nationalgrid

Jennifer Brooks Hutchinson
Senior Counsel

May 10, 2012

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4209 -- National Grid Electric and Gas Energy Efficiency Programs
2011 Year-End Report

Dear Ms. Massaro:

Enclosed please find ten (10) copies of National Grid's[1] 2011 Energy Efficiency Year-End Report. This report summarizes the gas and electric results, program highlights, and customer experiences over the 2011 program year. A copy of this report has also been provided to the parties in this proceeding.

Thank you for your attention to our filing. Please feel free to contact me if you have any questions regarding this matter at (401) 784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4209 Service List
RI Collaborative Members (w/attachments)

[1] The Narragansett Electric Company d/b/a National Grid (referred to herein as "National Grid" or the "Company").

The Narragansett Electric Company
d/b/a National Grid

2011 Energy Efficiency Year-End Report

May 10, 2012

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Attachments:

National Grid
2011 Energy Efficiency Year-End Report

Overview

2011 was a successful year for the Narragansett Electric Company d/b/a National Grid's (the "Company") energy efficiency (EE) portfolio of programs and initiatives. This Year-End report summarizes the gas and electric results, program highlights and customer experiences over the entire year. The electric and gas programs are described more fully in the "Settlement of the Parties," filed in Docket No. 4209 on November 1, 2010, and approved by the Rhode Island Public Utilities Commission (the "Commission") in Order No. 20236, issued December 23, 2010, as well as the "Energy Efficiency Program Plan for 2011 Revised Natural Gas Programs," filed in Docket 4209 on June 15, 2011 and approved by the Commission in Order No.20591, issued December 16, 2011.

The 2011 "Settlement of Parties" sets forth five major objectives for the year. The first objective was to "create economic value and cost savings for Rhode Islanders.[1]" The charts below summarize the electric and gas program benefit cost ratios, savings and expenditures compared to planned benefit cost ratios, savings goals and budgets respectively. The positive benefit cost ratios indicate that the Company's programs created value out of every dollar invested in 2011. This value represents an estimated annual electric bill savings of $11.5 million and annual gas bill savings of $2.3 million for Rhode Island customers. Additional cost and savings information can be found in Attachment 1, tables E-1 and E-3, and Attachment 2, tables G-1 and G-3.

	2012 Goal/Benchmark[2]	2012 Actual[3]	% Difference
Electric			
Annual MWh Savings	102,627	96,009	-6%
Annual kW Savings	19,142	13,651	-29%
Lifetime Benefits ($Mil)	$178.2	$151.5	-15%
Benefit/Cost Ratio	2.86	3.35	17%
Gas			
Annual MMBtu	102,203	119,613	17%
Lifetime Benefits ($Mil)	$20.2	$18.2	-10%
Benefit/Cost Ratio	2.24	2.21	1%

	2012 Budget ($Mil)[4]	2012 Actual ($Mil)[5]	% Difference
Electric			
Total Expenditures[6]	$59.2	$40.0	-32%
Total Expenditures and Commitments[7]	$64.2	$42.7	-33%
Total Implementation Expenses[8]	$45.6	$33.6	-26%

[1] Energy Efficiency Program Plan (EEPP) for 2011, Settlement of the Parties, November 1, 2010, Docket 4209, page 4
[2] See 2011 EEPP Settlement of the Parties, Docket No. 4209
[3] Actual spending in 2011
[4] See 2011 EEPP Settlement of the Parties, Docket No. 4209
[5] Id, at p. 1
[6] Includes implementation expenses, EERMC costs, shareholder incentive and evaluation expenses
[7] Total expenditures plus expenses from committed applications (electric programs only) as of December 2011
[8] Includes all DSM program-related expenses, i.e. incentives, administration and general expenses, marketing, sales, technical assistance and training. These are also net of the co-payment amounts paid directly by Small Business and Large Commercial program participants.

Gas			
Total Expenditures[9]	$7.3	$4.9	-33%
Total Implementation[10] **Expenses**	$6.2	$4.4	-28%

The second objective was to "ensure all customers have an opportunity to participate in energy efficiency programs.[9]" The Company has been successful in increasing participation in its programs throughout the year. The Residential New Construction program set a record high for participation with its Code Plus tier, training events, and personal attention to industry members. The Residential Lighting and ENERGY STAR® Products programs sponsored initiatives in schools and communities respectively that both encouraged both awareness and participation in energy efficiency. The 2011 program year was the first year of the Comprehensive Marketing Campaign that used radio ads and bus shelter posters to increase awareness of energy efficiency across the state. New financing initiatives also helped boost participation by giving both residential and commercial & industrial customers more time with no interest to pay back their portion of the costs. This addresses a major barrier to participation, especially in reference to achieving deeper participation. All of these initiatives helped to create opportunities for all Rhode Island customers to participate in energy efficiency.

The third objective was to "achieve electric savings targets for 2011 established in the 2009-2011 Least Cost Procurement Plan (LCPP), approved by the Commission in Docket 3931.[10]" The 2011 electric savings target was 102,627 annual MWh which is double the EE savings relative to 2008. At year's end, the Company achieved 96,009 annual MWh energy savings which represents 94% of that goal. The Company also established a benchmark of 19,142 kW in annual demand savings and at year's end, it achieved 13,651 kW.

Although the 2009-11 LCPP did not set a goal for gas savings, the Company did set a goal of achieving 102,203 annual MMBtu energy savings in the 2011 EEPP. At year's end, the Company achieved 119,613 annual MMBtu energy savings which represents 117% of that goal. Detailed savings information can be found in Attachment 1, tables E-1, E-2 and Attachment 2, tables G-1 and G-2.

The fourth objective was to "develop the infrastructure needed to meet the EERMC's proposed performance targets for saving 2.5% of electric load and 1.2% of natural gas consumption by 2014."[11] The Company pursued many new initiatives and partnerships throughout the year to meet this objective. Agreements were reached among the Company, regional utility partners and Ecova to start an Upstream Lighting initiative in 2012. The Company also focused on creating long-term partnerships with its residential new construction contractors, and put in place the new residential EnergyWise program delivery structure to take effect January 1, 2012. The Company and Regional Power Authority also formed a partnership to enhance the Whole Business Assessment (WBA) initiative. Also in 2011, the Company began to investigate claiming savings from Building Operator Certification (BOC) training in the future. Finally, Combined Heat and Power (CHP) leads were also pursued throughout the year, creating the potential for savings to be claimed in 2012 and 2013.

The fifth objective was innovation. The Company's residential pilots provided the foundation for innovation by testing new products like solar thermal hot water and heating for gas systems, ECM pump motors, Wi-fi thermostats, heat pump water heaters and boiler load controls. In addition, the

[9] See 2011 EEPP, Settlement of the Parties, Docket No. 4209, at p. 5
[10] Id.
[11] Id., at p. 6

System Reliability Procurement initiative in 2011 produced a set of guidelines for evaluating non-wires alternatives (NWA) to transmission and distribution investments[12] as well as a tool for analyzing the effects of potential NWA solutions on demand trends. These efforts informed the first annual System Reliability Procurement ("SRP") Report, which described and proposed a project in the communities of Tiverton and Little Compton starting in 2012. More information on SRP can be found in the 2012 System Reliability Report Supplement approved in Docket 4296.

The following sections outline highlights for the different programs and initiatives that comprise the 2011 Rhode Island Energy Efficiency Portfolio. Many activities undertaken in 2011 laid the foundation for inclusion in the 2012 Energy Efficiency Program Plan, approved by the Commission in Docket 4295. Some of these activities are highlighted below as well, even though they are expected to yield results in 2012.

[12] The guidelines were approved by the Commission in Docket 4202, Order 20419, issued July 25, 2011.

Residential Programs

Overview

In 2011, the residential sector was cost-effective with total resource B/C ratios of 2.81 for electric programs and 1.71 for gas programs. The Company spent approximately 86% of the electric residential implementation budget, achieved 111% of electric targeted annual energy savings and achieved 105% of electric targeted annual demand savings. The Company spent approximately 75% of the gas residential implementation budget and achieved 61% of gas targeted annual energy savings. Electric residential programs had strong performance across the board, while the gas residential programs were influenced by challenges in the High Efficiency Heating, Water Heating and Controls program, as described below. Additional details on spending and savings by program can be found in Attachment 1, tables E-1, E-2, E-3 and Attachment 2, tables G-1, G-2 and G-3.

Residential New Construction

The Residential New Construction 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. The Company also 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.

Overview of Performance

This program successfully achieved deeper energy savings in each participant's home while also broadening its reach into Rhode Island's residential new construction market. In addition to meeting the energy savings goal, a record high for participation rate was set in 2011 with just over half of all newly constructed homes in Rhode Island achieving an ENERGY STAR® label.

Highlights

Despite a continued decline in permits for new homes in 2011, this program was successful in engaging new participants in the residential construction community. Code Plus, the entry-level tier of the program, proved to be an excellent tool for recruitment. Many builders initially attracted to the program by Code Plus opted to participate in a higher tier, driving deeper energy savings for many new homes in Rhode Island.

The program supported training for students at nine technical and vocational schools throughout the state. With $58,000 worth of diagnostic equipment donated by the Company and the expertise of its lead vendor, Conservation Services Group (CSG), students learned how to ensure a home's compliance with the newly adopted 2009 International Energy Conservation Code (IECC). To the left, students from Warwick Area Career and Technical Center are shown learning how to use an infrared camera for thermal imaging.

They and others who participated in the training gained valuable, hands-on experience in air sealing, thermal imaging, blower door testing, and duct blaster testing. These training sessions have, in part, inspired some of the teachers from the schools to become Building Performance Institute (BPI) certified, solidifying their commitment to energy efficient building practices.

Because new home construction projects often take years to complete, builders' experience with the program is typically long-term. Generating leads, establishing new relationships and strengthening existing ones are key elements of the program. National Grid and CSG are committed to attempting to reach every builder in Rhode Island. In 2011, outreach by CSG included one-on-one meetings with architects, real estate developers, active members in several community organizations such as the Rhode Island Builders Association, and cold calling. On-boarding efforts in 2011 resulted in new participants accounting for about one-fifth of all units signed for completion in the program year.

Training events were held throughout the year for compliance with the 2009 IECC and ENERGY STAR® Homes Version 3. A special training event was held specifically for the staff, architects, and builders of Rhode Island Housing, reinforcing program participation in the low income sector. Overall, 2011 training events were well received by about 200 attendees.

Notable projects completed in 2011 included two in the affordable housing sector: (1) Kingstown Crossing, 58-units with HERS scores of 58 to 65 which achieved LEED for Homes Gold certification, and (2) the six-unit Willow Avenue project in Little Compton, which attained remarkable HERS scores of 43 to 46 (the lower the score the better).

Electric HVAC

This program promotes the installation of high efficiency central air conditioners as well as rebates for purchasing or replacing existing oil or propane heating systems. It also provides training of contractors in installation, testing of the high efficiency systems, tiered rebates for new ENERGY STAR® systems, and incentives for checking existing systems.

Overview of Performance

The Electric HVAC Program had a very productive year meeting its savings goal and participation benchmark.

Highlights

The success of this program in 2011 is a result of strong recruitment and training within the contractor community. Throughout the year, the program held 5 full day Quality Installation Verification (QIV) classes in Rhode Island to 29 technicians representing 9 companies. At year's end, over fifteen-percent of all rebates were for right sizing or down sizing of equipment. This is evidence of the positive training impacts in that contractors are following through by using properly sized equipment.

In addition, several trained Rhode Island contractors have taken the extra step and have become ENERGY STAR® Quality Installation contractors, endorsed by the EPA. This distinction means that these contractors are able to provide complete quality installations to their customers, including the use of duct testing equipment. These contractors have earned the distinction of being called Premier Contractors and are listed as such on National Grid's energy efficiency website, www.powerofaction.com/RI .

High Efficiency Heating, Water Heating & Controls (HEHE)

HEHE offers a variety of rebates for gas heating equipment, water heaters, combined systems, and thermostats. The rebate levels are based on the efficiency level of the equipment. This program also trains installers to promote efficient heating equipment to customers.

Overview of Performance

This was a challenging year for the HEHE program, resulting in lower than planned savings and participation.

Highlights

This program produced a new initiative that segmented customers by their likelihood of participation. With a newly acquired ability to isolate the "unlikely to participate" segment of the customer population, new marketing tactics were tested to see if a traditionally reluctant customer segment could be influenced into participation in this program. Further testing of this concept is continuing in 2012.

Several external and internal factors introduced challenges to smooth operations on the gas side. The external influences included an abridged program year due to the late approval of the gas energy efficiency budgets in August and difficulty in obtaining construction permits for customers attempting to run gas lines to their homes. Internal influences included a change in rebate processing vendors and the development and introduction of a rebate reservation system that was originally created to manage customer rebates and avoid the oversubscription that occurred in 2010. These influences hindered program success by slowing operations down to the point where savings achievements were affected.

In 2012, marketing efforts will be broader to increase consumer awareness of the program. The Company will also strongly promote the program with vendors.

*Energy*Wise

The Energy*Wise* program offers customers free home energy assessments of their homes and information on their actual electric usage. Participants in this program receive financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses baseload electric use as well as electric heat in all residential buildings. It also identifies additional energy saving measures in weatherization and heating system replacements.

Overview of Performance

This program exceeded its gas and electric savings goals with lower than expected participation and implementation expenses in 2011. The program leveraged other efforts within the Company's portfolio for leads and worked hard to achieve deeper savings for each of its participants. Its success is even more exciting considering the aggressive nature of the 2011 electric savings goals, which were almost 60% percent higher than those in 2010.

Highlights

2011 was a highly successful year for Energy*Wise* and many factors influenced that success. The traditional program marketing effort's fall mailing experienced a very high response rate which provided many potential customers. In addition, Rhode Island's comprehensive marketing campaign and a Communities Initiative with People's Power and Light and the University of Rhode Island ("URI") also provided numerous leads. The Company also pursued deeper savings in each lead. For example, the Company targeted installing approximately nine CFL bulbs per household through this program; actual numbers indicate an average of over twenty bulbs were installed per household.

In another positive influence on this program, the Company partnered with two Rhode Island based credit unions to offer customers a Heat Loan for energy efficiency improvements. One-hundred sixty customers participated in 2011, supplementing the Company's incentives with $1 million dollars in financing to install energy efficiency upgrades in their homes. Additional information on the Heat Loan can be found in the Financing section of this report.

The Company also offered heating system upgrades to deliverable fuel customers funded by an American Recovery and Reinvestment Act (ARRA) grant. The formidable response showed just how receptive this customer segment is to energy efficiency incentives. However, with ARRA funding ending in early 2012 and Company funding insufficient to support these incentives in the long term, such heating system upgrade efforts will not be sustainable.

