

November 2, 2009

VIA HAND DELIVERY & ELECTRONIC MAIL

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

**RE: The Narragansett Electric Company, d/b/a National Grid
Energy Efficiency Program Plan for 2010
Docket No. 4116**

Dear Ms. Massaro:

Enclosed please find ten (10) copies of a Settlement setting forth the proposed terms of the Electric Demand-Side Management Programs for 2010 entered into by The Narragansett Electric Company, d/b/a National Grid ("Company"), the Division of Public Utilities and Carriers, The Energy Council of Rhode Island, the Energy Consumers Alliance of New England d/b/a People's Power and Light, Environment Northeast (together, the "Parties"). The Parties hereby submit this agreement for the Commission's approval in this proceeding.

Thank you for your attention to this transmittal. Please contact me if you have any questions concerning this Settlement at (401) 784-7667.

Very truly yours,



Thomas R. Teehan

Enclosures

cc: Docket 4000 Service List
RI Collaborative Members (w/enc.)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

In Re: The Narragansett Electric Company d/b/a)
National Grid) Docket No. 4116
Energy Efficiency Program Plan for 2010)

ENERGY EFFICIENCY PROGRAM PLAN FOR 2010

SETTLEMENT OF THE PARTIES

November 2, 2009

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1. Summary of Proposed Changes to Residential Programs for 2010
2. 2010 Residential Electric and Gas Energy Efficiency Programs
3. Summary of Proposed Changes to the Commercial and Industrial Programs for 2010
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9. Energy Action: Aquidneck and Jamestown

1 **I. Introduction and Summary**

2 This Energy Efficiency Program Plan (“EE Program Plan”) for 2010 is submitted by The
3 Narragansett Electric Company d/b/a National Grid (“National Grid” or “Company”) in
4 accordance with R.I.G.L. 39-1-27.7 (the Least Cost Procurement provisions of the
5 Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006),
6 R.I.G.L. 39-2.1-2(b), and the Rhode Island Public Utilities Commission’s “Standards for
7 Energy Efficiency and Conservation Procurement” approved in order 19344 in Docket
8 3931 on July 17, 2008. This Energy Efficiency Program Plan has been developed in
9 collaboration with the Subcommittee of the Energy Efficiency and Resource
10 Management Council (“EERMC”) and is intended to be consistent with the three-year
11 Energy Efficiency Procurement Plan (“EE Procurement Plan”) submitted by National
12 Grid on September 2, 2008 with approval and support of the EERMC, the Office of
13 Energy Resources, the Division of Public Utilities and Carriers, Environment Northeast,
14 and TEC-RI.

15

16 This Plan is being jointly submitted as a Stipulation and Settlement (“Settlement”),
17 entered into by the Rhode Island Division of Public Utilities and Carriers (“Division”),
18 The Energy Council of Rhode Island (“TEC-RI”), Energy Consumers Alliance of New
19 England d/b/a People’s Power and Light (“PP&L”), Environment Northeast (“ENE”), the
20 EERMC, and National Grid (together, the “Parties”), and addresses all issues raised by
21 members Subcommittee¹ concerning the Company’s electric Demand-Side Management
22 (“DSM”) Programs for the year 2010.

23

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

1 This plan builds on the experiences and successes of National Grid’s implementation of
2 the approved electric and gas energy efficiency programs for all customer segments²
3 subject to the budget included in the revised Settlement filing of November 7, 2008, in
4 Docket No. 4000, which was approved by the Commission in Order 19608 on, April 6,
5 2009.

6

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

11

12 This Plan has been developed to continue the progress made in 2009 toward the aim of
13 the “The Comprehensive Energy Conservation, Efficiency and Affordability Act of
14 2006” to secure all cost-effective energy efficiency resources that are lower cost than
15 supply and are prudent and reliable. Furthermore, this plan is designed to be consistent
16 with the “Principles of Program Design,” outlined in Section 1.3A of the Commission’s
17 “Standards for Energy Efficiency and Conservation Procurement.” All customers will
18 have an opportunity to participate in the cost-effective³ programs and benefit from the
19 low-cost energy efficiency resource. Ramping up of program capability will be done in a
20 manner that ensures quality delivery and is economical and efficient.

21

22 This EE Program Plan is part of the three year plan established for electric programs in
23 the EE Procurement Plan and established for gas programs in the 2009 EE Program Plan.
24 The Company has progressed on several goals laid out in the three year plans. During
25 2009, gas and electric programs continued their integration efforts and were successful in
26 presenting customers with integrated offerings. In 2010, Commercial & Industrial

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

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

1 programs will continue integration efforts, with an increased focus on custom measures.
 2 During 2009, the Company further developed its program delivery infrastructure by
 3 hiring at least 10 individuals in program planning and implementation roles either wholly
 4 or partially devoted to Rhode Island.

5
 6 The table below summarizes the goals of this Plan. The goals are consistent with the
 7 goals for 2010 filed as part of the three year Least Cost Procurement Plan for electric
 8 programs in Docket 3931 and the three year view for gas programs filed in Docket 4000.⁴

9
 10 **Table 1: 2010 Energy Efficiency Program Plan Summary**

Electric Programs by Sector	Proposed Utility Spending in 2009 (\$000)	Annual MWh Savings	Annual kW Savings	Total Benefits (\$000)	B/C Ratio	cents/lifetime kWh
Low Income Residential	\$3,729	1,887	199	\$8,115	2.08	16.7
Non-Low Income Residential	\$10,689	22,509	2,393	\$30,464	2.38	5.8
<u>Commercial and Industrial</u>	\$16,587	65,242	15,082	\$127,005	4.47	3.3
Subtotal	\$31,006	89,637	17,674	\$165,585	3.67	4.1
Gas Programs by Sector						
	Proposed Utility Spending in 2009 (\$000)	Annual MMBtu Savings		Total Benefits (\$000)	B/C Ratio	
Low Income Residential	\$286	1,569		\$413	1.35	
Non-Low Income Residential	\$1,419	28,756		\$11,595	2.54	
<u>Commercial and Industrial</u>	\$2,896	90,823		\$6,473	2.18	
Subtotal	\$4,601	121,147		\$18,481	2.26	
Total for Plan	\$33,270			\$192,024		

11 Notes:

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

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

19
⁴ Because these plan values are consistent with the Least Cost Procurement Plan, the Company is not filing an update to that Plan as was its option according to approved guidelines.

1 Since demand for energy efficiency program services continues to be strong across all
2 sectors, National Grid is confident that it will meet the goals for 2010. The Parties agree
3 that 2010, the second of three years covered by the Energy Efficiency Procurement Plan,
4 is a time to expand ongoing program efforts and to innovate programs to create greater
5 increases in energy efficiency savings. To that end, the Company commits to continue to
6 work on an ongoing basis with the Subcommittee and members of the EERMC's
7 consulting team to explore financing, technological, marketing, integration, and
8 implementation innovations to further advance and deepen energy efficiency for its
9 customers in Rhode Island. The Company will invite the consulting team,
10 Subcommittee, and EERMC members to observe its implementation efforts in the field.
11 The Company will also increase its focus on evaluation efforts that support the energy
12 efficiency programs in Rhode Island.

