include at least one gas and electric measure. The incentive for performance between the threshold and the target will be scaled proportionately.

COMPREHENSIVE INDUSTRIAL INTEGRATION			
Performance	Signed Agreements	Incentive	% of Incentive
Threshold	3 (2009 Participation)	\$10,000	33%
Target	5	\$30,000	100%

**C&I Metric 3: Core Performance Buildings**

Metric: The Company will contract with design professionals (architects, engineers, builders) to commit to apply the Core Performance guidelines in the design and construction of new commercial buildings less than 75,000 square feet in area. The Company will sign 6 agreements, 2 more agreements than in 2009.

Objective: The metric supports market transformation in the construction of small to medium size commercial facilities which have not received as much energy efficiency attention as larger construction projects. By introducing the Core Performance guidelines to and securing commitments with design professionals, this effort will affect other facilities with which these professionals are involved.

Discussion: As noted in Attachment 4, Core Performance is a suite of technical resources and design guides that help design professionals create commercial buildings that are energy efficient and provide a healthy work environment for occupants. The Company has been promoting Core Performance in Rhode Island since 2006 to address the efficiency needs of new construction projects for commercial buildings less than 75,000 sf. This effort has featured several training programs on the topic offered in RI.

For 2010, we expect the number to grow as architects and their clients realize that buildings designed this way are practical and cost effective. The program will continue to be expanded in 2010 to reach more projects and more design firms through further training and promotional efforts. Also, National Grid continues to work closely with the New Buildings Institute, the national organization that manages and promotes and maintains Advanced Buildings across the country to add powerful new features to the program that will increase its appeal and market penetration. Furthermore, the Company is revising the incentive structure for Core Performance to be on a \$/sq. ft. basis—the same benchmark used by developers. The Company plans to monitor the effectiveness of reaching developers

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through this new this new incentive strategy and use data gathered to inform future program and metric design.

The Company signed 4 agreements during 2009. The 2010 threshold will be the same number of agreements signed in 2009, and the target will be an additional two agreements.

Partial Performance: The following is proposed for partial achievement toward the target. The incentive for performance between the threshold and the target will be scaled proportionately.

CORE PERFORMANCE BUIDLINGS			
Performance	Signed Agreements	Incentive	% of Incentive
Threshold	4 (2009 Participation)	\$10,000	33%
Target	6	\$30,000	100%



## **Energy Action: Aquidneck & Jamestown**

### **Overview**

The *Energy Action: Aquidneck & Jamestown* pilot project is a community initiative intended to leverage community partnerships and certain targeted marketing of program components in order to assess how these may support the objectives of least cost procurement. The program is unique because it creates partnerships and drives innovation across the Company's residential, commercial, and municipal sectors. Similar to political campaigns, it will combine both grassroots and corporate action.

### **Eligible Population**

Any resident, business, or municipality of the towns of Jamestown, Middletown, Newport, or Portsmouth, Rhode Island is eligible to participate. Participation is dependent upon eligibility for any of the standard National Grid energy efficiency programs in Rhode Island. The eligible base is 28,048 household customers and 5,340 business customers.

### **Program Design**

*Energy Action: Aquidneck & Jamestown* is designed to package and market pre-existing residential, municipal, and commercial programs in new ways. The program fully integrates gas and electric, commercial and residential programs under a community umbrella. The purpose of the program is to innovate how programs are delivered using a community mechanism. Evaluation will test the extent to which a combination of targeted marketing and outreach driven by National Grid combined with carefully managed community partnerships can create a movement for energy efficiency and significant increased adoption of National Grid programs within a community. Program managers from each sector work with the Energy Action program manager and marketing experts to create new strategies that market their services and products to a community. Essentially, new programs offering

are not created. This design supports our long term goal for replicating the program in additional communities.

### **A. Community Partnerships**

The first angle of the program's approach to customers is empowering local affinity groups to drive customers to our services through their own channels and networks. This is a new approach for the company, and one that requires a light hand. At the center of this side of the company's efforts is the Neighborhood Energy Challenge. Run by members of the towns' energy and environment committees, the challenge will focus on increasing residential participation. Residents of all four towns can sign a pledge to try to save energy, and are directed to a website or worksheet that offers a variety of energy efficiency options from which to choose. Newsletters sharing participants' accomplishments and providing tips and advice on energy efficiency also will be available. Every month, participants claim points for the energy saving actions they have taken. Prizes will be awarded and neighborhood parties will be held to celebrate everyone's achievements. The Neighborhood Energy Challenge plans to engage 2,768 residents. This will meet the dual goals of low cost procurement and creating a movement that can be sustained once the pilot has been completed. The website can be found at [www.neighborhoodenergychallenge.org](http://www.neighborhoodenergychallenge.org).