During 2011, the Company conducted a competitive bid for a new lead vendor to begin in 2012. Time in 2011 was also spent preparing for the 2012 independent insulation contractor (IIC) program model, allowing IIC's to "tag" or bring their own customers through the EnergyWise system. Sixteen independent insulation contractors tagged one hundred twenty-five customers for weatherization work upon completion of the home energy assessment. The Company shattered its goal for weatherization projects completed by IICs, exceeding its target by 75%. This is evidence of the Company's commitment to creating jobs for small businesses in Rhode Island, especially in the slower economic climate that persisted throughout 2011.

Despite the popularity and success of the program, the year was not without challenges. One consequence of the program's successful promotions was long wait times for audits during the seasonally busy fall and winter months. The Company is addressing these long wait times in 2012 in multiple ways: (i) by encouraging participation during the spring and summer months when demand for home energy assessments is traditionally lower; (ii) by establishing goals on the part of the lead vendor to bring audit wait times down to fifteen business days; and (iii) by piloting a Home Performance Contractor initiative, which will allow private firms to provide home energy assessments.

ENERGY STAR® Lighting

Overview of performance

The 2011 residential lighting program is another example of a well-implemented program. This program exceeded its savings goals and participation benchmarks while spending less than planned. The popularity of multi-packs of compact fluorescent lamps (CFLs) were influential in reducing overall program expenses; light emitting diodes lamps (LEDs), which are still much more expensive

than CFLs, were also very popular. These results are encouraging with changes to lighting incentives based on EISA regulations looming on the horizon.

Highlights

The ENERGY STAR® Lighting program had a strong year in spite of a slow retail economy. Much of the program's success may be due to the fact that lighting is considered a necessity by many and the purchase of light bulbs is still a relatively inexpensive way to reduce energy consumption.

The success of the program in 2011 was also bolstered by strong purchasing trends of light emitting diode (LED) bulbs and specialty bulbs. Specialty lighting included three-way bulbs, dimmable bulbs, chandelier bulbs, globes and A-style lamps. Even though specialty bulbs cost more than a standard CFL spiral, customers were willing to pay more to get a specific type of lighting product.

ENERGY STAR® lighting was promoted at corporate events with Commercial & Industrial partners as well as at consumer venues such as the Pawtucket Red Sox Fan Appreciation Day. CFLs were also distributed through food banks and sold at Family Dollar stores in an effort to reach customers that have not traditionally participated in this program. Spanish language promotions about energy efficiency were aired on Telemundo, and Spanish signage, such as the bus stop ad pictured above, was also employed. Finally a school program was offered to educate future lighting consumers on the benefits of energy efficiency and CFLs.

ENERGY STAR® Products

Overview of performance

The ENERGY STAR® Products program also had a very successful year highlighted by the Fine Art of Recycling competition which promoted refrigerator recycling to customers in a fun and tangible manner. The program achieved close to 100% of its savings goal with participation exceeding its 2011 benchmark.

Highlights

The Fine Art of Recycling competition was an effort conducted by the

Company and the city of Providence to promote refrigerator recycling. Local artists created works of art from old refrigerators that were then displayed in the city and voted upon by spectators. The competition raised awareness of refrigerator recycling, as well as the Company's incentives for doing so, in an environment that was entertaining for customers. In 2011, the highest level of participation in the Energy Star Products program occurred in refrigerator and freezer rebates, refrigerator recycling, and television rebates.

ENERGY STAR® Products, along with the ENERGY STAR® Lighting program, truly encompass the "energy efficiency for everyone" philosophy. All households need lighting and the majority of households in Rhode Island have a television set. These two programs allow consumers to become familiar with energy efficiency by promoting easily identifiable products and illustrating how easy it can be to save energy.

Low Income Programs

Overview

In 2011, the low income DSM sector was cost-effective with total resource B/C ratios of 2.29 for electric programs and 2.07 for gas programs. The Company spent approximately 48% of the electric low income implementation budget, achieved 73% of electric targeted annual energy savings and achieved 75% of electric targeted annual demand savings. The Company spent approximately 53% of the gas low income implementation budget and achieved 67% of gas targeted annual energy savings. Both the electric and gas low-income program savings were affected by an issue relating to the largest program implementation vendor, as described below. Additional details on spending and savings by program can be found in Attachment 1, tables E-1, E-2, E-3 and Attachment 2, tables G-1, G-2 and G-3.

Single Family Low Income Services

The low income program, marketed as the Appliance Management Program, is delivered by the State Energy Office and local Community Action agencies. It provides the same services as the EnergyWise program, described below, but no customer contribution is required for equipment installation.

Overview of Performance

The Single Family Low Income program's performance in 2011 was positive considering the program faced a major, unforeseen challenge in Providence, the most densely populated territory. Despite the circumstances which are detailed in the next section, the program was able to end the year achieving two thirds of its gas savings goals and three quarters of its electric savings goals. Compared to energy savings and participation in 2010, achievements in 2011 increased in the gas sector and remained at the same levels in the electric sector.

Highlights

In an untimely and unforeseen event, the local Community Action Program (CAP) delivering program services in Providence was suspended from work due to a federal investigation. This suspension halted program delivery in Rhode Island's largest and most densely populated territory late in the year, which is the busiest time for energy efficiency services. In the face of this challenge, the Company and the Rhode Island Office of Energy Resources ("OER") have been working together to develop a contingency plan that will allow program delivery to resume for 2012 as well as prepare for an event of similar impact, should one occur in the future.

Despite the challenges this program faced, there was also success. One example of this success in 2011 was the impact made by one customer, Anna Golderese, who shared her positive experience with Congressman Jim Langevin. Her home was outfitted with CFLs, weatherized with air sealing and insulation, and her oil-fired boiler was repaired. After receiving her letter, the Congressman decided to meet her and the team from Westbay Community Action. The event spread awareness of the program and inspired Congressman Langevin to urge fellow members of Congress to restore additional funds for weatherization programs. Anna and her family are pictured above with Congressman Langevin and Patrick McCarthy from OER.

The Company also developed a partnership with the Green & Healthy Homes Initiative and the City of Providence with plans for collaborative work scheduled to come to fruition in 2012. GHHI's comprehensive approach to health and energy efficiency will provide enhanced program benefits for Providence customers in the neighborhoods of Olneyville and Valley.

Gas billing and invoicing for this program was fully integrated into the Company's tracking system in 2011. This update has allowed for a more efficient process and consistency with electric billing and invoicing. The transition was smooth and has resulted in faster payment processing.

Finally, the Company considered incorporating high efficiency heating equipment into the program and it was determined that further exploration is necessary. While high efficiency heating equipment holds a lot of potential for deeper savings, its inclusion in the program needs to be balanced with participation benchmarks and cost-effectiveness.

Commercial & Industrial Programs

Overview

In 2011, the Commercial & Industrial (C&I) DSM sector was cost-effective with total resource B/C ratios of 3.77 for electric programs and 2.58 for gas programs. The Company spent approximately 75% of the electric C&I implementation budget, achieved 86% of electric targeted annual energy savings and achieved 64% of electric targeted annual demand savings. The Company spent approximately 81% of the gas C&I implementation budget and achieved 163% of gas targeted annual energy savings. Strong gas program performance was driven by both a number of large projects as well as the growing gas small business program, while electric energy savings appear to have been influenced by continuing economic conditions, as described in the next section.[13] Additional details on spending and savings by program can be found in Attachment 1, tables E-1, E-2, E-3 and Attachment 2, tables G-1, G-2 and G-3.

Large Commercial New Construction

This program promotes energy efficient design and construction practices in new and renovated commercial, industrial, and institutional buildings. It also promotes the installation of high efficiency equipment in existing facilities during building remodeling and at the time of equipment failure and replacement. The program offers technical and design assistance and rebates to reduce the incremental cost of high efficiency equipment over standard efficiency equipment. Large Commercial New Construction 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. Commissioning or quality assurance is also offered to ensure that the equipment and systems operate as intended.

Overview of Performance

The slow economic environment in Rhode Island that continued in 2011 was a challenge for the Company's C&I energy efficiency programs. Despite these difficult circumstances the Company made impressive progress towards its 2011 electric savings goals and, with the help of a large project, exceeded its gas savings goals several times over.

Highlights

All savings achieved in this program, both electric and gas, were achieved in a very cost effective manner. The Company had several great custom projects this year. For example, thermal oxidizer upgrades at Aspen Aerogel in East Providence are projected to save 400,000 therms per year. At Brown University's new Warren Alpert Medical School building, more than 10 energy conservation measures ("ECMs") were installed. Improvements include an improved envelope and glazing systems, high performance lighting and mechanical measures. The potential savings are 405,000 kWh annually. The Company also worked with CVS to build a new corporate facility in Cumberland. The incentive provided by the Company dropped the simple payback on the entire package of ECMs by 5.5 years.

[13] The demand savings achievement percentage is different from energy savings because the 2011 plan goal was overstated due to a calculation error in the application of 2009 evaluation results that was not discovered until after plan approval.

In 2011, the Company, along with NStar in Massachusetts, laid the foundation for partnering with commercial real estate experts to test the Advanced Energy Office ("AEO") Initiative (also known as Office-of-the-Future or OTF) based on the guidelines developed by the AEO Consortium. The next phase of the initiative will focus on testing different market approaches with selected property developers and their tenants. It will address specific barriers in the commercial real estate sector such as owner/tenant split, net vs. gross lease structure and the short timeline of tenant fit-outs. The result of this next phase will be used to refine the initiative and then scaled up for other customers in this segment.

The Company, along with regional partners such as MassSave, selected Ecova to be the third party processor for a new Upstream Lighting initiative within the C&I New Construction program. The Company agreements forged in 2011 between participating distributors and the program launched on January 29th, 2012. The company expects the Upstream initiative to be a major contributor to the New Construction Program in 2012.

Also in 2011, the Company continued to work with KEMA to develop a draft proposal for a building codes and compliance baseline study in Rhode Island.

Large Commercial Retrofit

This 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.

Overview of Performance

Uncertainty in the business environment continued to affect customers' willingness to invest in non-core business improvements even if paybacks were attractive compared to other investments. However, efforts such as educating customers, making a concerted effort to understand customer's needs, and financing were influential countermeasures that drove the success in both the gas and electric areas of this program in 2011.

Highlights

Lighting continues to be strong source of cost effective savings. Indoor and outdoor applications of LEDs in 2011 continued their upward pattern. Successful projects were diverse, from universities, to parking garages to manufacturers. In addition, the Company continued its success in encouraging building owners and operators to install various types of Energy Management Systems ("EMS") in their facilities.

In 2011, the Company formed a partnership with Rethinking Power Management ("RPM") with the goal of enhancing the Whole Building Assessment ("WBA") initiative in the future. Research and collaboration completed so far indicates that enhancements may include more precise targeting of customers as well as turn-key solutions for select customers.

The Company actively pursued all Combined Heat and Power ("CHP") leads in Rhode Island in 2011. Although there were no CHP project completions in 2011 due to the long lead times and technical challenges inherent to any CHP project, there is potential for several projects to be completed in 2012 and 2013.

In 2011, the Company began to investigate electric kitchen measures in order to offer a more complete package to our customers (Gas kitchen measures have been offered for some time.).

Small Business Direct Install

This 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 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.

Overview of Performance

2011 was another great year for the Small Business Direct Install ("SB/DI") program. It exceeded its savings goal with lower than expected implementation expenses. The program achieved these results with fewer participants than expected. This is an indicator of the Company'sproductive and cost-effective relationship with RISE Engineering Inc., its third-party vendor, and that the program went slightly deeper than expected in terms of savings with each customer.

Highlights

In 2011, this program served a wide variety of customer types with many exciting projects. Successful projects were completed at gyms, car dealerships, bakeries and small manufacturing facilities, to name a few. Many gas and electricity-conserving measures that played critical roles in its success were new additions to the program in 2011. In particular, these new measures helped gas savings surged more than 100% over the previous year.

Colbea Enterprises, which operates over 20 gasoline/service stations received exterior canopy and pole lighting upgrades to each of its 24 hour stations, saving an average of 23,636kWh per location. Healthtrax's gym facilities underwent lighting and occupancy control upgrades yielding a combined annual energy savings of 260,000kWh. In addition to lighting and control upgrades, discount retailer Ocean State Job Lot installed EMS's at two locations. Each location will save over 30,000kWh annually. Finally, Chelos restaurant installed lighting upgrades and an EMS at their Warwick location saving 51,000 kWh annually. A larger list of project types and case studies in both Rhode Island and elsewhere in New England can be found at: https://www.powerofaction.com/smallbusinessne/.

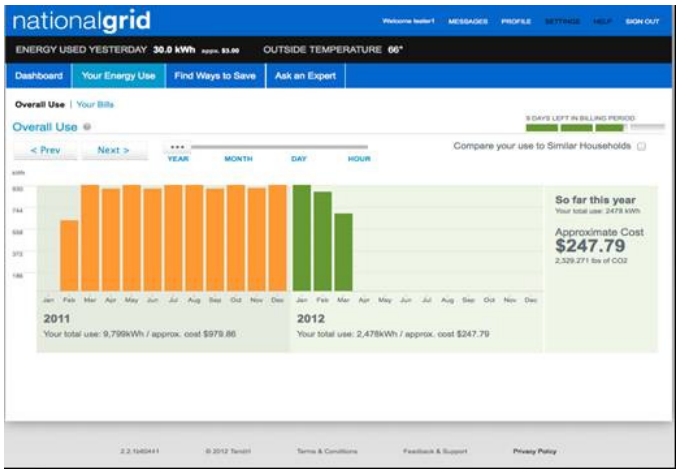
The "Main Streets" approach, which is detailed on page 83 of the 2011 EEPP, was a big hit among all businesses in 2011 including those in economically disadvantaged areas of Pawtucket, Providence, Woonsocket, West Warwick and Central Falls. Savings achieved through this initiative helped these businesses reduce costs and improve customer and employee comfort in a tough economy.

Pilots and Other Initiatives

Residential Behavior Pilot

2011 was a year of ramping up for this pilot, which is being carried out in the communities of Tiverton and Little Compton, and beginning thermostat installations in the first quarter of 2012. Tendril Network Inc. was procured as a third party vendor, and legal documents, marketing design, equipment procurement and web site design were all finalized. Customers will receive some or all of the following equipment for installation: communicating thermostat, Energize portal, In-Home Display, communicating outlet and a Load Control device to control and measure loads.

A request for proposal ("RFP") was issued in June to over 20 equipment manufacturers/vendors operating in the smart grid industry. Tendril Network Inc. was selected as the vendor in September.



A website domain was selected for the program: www.nationalgridempower.com.