13

14 The proposed plan features levels of savings and spending not seen before in the
15 Company's programs in Rhode Island. This creates some new dynamics in the
16 achievement of energy savings in Rhode Island, particularly as Rhode Island recovers
17 from the economic downturn in 2010. On the savings side, it will require overcoming
18 customers' reluctance to spend the money on energy efficiency as well as successful
19 delivery of the innovative program plans that are described herein. On the spending side,
20 it will require that the Company secure funds from new sources, in particular since
21 electric sales and DSM collections are forecasted to be lower in 2010 than in 2009, while
22 gas collections are forecast to remain stable. Fortunately, the American Recovery and
23 Rehabilitation Act (ARRA) has created some opportunities for advancing energy
24 efficiency and may impact the Company's programs. ARRA funds will support state
25 efforts in weatherization, energy efficiency programs in the State Energy Plan, and
26 Community Block Grants (CBGs). The Company expects increased interest in its energy
27 efficiency programs from municipalities receiving CBGs.⁵ The Company also recognizes
28 that ARRA funded weatherization programs will rely heavily on existing weatherization
29 vendors and program administrators – the competition for weatherization resources may

⁵ These will fund a portion of efficiency project costs; the Company expects municipalities to participate in the Company's programs to supplement the CDBG funds.

1 present a challenge for the Company’s low income programs that use the same channels.
2 The Company will continue to play a role in assisting weatherization planners prepare for
3 this ramp up. The Company is also applying for a subgrant from the state’s Energy Star
4 Energy Efficiency Appliance Rebate grant. The Collaborative supports the Company’s
5 proposal to expand rebates on gas, oil and propane heating equipment.

6
7 The Company also intends to leverage some funds to make it easier for customers to
8 finance energy efficiency installations. This is in accordance with Section 1.3.A.8 which
9 requires “the Utility shall explore as part of its plan, new strategies to make available the
10 capital needed to effectively overcome market barriers and implement projects that move
11 beyond traditional financing strategies.”

12
13 Subsequent sections highlight the details of the gas and electric programs for 2010.⁶

14
15 **II. Proposed 2010 DSM Programs**

16 The DSM programs for 2010 build on the momentum and success of prior DSM
17 programs and services, offering energy efficiency opportunities to all customer
18 segments,⁷ with a focus on providing needed services to low and moderate income
19 residential consumers as a means of reducing bills. In addition, the Company will
20 continue to integrate the delivery of electric energy efficiency programs with its natural
21 gas efficiency programs where practical. The Parties agree to the Company’s 2010
22 electric and gas DSM Programs described below.⁸

23

⁶ Section 1.3.B.1 requires “the Utility shall include a detailed budget for the EE Program Plan covering the annual period beginning the following January 1, that identifies the projected costs, benefits, and energy savings goals of the portfolio of each program. The budget shall identify at the portfolio level, the projected cost of efficiency resources in cents/lifetime kWh.

⁷ Standards Section 1.3.A.2 requires “the Utility should consistently design programs and strategies to ensure that all customers have an opportunity to benefit comprehensively, where appropriate, from expanded investments in this low-cost resource.”

⁸ Throughout the program year, the Parties may consider additional enhancements beyond those identified herein as more information becomes available to support an informed review of those potential changes. As part of this process of identifying additional enhancements, in addition to continuing to meet with the Subcommittee, the Company has agreed to regular work sessions with the EERMC’s program and policy consultants, the VEIC team.

1 A. **Residential Programs**

2 The Parties agree to continue in 2010 the residential programs offered in 2009.

3 The programs are summarized in Table 2 below.

4

5 A summary of the proposed changes in these programs from 2009 are provided in

6 Attachment 1. Descriptions of these programs are provided in Attachment 2.

7 Highlights of proposed program changes for 2010 include continued integration

8 of gas and electric programs, redesign of the residential lighting program, and the

9 initiation of pilot programs to help identify future savings opportunities in home

10 energy usage.

Table 2. Proposed Residential Energy Efficiency Programs	
Residential Buildings Efficiency Programs	
EnergyWise Program (Funded by Gas and Electric)	The EnergyWise program offers single and multi-family customers free home energy audits of their homes and information on their actual electric and gas usage. Participants in this program receive recommendations and technical assistance as well as financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses base load electric use as well as gas and electric heat in all residential buildings.
Single Family Low Income Services (Funded by Gas and Electric)	The low income program, marketed as the Appliance Management Program, is delivered by the Office Energy Resources and local Community Action agencies. It provides the same services as the EnergyWise program, described below, except it also addresses oil heat in all residential buildings and no customer contribution is required for equipment installation.
ENERGY STAR[®] Homes Program (Funded by Gas and Electric)	The ENERGY STAR [®] Homes Program promotes the construction of energy efficient homes by offering technical and marketing assistance, as well as cash incentives to builders of new energy efficient homes that comply with the program’s performance standards.
ENERGY STAR[®] Homes Version III Pilot (Funded by Electric)	Technical assistance as well as an additional \$1000 incentive (above tier 1 incentives) for up to 15 projects to be built to 2011 Version 3 levels in 2010.
ENERGY STAR[®] Homes Vocational Education Program (Funded by Electric)	The Company supports the ENERGY STAR [®] Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR [®] certified builders.

Building Practices and Demonstration Program (Funded by Gas)	Participate in funding for demonstration projects that apply to new or underutilized technologies.
Deep Energy Retrofit Pilot (Funded by Electric)	The pilot will provide significant financial incentives for deep energy retrofit demonstration projects involving super-insulation upgrades and other measures in conjunction with customer planned projects such as re-siding or roofing. Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.

1

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

2

Table 1. Proposed Residential Energy Efficiency Programs

Residential Buildings Efficiency Programs	
EnergyWise Program (Funded by Gas and Electric)	The EnergyWise program offers single and multi-family customers free home energy audits of their homes and information on their actual electric and gas usage. Participants in this program receive recommendations and technical assistance as well as financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses base load electric use as well as gas and electric heat in all residential buildings.
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ENERGY STAR[®] Homes Vocational Education Program (Funded by Electric)	The Company supports the ENERGY STAR [®] Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR [®] certified builders.
Building Practices and Demonstration Program (Funded by Gas)	Participate in funding for demonstration projects that apply to new or underutilized technologies.
Deep Energy Retrofit Pilot (Funded by Electric)	The pilot will provide significant financial incentives for deep energy retrofit demonstration projects involving super-insulation upgrades and other measures in conjunction with customer planned projects such as re-siding or roofing. Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.

1

Residential Efficient Products Programs	
ENERGY STAR[®] Lighting (Funded by Electric Only)	This is an initiative implemented jointly with other regional utilities. It provides discounts to customers for the purchase of ENERGY STAR [®] compact fluorescent lamps and fixtures and solid state lighting through instant rebates, special promotions at retail stores, or a mail order catalog.

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

1

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

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

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Several of the Company’s proposed programs provide low income customers with services that are designed to help reduce their electric bills, including the Single Family Low Income Services Program, the EnergyWise Program, and the ENERGY STAR® Homes Program. The Single Family Low Income Services Program provides qualifying low-income customers in 1-4 unit dwellings with energy efficiency services. Both low income and non low income residential customers receive services through the EnergyWise Program and the ENERGY STAR® Homes Program. Additional detail about the services offered to economically disadvantaged customers is set forth in Attachment 2.