Because a community comprises many differing interest groups, National Grid is committed to exploring and building a variety of partnerships within the community. To date, these partnerships include working with Rhode Island Interfaith Power and Light to offer the Savings Through Energy Management Program to up to 10 religious congregations, working with large C&I customers such as the Navy and Raytheon to conduct employee outreach, and offering the educational campaign Power to Save to all municipalities which sign up for Whole Building Assessment. The company is also developing a partnership with the Aquidneck Island Energy Alliance to conduct direct energy efficiency outreach across the

islands. Creating such a wide variety of partnerships will enable the company to cast a wide net as well as to test which types of community partnerships are most effective.

On the C&I side, National Grid will continue to work with the Newport County Chamber of Commerce, the municipal governments, and the Portsmouth Economic Development Committee to develop an outreach program for local businesses, from networking events, to business education events, and community recognition.

## **B. Company-led Marketing**

Concurrent with the grassroots community work, the company will push its own marketing for a full-circle approach.

These include:

- “Ambassador Kits” that can be distributed to high profile and influential citizens on both the residential and business sides. These kits will give them digestible information on energy efficiency that they can share with their circle.
- A micro-site branded for this community, with local events, pictures, and news.  
[www.powerofaction.com/aquidjames/](http://www.powerofaction.com/aquidjames/)
- Radio and Advertising through local media: Newport Daily News, Sakonnet Times, Jamestown Weekly, and WADK.
- Door Hangers for homes and businesses on the most constrained areas of the Grid
- Bill-stuffers for residential and small business customers
- E-mail blasts to residential and commercial customers
- PR efforts to get coverage of high-profile citizens and local businesses who participate
- Energy Efficiency tip-sheets for local rental companies
- Direct outreach to contractors in the area for energy efficiency training

- Home Energy Makeover Contest (potentially). This contest would be open to all homeowners in Jamestown, Middletown, Newport, and Portsmouth. This contest would raise the profile of National Grid's energy efficiency efforts in the area and would aim for a quick push to residential home energy audits. The grand prize winner would receive \$10,000 towards home energy efficiency improvements. The launch of this contest will depend upon fourth quarter 2009 participation results.

### **Cooperation with Transmission and Distribution**

The company is also applying for ARRA funds to conduct a smart grid test in the Newport area to address certain transmission and distribution issues. In the coming year, the company will explore strategies to coordinate and maximize returns from the two efforts occurring in this geographic space. Potential synchronization includes shared marketing materials and targeted marketing to customers on constrained feeders.

### **Program Goals**

Program goals were established after calculating 2008 participation and savings through National Grid energy efficiency programs. It should be noted that using 2008 for a baseline is ambitious – participation already increased in 2008 due to high gas prices. In light of overall state goals for 2010, however, the company feels it is prudent to stretch in this initiative. While absolute savings goals still remain modest, the goals do reflect a tripling of electric savings, and in some cases, more than tripling the baseline participation levels.

In regards to Gas C&I savings, goals reflect a change in the marketplace. Of 5340 C&I electric customers, only 1688 are also gas customers. Most previous C&I gas savings on Aquidneck has come from large businesses. Because of that, many of the massive savings opportunities with large customers have already been realized. The community initiative will take advantage of this situation to improve our integrated gas and electric offerings on the

small business level. We will push direct install on thermostats and spray valves in small businesses, particularly restaurants and hotels.

Program	2008 Baseline		Community Initiative Planned	
	MWh Savings	% Savings	MWh Savings	% Savings
<b>ELECTRIC</b>				
<b>RESIDENTIAL</b>	709.13	0.35%	2088.49	1.03%
<b>C&amp;I</b>	821.46	0.25%	3681.66	1.10%
<b>TOTAL</b>	1530.59	0.29%	5770.15	1.08%
<b>GAS</b>				
	<b>Therm Savings</b>	<b>% Savings</b>	<b>Therm Savings</b>	<b>% Savings</b>
<b>RESIDENTIAL</b>	1523.13	0.01%	4325.90	0.03%
<b>C&amp;I</b>	61046.00	0.29%	80000.00	0.38%
<b>TOTAL</b>	62569.13	0.30%	84325.90	0.41%

It should be noted that while the company has established targets for the purposes of budgeting and planning, should customer response exceed expectations, the company is prepared to respond within the limits of the 2010 budget.

**Evaluation**

During second quarter 2010, a program evaluation is planned to begin in order to study process and savings impact. The evaluation will determine the cost effectiveness of the program by measuring increased participation in existing programs, investigate whether there are any transmission and distribution deferral benefits from the increase in energy efficiency activity in the area, and assess the overall impact of the new strategies including the marketing campaign. The evaluation will also collect best practices in order to inform expansion to additional communities in time for the 2011 planning period.