Residential Products Pilot

The residential products pilot explored and tested several product offerings throughout 2011. The Company offered a solar thermal hot water and heating pilot for gas systems, an ECM pump motor pilot (offered with Cool Smart), Wi-fi Thermostat pilot, Heat Pump Water Heater pilot and a Boiler Load Control Pilot.

The Company continued the installation and evaluation of Wi-fi thermostats during 2011. Customers enthusiastically embraced this emerging technology citing the ability to adjust the thermostat remotely via a mobile device, the ease of setting programming schedules and the web portal as positive attributes in their feedback.

ECM (Electronically Commutated Motors) Pumps were installed on new boiler installations. The ECM, when installed on a new system, can replace multiple pumps with the ability to modulate system capacity in relationship to heating zone demand.

The marketing and program design launched in 2011 for a Boiler Load Control pilot will be completed in 2012. The pilot will allow

the exploration of gas savings based on a new type of technology that recognizes the thermal load of the boiler. Results of this effort are expected in 2012.

The Heat Pump Water Heater pilot was also evaluated and customer feedback was requested for customer satisfaction.

Regional Greenhouse Gas Initiative Pilots

In December 2010, the Company received auction proceeds from the Regional Greenhouse Gas Initiative, Inc. ("RGGI") as part of the OER's 2009 Plan for the Allocation and Distribution of RGGI Proceeds, approved September 2009. The funds were designed to spur innovative pilots and finance programs. The Company's 2011 innovative pilots included Deep Energy Retrofit and New Homes Tier III. Its innovative finance programs in 2011 included Heat Loan and the Small Business Revolving loan fund, which are both described in the Financing section of this report. Although these pilots and finance programs are funded solely by RGGI funds, they are integral to the Company's EE portfolio and are, therefore, included as part of this report.

The Deep Energy Retrofit pilot is designed to determine the energy savings and market potential for super insulation retrofits in Rhode Island. In 2011, the pilot held a full-day workshop and also recruited single-family and multi-family owners, builders, developers and architects in the program. Two projects began in 2011. They include a two-family residence in North Kingstown and a three-family residence in Providence. Construction will be completed in 2012. Two more projects are under review for a three-family in Providence and a single-family in Wakefield.

The Homes Tier III Pilot was intended to demonstrate advanced construction practices necessary for achieving a Home Energy Rating ("HER") score of 35. It was also intended to prepare the Rhode Island construction, developer and architecture communities for forthcoming advancements in the ENERGY STAR® label standards for residential new construction. The Company faced challenges with the pilot. The region does not have an HVAC contractor who has the appropriate accreditation according to the federal government's ENERGY STAR® guidelines. Due to the lack of accredited HVAC contractors, eligible customers instead opted to participate in the Residential New Construction program which had fewer barriers to entry. To overcome the HVAC accreditation barrier, National Grid is working with the Northeast Energy Efficiency Partnership ("NEEP") to advocate for solutions to this regional challenge. This barrier is expected to remain throughout 2012; therefore, the RGGI funds for this pilot were transferred to Deep Energy Retrofit pilot in January 2012 in order for that pilot to expand to more Rhode Island customers.

Additional details about the RGGI pilots can be found in the RGGI Auction Proceeds Report, Attachment 4.

Residential Energy Efficiency Education Programs

The Company continued to support the National Energy Education Development ("NEED") project in Rhode Island in 2011. NEED is a national program offered in 50 states, that provides funding for teacher seminars, lesson plans and materials. The NEED model is that of "Kids Teaching Kids". The NEED materials funded by the Company provided opportunities to educate students about their own energy usage how to apply what they learn to real life habits.

In 2011, Scituate High School teacher Shannon Donovan, a NEED teacher, was named 2011 Rhode Island Teacher of the Year.

Park View Middle School in Cranston was named Junior Level School of the Year and Scituate High School in Scituate was named Senior Level School of the year, both by NEED.

The NEED Evaluation indicates that 90% of teachers trained in NEED workshops use the materials in their classrooms, and 85% of their students are more aware of energy as a subject and career because of the program.

Community-based Initiatives

In 2011 a Request for Information ("RFI") was released to town planning departments and community-based organizations for participation in the Community Based Initiatives pilot. The goal of this pilot was to test the effectiveness of a locally focused, grassroots approach to promoting the residential and small business energy efficiency programs. There were nine respondents to the RFI representing fifteen communities.

People's Power and Light and URI were selected to participate in the 2011 Community Based Initiatives representing the towns of Cranston, East Providence, Warwick and South Kingstown.

Since the initiative did not fully deploy until fall of 2011, the program cycle was extended until March 31, 2012. At the completion of the program cycle, there will be an assessment of lessons learned from both organizations.

At year's end the Company was successful in working with local politicians to promote energy efficiency, achieving local television and newspaper coverage, hosting events ranging from farmers markets to Chamber of Commerce events, mall events, and high school football games. Students from URI and Brown University also canvassed neighborhoods promoting EnergyWise. Both community organizations found it more difficult to approach and sell to the commercial and industrial sector.

Preliminary results indicate that both organizations will achieve savings and participation goals.

System Reliability Procurement

SRP is an important effort included in the Rhode Island Least Cost Procurement law, R.I.G.L. §39-1-27.7, which entails identifying transmission or distribution needs that can be deferred by non-wires alternatives ("NWA") projects. These projects are customer-based and are likely to include some measures that are also offered through the Company's EE programs; therefore, there will be some overlap between SRP and energy efficiency and, ultimately, the design of both plans will consider the most efficient use of funds to maximize the effectiveness of these projects. In order to advance SRP concepts in 2011, some SRP activities were, therefore, funded through the energy efficiency programs in 2011.

2011 was a busy year for SRP. An interdisciplinary team within the Company collaborated to produce a set of internal guidelines governing the internal treatment and analysis of potential NWA projects. These were incorporated into the revised guidelines for SRP, approved by the Commission in Docket 4202.[14] In addition, the Company hired Freeman Sullivan & Co. to create a specialized

[14] The guidelines were approved by the Commission in Docket 4202, Order 20419, issued July 25, 2011.

tool to enhance the internal analysis of different transmission or distribution needs and whether any NWAs have the potential to defer them.

Most importantly, the Company filed its first Annual SRP Report in Docket 4296 which included a plan to launch a pilot in the communities of Tiverton and Little Compton over the next six years. This was approved by the Commission on February 29, 2012. If successful, the pilot will reduce the load on specific substation feeders serving that area by 1MW by the end of 2017.

Financing

The Company offers a variety of finance options to all customers.

In 2011, the Company offered approximately $840,000 in on-bill financing to 11 Large Commercial customers. The Lincoln School System was one of the customers who received financing. The school system was able to complete retrofit projects at Central Elementary, Northern Elementary, Saylesville Elementary, Londsale Elementary, and Lincoln High School.

Additionally, the Company set out to create a sustainable loan fund for large C&I customers in the 2011 plan. The Company was successful in establishing the loan fund, which will begin to dispense funds in 2012. The loan fund was capitalized by $945,000 in DSM funds available for finance and by approximately $2 million in RGGI funds received in January 2012.

The Company has always offered on-bill financing to Small Business Customers to cover their portion of the costs of completing an energy efficiency project. These customers have historically been able to pay back their financing through on-bill repayment. In previous years, the Small Business program funded the on-bill repayment using copayments from the DSM fund. In 2011, the Company successfully created a revolving loan fund for small business customers using $1.8 million of RGGI proceeds; this is in place of the copayments from the DSM fund. Establishing a revolving loan fund potentially provides a new source for copayment funding, which means that the Company may no longer need to request a budget for copayments in future years. An additional $2 million in RGGI funds was received in January 2012 to help capitalize the loan fund for 2012.

1281 customers participated in the Small Business Direct Install program, the majority receiving finance of $1.8 million. Overall, the program was able to save 16,871 MWh.

Also in 2011, the Company began offering a 0% interest Heat Loan to residential customers to finance their portion of residential energy efficiency projects. The interest buy-down program was funded by RGGI funds in 2011. There are currently two lenders participating in the program, Navigant Credit Union and Citizens-Union Savings Bank. The Heat Loan can be used for Insulation and/or Air Sealing Upgrades, Energy Efficient Heating System Replacement, Duct Sealing and Duct Insulation, Energy Efficient Domestic Hot Water System, ENERGY STAR® Thermostat(s). Customers are eligible to receive 0% interest loans up to $25,000, for period of up to 7 years.

Over 160 customers received Heat Loans in 2011, valued at approximately $1 million. They are promoted during the EnergyWise home assessment, as well as on the Company's website, where customer-friendly guidance and program FAQs also exist to keep customers well informed. More information about the Small Business Revolving Loan Fund and the Heat Loan are available in Attachment 4, the RGGI Auction Proceeds Report.

Rhode Island Comprehensive Marketing

In 2011, the Rhode Island Comprehensive Marketing program achieved its goal of increasing awareness of the availability of Energy Efficiency program offerings in Rhode Island. This determination is based on market research testing conducted pre, mid and post campaign.

2011 was the first year that awareness was measured and a statewide campaign was implemented conveying a general message regarding the EE programs to the customers. The use of mass media such as radio, and more tactical media such as outdoor and digital, served as conduits for leading customers to the Rhode Island EE page on the Company's website.

This program amplified the efforts of the individual program communication strategies in the market. However, it is not yet possible to measure the impact of this campaign on each individual program. In 2012, visits to the website will be tracked by tactic to try to measure that impact.

Shareholder Incentive

The Company's Shareholder Incentive earnings are determined by its performance against the established annual savings goals documented in the 2011 EEPP. The Company has earned a total of $2,169,136 for the successful implementation of its energy efficiency programs in 2011.

The Shareholder Incentive is earned by sector. An incentive is earned if savings in a sector fall between 60% and 125% of the savings goal for the sector. An enhanced incentive up to 125% of the target incentive is available for achieving greater savings than the savings target. A cost efficiency feature of the incentive design can adjust the calculated incentive under certain conditions, for example if a sector achieves more than 100% of its savings while spending less than 95% of its budget[15]. All sectors earned an incentive for their 2011 performance. Two sectors (electric residential non-low income and gas commercial sectors) earned an enhanced incentive.

More details on the Company's Shareholder Incentive achievements can be found in Attachments 1 and 2, tables E-4 and G-4.

[15] Full details on the incentive design are found in the 2011 EEPP, Settlement of the Parties, Docket No. 4209, pages 21 and 22.

Attachment 1

Electric Summary Tables of Year End Results

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table E-1: Summary of 2011 Target and Year End Results

Sector and Program	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Demand Reduction (Annual kW)			Energy Savings (Annual MWh)			Customer Participation			Implementation Expenses ($ 000)				
Commercial & Industrial	**Target**	**Year To Date**	**Pct Achieved**	**Target**	**Year To Date**	**Pct Achieved**	**Approved Target**	**Year To Date**	**Pct Achieved**	**Budget**	**Year To Date**	**Pct Achieved**	**Lifetime MWh**	**$/kWh**
Large Commercial New Construction	4,530	1,829	40.4%	15,628	11,561	74.0%	204	155	76.0%	$5,475.7	$3,100.1	56.6%	174,046	$0.018
Large Commercial Retrofit	7,196	4,408	61.3%	36,301	30,848	85.0%	392	282	72.0%	$9,620.8	$7,402.1	76.9%	380,289	$0.019
Small Business Direct Install	3,727	3,649	97.9%	16,652	16,871	101.3%	1,700	1,153	67.8%	$9,463.9	$7,672.1	81.1%	196,901	$0.039
Community Based Initiatives - C&I										$105.0	$1.5	1.5%		
Comprehensive Marketing - C&I										$94.3	$96.6	102.4%		
Outside Financing Costs										$945.0	$945.0	100.0%		
SUBTOTAL	**15,454**	**9,886**	**64.0%**	**68,580**	**59,279**	**86.4%**	**2,296**	**1,590**	**69.3%**	**$25,704.6**	**$19,217.5**	**74.8%**	**751,236**	**$0.026**
Low Income Residential														
Single Family - Low Income Services	**325**	**243**	**74.8%**	**3,091**	**2,243**	**72.6%**	**1,813**	**1,499**	**82.7%**	**$5,725.4**	**$2,725.7**	**47.6%**	**29,089**	**$0.094**
Non-Low Income Residential														
Residential New Construction	215	199	92.4%	616	613	99.5%	450	384	85.3%	$734.7	$848.7	115.5%	8,366	$0.101
Electric HVAC	424	709	167.1%	622	680	109.2%	1,695	1,630	96.2%	$1,203.5	$1,102.2	91.6%	12,149	$0.091
EnergyWise	891	513	57.5%	8,716	9,696	111.2%	11,113	9,979	89.8%	$5,753.1	$4,292.1	74.6%	99,521	$0.043
ENERGY STAR ® Lighting	1,619	1,864	115.1%	15,088	17,460	115.7%	192,503	223,003	115.8%	$2,328.2	$2,030.3	87.2%	125,965	$0.016
ENERGY STAR ® Appliances	214	238	111.1%	5,914	6,037	102.1%	15,568	16,662	107.0%	$2,084.3	$2,052.4	98.5%	50,452	$0.041
Energy Efficiency Education Programs										$50.0	$54.2	108.3%		
Residential Behavior Pilot										$387.8	$379.0	97.7%		
Residential Products Pilot										$111.0	$59.5	53.6%		
Community Based Initiatives - Residential										$140.9	$35.3	25.0%		
Comprehensive Marketing - Residential										$605.4	$617.4	102.0%		
SUBTOTAL	**3,364**	**3,522**	**104.7%**	**30,956**	**34,486**	**111.4%**	**221,329**	**251,658**	**113.7%**	**$13,398.9**	**$11,471.0**	**85.6%**	**296,453**	**$0.039**
SRPP										**$425.0**	**$150.7**	**35.4%**		
SUBTOTAL										**$425.0**	**$150.7**	**35.4%**		
TOTAL	**19,142**	**13,651**	**71.3%**	**102,627**	**96,009**	**93.6%**	**225,438**	**254,747**	**113.0%**	**$45,253.9**	**$33,564.8**	**74.2%**	**1,076,778**	**$0.031**

Notes

(1)(4) Approved Target from 2011 EEPP, Attachment 5, Table E-6

(3) Pct Achieved is Column (2)/ Column (1).

(6) Pct Achieved is Column (5)/ Column (4).

(7) Approved Target from 2011 EEPP, Attachment 5, Table E-7

(9) Pct Achieved is Column (8)/ Column (7).

(10) Approved Implmentation Budget from 2011 EEPP, Attachment 5, Table E-5
For Large Commercial New Construction and Large Commercial Retrofit, the implementation budget excludes commitment budgets of $3,570,000 and $1,430,000, respectively.
SRP budget comes from unspent funds approved in 2010 EEPP

(11) Year To Date Implementation Expenses are net of finance, TA Copay and Municipal Copays offered in 2011 to Large Commercial New Construction and Large Commercial Retrofit.