C. Commercial and Industrial Programs

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

Table 3. Proposed Commercial and Industrial Energy Efficiency Programs	
Small/Medium Business Program (Electric Only)	The Small/Medium Business Program provides direct installation of energy efficient lighting and non-lighting retrofit measures. Customers with average monthly demand of less than 200 kW or annual energy usage of less than 300,000 kWh are eligible to participate. The program’s lighting measures are delivered through one labor and one product vendor selected through a competitive bidding process. The labor vendor performs lighting analysis, installs measures, and inputs data into a database. Refrigeration measures are performed by a different vendor. These measures include cooler door heaters, fan controls, and freezer door heater controls. The customer pays 30% of the total cost of a retrofit. This amount is discounted 15% for a lump sum payment or the customer has the option of spreading the payments over a two-year period interest free. Gas opportunities will be identified during the audit and referred for further evaluation.
Energy Initiative (Electric Only)	Energy Initiative is a comprehensive retrofit program designed to promote the installation of energy efficient electric equipment such as lighting, motors, and heating, ventilation and air conditioning (HVAC) systems in existing buildings. All commercial, industrial, and institutional customers are eligible to participate. The Company offers technical assistance to customers to help them identify cost-effective conservation opportunities, and pays rebates to assist in defraying part of the material and labor costs associated with the energy efficient equipment.

Design 2000plus (Electric Only)	<p>Promotes energy efficient design and construction practices in new and renovated commercial, industrial, and institutional buildings. The program also promotes the installation of high efficiency equipment in existing facilities during building remodeling and at the time of equipment failure and replacement. Design 2000plus is known as a lost opportunities program because a customer who does not install energy efficient equipment at the time of new construction or equipment replacement will likely never make the investment for that equipment or will make the investment at a much greater cost at a later time.</p> <p>Design 2000plus provides both technical and design assistance to help customers identify efficiency opportunities in their new building designs and to help them refine their designs to pursue these opportunities. The program also offers rebates to eliminate or significantly reduce the incremental cost of high efficiency equipment over standard efficiency equipment. Commissioning or quality assurance is also offered to ensure that the equipment and systems operate as intended.</p>
Commercial Energy Efficiency Program (Gas Only)	<p>Promotes energy efficient gas technologies for commercial, industrial, institutional and large multifamily buildings. Technical assistance services are provided. Gas and electric energy efficiency opportunities are addressed simultaneously through technical assistance. Prescriptive incentives are offered for more common measures such as programmable thermostats, boiler reset controls, steam trap replacements, pipe and/or duct insulation, building shell (walls, roof, floor, crawl space) insulation, and high efficiency windows. Custom incentives are offered for unique energy efficiency opportunities and comprehensive design projects such as high performance buildings and combined heat and power projects</p>
Commercial High Efficiency Heating Equipment (Gas Only)	<p>Promotes energy efficient gas heating and domestic hot water heating equipment for commercial, industrial, institutional and large multifamily building. Prescriptive incentives are offered for energy efficient heating furnaces, boilers, infrared heaters and domestic hot water systems.</p>

1

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

7

8 **Community Based Initiative**

9 The Company will continue working with affinity groups, companies, and
10 municipalities in Newport, Middletown, Portsmouth, and Jamestown, to pilot
11 innovative strategies for community based involvement in energy efficiency
12 program implementation, for both residential and commercial and industrial
13 customers. The pilot, named Energy Action: Aquidneck and Jamestown, will run

1 through the end of 2010. This community based effort leverages community
2 involvement in energy efficiency implementation as well as targeted community-
3 oriented marketing of program elements in order to assess how these may support
4 the objectives of least cost procurement. These communities were selected for
5 this effort because of pre-existing community interest and because they
6 overlapped with the targeting of this area as part of the System Reliability
7 Procurement Plan. The Company plans to conduct a process and impact
8 evaluation of this initiative beginning in the first half of 2010. The Company will
9 use preliminary results of this study as a basis of recommending whether and how
10 to target additional community(ies) in 2011. The Company budgeted \$300,000
11 for implementation of the pilot in 2009 and 2010, using expected funds from 2009
12 RGGI auctions. No additional funds are budgeted in 2010. For more
13 information, see Attachment 9.

14

15 **System Reliability Procurement Plan**

16 On October 24, 2008, the Company proposed an amended System Reliability
17 Procurement Plan in Docket 3931, with the EERMC's endorsement. The
18 Commission approved this Plan on April 17, 2009, but did not approve the
19 recommended surcharge. The Commission deferred funding for the SRPP "until
20 it is determined whether excess funds have been recovered from the Energy
21 Efficiency Procurement Plan." As discussed below regarding the fund balance for
22 2009, there have been no excess funds from energy efficiency. Implementation of
23 the SRPP has been delayed by the lack of funding and by considerations of how
24 this effort would be coordinated with the Company's larger SmartGrid proposal
25 for Rhode Island, filed in Docket 4075. Activities that had been planned for 2009
26 have essentially been deferred to 2010. In 2010, the Company has budgeted
27 \$425,000 of energy efficiency funds for "C/I Audit and Automation Demand
28 Response" activities (that had been planned for 2009) as described in the SRPP
29 and shown on page 22 of that plan.

30

31

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

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

5
6 **A. 2010 DSM Program Funding Sources**

7 The sources of funding for the 2010 electric DSM Programs are shown in Table
8 E-1. This funding is consistent with the funding plan contained in the LCP Plan
9 and included the following sources: (1) a statutory-based DSM charge of \$0.0038
10 per kWh (the currently approved \$0.0032 per kWh plus an increase of \$0.0006
11 per kWh; an increase of \$0.0012 was proposed in the Least Cost Procurement
12 Plan in Docket 3931 and approved in Order 19621 on April 17, 2009); (2) interest
13 expected to be accrued on the fund balance during the year due to timing
14 differences for collections compared to expenditures; (3) funds expected to be
15 received from Small Business Program co-payments⁹ and from large Commercial
16 and Industrial technical assistance co-payments¹⁰ in 2010; (4) Large C&I
17 commitments from 2009;¹¹ (5) forecast carryover of the year end 2009 fund
18 balance, if any, (6) revenue generated by ISO-New England's (ISO-NE) Forward
19 Capacity Market (FCM), as explained below; (7) revenue generated through
20 RGGI, Inc. permit auctions, as discussed below. The projected funding amounts
21 are also shown in Table E-1.

22

⁹ The Company provides Small Business customers with the opportunity to finance their share of project costs. The Small Business co-pays refer to the projected amount of funds customers are expected to repay to the Company in calendar year 2010. Because of an accounting change, these copayments are now included as a credit in the fund balance rather than a separate fund source.

¹⁰ The Company typically pays the full cost of technical assistance studies for Large Commercial and Industrial program participants and then bills the customer for their share of the technical assistance study cost. The Large Commercial and Industrial co-pays shown in Table E-1 reflect the projected amount of technical assistance study funds expected to be repaid by customers in 2010. Because of an accounting change, these copayments are now included as a credit in the fund balance rather than a separate fund source.

¹¹ As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

1 The Company will be attempting to secure additional funds in 2010 from Federal
2 stimulus grants, RGGI auctions beyond those included in the funding plan, as well
3 as outside sources of funding. The proposed treatment of these additional funds,
4 should the Company be successful in securing them, is discussed in Section III.E
5 below.

6
7 The projected 2010 budget for DSM programs is dependent on a number of
8 projections that inform the amount of funding, including projections of kWh sales
9 of electricity, year-end 2009 large commercial and industrial program
10 commitments, capacity payments received from ISO-NE, and a projection of
11 year-end 2009 spending. As shown in Table E-1, the Company currently projects
12 that the fund balance at year end 2009 will be \$1,343,300.

13
14 **ISO-NE Capacity Market Revenue**

15 Consistent with the Commission's Standards for Energy Efficiency and
16 Conservation Procurement, the Energy Efficiency Procurement Plan, and
17 Commission decisions in Dockets 3779, 3892, and 4000, the Company and the
18 Parties recommend that kW demand savings achieved via the electric energy
19 efficiency programs continue to be reported by the Company to ISO-NE as Other
20 Demand Resources (ODR) during the transition period through May 2010. In
21 addition, the Parties recommend that the Company report demand savings for
22 previously bid projects to the FCM beginning with the opening of the market on
23 June 1, 2010. All ISO-NE capacity payments received during the transition
24 period and the FCM will be used to supplement the energy efficiency program
25 budgets. Capacity market payments in Table E-1 are a combination of projected
26 transition period capacity payments through May 31, 2010 and FCM payments
27 from June 1 through December 31, 2010.

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

13
14 In addition, as part of the FCM, all qualified auction participants are required to
15 post Financial Assurance to provide security that the promised resource will
16 deliver the promised MW at the promised time.¹² If, as a result of circumstances
17 beyond the control of the Company,¹³ the Company is unable to provide all or a
18 portion of the megawatts of capacity proposed in its qualification packages and
19 capacity auction bids, some or all of the financial assurance monies would be
20 forfeited. Accordingly, the Parties agree that the Company should recover all
21 prudently incurred Financial Assurance expenses from ISO-NE capacity
22 payments generated by the demand savings represented by the Company or the

¹² Since the Company was able to qualify its bid as an existing resource rather than a new resource (because of its activity during the transition period), ISO-NE has notified the Company that it will not be required to post security for Forward Capacity Auction 1. However, the Company will be required to post security for all future capacity auctions.

¹³ Such circumstances may include legislative action to alter the DSM charge or discontinue the Company's authority to implement the energy efficiency programs underlying the Qualifications Package, or a Commission decision limiting the Company's role in bidding the demand savings acquired through program efforts into the FCM.

1 energy efficiency program fund,¹⁴ similar to the procedures described above for
2 administrative and M&V compliance costs.

3
4 **Regional Greenhouse Gas Initiative, Inc. Funds**

5 On February 26, 2009, the Rhode Island Office of Energy Resources (OER)
6 issued rules regarding the distribution of funds generated from Regional
7 Greenhouse Gas Initiative, Inc (RGGI) auction of carbon allowances. The rules
8 indicate that 60% of the proceeds should be allocated to the Company to
9 “supplement and expand energy efficiency efforts consistent with the PUC
10 approved Energy Efficiency (EE) Procurement Plan and annual efficiency
11 Program Plans”¹⁵ and 40% should be allocated to innovative programs according
12 to procedures to be developed. The OER held public hearings on its draft rules on
13 April 3, 2009. The rules were approved on September 30, 2009. The Company
14 has not yet received any funds from the first five auctions held September 2008
15 through September 2009 but the Company’s funding plan for its 2010 programs
16 includes an estimate of “60% proceeds” expected to be received in 2010 from
17 both 2009 and 2010 auctions.¹⁶ Consistent with the intent of the rules, these funds
18 will be used to increase the scope of the electric energy efficiency programs in
19 2010. Indeed, if these funds are not received, the Company will have to scale
20 back its proposed programs. No funds from the 40% proceeds are currently
21 included in the funding plan. Please see Section III.E, below.

22
23 **B. Budgets**

24 The Parties agree that the portfolio of DSM programs and services for 2010 will
25 have an overall projected budget of approximately \$43.9 million. The Parties
26 agree to segment the budget into three sectors: residential low income, residential

¹⁴ Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as a contingency fund to cover future Financial Assurance claims that result from the Company’s inability to meet its obligation to deliver demand savings due to circumstances beyond its control.

¹⁵ Since the auctions are related to allowing carbon emission from electric generation, RGGI auction proceeds are applied only to electric energy efficiency programs.

¹⁶ Because funds expected in 2009 have not yet been received, the Company will apply funds from auctions in 2009 to the 2010 budget as well.

1 non-low income, and commercial and industrial. Proposed sector and program
2 budgets are provided in Table E-2. A comparison of these proposed budgets to
3 the 2009 budget is provided in Table E-3. As seen in this table, funding for all
4 electric programs are proposed to increase significantly over 2009, consistent with
5 the objectives of least cost energy efficiency procurement as the efficiency
6 resource is 4.1 cents/lifetime kWh versus 9.2 cents/kWh for electric supply.

7
8 The Parties agree that the Company should make every attempt to spend or
9 commit all the funds available for DSM in the year, including any increases in the
10 fund balance due to increased sales or other factors. The Parties also agree to
11 review the status of program budgets regularly to assess whether they are likely to
12 come to a successful completion. If not, the Parties agree to review the
13 advisability of transferring funds to other programs where the money could be
14 more effectively used.

15
16 **C. Transferring of Funds**

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

23 1. Transfers within a Sector:

24 a) For transfers of less than 10% of the originating program's
25 budget, the Company can transfer funds from one program to
26 another program within the same sector without prior approval
27 of the Division.

28 b) For transfers of 10% or more of the originating program's
29 budget, the Company can transfer funds from one program to

1 another program within the same sector with prior approval of
2 the Division.

3 c) For any transfers in the Commercial and Industrial Sector
4 between large commercial and industrial programs (Design
5 2000*plus* and Energy Initiative) and Small/Medium Business
6 Services programs,¹⁷ Division approval is required. In
7 addition, if a transfer would reduce the originating program's
8 budget by more than 20% in aggregate (over the course of the
9 program year), the transfer would require Commission
10 approval as well.

11 2. Transfers between Sectors. The Company can transfer funds from one
12 sector to another sector with prior approval of the Division. If a
13 transfer would reduce the originating sector's budget by more than
14 20% in aggregate (over the course of the program year), the transfer
15 would require Commission approval as well.

16
17 For transfers requiring Division, but not Commission, approval, the Parties will
18 inform the Commission about all the transfers, both between sectors and within
19 sectors, in a timely fashion. The Company will not be permitted to adjust its goals
20 or incentive target calculations for any transfers between sector budgets.

21
22 **D. Cost-Effectiveness**

23 The Company has projected cost-effectiveness for the proposed 2010 programs
24 using the Total Resource Cost ("TRC") test. The use of this test was required by
25 the Commission's Standards for Energy Efficiency and Conservation
26 Procurement.¹⁸ The TRC test requires that the total lifetime savings from the

¹⁷ Prior to 2009, small and large business program were in separate sectors. While they have been combined into a single Commercial and Industrial sector to better align with implementation objectives, Parties wanted to treat them separately for the purposes of budget transfers.

¹⁸ Prior to 2009, the Utility Cost Test was used.

1 efficiency measures will exceed the total costs of the measures (i.e., program and
2 customers costs).

3
4 As is customary in a TRC test, the value of other resource benefits is included in
5 the analysis of expected benefits from program efforts. In this case, the other
6 resource benefits include expected fuel and water savings that are incremental to
7 the electricity savings expected through the electric efficiency programs.