(12) Pct Achieved is Column (11)/ Column (10).

(14) $/lifetime kWh = Column (11)/Column (13)

NATIONAL GRID ELECTRIC ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table E-2: Summary of Value, kW, and kWh by Program
2011 Program Year

	Value (000's)												kW Saved				MWh Saved	
		Capacity					Energy					Non-Electric	Maximum					
		Generation					Winter		Summer									
Commercial & Industrial	**Total**	**Summer**	**Winter**	**Trans**	**MDC**	**DRIPE**	**On Peak**	**Off Peak**	**On Peak**	**Off Peak**	**DRIPE**	**Benefits**	**Annual**	**Winter**	**Summer**	**Lifetime**	**Annual**	**Lifetime**
Large Commercial New Construction	$23,380	$746	$0	$542	$2,368	$1,015	$5,836	$2,932	$2,959	$1,361	$3,869	$1,753	1,827	1,398	1,829	27,165	11,561	174,046
Large Commercial Retrofit	$49,347	$1,387	$0	$1,114	$4,864	$2,437	$12,317	$6,944	$6,175	$3,212	$10,047	$852	4,408	3,658	4,408	54,723	30,848	380,289
Small Business Direct Install	$29,226	$1,084	$0	$865	$3,779	$2,025	$8,369	$1,984	$4,254	$931	$5,790	$145	3,649	2,016	3,649	42,374	16,871	196,901
SUBTOTAL	**$101,954**	**$3,217**	**$0**	**$2,521**	**$11,010**	**$5,476**	**$26,522**	**$11,860**	**$13,388**	**$5,504**	**$19,705**	**$2,750**	**9,884**	**7,072**	**9,886**	**124,262**	**59,279**	**751,236**
Low Income Residential																		
Single Family - Low Income Services	$6,691	$105	$0	$66	$289	$133	$645	$758	$318	$358	$661	$3,359	243	459	243	3,329	2,243	29,089
SUBTOTAL	**$6,691**	**$105**	**$0**	**$66**	**$289**	**$133**	**$645**	**$758**	**$318**	**$358**	**$661**	**$3,359**	**243**	**459**	**243**	**3,329**	**2,243**	**29,089**
Non-Low Income Residential																		
Residential New Construction	$2,763	$183	$0	$78	$342	$110	$180	$215	$94	$102	$176	$1,283	199	152	199	4,182	613	8,366
Electric HVAC	$4,194	$393	$0	$246	$1,073	$392	$273	$165	$535	$168	$281	$667	709	38	709	12,593	680	12,149
EnergyWise	$12,191	$174	$0	$118	$517	$284	$2,190	$2,620	$1,144	$1,232	$2,801	$1,111	929	1,300	513	9,209	9,696	99,521
ENERGY STAR ® Lighting	$17,920	$375	$0	$283	$1,236	$1,033	$2,880	$3,354	$1,402	$1,568	$4,684	$1,105	1,864	3,727	1,864	13,343	17,460	125,965
ENERGY STAR ® Appliances	$5,830	$57	$0	$45	$198	$132	$1,150	$1,344	$563	$631	$1,711	$0	238	264	238	2,172	6,037	50,452
SUBTOTAL	**$42,898**	**$1,182**	**$0**	**$771**	**$3,365**	**$1,952**	**$6,674**	**$7,697**	**$3,737**	**$3,701**	**$9,653**	**$4,166**	**3,938**	**5,481**	**3,522**	**41,498**	**34,486**	**296,453**
TOTAL	**$151,542**	**$4,505**	**$0**	**$3,358**	**$14,665**	**$7,561**	**$33,841**	**$20,314**	**$17,443**	**$9,563**	**$30,018**	**$10,276**	**14,065**	**13,013**	**13,651**	**169,089**	**96,009**	**1,076,778**

NATIONAL GRID ELECTRIC ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table E-3: Summary of B/C Ratios, Value and Costs ($000's)
2011 Program Year

Commercial & Industrial	(1) Benefit/ Cost	(2) Total Value	(3) Program Implementation Expenses	(4) Customer Contribution	(5) Evaluation Expenses	(6) Shareholder Incentive
Large Commercial New Construction	6.60	$23,380.2	$3,100.1	$347.1	$93.5	
Large Commercial Retrofit	4.33	$49,347.3	$7,402.1	$3,951.8	$49.2	
Small Business Direct Install	3.02	$29,226.2	$7,672.1	$1,998.5	$15.0	
Community Based Initiatives - C&I			$1.5		$1.9	
Comprehensive Marketing - C&I			$96.6		$0.0	
Outside Financing Costs			$945.0		$0.0	
EERMC - Large C&I			$403.1			
SUBTOTAL	**3.77**	**$101,953.8**	**$19,620.6**	**$6,297.3**	**$159.5**	**$962.2**
Low Income Residential						
Single Family - Low Income Services	**2.29**	**$6,690.8**	**$2,725.7**	**$0.0**	**$13.2**	**$182.8**
Non-Low Income Residential						
Residential New Construction	2.81	$2,762.6	$848.7	$0.0	$135.2	
Electric HVAC	3.09	$4,194.0	$1,102.2	$250.5	$3.7	
EnergyWise	2.69	$12,190.9	$4,292.1	$193.3	$48.4	
ENERGY STAR ® Lighting	4.69	$17,920.0	$2,030.3	$1,758.3	$36.2	
ENERGY STAR ® Appliances	2.51	$5,830.4	$2,052.4	$232.9	$36.9	
Energy Efficiency Education Programs			$54.2		$0.0	
Residential Behavior Pilot			$379.0		$1.1	
Residential Products Pilot			$59.5		$23.9	
Community Based Initiatives - Residential			$35.3		$45.4	
Comprehensive Marketing - Residential			$617.4		$0.0	
EERMC - Residential			$267.1			
SUBTOTAL	**2.81**	**$42,897.9**	**$11,738.1**	**$2,434.9**	**$330.7**	**$784.2**
TOTAL	**3.35**	**$151,542.4**	**$34,084.3**	**$8,732.3**	**$503.5**	**$1,929.3**

Notes:

(1) RI Total Resource Cost test Benefit/Cost Ratio = Total Value/(Program Implementation Expenses + Customer Contribution + Evaluation Cost + Shareholder Incentives).

(2) Year-End Value Total from Table E-2.

(3) Year-End Implementation Expenses by Program from Table E-1.

(5) Evaluation Costs include outside contractor services.

(6) Shareholder incentives from Table E-4.

NATIONAL GRID ELECTRIC ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table E-4: National Grid 2011 EE Incentive Calculation

Incentive Rate: 4.40%

Sector	(1) Approved Spending Budget	(2) Target Incentive	(3) Annual kWh Savings Goal	(3a) Actual Spending	(3b) % of Approved Spending	(3c) Budget adjusted target kWh savings	(4) Threshold kWh Savings
Low Income Residential	$5,725,360	$251,916	3,091,064	$ 2,738,910	47.8%	3,091,064	1,854,639
Non-Low Income Residential	$14,258,907	$627,392	30,955,977	$ 11,801,767	82.8%	25,621,545	15,372,927
Commerical & Industrial	$25,300,109	$1,113,205	68,580,392	$ 18,432,002	72.9%	68,580,392	41,148,235
Total	**$45,284,376**	**$1,992,513**	**102,627,433**	**$ 32,972,679**		**97,293,001**	**58,375,801**

Sector	(5) Target Incentive Per kWh	(5a) Adj Target Incentive Per kWh	(6) Actual kWh	(7) % of Target Savings	(8) Savings Eligible for Incentive	(9) Total Earned Incentive	(10) % of Target Incentive Achieved
Low Income Residential	$0.081	$0.081	2,243,015	73%	2,243,015	$ 182,801	73%
Non-Low Income Residential	$0.020	$0.024	34,486,290	135%	32,026,931	$ 784,240	125%
Commerical & Industrial	$0.016	$0.016	59,279,476	86%	59,279,476	$ 962,231	86%
Total			**96,008,782**		**93,549,422**	**$ 1,929,273**	**97%**

Notes

(1) Budget from 2011 EEPP. Includes Implementation and Evaluation Expenses; excludes EERMC Costs, Commitments and Copays and Outside Finance Costs.

(2) Equal to the incentive rate (4.40%) x Column (1)

(3) Approved savings goal from 2011 EEPP

(3a) Actual spending includes actual Implementation Expenses from Table E-1 and Evaluation Expenses from Table E-3. It excludes EERMC costs and Outside Finance Costs.

(3b) Column (3a)/ Column (1)

(3c) Column (3) * (3b), only if 100% of Target Savings were achieved in Column (3)

(4) 60% of Target kWh Savings

(5) Column (2)/ Column (3)

(5a) Column (2)/ Column (3c)

(6) Year End Savings from Table E-1

(7) Column (6)/ Column (3c)

(8) If Column (7) is less than 60%, Column (8) = 0,
If Column (7) is between 60% and 125%, Column (8) = Column 6;
If Column (7) is greater than 125%, Column (8) = 125% of Column (3c) due to the incentive cap.

(9) Column (8)*Column (5a)

(10) Column (9) / Column (2)

NARRAGANSETT ELECTRIC COMPANY
2011 DEMAND - SIDE MANAGEMENT ADJUSTMENT AND BALANCE
12 month(s) of actuals 0 month(s) of estimates

Total C&LM Revenue/Expense for Jan-Dec 2011

	Actual JAN	Actual FEB	Actual MAR	Actual APRIL	Actual MAY	Actual JUNE	6MTHS Y.T.D
TOTAL REVENUE (A)	$4,333,297	$3,354,689	$3,471,244	$3,157,215	$3,163,397	$3,663,396	$21,143,240
TOTAL EXPENSE (B)	$811,327	$1,402,236	$2,202,694	$2,595,701	$1,452,126	$2,868,591	$11,332,675
Cash Flow Over/(Under)	$3,521,970	$1,952,454	$1,268,551	$561,514	$1,711,270	$794,806	$9,810,564
Start of Period Balance (C)	$8,284,914	$11,828,100	$13,807,477	$15,108,621	$15,706,296	$17,457,975	$8,284,914
End of Period Balance Before Interest	$11,806,884	$13,780,554	$15,076,028	$15,670,135	$17,417,566	$18,252,781	$18,095,478
TOTAL INTEREST (D)	$21,216	$26,923	$32,594	$36,161	$40,409	$45,027	$202,329
End of Period Balance After Interest	$11,828,100	$13,807,477	$15,108,621	$15,706,296	$17,457,975	$18,297,808	$18,297,808

	Actual JULY	Actual AUG	Actual SEPT	Actual OCT	Actual NOV	Actual DEC	ANNUAL TOTAL
TOTAL REVENUE (A)	$4,552,211	$3,918,002	$3,800,032	$3,277,039	$3,290,616	$3,525,741	$43,506,882
TOTAL EXPENSE (B)	$1,417,304	$79,226	$4,934,156	$3,132,495	$3,721,093	$9,882,194	$34,499,142
Cash Flow Over/(Under)	$3,134,907	$3,838,776	($1,134,124)	$144,545	($430,476)	($6,356,453)	$9,007,740
Start of Period Balance (C)	$18,297,808	$21,484,542	$25,386,607	$24,320,759	$24,532,946	$24,170,544	**$8,284,914**
End of Period Balance Before Interest	$21,432,715	$25,323,318	$24,252,483	$24,465,304	$24,102,469	$17,814,091	$17,292,654
TOTAL INTEREST (D)	$51,827	$63,289	$68,276	$67,642	$68,075	$58,591	$580,029
End of Period Balance After Interest	$21,484,542	$25,386,607	$24,320,759	$24,532,946	$24,170,544	$17,872,682	**$17,872,682**
Total Incentives (D)							$1,929,272
End of Period Balance (minus incentive)							**$15,943,410**
Commitments(D)							$2,791,440
FUND BALANCE AT YEAR-END							$13,151,970

(A) Revenue Report
(B) Source: PeopleSoft query
(C) "End of Period Balance Before Interest" from prior month.
(D) Incentives and commitments are estimated until year-end

Attachment 2

Gas Summary Tables of Year End Results

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table G-1: Summary of 2011 Target and Year End Results

Sector and Program	(1) Energy Savings (MMBtu)	(2)	(3)	(4) Customer Participation	(5)	(6)	(7) Implementation Expenses ($ 000)	(8)	(9)	(10)	(11)
Commercial & Industrial	**Approved Target**	**Year To Date**	**Pct Achieved**	**Approved Target**	**Year To Date**	**Pct Achieved**	**Approved Budget**	**Year To Date**	**Pct Achieved**	**Lifetime MMBtu**	**$/Lifetime MMBtu**
Large Commercial New Construction	18,031	54,721	303.5%	176	71	40.3%	$ 1,012.5	$ 700.9	69.2%	712,789	$ 0.98
Large Commercial Retrofit	35,445	31,009	87.5%	558	47	8.4%	$ 1,142.0	$ 1,081.3	94.7%	302,405	$ 3.58
Small Business Direct Install	2,302	5,346	232.2%	48	128	266.7%	$ 106.3	$ 46.9	44.2%	32,638	$ 1.44
Comprehensive Marketing - C&I							$ 23.7	$ 15.4	64.7%		
SUBTOTAL	**55,779**	**91,075**	**163.3%**	**782**	**246**	**31.5%**	**$ 2,284.5**	**$ 1,844.4**	**80.7%**	**1,047,831**	**$ 1.76**
Low Income Residential											
Low Income	**3,848**	**2,572**	**66.8%**	**215**	190	**88.4%**	**$ 983.9**	**$ 522.4**	**53.1%**	**51,430**	$ 10.16
Non-Low Income Residential											
Residential High-Efficiency Heating	33,243	14,023	42.2%	4,100	1,148	28.0%	$ 1,465.9	$ 708.0	48.3%	260,405	$ 2.72
Energy*Wise*	9,334	11,943	128.0%	1,126	1,496	132.9%	$ 1,174.7	$ 1,336.5	113.8%	264,257	$ 5.06
Residential Products Pilot							$ 49.4	$ 30.1	61.0%		
Comprehensive Marketing - Residential							$ 80.2	$ 0.0	0.0%		
SUBTOTAL	**42,577**	**25,966**	**61.0%**	**5,226**	**2,644**	**50.6%**	**$ 2,770.2**	**$ 2,074.6**	**74.9%**	**524,661**	**$ 3.95**
TOTAL	**102,203**	**119,613**	**117.0%**	**6,223**	**3,080**	**49.5%**	**$ 6,038.6**	**$ 4,441.4**	**73.6%**	**1,623,922**	**$ 2.73**

NOTES

(1) Approved Target from 2011 EEPP Attachment 6, Table G-6
(3) Pct Achieved is Column (2)/ Column (1).
(4) Approved Target from 2011 EEPP, Attachment 6, Table G-7
(6) Pct Achieved is Column (5)/ Column (4).
(8) Approved Budget from 2011 EEPP, Attachment 6, Table G-5
(9) Pct Achieved is Column (8)/ Column (7).
(11) $/ Lifetime MMBtu is Column (8)/ Column (10)

NATIONAL GRID NATURAL GAS ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table G-2: Summary of Value and MMBTU Saved by Program
2011 Program Year

	Value ($000)			MMBTU Gas Saved	
	(1) Total Value	(2) Natural Gas Benefits	(3) Non-Gas Benefits	(4) Annual	(5) Lifetime
Commercial & Industrial					
Large Commercial New Construction	$7,900	$7,865	$36	54,721	712,789
Large Commercial Retrofit	$3,316	$3,316	$0	31,009	302,405
Small Business Direct Install	$370	$370	$0	5,346	32,638
SUBTOTAL	**$11,586**	**$11,550**	**$36**	**91,075**	**1,047,831**
Low Income Residential					
Low Income	$1,149	$537	$612	2,572	51,430
SUBTOTAL	**$1,149**	**$537**	**$612**	**2,572**	**51,430**
Non-Low Income Residential					
Residential High-Efficiency Heating	$2,730	$2,730	$0	14,023	260,405
EnergyWise	$2,732	$2,732	$0	11,943	264,257
SUBTOTAL	**$5,462**	**$5,462**	**$0**	**25,966**	**524,661**
TOTAL	**$18,196**	**$17,549**	**$648**	**119,613**	**1,623,922**

Notes:

(1) Total Benefits equal Natural Gas Benefits plus Non-Gas Benefits.