8
9 Table E-4 provides the calculation of 2010 program year cost-effectiveness.
10 Table E-5 shows the goals based on the proposed budgets. Table E-6 shows a
11 comparison of the goals with the approved program goals from 2009. Table E-4
12 shows that the proposed portfolio of programs is expected to have a benefit/cost
13 ratio of 3.67 which means that approximately \$3.67 in benefits is expected to be
14 created for each \$1 invested in the programs. This increase in efficiency
15 investment moves towards a level that is closer to acquiring all energy efficiency
16 resources that are lower cost than supply.

17
18 The cost-effectiveness analyses of the proposed programs use avoided energy
19 supply costs that were developed by Synapse Energy Economics as part of a 2009
20 study, "Avoided Energy Supply Costs in New England: 2009 Report," issued
21 August 21, 2009, that was sponsored by all electric DSM program administrators
22 in New England, as well as some gas program administrators. They reflect current
23 and expected market conditions and are highly influenced by the cost of fossil
24 fuels and expectations about ISO-NE's emerging forward capacity market.
25 Company-specific transmission and distribution capacity values are also included.
26 The avoided costs used for 2010 are shown in Table E-7.

27
28 The avoided costs include the demand reduction induced price effect (DRIPE)
29 benefits that are projected to result from the installation of energy efficiency

1 measures in 2010. These benefits occur when the retail price of electricity is
2 reduced as a result of the reduced long term demand for electricity stemming from
3 the installation of energy efficiency measures. Some amount of DRIPE benefits
4 have been counted in Rhode Island since 2006. While some Collaborative
5 members have expressed concern about whether DRIPE represents a real benefit
6 to Rhode Island consumers, the Parties have agreed to include DRIPE in value
7 and cost effectiveness calculations for energy efficiency programs in 2010.

8
9 **E. Additional Sources of Funds**

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

- 13
14 1. RGGI 40% Funds. As mentioned above, 40% of the proceeds from
15 RGGI auctions are proposed to be allocated to innovative programs,
16 according to OER approved rules. The Company will apply to the
17 OER to secure “RGGI 40%” funds from 2009 and 2010 to create a
18 revolving loan fund for municipal, commercial and industrial
19 customers participating in its electric programs. In order to fully
20 capitalize the loan fund, some of the funds may be used to replace
21 funds used for municipal and large customer on-bill financing in
22 2009. In the event that the Company secures these funds, the
23 Company will notify the Commission of the increase in the total
24 funding (Table E-1) and of its plans for the funds. Because these
25 funds will be used for assisting customers pay their portion of
26 measure installation costs, there will be no change to program
27 spending budgets, savings goals or the shareholder incentive
28 calculation.

- 1 2. ARRA/Stimulus Funds. The Rhode Island Office of Energy
2 Resources is administering the distribution of Federal ARRA grant
3 funds through several programs. The Company plans to apply for
4 grants under the State Energy Program (SEP) and Energy Star
5 Appliance Program requests for proposals. In the event that the
6 Company secures these funds, the funds will be used to increase
7 energy efficiency program scope or rebate levels, as directed by the
8 State of Rhode Island’s interpretation of current ARRA guidance.¹⁹
9 If ARRA funds will only be used as an additional rebate above the
10 Company’s existing rebate levels, then savings goals will not be
11 affected. If ARRA funds are used to capture savings, then goals will
12 be adjusted accordingly, and the Company will file a plan for the use
13 of the funds to the PUC.
- 14 3. Other Funds. The Company will attempt to secure funds from other
15 sources. These funds will be used to offset DSM charge funds
16 collected from customers, to accelerate participation in 2010, or to
17 increase program scope (or savings) in 2010. In the event that the
18 Company is successful in securing these funds and the funds will be
19 used to increase program scope, then the Company will file a
20 proposal to the PUC regarding the use of the funds to update the
21 plan’s spending budget, savings goals, and shareholder incentive for
22 approval by the PUC. If the funds will be used to accelerate
23 participation and will not affect savings, the Company will file a
24 plan for the use of the funds to the PUC. If the funds are not spent in
25 2010, but are reserved to offset future DSM charges, the Company
26 will file a plan for the use of the funds to the PUC. The timing and
27 magnitude of the available funds will influence the Company’s
28 proposal and how it may affect program budgets, savings goals, and
29 incentive calculation.

¹⁹ In the event that DOE energy efficiency savings standards are inconsistent with the Company’s standards, the Company will use the higher of the two standards.

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

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

5
6 **A. 2010 DSM Program Funding Sources**

7 The sources of funding for the 2010 gas DSM Programs are shown in Table G-1.
8 The Parties agree that the 2010 budget should continue to be funded from the
9 following sources: (1) the statutory-based DSM charge of \$0.15 per dekatherm;
10 (2) interest expected to be accrued on the fund balance during the year due to
11 timing differences for collections compared to expenditures; (3) Large C&I
12 commitments from 2009;²⁰ and (4) forecast carryover of the year end 2009 fund
13 balance, if any. The projected funding amounts are also shown in Table G-1

14
15 The Company will be attempting to secure additional funds in 2010 from Federal
16 stimulus grants and outside sources of funding. The proposed treatment of these
17 additional funds, should the Company be successful in securing them, is discussed
18 in Section IV.F below.

19
20 As shown in Table G-1, the Company currently projects that the fund balance at
21 year end 2009 will be (\$1,172,390). This negative fund balance indicates that
22 actual spending in 2009 is expected to exceed available funding compared to
23 levels projected when the 2009 Settlement filing was prepared. This is greater
24 than expected spending at year end 2008, which carried into 2009, as well as
25 spending in excess of sources of funds in 2009. Because the negative fund

²⁰ As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

1 balance must be “paid off” using 2010 collections, available funding for 2010
2 programs is less than funding for 2009.²¹

3

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

8

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

10 1. The Parties agree that gas used for distributed generation (excluding
11 natural gas used by emergency generators) will not be subject to the
12 energy efficiency surcharge when gas used for that purpose can be clearly
13 identified through uniquely metered use and when so requested in writing
14 by the customer.

15

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

27

²¹ The Parties note that recent experience with the gas energy efficiency programs indicates that supplemental funding may be needed in order to meet customer demand.

1 **C. Budgets**

2 The Parties agree that the portfolio of gas DSM programs and services for 2010
3 will have an overall projected budget of approximately \$5.6 million. The Parties
4 agree to segment the budget into three sectors: low-income residential, non-low
5 income residential, and commercial and industrial. Proposed sector and program
6 budgets are provided in Table G-2. A comparison of these proposed budgets to
7 the 2009 budget filed with the Commission is also provided in Table G-3.

8
9 The Parties agree that the Company should make every attempt to spend or
10 commit all the funds available for gas DSM in the year, including any increases in
11 the fund balance due to increased sales or other factors. The Parties also agree to
12 review the status of program budgets regularly to assess whether they are likely to
13 come to a successful completion. If not, the Parties agree to review the
14 advisability of transferring funds to other programs where the money could be
15 more effectively used.

16
17 **D. Transferring of Funds**

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

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

1 b) For transfers of 10% or more of the originating program's
2 budget, the Company can transfer funds from one program to
3 another program within the same sector with prior approval of
4 the Division.

5 2) Transfers between Sectors. The Company can transfer funds from
6 one sector to another sector with prior approval of the Division. If
7 a transfer would reduce the originating sector's budget by more
8 than 20% in aggregate (over the course of the program year), the
9 transfer would require Commission approval as well.

10

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

15

16 **E. Cost-Effectiveness**

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

24

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

29

1 Table G-4 provides the calculation of 2010 program year cost-effectiveness.
2 Table G-5 shows the benefits and goals based on the proposed budgets. Table G-
3 6 shows a comparison of the goals with the approved program goals from 2009,
4 annualized to allow for an effective comparison. Table G-4 shows that the
5 proposed portfolio of programs is expected to have a benefit/cost ratio of 2.26
6 which means that \$2.26 in benefits is expected to be created for each \$1 invested
7 in the programs.

8

9 The cost-effectiveness analyses of the proposed programs use the avoided energy
10 supply costs developed by Synapse Energy Economics as part of a 2009 study,
11 “Avoided Energy Supply Costs in New England: 2009 Report,” issued August 21,
12 2009, that was sponsored by all electric DSM program administrators in New
13 England, as well as some gas program administrators. They reflect current and
14 expected market conditions and are highly influenced by the cost of fossil fuels.
15 The avoided gas costs are shown in Table G-7.

16

17 **F. Additional Sources of Funds**

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

21

- 22 1. ARRA/Stimulus Funds. The Rhode Island Office of Energy
23 Resources is administering the distribution of Federal ARRA grant
24 funds through several programs. The Company plans to apply for
25 grants under the State Energy Program (SEP) and Energy Star
26 Appliance Program requests for proposals. In the event that the
27 Company secures these funds, the funds will be used to increase
28 energy efficiency program scope or rebate levels, as directed by the

1 State of Rhode Island’s interpretation of current ARRA guidance.²²
2 If ARRA funds will only be used as an additional rebate above the
3 Company’s existing rebate levels, then savings goals will not be
4 affected. If ARRA funds are used to capture savings, then goals will
5 be adjusted accordingly, and the Company will file a plan for the use
6 of the funds to the PUC.

7 2. Other Funds. The Company will attempt to secure funds from other
8 sources. These funds will be used to offset DSM charge funds
9 collected from customers, to accelerate participation in 2010, or to
10 increase program scope (or savings) in 2010. In the event that the
11 Company is successful in securing these funds and the funds will be
12 used to increase program scope, then the Company will file a
13 proposal to the PUC regarding the use of the funds to update the
14 plan’s spending budget, savings goals, and shareholder incentive for
15 approval by the PUC. If the funds will be used to accelerate
16 participation and will not affect savings, the Company will file a
17 plan for the use of the funds to the PUC. If the funds are not spent in
18 2010, but are reserved to offset future DSM charges, the Company
19 will file a plan for the use of the funds to the PUC. The timing and
20 magnitude of the available funds will influence the Company’s
21 proposal and how it may affect program budgets, savings goals, and
22 incentive calculation.

23
24 **V. Measurement and Verification Plan**

25
26 The Measurement and Verification Plan for 2010 is presented in tabular form in
27 Attachment 7, accompanied by a brief description of each of the proposed studies. The
28 areas proposed for study in 2010 have been chosen based on a number of factors: the
29 relative amount of savings in that program or end use, the vintage of the most recent

²² In the event that DOE energy efficiency savings standards are inconsistent with the Company’s standards, the Company will use the higher of the two standards.

1 evaluation study, the relative precision of the recent evaluation study, the available
2 evaluation budget. In addition, some new program areas are designated for both impact
3 (savings) and process evaluations. This list may be added to as the year progresses and
4 different evaluation priorities are identified. In particular, the parties will consider adding
5 Rhode Island-specific impact or process evaluations, as appropriate, that will help inform
6 the Company's efforts towards achieving the goals of least cost procurement.

7
8 **VI. Reporting Obligations**

9 **A. Summary of Reporting Obligations**

- 10 1. During 2010, the Company will provide quarterly reports to the
11 EERMC, the Division, and the Commission on the most currently
12 available program performance for both gas and electric efficiency
13 programs. These reports will include a comparison of budgets and
14 goals by program to actual expenses and savings on a year-to-date
15 basis, as well as information about the number of customers who
16 may be waiting for energy efficiency program services. The second
17 quarter report, delivered in July 2010, will also include updated
18 metric targets for those metrics that are contingent on 2009 year end
19 results.
- 20 2. The Company will provide to the Parties and file with the
21 Commission its 2010 Year-End Report no later than May 31, 2011.
22 This report will include achieved gas and electric energy savings in
23 2010, metric results, and earned incentives for 2010.
- 24 3. The Company will provide to the Parties a summary of evaluation
25 results obtained since October 1, 2009, together with a memorandum
26 summarizing the impact of those results in planning the Company's
27 2011 programs no later than September 30, 2010.

1 **VII. Incentive**

2 The proposed shareholder incentive mechanism applicable to Company DSM efforts in
3 2010 follows the incentive mechanism structure applicable to the 2009 electric energy
4 efficiency programs in Docket No. 4000, with a few changes that are described below.²³

5

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

9

10 **A. kWh Savings**

11 The Parties have agreed to retain a target base incentive rate of 4.40% in 2010
12 applied to the eligible spending budget for 2010. The projected spending budget
13 for 2010 is approximately \$43.9 million (see Table E-8). The total target
14 incentive for 2010 is 4.40% of the approved spending budget, or approximately
15 \$1.49 million (see Table E-9). Of this total, \$150,000 will be the target incentive
16 for the performance-based metrics and the remainder will be for the kWh savings
17 target.

18

19 The savings target is based on a set of assumptions of savings per measure and
20 other impact factors in each program, as well as the proposed budget. The
21 determination of achieved savings will be based on the same set of savings and
22 impact assumptions as is used to develop the savings target in this EE Program
23 Plan.²⁴

²³ The parties recognize the interplay between the shareholder incentive mechanism and the manner in which savings are estimated, measured, and verified, and will with the participation of the EERMC and the OER, explore this in 2010.

²⁴ In prior years, both the target and achieved savings were adjusted at year end to reflect updated savings and other impact factors that reflected the most recent evaluation studies. Since both target and achieved savings were similarly adjusted, there was little impact on the Company's earned incentive. However, the adjustment of goals often caused confusion among field implementation personnel and for that reason this change is recommended.

1

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

10

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

18

19 Table E-8 provides the derivation of the eligible spending budget²⁵ that is used to
20 determine the amount of the incentive that the Company may earn if it is
21 successful in achieving its goals for both energy savings and performance metrics.
22 Table E-9 provides a summary of the incentive related to performance metrics and
23 the incentive related to annual energy savings goals by sector. Energy savings
24 goals by sector reflect the expected cost of savings in each sector informed by
25 evaluation studies and have been adjusted to take into account changing rebate
26 policies and the changing market being served. These goals have been carefully

²⁵ The Parties propose for 2010 that the calculation of the spending budget be modified to discontinue the subtraction of copayments expected to be received from the spending budget. This is because the spending budget represents funds that the Company manages to achieve savings, even including funds it expects to be repaid by customers.

1 reviewed by the Collaborative to ensure that they represent reasonable and
2 challenging goals for the year.

3
4 **B. MMBtu Savings**

5 For gas efficiency programs, the proposed target base incentive is equal to 4.40%
6 of the eligible budget. The eligible budget includes all program expenses shown
7 in Table G-2, except for the commitments budget and the amount budgeted for the
8 target shareholder incentive. Therefore, the total target incentive for 2010 is
9 4.40% of approximately \$4.9 million, or \$215,000, as shown in Table G-8.