(3) Non-Gas Benefits include electric benefits and non-resource benefits

NATIONAL GRID NATURAL GAS ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table G-3: Summary of B/C Ratios, Value and Costs ($000's)
2011 Program Year

	(1) Benefit/ Cost	(2) Total Value	(3) Program Implementation Expenses	(4) Customer Contribution	(5) Evaluation Expenses	(6) Shareholder Incentive
Commercial & Industrial						
Large Commercial New Construction	4.30	$7,900.2	$700.9	$1,099.9	$38.0	
Large Commercial Retrofit	1.38	$3,315.9	$1,081.3	$1,310.5	$9.4	
Small Business Direct Install	7.22	$369.5	$46.9	$3.6	$0.7	
Comprehensive Marketing - C&I			$15.4			
EERMC - C&I			$41.9			
SUBTOTAL	**2.58**	**$11,585.6**	**$1,886.4**	**$2,414.0**	**$48.2**	**$136.6**
Low Income Residential						
Low Income	2.18	$1,149.0	$522.4	$0.0	$3.9	
SUBTOTAL	**2.07**	**$1,149.0**	**$522.4**	**$0.0**	**$3.9**	**$28.9**
Non-Low Income Residential						
Residential High-Efficiency Heating	2.68	$2,729.8	$708.0	$304.0	$6.4	
EnergyWise	1.37	$2,731.9	$1,336.5	$641.9	$18.1	
Residential Products Pilot			$30.1		$0.4	
Comprehensive Marketing - Residential			$0.0			
EERMC - Residential			$67.5			
SUBTOTAL	**1.71**	**$5,461.7**	**$2,142.1**	**$945.9**	**$24.9**	**$74.3**
TOTAL	**2.21**	**$18,196.4**	**$4,550.9**	**$3,359.8**	**$77.0**	**$239.9**

Notes:

1) RI Total Resource Cost test Benefit/Cost Ratio = Total Value/(Program Implementation Expenses + Customer Contribution + Evaluation Cost + Shareholder Incentives).

(2) Year-End Value Total from Table G-2.

(3) Year-End Implementation Expenses by Program from Table G-1.

(5) Evaluation Costs include outside contractor services.

(6) Shareholder incentives from Table G-4.

NATIONAL GRID NATURAL GAS ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table G-4: National Grid 2011 EE Incentive Calculation

Incentive Rate: 4.40%

Sector	(1) Approved Spending Budget	(2) Target Incentive	(3) Annual Savings Goal (MMBTU)	(3a) Actual Spending	(3b) % of Approved Spending	(3c) Budget Adjusted target MMBtu Savings	(4) Threshold MMBtu Savings
Low Income Residential	$ 983,905	$ 43,292	3,848	$ 526,325	53.5%	3,848	2,309
Non-Low Income Residential	$ 2,770,189	$ 121,888	42,577	$ 2,099,136	75.8%	42,577	25,546
Commercial & Industrial	$ 2,483,635	$ 109,280	55,779	$ 1,892,608	76.2%	42,505	25,503
Total	**$ 6,237,728**	**$ 274,460**	**102,203**	**$ 4,518,069**	**72.4%**	**88,930**	**53,358**

Sector	(5) Target Incentive Per MMBtu	(5a) Adj Target Incentive Per MMBtu	(6) Actual MMBtu	(7) % of Target Savings	(8) Savings Eligible for Incentive	(9) Earned Savings Incentive	(10) % of Target Incentive Achieved
Low Income Residential	$ 11.25	$11.25	2,572	66.8%	2,572	$28,928	67%
Non-Low Income Residential	$ 2.86	$2.86	25,966	61.0%	25,966	$74,335	61%
Large Commercial & Industrial	$ 1.96	$2.57	91,075	214.3%	53,131	$136,600	125%
Total	**$ 2.69**	**$3.09**	**119,613**	**134.5%**	**81,669**	**$239,863**	**87%**

Notes:

(1) Budget from 2011 EEPP. Includes Implementation and Evaluation Expenses.
(2) Equal to the incentive rate (4.40%) x Column (1).
(3) Approved savings goal from 2011 EEPP
(3a) Actual spending includes actual Implementation Expenses Table G-1, and Evaluation Expenses from Table G-3
(3b) Column (3a)/ Column (1)
(3c) Column (3) * (3b), only if 100% of Target Savings were achieved in Column (3)
(4) 60% of Target MMBtu Savings
(5) Column (2)/ Column (3)
(5a) Column (2)/ Column (3c)
(6) Year End Savings from Table G-1
(7) Column (6)/ Column (3c)
(8) If Column (7) is less than 60%, Column (8) = 0,
If Column (7) is between 60% and 125%, Column (8) = Column 6;
If Column (7) is greater than 125%, Column (8) = 125% of Column (3c) due to the incentive cap.
(9) Column (8)*Column (5a)
(10) Column (9) / Column (2)

NATIONAL GRID - RHODE ISLAND GAS
2011 DEMAND - SIDE MANAGEMENT ADJUSTMENT AND BALANCE
12 month(s) of actuals 0 month(s) of estimates

Total C&LM Revenue/Expense for Jan-Dec 2011

		Actual JAN	Actual FEB	Actual MAR	Actual APRIL	Actual MAY	Actual JUNE	6 MTHS Y.T.D
1.	TOTAL REVENUE (A)	$936,026	$1,035,042	$810,568	$605,997	$334,469	$226,642	$3,948,743
2.	TOTAL EXPENSE (B)	$138,234	$177,077	$619,101	$293,907	($59,028)	$329,041	$1,498,332
3.	Cash Flow Over/(Under)	$797,792	$857,965	$191,467	$312,090	$393,497	($102,399)	$2,450,411
4.	Start of Period Balance	($793,901)	$3,479	$861,894	$1,054,359	$1,367,710	$1,762,836	($793,901)
5.	End of Period Balance Before Interest	$3,891	$861,444	$1,053,362	$1,366,449	$1,761,207	$1,660,438	$1,656,511
6.	TOTAL INTEREST	($411)	$450	$998	$1,261	$1,630	$1,783	$5,710
7.	End of Period Balance After Interest	$3,479	$861,894	$1,054,359	$1,367,710	$1,762,836	$1,662,221	$1,662,221

		Actual JULY	Actual AUG	Actual SEPT	Actual OCT	Actual NOV	Actual DEC	2011 Y.T.D
8.	TOTAL REVENUE (A)	$186,978	$380,764	$504,056	$550,565	$1,082,362	$1,416,058	$8,069,528
9.	TOTAL EXPENSE (B)	$109,060	$321,644	$417,066	$535,913	$187,587	$1,448,834	$4,518,436
10.	Cash Flow Over/(Under)	$77,918	$59,120	$86,990	$14,652	$894,775	($32,776)	$3,551,092
11.	Start of Period Balance	$1,662,221	$1,741,911	$1,802,877	$1,891,790	$1,908,420	$2,805,650	($793,901)
12.	End of Period Balance Before Interest	$1,740,139	$1,801,031	$1,889,867	$1,906,442	$2,803,196	$2,772,874	$2,757,191
13.	TOTAL INTEREST	$1,772	$1,845	$1,923	$1,978	$2,454	$2,905	$18,588
14.	End of Period Balance After Interest	$1,741,911	$1,802,877	$1,891,790	$1,908,420	$2,805,650	$2,775,780	$2,775,780
15.	2011 Total Incentives (C)							$239,863
16.	End of Period Balance (minus incentive)							**$2,535,917**
17.	Commitments							$0
18.	FUND BALANCE AT YEAR-END							$2,535,917

(A) Revenue Report
(B) Source: PeopleSoft query
(C) This is the amount credited to the Company's General Ledger during this year.

Attachment 3

Case Studies

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Energy*Wise*

Single family home, Rhode Island

National Grid customers can request a FREE in-home energy assessment by calling the EnergyWise program. An assessment will determine a customer's current home energy use and provide recommended measures they can make to improve efficiency and save money.

An in-home energy assessment was completed for this Bungalow style home located in Riverside, RI. The home has 1,800 square feet of living space, and was built in 1930.

Upon completion of the work, the homeowner was eligible to receive free air sealing and a rebate of over $1,400 towards the cost of insulation.

Project Summary

- Air Sealing
- Insulation
- Weather Stripping
- Pipe Insulation

"The EnergyWise Program really helped us save money on some big-time improvements to our home. It would have been tough to afford otherwise. Upstairs used to get really hot in the summer and now we've really noticed a big difference – it's much cooler up there. It surprised us how smoothly everything went, and we're grateful National Grid helped us make these improvements. It's nice to get some money back from the gas company instead of always paying."

– Terri Sears, Homeowner

Savings Summary

The Need—
Improve efficiency and reduce utility costs.

The Solution—
Offer an incentive to consumers to have an in-home energy assessment completed.

The Result—

Project Cost	$1,898.79
National Grid Incentive	$1,407.27
Annual kWh Savings	459 kWh
Annual Therm Savings:	329.16
Annual Cost Savings:	$561.00
CO_2 Lifetime Reduction	1.6

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/efficiency** or call 1-888-633-7947.

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EnergyWise

Single Family Home, Rhode Island

National Grid electric customers can request a FREE in-home energy assessment by calling the EnergyWise program. An assessment will determine the customer's current home energy use and provide recommended measures they can make to improve efficiency and save money.

An in-home energy assessment was completed for this Cape Cod style home located in Westerly, RI. The home has 1,739 square feet of living space, and was built in 1957.

Upon completion of the work, the homeowner was eligible to receive free air sealing and a rebate of over $1,700 towards the cost of insulation.

Project Summary

- Air sealing
- Insulation
- Installed high-efficiency compact fluorescent lighting and electric heat thermostats

"I was extremely pleased with the staff from the EnergyWise Program. They were very efficient, professional and courteous. They performed their tasks with the least amount of inconvenience. I have already noticed a significant decrease in my electric bills. I would highly recommend National Grid's EnergyWise Program."

– Rose Marie Christina, Homeowner

Savings Summary

The Need—
To reduce electric consumption and energy bills.

The Solution—
Offer incentives to consumers to have an in-home energy assessment completed.

The Result—

Project Cost	$2,319.88
National Grid Incentive	$1,746.58
Annual kWh Savings	14680. 44 kWh
Annual Cost Savings:	$2,697.84

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/efficiency** or call 1-888-633-7947.

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High-Efficiency Heating

A Single Family Home in Barrington, Rhode Island

"I went with my plumber's recommendation to replace the old inefficient system. The heat is kept at 65 degrees and dropped to 60 degrees at night, with the help of my new programmable thermostat. The new boiler was installed with the purpose of resale in the future."

-The MacIntyre Family Homeowners

The residential high-efficiency heating program from National Grid is available to natural gas heating customers residing in Rhode Island, like the MacIntyre family. The family resides in a single-family salt box colonial in Barrington, Rhode Island. When it came time to replace their heating and water heating systems, the family turned to the efficiency experts at National Grid.

The MacIntyre's installed a high-efficiency space heating unit, water heating unit and programmable thermostat, qualifying them for $825 worth of mail-in rebates from National Grid.

Project Summary

Energy Efficiency Measures Installed

- **An Indirect Water Heater**, which is a type of high-efficiency hot water storage unit. An indirect hot water unit uses the home's space heating unit to heat a fluid that's circulated through a heat exchanger in the storage tank.
- **A High-Efficiency Forced Hot Water Boiler**, which is a type of high-efficiency space heating unit. Natural gas is burned to heat boiler water which is circulated throughout the home as heat. High-efficiency units use less energy to produce the same amount of heat as standard equipment, saving up to 30%* on heating costs, year after year.
- **A Programmable Thermostat**, saving up to $180* a year by managing heating needs automatically and efficiently.

Savings Summary

The Need –

Replace older heating and water heating systems to help the MacIntyre's use less energy and save money.

The Solution –

Installed a high-efficiency heating unit, water heating unit and programmable thermostat with the help of mail-in rebates from National Grid.

The Result –

National Grid Incentive	$925
Cost to the Customer	$7,100

For more information on energy efficiency programs from National Grid, please visit **www.powerofaction.com/efficiency** or call **1-800-292-2032**.

*Savings Sources: Public Service Commission 2010 Technical Manual and the ENERGY STAR® website.