10
11 The savings target is based on a set of assumptions of savings per measure and
12 other impact factors in each program, as well as the proposed budget. The
13 determination of achieved savings will be based on the same set of savings and
14 impact assumptions as is used to develop the savings target in this EE Program
15 Plan.²⁶

16
17 The threshold performance level for energy savings by sector will be set at 60%
18 of the annual energy savings goal for the sector. The Company must attain at
19 least this threshold level of savings in the sector before it can earn an incentive
20 related to achieved energy savings in the sector. The Company will have the
21 ability to earn an incentive for each MMBTU saved, once threshold savings for
22 the sector are achieved. The incentive per MMBTU saved by sector is provided
23 in Table G-8. The cap for the target incentive amount of energy savings will
24 remain at 125%.

25

²⁶ In prior years, both the target and achieved savings were adjusted at year end to reflect updated savings and other impact factors that reflected the most recent evaluation studies. Since both target and achieved savings were similarly adjusted, there was little impact on the Company's earned incentive. However, the adjustment of goals often caused confusion among field implementation personnel and for that reason this change is recommended.

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

5

6 **C. Adjustments**

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

8 1. If the actual spending of funds in a sector at year end from the sources
9 listed in Tables E-1 (for electric programs) or G-1 (for gas programs)
10 is greater than or less than²⁷ the original spending budgets by more
11 than five percent, the savings goal for that sector will be adjusted by
12 the ratio of actual spending to the spending budget.

13 2. If the Company secures funding from sources listed in Sections III.E
14 or IV.F and uses those funds to offset some DSM charges in future
15 years, the target incentive rate for 2010 will be adjusted by the ratio of
16 the original spending budget divided by the original spending budget
17 minus the funds from outside sources obtained but reserved for future
18 years. Only funds obtained from other sources and not spent in 2010
19 are eligible for this adjustment. Funds used to increase rebates or
20 accelerate participation in 2010 (such as RGGI 40% funds or Federal
21 stimulus grants) are not eligible for this adjustment.

22

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

26

²⁷ If spending is less than five percent, the savings must exceed 100%.

1 **D. Electric Program Performance Metrics**

2 The Parties have agreed to the inclusion of five performance-based metrics for
3 2010. These metrics include one that relates to the Non-Low Income Residential
4 sector, three that relate to the Commercial and Industrial sector, and one
5 integrated metric. Each of the proposed performance-based metrics is described
6 in Attachment 6. The Parties agree that the Company will have the ability to earn
7 \$30,000 for each performance metric it successfully achieves in 2010 with an
8 opportunity to earn a portion of the incentive for partially achieving goals for four
9 of the metrics as shown in Attachment 6. The total potential incentive for
10 performance metrics is capped at \$150,000.

11
12 Attachment 8 includes a framework for establishing the goals for the proposed
13 metrics based on currently available information. As described above, under
14 Section VI, “Reporting Obligations,” the Company, with agreement of the Parties,
15 will file with the Commission with its second quarter 2010 results, a supplement
16 to this Settlement that provides final goals for each metric. Finalizing the numeric
17 performance targets at a later date will have no impact on the shareholder
18 incentives established for these performance-based metrics. If the Parties are
19 unable to reach agreement about the specific performance goals, the Company
20 reserves the right to file recommended goals with the Commission.

21

22 **VIII. Miscellaneous Provisions**

23 **A. Other Miscellaneous Provisions**

- 24 1. Other than as expressly stated herein, this Settlement establishes no
25 principles and shall not be deemed to foreclose any Party from
26 making any contention in future proceeding or investigation.
- 27 2. This Settlement is the product of settlement negotiations. The
28 content of those negotiations is privileged and all offers of settlement
29 shall be without prejudice to the position of any Party.

1 3. Other than as expressly stated herein, the approval of this Settlement
2 by the Commission shall not in any respect constitute a
3 determination as to the merits of any issue in any other proceeding.

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

8

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

11

12 Respectfully submitted,
13 THE NARRAGANSETT ELECTRIC COMPANY D/B/A
14 NATIONAL GRID

15

16 _____/S/_____

17 Thomas Teehan, Esq. Date

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Respectfully submitted,
THE NARRAGANSETT ELECTRIC COMPANY D/B/A
NATIONAL GRID



Thomas Teehan, Esq.

Date **10/30/2009**

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RHODE ISLAND DIVISION OF PUBLIC UTILITIES AND
CARRIERS

 30 October 2009

By its Attorney

Date

Jon Hagopian, Special Assistant Attorney General

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THE ENERGY COUNCIL OF RHODE ISLAND

John Farley 10/30/2009

John Farley Date

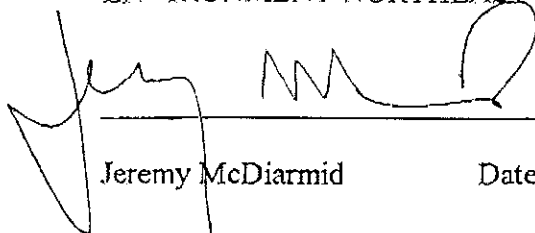
National Grid 2010 Energy Efficiency Program Plan

Post-it* Fax Note	7671	Date	10/30	# of pages	▶ 1
To	JOANNE SCAMLO	From	JOHN FARLEY		
Co./Dept.	NATIONAL GRID	Co.	TEC-RI		
Phone #		Phone #	621-2240		
Fax #	784-4321	Fax #			

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ENVIRONMENT NORTHEAST

 10/30/09

Jeremy McDiarmid

Date

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

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

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

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Program	Changes
	<p>pumps.</p> <ul style="list-style-type: none">• Introduce a \$10 rebate for personal computers and \$20 for televisions (between tiers 3 and 4), monitors, and room air cleaners.• Propose to assist the ARRA-funded State Energy Efficiency Star Rebate Program.

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2010 RESIDENTIAL PROGRAMS

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

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

Programs focused on creating efficiency through product selection include High Efficiency Heating Equipment, Water Heating and Controls, ENERGY STAR[®] Heating Equipment, ENERGY STAR[®] Central Air Conditioning, Heat Pump Water Heater Pilot, ENERGY STAR[®] Lighting, and ENERGY STAR[®] Products. Programs focused on

1 products use various distribution channels, including installation vendors and retail
2 stores, in order to influence customer selection. They also use different marketing
3 strategies that work in concert with distribution channels. The Company will review
4 these delivery channels to make sure that they are as effective as possible, and whether
5 lessons learned in the delivery of one product can be applied to other product groups.