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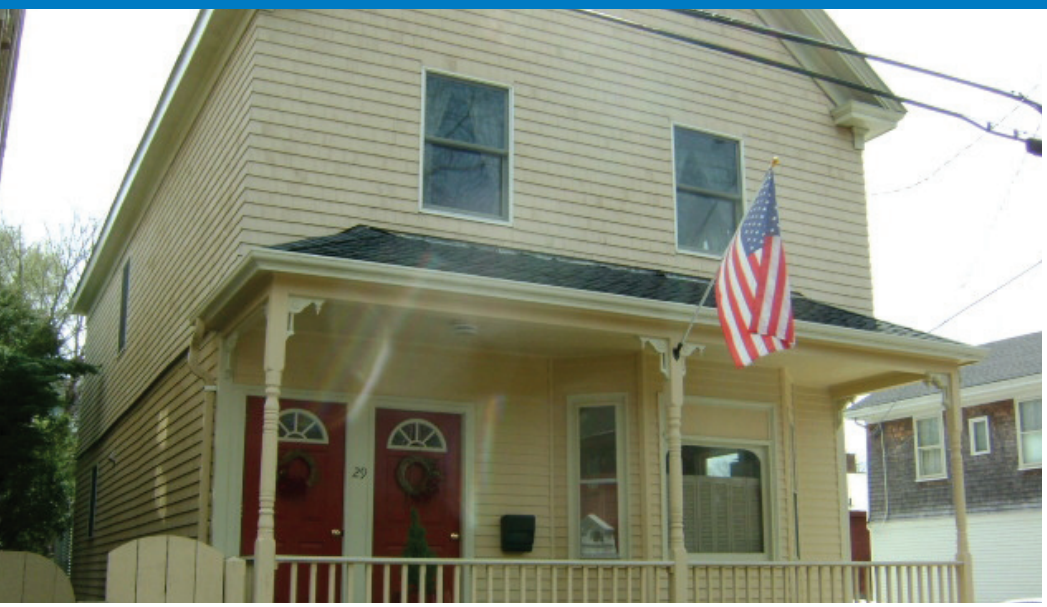
High-Efficiency Heating

A Single Family Home in Newport, Rhode Island



"We wanted a unit that was quiet and compact, with good solid engineering. We looked for models with excellent recommendations from industry experts and other homeowners. The rebates from National Grid were a good thing, allowing us to get a better system."

-The Powers Family Homeowners

The residential high-efficiency heating program from National Grid is available to natural gas heating customers residing in Rhode Island, like the Powers family. The family resides in a single-family home in Newport, Rhode Island. When it came time to replace their heating and water heating systems, the family turned to the efficiency experts at National Grid.

Project Summary

Energy Efficiency Measures Installed

- **A Forced Hot Water Condensing Boiler**, which is a type of high-efficiency space heating unit. Natural gas is burned to heat boiler water which is circulated throughout the home as heat. Condensing units extract additional heat from exhaust gas to help heat your home. High-efficiency units use less energy to produce the same amount of heat as standard equipment, saving up to 30%* on heating costs, year after year.
- **An Indirect Water Heater**, which is a type of high-efficiency hot water storage unit. An indirect hot water unit uses the home's space heating unit to heat a fluid that's circulated through a heat exchanger in the storage tank.

Savings Summary

The Need –

Replace older heating and water heating systems to help the Powers' use less energy and save money.

The Solution –

Installed a high-efficiency heating unit and water heating unit with the help of mail-in rebates from National Grid.

The Result –

National Grid Incentive	$1,400
Cost to the Customer	$10,480

For more information on energy efficiency programs from National Grid, please visit **www.powerofaction.com/efficiency** or call **1-800-292-2032**.

*Savings Sources: Public Service Commission 2010 Technical Manual and the ENERGY STAR® website.

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High-Efficiency Heating

A Single Family Home in East Providence, Rhode Island

"In converting from oil to gas, the rebate played a major part, as well as the recommendation from my plumber."

-The Rebello Family Homeowners

The residential high-efficiency heating program from National Grid is available to natural gas heating customers residing in Rhode Island, like the Rebello family. The family resides in a single-family ranch style home in East Providence, Rhode Island. They decided to switch from oil heat to natural gas heat, installing high-efficiency natural gas heating and water heating equipment as part of the conversion process.

The Rebello's installed a high-efficiency space heating unit, water heating unit and programmable thermostat, qualifying them for $1,325 worth of mail-in rebates from National Grid.

Project Summary

Energy Efficiency Measures Installed

- **A Forced Hot Water Condensing Boiler**, which is a type of high-efficiency space heating unit. Natural gas is burned to heat boiler water which is circulated throughout the home as heat. Condensing units extract additional heat from exhaust gas to help heat your home. High-efficiency units use less energy to produce the same amount of heat as standard equipment, saving up to 30%* on heating costs, year after year.
- **An Indirect Water Heater**, which is a type of high-efficiency hot water storage unit. An indirect hot water unit uses the home's space heating unit to heat a fluid that's circulated through a heat exchanger in the storage tank.
- **A Programmable Thermostat**, saving up to $180 a year by managing heating needs automatically and efficiently.

Savings Summary

The Need –

Enable the homeowners to go high-efficiency in their conversion from oil to gas heating and water heating equipment.

The Solution –

Installed a high-efficiency heating unit and water heating unit with the help of mail-in rebates from National Grid.

The Result –

National Grid Incentive	$1,425

For more information on energy efficiency programs from National Grid, please visit **www.powerofaction.com/efficiency** or call **1-800-292-2032**.

*Savings Sources: Public Service Commission 2010 Technical Manual and the ENERGY STAR® website.

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Large Business Program

Blue Cross Blue Shield of Rhode Island

Source: SMMA

Blue Cross & Blue Shield RI

Since 1939, Blue Cross & Blue Shield of Rhode Island, a non-profit corporation, has been dedicated to improving the health of its members, strengthening relations with providers and simplifying its business processes. As a LEED New Construction Gold recipient, the new Blue Cross & Blue Shield RI headquarters treads lightly on the environment while offering a heathier, more comfortable workplace for employees and a sound investment for the company.

Project Summary

High Efficiency Lighting Systems and Controls

- High efficiency lighting design layout and system equipment
- Curtainwall fenestration design to optimize the use of daylight and reduce demand on the electrical lighting
- Occupancy sensors
- Daylight dimming controls

High-Performance Building Envelope

- Improved curtainwall system thermal value
- Additional Insulation at Opaque envelope
- Additional roof insulation
- Cool roof: Reflective roof membrane and green vegetated roof

Efficient Mechanical Equipment and Systems

- High-performance HVAC Chilled water system
- Premium energy efficiency motors in fan boxes
- Static pressure reset
- Dual enthalpy economizer
- Data room water-side economizer
- Premium-efficient motors
- CO_2 Sensors
- Chemical-free water treatment
- Energy Management System
- Measurement and verification program

Strategic Partners

Symmes Maini & McKee Associates
1000 Massachusetts Avenue
Cambridge, MA 02138-5397

National Grid

Savings Summary

The Need—
Achieve a high performance, energy-efficient building space.

The Solution —
Integrated design with high efficiency lighting and controls, rooftop HVAC system, economizers, and premium motors.

The Result—

Total Project Cost	$612,557
National Grid Incentive	$382,338
Cost to Customer	$230,220
Simple Payback	1.9 years
Estimated Annual Electric Energy Savings	1,119,849 kWh
Annual Electric Cost Savings	$118,368
CO_2 Lifetime Reduction	94,718 tons
SO_2 Lifetime Reduction	36 tons
NO_x Lifetime Reduction	16 tons

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/efficiency** or call 1-877-378-2762.

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Small Business Program

Planet Fitness

Planet Fitness, Warwick, RI

> **Better for the environment, better for everyone in a 100 different ways, better for my bottom line.**
>
> Steve Eddleston, Owner

Planet Fitness

Planet Fitness in Warwick takes pride in being a business that keeps costs down for its customers. They strive to provide a health club that is clean, comfortable and hassle-free. One key way to keep the costs of running a business down is to decrease energy costs.

Planet Fitness received a free, no-obligation energy evaluation through National Grid's Small Business Program and took advantage of incentives that allowed them to install energy efficient lighting throughout the facility which resulted in decreased energy costs.

Efficiency Improvements

Project 1: Custom overhead and High Bay Induction lighting

Project 2: Occupancy sensors, LED lighting and T8 lamps and ballasts

Savings Summary

The Result

Project 1:

Project Cost	$44,741.20
National Grid Incentive	$31,318.84
Cost to Customer	$11,409.01 includes 15% discount for paying in one lump sum
Annual Cost Savings	$13,801.54

Project 2:

Project Cost	$7,339.43
National Grid Incentive	$5,137.601
Cost to Customer	$1,871.55 includes 15% discount for paying in one lump sum
Annual Cost Savings	$5,358.91

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/smallbusinessNE**.

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Small Business Program

PMI Incorporated

PMI Incorporated, Woonsocket, RI

> **The Small Business Program enables us to upgrade to energy efficient equipment that meet the demands of the business. It's a fantastic offer. A no-brainer.**
>
> Bill Ober, President

PMI Incorporated

PMI-Polyurethane Molding Industries, Inc.custom molds components for medical equipment, industrial and transportation oem applications. The company also maintains cnc machine shop for mold building. As a Rhode Island-based family run company with over 30 years of experience, the entire company is committed to product quality and cost-effective molded solutions for their customers. Over the past two years they have also acted on their commitment to improving their energy efficiency and it began with a free energy evaluation from National Grid. After National Grid identified areas of their facility where they could decrease costs and energy consumption, PMI pursued two energy efficiency products with the help of financial incentives from National Grid's Small Business Program. Initially they switched to more efficient lighting and then they increased the efficiency of their compressed air system.

Efficiency Improvements

Project 1:
PMI replaced fixtures and ballasts and lamps and put in occupancy sensors

Project 2:
Compressed Air system efficiency project. PMI Installed a 40 HP with Integrated Cycling Air Dryer Variable Speed Drive (VSD) air compressor

Savings Summary

The Result

Project 1:

Project Cost	$5604.16
National Grid Incentive	$3,922.91
Cost to Customer	$1681.25
Annual Cost Savings	$1,193.62

Project 2:

Project Cost	$41,541.84
National Grid Incentive	$29,079.29
Cost to Customer	$12,462.55
Annual Cost Savings	$4,561.46
Annual kWh savings	31,226

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/smallbusinessNE**.

Attachment 4

2011 RGGI Report

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Rhode Island
Regional Greenhouse Gas Initiative, Inc. Auction Proceeds Report
Presented by National Grid
May 1, 2012

Introduction

Since 2008, Rhode Island (RI) has received approximately $15.8 million from CO_2 Allowance Auctions through the Regional Greenhouse Gas Initiative, Inc. (RGGI).[1] As of January 2012, National Grid received $11.5 million of those funds in order to expand energy efficiency (EE) efforts throughout the state. This report is in accordance with the RI Office of Energy Resource's (OER) 2011 Plan for the Allocation and Distribution of RGGI Proceeds ('2011 Plan'), which calls for an annual report that describes results for expanded and supplemental EE activities.

Background

The following table illustrates the RGGI proceeds that National Grid has or expects to receive:

Auctions	Auction Year	Net Proceeds	EE Funding	Status	EE Initiatives
1-5	2008 - 2009	$6,581,188	$3,950,152	Received March 2010	Funded all 2010 EE Programs Saved 115,540 Lifetime MWh in 2010
			$2,633,434	Received December 2010	Deep Energy Retrofit Pilot New Homes Tier III Pilot Heat Loan Small Business Revolving Loan Fund
6-10	2009 - 2010	$5,043,347	$4,034,678	Received January 2012	Small Business Revolving Loan Fund Large Commerical Revolving Loan Fund
11-14	2011	$2,621,091	$2,096,873	Anticipated 2012	Plan to use for all EE Programs Plan to save 57,506 Lifetime MWh

Under the OER's 2009 Plan for the Allocation and Distribution of RGGI Proceeds ('2009 Plan') sixty percent of RGGI auction proceeds were allocated to utility energy efficiency programs to be used to fund all energy efficiency programs in 2010. Those funds were used to save 115,540 lifetime MWh. Preliminary results were reported to RGGI, Inc. in February, 2011, and to the OER in the RGGI Auction Proceeds Report submitted on March 1, 2011.

Additionally, National Grid received forty percent of RGGI auction proceeds from Auctions 1-5 in December 2010. Those funds were used to launch the Deep Energy Retrofit pilot, New Homes Tier III pilot, Heat Loan and Small Business Revolving Loan fund in early 2011. This report describes the results of these energy efficiency pilots and finance initiatives throughout 2011.

[1] Source: http://www.rggi.org/market/co2_auctions/results

Under the OER's 2011 Plan, the Company received eighty percent of proceeds from Auctions 6-10 for innovative finance initiatives, including fully capitalizing the Small Business Revolving Loan fund and establishing a Large Commercial Revolving Loan fund. This report includes a brief update on these ongoing 2012 RGGI activities.

Deep Energy Retrofit

The Deep Energy Retrofit (DER) pilot is designed to determine the energy savings and market potential for super insulation retrofits in Rhode Island. The goal of the DER pilot is to achieve significant energy reductions of 50% or more in a home and learn how DER measures can be applied to retrofit programs in the future for all customers.

A DER is a complex undertaking. Through the DER process, an existing home is transformed to a high performance home in which the dynamics of energy, moisture and air flows are changed in both subtle and significant ways. The contractor or consultant who develops the DER design and takes responsibility for its implementation must have a thorough understanding of how the various measures of the DER change energy, moisture and airflow dynamics. This understanding is essential to managing the risks necessarily entailed in changing how a building works. To qualify for this pilot program and applicable incentives customers are required to go through an in-depth selection process and must be willing to make significant financial investments. For additional program details, please see the program materials and case studies in Attachment 1.

In 2011, the pilot held a full-day workshop to recruit interested builders, designers, and homeowners. Two projects were accepted in 2011 and began construction. They include a two-family residence in North Kingstown and a three-family residence in Providence. Two more projects are currently under review for a three-family in Providence and a single family in Wakefield. Construction on all projects is expected to be completed in 2012.

The North Kingstown DER home, pictured here, was featured in the annual Northeast Sustainable Energy Association (NESEA) Green Building Open House tour in October 2011. The home includes materials from RI businesses such as basement insulation from Aspen Aerogels in East Providence and R-5 windows from Custom Built Window & Door Systems in Warwick. For additional information and photos from the project, please see the DER program materials in Attachment 1. Additional details are also available online at www.powerofaction.com/der.

Homes Tier III Pilot
The Homes Tier III Pilot was intended to demonstrate advanced construction practices necessary for achieving a Home Energy Rating (HER) score of 35. It was also intended to prepare the RI construction, developer and architecture communities for forthcoming advancements in the ENERGY STAR® label standards for residential new construction. The Company faced challenges with the pilot. The region does not have an HVAC contractor who has the appropriate accreditation according to the federal government's ENERGY STAR® guidelines. Due to the lack of accredited HVAC contractors, eligible customers instead opted to participate in the established Residential New Construction program which had fewer barriers to entry. This barrier is expected to remain throughout 2012; therefore the RGGI funds for this pilot were transferred to Deep Energy Retrofit pilot in January 2012 in order for that pilot to expand to more RI customers.

However, the Company is still committed to advancing design and construction to a new HER level. The Company approached Northeast Energy Efficiency Partnership (NEEP) and the Consortium for Energy Efficiency (CEE) about advocating for a solution to region-wide issue with HVAC accreditation. The Company has also folded the goals of this pilot into its 2012 Residential New Construction program so that it can continue to focus on the pilot's important objectives.

Heat Loan
In 2011, the Company partnered with Navigant Credit Union and Citizens-Union Savings Bank in order to offer customers 0% financing for energy efficiency improvements. The Heat Loan can be used for Insulation and/or Air Sealing Upgrades, Energy Efficient Heating System Replacement, Duct Sealing and Duct Insulation, Energy Efficient Domestic Hot Water System, ENERGY STAR® Thermostat(s). Customers are eligible for 0% interest loans up to $25,000, for period of up to 7 years. Customers must receive an EnergyWise home assessment in order to be eligible for the Heat Loan. During the home assessment, auditors recommend the Heat Loan and leave behind customer-friendly information about taking the next steps. Please see some of the Heat Loan's program materials in Attachment 2.

One hundred sixty customers participated in 2011. RGGI funds were used to buy the interest rate down to 0%, administer the program, and conduct quality assurance inspections. Through the interest rate buy down, customers received a total amount of $942,159 in loans. The average loan was approximately $5,900. The Heat Loan helped customers overcome financial barriers to participating in energy efficiency programs. The annual and lifetime energy savings, as well as the benefits and cost savings, from equipment that Heat Loan financed are attributed to the programs, for example EnergyWise or High Efficiency Heating.

Heat Loan will continue in 2012. The program will rely on RGGI funds until they are exhausted. The Company incorporated Heat Loan into the 2012 EnergyWise program, and EE funds will be used to continue to offer finance opportunities.

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Small Business Revolving Loan Fund

The Small Business Direct Install program helps businesses reduce their energy costs with energy efficient equipment such as lighting upgrades, lighting occupancy sensors, walk-in cooler efficiency measures, and site-specific custom projects. National Grid offers incentives for up to 70% of the cost of the installation of qualified equipment and then finances the customers' share of the cost with interest-free financing up to 24 months. The finance can be repaid on monthly electric bills.

In 2011, the Company successfully created a revolving loan fund for small business customers using $1.8 million of RGGI proceeds. This revolving loan fund replaces the preexisting copayment program for small business customers that relied on DSM funds. Establishing a revolving loan fund potentially provides a source for sustainable finance funding which means that the Company may no longer request DSM funds for copayments. An additional $2 million in RGGI funds was received in January 2012 to help capitalize the loan fund so that it may continue to revolve and support customer finance in the future. For examples of customer success stories, please see case studies in Attachment 3.

The Small Business Direct Install program had 1,281 customers participate in 2011. The majority of these customers elected to receive finance and repay it on their bills and received a total of $1,843,371. A fund balance report for the Revolving Loan Fund is included as Attachment 4. Overall, the program was able to save 16,871 annual MWh and 196,601 lifetime MWh. The program created a total lifetime benefit of $29,226,000 which includes $20,183,000 in reduced transmission, distribution, summer and winter energy over the life of the measures. For more information about benefits please see the RI 2011 Energy Efficiency Year End Report, Table E-2, filed with the Public Utilities Commission on May 10, 2012.

Spending & Reporting

The following table illustrates the 2011 budget and spending, as well as the budget for 2012 which also includes RGGI proceeds received in January 2012.

Auctions	Received	EE Funding	Initiative	2011 Budget	2011 Spend	2012 Budget
1 - 5	December 2010	$2,633,434	Heat Loan	$ 449,463	$ 146,698	$ 302,765
			Homes Tier III Pilot	$ 65,000	$ -	$ -
			Deep Energy Retrofit Pilot	$ 260,000	$ 27,848	$ 297,152
			Small Bus. Revolving Loan Fund	$ 1,858,971	$ 1,843,371	$ 15,600
Total				$ 2,633,434	$ 2,017,917	$ 615,517

Additionally, the Company submitted preliminary 2011 results of the RGGI pilots and finance programs to RGGI, Inc., in March 2011.

ATTACHMENTS

Attachment 1 – DER Program Materials
Attachment 2 – Heat Loan Program Materials
Attachment 3 – Small Business Case Studies
Attachment 4 – 2011 Small Business Revolving Loan Fund Balance

ATTACHMENT 1

DER Program Materials

1. DER Brochure
2. DER Open House

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Achieve significant energy saving and a more comfortable, better quality home with the Deep Energy Retrofit program from National Grid.

National Grid is expanding a pilot program to demonstrate Deep Energy Retrofits in existing single and multi-family homes in Rhode Island in 2011 and in Massachusetts through 2012. A key goal of the pilot is to achieve significant energy reductions of 50% or more.

What is a Deep Energy Retrofit (DER) project?

Major insulation upgrades including super insulation build-outs are a substantial portion of the initiative, with potential reimbursements of 75% of this cost up to $42,000 for single family homes involving a deep retrofit of the whole building.

- Incentive maximums vary based on the number of units in a building.
- Staged or partial projects will be considered for inclusion in the pilot.
- Additional incentives will be offered for deep energy retrofit projects in Massachusetts that reach higher performance levels of Net Zero energy, Passive House or Thousand Home Challenge standards.

How can I participate?

This pilot requires that customers team up with a contractor or designer with relevant experience to identify and propose deep retrofit projects in conjunction with customer planned projects such as siding, windows, basement conversions and/or remodeling. If you are planning to renovate your residential building soon then, you may be a good candidate.

Am I eligible?

The pilot is limited to:

- ◆ Owners of residential 1-4 unit buildings in National Grid's electric service area in Rhode Island that heat with any fuel or in Massachusetts that heat with any fuel besides natural gas.
- ◆ Owners of residential 1-4 unit buildings or 5+ unit apartment buildings in National Grid's Massachusetts gas service area that heat with natural gas.
- ◆ Owners of residential 1-4 unit buildings in National Grid's electric service area in that heat with any fuel besides natural gas.
- ◆ Owners of 5+ unit apartment buildings in National Grid's electric service area in Massachusetts that heat with electricity.

- Candidates must be able to secure their own financing of up to $50,000 or more for a comprehensive single family project (to cover non-energy and non-reimbursable portions of the project).
- Projects will require support from the building owner, a willingness to test new technologies in their building as well as to provide cooperation and access for program monitoring, learning and publicity.

I'm ready to learn more.

If you are interested and plan to renovate your building, please review the pilot program guidelines at **www. powerofaction.com/der**. If after doing so you believe you might be eligible, please fill out the questionnaire on the web page.

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Highlights and Benefits of Deep Energy Retrofit Homes

Highlights of Deep Energy Retrofit in a two-family home in Belmont:

HERS Index 32 - The lower a home's HERS Index, the more energy efficient it is in comparison to the HERS Reference Home where HERS 100 is standard new construction.

- **Attic Insulation:** R-60 (6" Cellulose, 6" Rigid Polyiso Foam added to exterior)
- **Wall Insulation:** R-40 (3½" Cellulose, 4" Rigid Polyiso Foam added to exterior)
- **Basement walls:** R-40 (2" Closed-cell Spray Foam, 7" mineral wool)
- **Windows:** R-5 triple pane, low E, argon/krypton filled
- **Air leakage reduction:** 90%, CFM 50 initial 5700, final 590
- **Heating system:** 95% efficient natural gas forced-air
- **Heat Recovery Ventilation:** Energy Recovery Ventilator (ERV)
- **Lighting:** Compact Fluorescent or Light Emitting Diode lighting throughout
- **Appliances:** Mostly ENERGY STAR®
- **Renewables:** 4.6 kW Photovoltaic array, Solar DHW with electric back-up

Customer Testimonials

A deep energy retrofit is really a modernization of the building envelope — it brings benefits in noise reduction, temperature stability, indoor air quality and durability — as well as saving energy. It's very valuable to do a DER as part of some kind of official grant program because of the support, peer-review and accountability that a good grant program like the National Grid pilot provides.

— Owners of a Deep Energy Retrofit Home in Belmont, MA

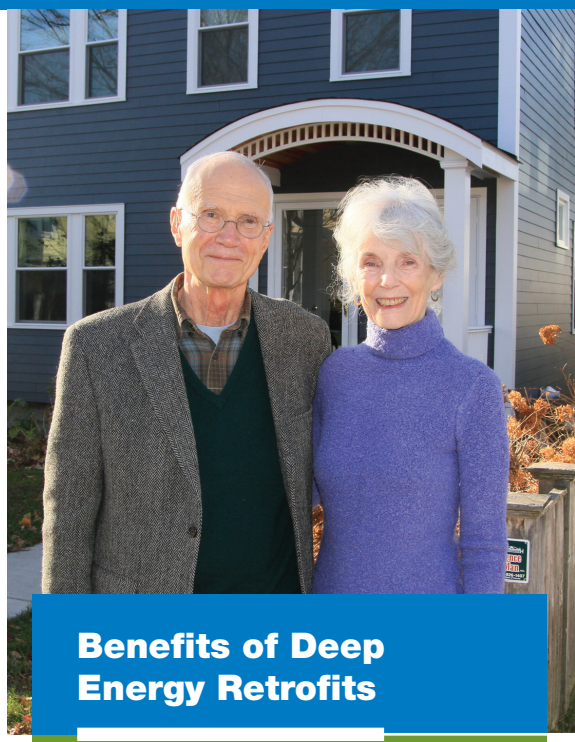
"National Grid's commitment, financial and scientific, enabled us to move our renovation project to the Deep Energy Retrofit level. What we have now exceeds all our expectations."

— Owners of a Deep Energy Retrofit Home in Belchertown, MA

"This retrofit program is transforming my 1962 duplex into a super-insulated, ultra efficient twenty-first century home!"

— Owners of a Deep Energy Retrofit Two-family Home in North Kingstown, RI

Building Science Corporation



Benefits of Deep Energy Retrofits

- Reduces greenhouse gas emissions
- Increases the impact of investment in renewables
- Energy cost savings
- Builds local economies
- Increases long term affordability
- Creates good jobs that cannot be out-sourced
- Increases passive survivability
- Stimulates product development
- Maintains embodied energy and cultural value
- Builds energy independence
- Improves durability, indoor air quality, comfort, health and safety

Through a mutual agreement with US DOE's Building America program and Building Science Corporation the pilot provides advanced technical guidance on each project. This is a limited time opportunity. This notice does not constitute a guarantee of savings or an offer to fund work in customer's homes. Please check with us before incurring costs to plan a project. For more information on Deep Energy Retrofit, please visit our website at **www.powerofaction.com/der** or contact us at DeepEnergyRetrofit@us.ngrid.

Deep Energy Retrofit Open House

Saturday, October 1, 2011 • 1 PM — 4 PM

354 Boston Neck Rd • North Kingstown, RI

National Grid will be sponsoring an Open House, with Caldwell & Johnson Custom Home Builders, showcasing the Deep Energy Retrofit of a 1962 two-family home at 354 Boston Neck Rd, North Kingstown, RI. The Open House will coincide with the NESEA Green Building Open House tour.

The owners, David and Christina Caldwell, are second generation home builders in North Kingstown. Caldwell & Johnson Custom Builders has a 43 year history in the Rhode Island market with a long and documented history of building energy efficient and solar houses since the 1970s, and is a leader in new methods of high performance and green building.

The property had been abandoned and condemned. The roof, which was nearly flat, had leaked badly, and the septic system had failed. The property was sold in foreclosure and required a back-to-the-studs “gut” remodel. The buyers saw this as an opportunity to become the first Deep Energy Retrofit in Rhode Island and a case study for other homeowners and landlords.

The super-insulated enclosure, made possible through financial and technical support from National Grid and Building Science Corporation, essentially includes an entire new frame, or exoskeleton, installed over the existing structure. This new structure has created the cavity space necessary to super-insulate the house. Separate heat pumps and heat recovery ventilators in each unit will lower energy use, improve indoor air quality and eliminate cross-contamination between units.

The project is aiming for completion by February 2012.

Here are some of the highlights of this North Kingstown 2-family DER retrofit project:

- **Roof:** Up to R-60 (open cell spray foam) with new truss roof built over existing for additional insulation.
- **Walls:** R-40 with 1.5” of polyisocyanurate rigid foam on the exterior, 3.5” of high density closed cell phone on the exterior in the new exoskeleton, and 3.5 inches of open cell insulation in the existing wall cavity.
- **Basement walls:** R-20 Dow Thermax
- **Basement floor:** R-10.5 Aspen Aerogel Cryogel Z insulation, 10mm
- **Windows:** R-5 Triple pane windows, Low-E glass, Argon filled, manufactured by Custom Built Window & Door Systems in Warwick, RI
- **Heating:** Heating and Air Conditioning will be Fujitsu Air Source Heat Pumps.
- **DWH:** On-Demand hot water will be a Navien Tankless system in each unit.
- **Ventilation:** Balanced ventilation with 75% efficient Fantech Heat Recovery Ventilators in each unit

Directions by public transportation to the Open House:

The home is in the Wickford neighborhood of North Kingstown, and is available via RIPTA transportation.

Directions by car to the Open House:

- Take Route 95 South to Route 4, Exit 9
- Take Exit 5A, RI 102 South to Wickford
- RI 102 becomes Route 1A (also Boston Neck Rd)
- 354 Boston Neck Rd located on the left at a stoplight on the corner of Boston Neck Rd and Elm Drive.

Exterior showing new exoskeleton with closed cell foam

The site opens up to a walkout basement in the rear

Front façade with new entrance portico. The new truss roof allowed for additional insulation as well as improved water management and shading.

ATTACHMENT 2
Heat Loan Program Materials

1. Steps to Heat Loan Program
2. FAQs about the RI Heat Loan Program
3. Heat Loan Minimum Standards and Requirements

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Steps to the HEAT Loan Program

The HEAT loan is available to qualified customers participating in the Energy*Wise* Home Energy Assessment Program and is designed to promote the installation of high efficiency improvements. Customers must be owners of one- to four- family homes and have a current residential gas and/or electric account with National Grid.

Customers are eligible to apply for a 0% loan and obtain applicable utility rebates for the measures installed.

1. **Complete an EnergyWise Home Energy Assessment and receive a HEAT Loan Intake Form**. Read over the Minimum Standards and Requirements and other program fact sheets provided to you. Visit **www.powerofaction.com/riheatloan** for more information and a list of participating lenders. Call **1-888-633-7947** to schedule the Home Energy Assessment, or if you have any questions concerning the eligible improvements and process.

2. **If you choose to obtain pre-approval from one of the HEAT Loan participating lenders,** loans are unsecured or secured depending on the lender. Refer to the lender list for pre-approval and loan options.

Eligible Customer 1–4 Unit Property	Type	Loan Amount	Loan Term
Owner Occupied	Micro Loan	$500 – $2,000	24 months
Owner Occupied	1–4 Unit Standard Loan	$2,001 – $25,000	Up to 84 Months
Non-Owner Occupied	1–4 Unit Rental Property Loan	$5,000 – $25,000	Up to 84 Months

Maximum loan amounts and loan type can vary by participating lender.

Note: Units in a condo complex with a condo board are not eligible for a HEAT Loan. Condo complexes are served through the utility's multi¬family program.

3. **Obtain signed, itemized contractor proposals for the eligible efficiency improvements that you want to finance.** The customer is responsible for obtaining proposals from qualified contractor(s) for the eligible efficiency improvements. Do-it-yourself installations are not eligible for HEAT Loan financing. Review the Minimum Standards and Requirement fact sheet and share a copy with your contractor(s).

4. **Choose the contractor(s) you want to use and provide copies of the contractor proposals to your HEAT Loan Administrator for eligibility review and approval.** The HEAT Loan Administrator will review the contractor(s) proposal(s) the customer submits for the HEAT Loan. The HEAT Loan Administrator will contact the customer if any paperwork is incomplete or does not meet the eligibility requirements.

Mail or Fax the following information to your HEAT Loan Administrator for Review and Authorization:

- ✔ The original, white copy, of the completed and signed HEAT Loan Intake Form provided at the Home Energy Assessment with section 2 completed and signed.
- ✔ Contractor Proposal(s) for the eligible improvements you want to finance along with all required supporting documentation as described in the Minimum Standards and Requirements on the back of this form.
- ✔ If replacing a heating system please include a heat loss calculation provided by your heating contractor and a proposal stating the make, model and efficiency rating of the proposed new system.

5. **Receive a HEAT Loan Authorization Form.** The Customer provides this form to the lender, then the lender does a final determination on the loan and disperses the funds to the customer in the form of a two-party check.
6. **Check disbursements.** Successful applicants will receive a loan agreement and two-party check(s) made out to the customer and contractor for the full amount of the loan, net any utility rebates.
7. **After all work financed through the HEAT Loan is complete, the customer needs to notify the HEAT Loan Administrator and schedule a verification inspection.** The purpose of the inspection is to verify that the work financed by the HEAT Loan has been installed.

Note: All payment arrangements including payment of any required initial deposits, subsequent or final payments, along with payments schedule, are solely between the contractor and the customer.

Financing offer is for a limited time. Participating in the HEAT Loan Program is contingent on being approved for a loan from a participating lender. Financing is subject to funding availability and the Terms and Conditions listed on the HEAT Loan Intake Form are subject to change or cancellation without notice. This program will end on December 31, 2012.

For questions regarding the HEAT Loan Program contact HEAT LOAN Administrator. Contact information and telephone number will be provided during your Home Energy Assessment.

FAQs about the Rhode Island Heat Loan Program (HLP)

Am I eligible for the HLP?
You must be a residential customer with a 1-4 unit property being serviced by National Grid.

Who determines if I am eligible for the HLP?

- The EnergyWise Program determines the eligibility for a customer to participate in the HLP.
- The participating Lender determines the credit-worthiness for a customer to undertake a loan through the HLP.

What are the steps to participate in the HLP?

1. You must first have an EnergyWise Home Energy Assessment completed. An EnergyWise representative will discuss the HLP during the energy efficiency recommendations part of the Home Energy Assessment visit. You will be provided with the following documents during the visit:
    - Intake Form
    - Steps to the Process & Minimum Standards for the Eligible Measures
    - Participating Lender List
2. Contractor proposals and associated documents for eligibility must be submitted to the HEAT Loan administrator for review and approval.
3. HEAT Loan Authorization Form must be submitted to the Lender.
4. You will then proceed with the Lenders' underwriting process.

How much does EnergyWise Home Energy Assessment cost?
There is no cost for residential customers served by National Grid to have an EnergyWise Home Energy Assessment completed.

Who do I contact to sign up for an EnergyWise Home Energy Assessment?
Please visit www.powerofaction.com/rireenergywise or call 1-888-633-7947 to schedule your Home Energy Assessment.

I'm a tenant at a multifamily property. Can I participate in the HLP?
Financing is not offered to tenants. However, you should discuss energy efficiency upgrades with your landlord. Landlords can take advantage of the HLP if they are the owner of a 1-4 unit residence.

Can alternative energy systems be financed through this program (i.e. financing solar systems)?
No. Financing is only available for energy efficiency projects. Eligible measures include heating systems, hot water systems, solar hot water, and insulation upgrades. For a complete list visit www.powerofaction/riheatloan

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HEAT Loan Minimum Standards and Requirements

The HEAT Loan is available to qualified customers participating in the EnergyWise Home Energy Assessment Program and is designed to promote the installation of high efficiency improvements. To be eligible for the HEAT Loan, the energy efficiency improvements must meet the following requirements and standards.

Customer Eligibility

To be eligible to apply for the HEAT Loan, you must:

- Be an owner of a one to four family residence
- Have completed a Home Energy Assessment through the EnergyWise Home Energy Assessment Program

Heating Systems and Thermostat Controls:

Heating systems proposal(s) must state manufacturer, model, Efficiency Rating (AFUE, HSPF, or COP) of the proposed heating system. For all Heating systems, the new system must be sized based on actual heating load calculations for the building according to ACCA Manual J, Manual S, IBR load calculations, or equivalent sizing methods. Installations must be performed by a RI licensed heating contractor.

A copy of the sizing calculation must be provided with the contractor's proposal.

Distribution system upgrades are limited and can only be covered when a customer is switching form Electric baseboard, Electric Radiant heat or when a customer is switching from a steam boiler to a hot water boiler.

When switching from Electric baseboard or Electric radiant heat the new heating system must meet the minimum efficiency standards as listed in the following table.

When switching from a steam boiler to a hot water boiler you must meet the following minimum standards listed below.

- To finance a distribution upgrade with the Heat Loan, new natural gas or propane boilers must be at least 90% AFUE to be eligible.
- To finance a distribution upgrade with the Heat Loan, new oil boilers must be at least 85% AFUE and an outdoor weather responsive control must be installed in conjunction with the boiler to be eligible for the Heat Loan

Not Covered: Oil tanks and air conditioning.

Heating Systems and Controls	Minimum Standard
Furnace — Natural Gas with ECM*	AFUE ≥ 92%
Furnace — Propane	AFUE ≥ 90%
Furnace — Propane with ECM*	AFUE ≥ 92%
Furnace — Oil	AFUE ≥ 83%
Furnace — Oil with ECM*	AFUE ≥ 83%
Steam Boiler — All Fuels	AFUE ≥ 82%
Hot Water Boiler — Natural Gas Natural Gas or Propane	AFUE ≥ 85%
Hot Water Boiler — Oil	AFUE ≥ 85%
Combined High Efficiency Boiler and Water Heater — Natural Gas	AFUE ≥ 85%
Air Source Heat Pump — Electric	HSPF ≥ 8.2
Air Source Heat Pump — Electric	HSPF ≥ 8.2
Ground Source Heat Pump	COP ≥ 3.3
Oil/Propane Boiler's Weather Responsive Controls	
Natural Gas — Market Boiler Reset Controls (After Market)	

*Electronic Commutated Motor
HSPF (Heating Seasonal Performance Factor)
AFUE (Annual Fuel Utilization Efficiency)
COP (Coefficient of Performance)

Insulation, Air Sealing, and Duct System Improvements
Insulation, air sealing, and ductwork (duct sealing and insulation) improvements must be recommended at the time of the audit and included on your Action Plan. All measures must be must be installed to the EnergyWise Home Energy Assessment material and installation standards. Work must be completed by a contractor that has met all of the requirements and is currently eligible to provide program approved weatherization services in the EnergyWise Home Energy Assessment program.

Insulation proposals need to be itemized by type of work, insulation area, square footage, costs, and inches installed.

Domestic Hot Water Systems: Domestic hot water systems must meet the minimum efficiency standards as noted in the following table to be eligible for the HEAT Loan.

Domestic Hot Water System Type and Fuel	Minimum Standard
Indirect Water Heater	Meets Rhode Island State Code Requirements
Freestanding Electric Water Heater	Energy Factor (EF) $\geq$ .92
On-Demand Tankless Water Heater – Natural Gas or Propane	Energy Factor (EF) $\geq$ .82 with Electronic Ignition
Freestanding Gas, Oil, or Propane Water Heaters	Energy Factor (EF) $\geq$ .61
Heat Pump Water Heater	Energy Factor (EF) $\geq$ 2.0
Solar Hot Water	Collectors must be certified by SRCC (Solar Rating Certification Corporation)
Condensing Water Heater – Natural Gas	Thermal Efficiency $\geq$ 95%

Please refer to the HEAT Loan Steps for information on how to apply for the loan.

ATTACHMENT 3
Small Business Case Studies

1. Mews Tavern
2. Phred's Drug Store
3. Spumoni's Restaurant

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Small Business Program

Mews Tavern

MewsTavern Wakefield, RI

Mews Tavern

Originally a small fishermen's tavern which opened in 1947, owners Dave and Danny have transformed Mews Tavern into a legendary Rhode Island restaurant and bar. It's an authentic Celtic Pub where you can enjoy the best burger in South County and enjoy live entertainment. There is a great deal of history packed into Mews. People from all over come to visit this legendary establishment and now all patrons will drink and dine under their new energy efficient lighting that was installed after Mews took advantage of National Grid's Small Business Program. After a free energy evaluation they decided to move forward with recommended measures that helped decrease energy costs and their environmental impact.

Efficiency Improvements

Mews installed an Energy Management System and new energy efficient custom lighting.

Savings Summary

The Result

Project 1:

Project Cost	$28,159.45
National Grid Incentive	$19,711.60
Cost to Customer	$8,447.85
Annual Cost Savings	$10,438.62
Annual kWh savings	77,750

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/smallbusinessNE**.

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Small Business Program

Phred's Drug

Phred's Drugs Cranston, RI

"The lights are nice and bright and the LED cooler lights enhance the product. I was impressed. It was easy there was no disruption to my business."

Charles Rossi, Owner

Phred's Drug

Established in 1956, Phred's Drug in Cranston, RI has been serving their customers diverse needs for 55 years. The owner, Charles Rossi, comes from a long line of pharmacists and intends to maintain the commitment, to the community that Phred's is known for. As part of that commitment he decided to take advantage of National Grid's Small Business Program and get a free energy evaluation that would identify ways that Phred's could decrease their energy consumption and reduce their energy costs. Charles chose to switch to energy efficiency overhead lights and LED cooler lights.

Efficiency Improvements

Phred's Drug installed over head lights—T8 lamps and ballasts and changed out refrigeration lights for LED cooler lights.

Savings Summary

The Result

Project Cost	$21,395.75
National Grid Incentive	$14,977.05
Cost to Customer	$6,418.70
Annual Cost Savings	$4,561.46
Annual kWh savings	46,131

Customer financed their portion of the costs on their electric bill interest-free over 24 months.

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/smallbusinessNE**.

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Small Business Program

Spumoni's Restaurant

Spumoni's Restaurant Pawtucket, RI

Spumoni's Restaurant

Established in 1978, Spumoni's in Pawtucket is one of Rhode Island's favorite Italian seafood restaurants, offering authentic home made Italian cuisine. A family run business, owner George Jr. and his sister Michele want to uphold the quality and service that their father began when the family entered the restaurant business. In order to cut energy costs and decrease their environmental impact, they took advantage of National Grid's Small Business Program, got a free energy evaluation and moved forward with recommended measures that decreased their energy costs. George and Michele chose to switch to energy efficiency overhead lights and LED recessed cans.

Efficiency Improvements

Spumoni's installed over head lights—T8 lamps and ballasts and14 Watt LED recessed Cans.

Savings Summary

The Result

Project Cost	$8,281.26
National Grid Incentive	$6,169.54
Cost to Customer	$2,111.72
Annual Cost Savings	$1,638.59
Annual kWh savings	13,857

Spumoni's owners chose to pay their portion of the project cost in one lump and received 15% discount.

For more information on National Grid's energy efficiency programs, please visit **www.powerofaction.com/smallbusinessNE**.

ATTAHCMENT 4
2011 Small Business Revolving Loan Fund Balance

NARRAGANSETT ELECTRIC COMPANY
2011 RGGI FUNDED ENERGY EFFICIENCY ADJUSTMENT AND BALANCE
SMALL COMMERCIAL & INDUSTRIAL REVOLVING LOAN FUND
12 month(s) of actuals 0 month(s) of estimates

		Actual JAN	Actual FEB	Actual MAR	Actual APRIL	Actual MAY	Actual JUNE	6MTHS Y.T.D
1.	**TOTAL PAYMENTS RECEIVED**	$93,233	$91,526	$52,122	$46,976	$100,227	$92,711	$476,795
2.	**TOTAL EXPENSE**	$420,692	$0	$92,276	$105,035	$256,499	$8,290	$882,790
3.	**Cash Flow Over/(Under)**	($327,458)	$91,526	($40,154)	($58,059)	($156,272)	$84,421	($405,995)
4.	**Start of Period Balance (C)**	$1,858,972	$1,536,684	$1,633,037	$1,597,802	$1,544,528	$1,392,729	$1,858,972
5.	**End of Period Balance Before Interest**	$1,531,514	$1,628,210	$1,592,883	$1,539,744	$1,388,257	$1,477,150	$1,477,150
6.	**TOTAL INTEREST (D)**	$5,170	$4,826	$4,920	$4,785	$4,472	$4,377	$28,550
7.	**End of Period Balance After Interest**	$1,536,684	$1,633,037	$1,597,802	$1,544,528	$1,392,729	$1,481,527	$1,481,527

		Actual JULY	Actual AUG	Actual SEPT	Actual OCT	Actual NOV	Actual DEC	ANNUAL TOTAL
8.	**TOTAL REVENUE (A)**	$60,786	$23,399	$60,831	$133,297	$79,531	$166,495	$1,001,134
9.	**TOTAL EXPENSE (B)**	$0	$260,963	$134,777	$9,535	$196,666	$358,640	$1,843,371
10.	**Cash Flow Over/(Under)**	$60,786	($237,564)	($73,946)	$123,762	($117,136)	($192,145)	($842,237)
11.	**Start of Period Balance (C)**	$1,481,527	$1,546,925	$1,313,717	$1,243,665	$1,371,409	$1,258,277	**$1,858,972**
12.	**End of Period Balance Before Interest**	$1,542,313	$1,309,361	$1,239,771	$1,367,427	$1,254,273	$1,066,132	$1,066,132
13.	**TOTAL INTEREST (D)**	$4,611	$4,356	$3,894	$3,982	$4,004	$3,545	$52,942
14.	**End of Period Balance After Interest**	$1,546,925	$1,313,717	$1,243,665	$1,371,409	$1,258,277	$1,069,677	**$1,069,677**
15.	**FUND BALANCE AT YEAR-END**							$1,069,677

(A) Revenue Report
(B) Source: PeopleSoft query
(C) "End of Period Balance Before Interest" from prior month.
(D) Commitments are estimated until year-end