6

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

10

Table 1. Proposed Residential Energy Efficiency Programs	
Residential Buildings Efficiency Programs	
EnergyWise Program (Funded by Gas and Electric)	The EnergyWise program offers single and multi-family customers free home energy audits of their homes and information on their actual electric and gas usage. Participants in this program receive recommendations and technical assistance as well as financial incentives to replace inefficient lighting fixtures, appliances, thermostats, and insulation levels with models that are more energy efficient. The program addresses base load electric use as well as gas and electric heat in all residential buildings.
Single Family Low Income Services (Funded by Gas and Electric)	The low income program, marketed as the Appliance Management Program, is delivered by the Office Energy Resources and local Community Action agencies. It provides the same services as the EnergyWise program, described below, except it also addresses oil heat in all residential buildings and no customer contribution is required for equipment installation.
ENERGY STAR[®] Homes Program (Funded by Gas and Electric)	The ENERGY STAR [®] Homes Program promotes the construction of energy efficient homes by offering technical and marketing assistance, as well as cash incentives to builders of new energy efficient homes that comply with the program's performance standards.
ENERGY STAR[®] Homes Version III Pilot (Funded by Electric)	Technical assistance as well as an additional \$1000 incentive (above tier 1 incentives) for up to 15 projects to be built to 2011 Version 3 levels in 2010.
ENERGY STAR[®] Homes Vocational Education Program (Funded by Electric)	The Company supports the ENERGY STAR [®] Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR [®] certified builders.
Building Practices and Demonstration Program (Funded by Gas)	Participate in funding for demonstration projects that apply to new or underutilized technologies.

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Deep Energy Retrofit Pilot (Funded by Electric)	The pilot will provide significant financial incentives for deep energy retrofit demonstration projects involving super-insulation upgrades and other measures in conjunction with customer planned projects such as re-siding or roofing. Customers with 1 to 4 family buildings, regardless of heating fuel type are eligible.
--	--

1

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

2

1 **RESIDENTIAL BUILDING EFFICIENCY PROGRAMS**

2 **1. EnergyWise Program (Gas and Electric)**

3 **Overview**

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

13

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

21

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

27

1 **Program Delivery**

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

4

5 ***Energy Assessments***

6 A typical single family home energy audit includes the following:

- 7 • Gathering and analysis of energy usage data
- 8 • Description of overall program to the customer
- 9 • Confirmation and/or determination of customer primary concerns
- 10 • Gathering and analysis of energy usage data and relevant demographic
11 information
- 12 • Definition of the thermal envelope of the home
- 13 • Investigation of thermal envelope air leakage paths by visual inspection of the
14 home's specific architectural features that are the most common leakage points
 - 15 ○ Attic and knee wall inspection of top plates, plumbing & wiring
 - 16 penetrations, chimney chase, framing transitions, etc.
 - 17 ○ Basement/crawl space inspection of exterior perimeter leaks and interior
 - 18 vertical bypasses
 - 19 ○ Exterior overhangs or cantilevered areas
- 20 • Evaluation of the existing insulation levels of the thermal envelope
- 21 • Evaluation of the adequacy of ventilation of unconditioned spaces
- 22 • Assessment of the type, efficiency, and condition of windows and doors
- 23 • Identification of type and efficiency of existing heating, cooling, and domestic
24 hot water equipment
- 25 • Assessment of heating distribution system for insulation and/or sealing needs
- 26 • Performance of a combustion efficiency test of the heating equipment as
27 conditions allow

- 1 • Visual evaluation of potential health & safety concerns
- 2 ○ Inspection for signs of potential combustion safety issues
- 3 ▪ Adequate combustion air
- 4 ▪ Condition of combustion gas venting components
- 5 ▪ Evidence of back drafting
- 6 ○ Potential effects of exhaust appliances and distribution systems on
- 7 appliance draft
- 8 ○ Identification of existing or potential moisture concerns from both
- 9 internal and external sources
- 10 • Identification of high use and/or inefficient appliances and lighting
- 11 • Installation of immediate savings measures such as compact fluorescent bulbs,
- 12 water saving devices and air sealing for electrically and gas heated facilities.
- 13 • Motivation of customer to implement energy efficiency improvements
- 14 • Computer modeling of the home using approved audit software
- 15 • Presentation of a customized report with detailed recommendations for
- 16 improvements including costs, energy savings, payback
- 17 • Presentation of Company information packet
- 18 ○ Appliance rebate information
- 19 ○ Financing information including 0% interest loans through the HEAT
- 20 Loan program

21

22 ***Installations***

23 The Company advocates a program design which incorporates appropriate roles for

24 independent contractors allowing customers a choice of who will install their follow-up

25 measures. Choice is essential for National Grid customers, when selecting energy

26 efficiency measures, especially when it is an investment by the customer.

27

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1 The Company's single-vendor energy assessment model has been approved by the
2 Environmental Protection Agency (EPA) and Department of Energy (DOE) for the Home
3 Performance with EnergyStar® national initiative. This model minimizes administrative
4 costs, and guarantees customer equity. The Company has established several rules for
5 the single-vendor that guarantee a competitive market for follow up measures. During
6 the energy assessment, all auditors are required by the Company to provide a complete
7 weatherization contractor list to all customers. They are not allowed to compare their
8 services to those of other contractors in any way. They are not allowed to disparage the
9 work of others or promote their company over others. They must also do follow-up
10 measures at a fixed price. These fixed rates are determined during the competitive
11 bidding process. The fixed price cannot be increased, regardless of the difficulty or
12 complexity of an installation job. The fixed price can also not be decreased to compete
13 with weatherization contractors who are at liberty to offer customers less expensive
14 quotes.

15
16 In addition, the Company promotes all participating contractors by posting the complete
17 list on www.powerofaction.com. The Company also allows each participating contractor,
18 to use the National Grid logo on their company website if they choose. The Company
19 also provides all contractors with EnergyWise marketing materials.

20
21 Contractors wishing to become pre-qualified as a National Grid approved weatherization
22 contractor must provide proof of insurance in amounts and coverage acceptable to
23 National Grid. National Grid will perform a background check to verify the contractor's
24 good standing, and determine if there have been complaints or other issues that would
25 render the contractor ineligible. Additional quality control will be required as contractors
26 work in the program, including third party verification.

27
28 Contractors performing follow up measures must be accredited by the Building
29 Performance Institute (BPI). BPI credentialed companies are trained to take into account

1 the complex interactions that affect health, safety, comfort, energy performance, and the
2 durability of homes. BPI standards include comprehensive diagnostic testing,
3 measurement and verification that the work is completed properly, and quality assurance.

4

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

10

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

16

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

21

22 ***Quality Assurance / Quality Control***

23 In the interest of achieving high quality installations, the Company, subject to contract
24 terms and available trained personnel, will work toward a system where, when
25 verification is done, the contractor that does the installation is from a different
26 organization than the contractor doing the verification. Therefore, the Company will go
27 out to competitive bid for third party verification services by the second quarter of 2010.

1 In addition to third party quality assurance, the Company will closely monitor the audit
2 and installation processes. The Company will do this to ensure that all program protocols
3 are being adhered to by the auditing vendor, as well as the installation contractors. The
4 Company will track the amount of follow up work being conducted by all parties.

5

6 **Complaint Resolution**

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

9

10 **Eligible Population**

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

15

16 **Program Design**

17

18 The Company will go out to competitive bid for program delivery vendor(s) in Rhode
19 Island by the end of second quarter in 2010. This will be accomplished in conjunction
20 with National Grid's *EnergyWise* multifamily program in Massachusetts and New
21 Hampshire's Home Performance with ENERGY STAR[®] program.

22

23 ***Rebates***

24 The program will provide incentives covering up to 75% with a maximum of \$2,000 to
25 cover the cost of installing certain weatherization measures in electric and gas heating

1 single family homes. Multifamily facilities of 5 or greater dwelling units can receive an
2 incentive covering 75% of the cost to install insulation, duct insulation and duct sealing.

3

4 In 2010, the incentive structure will be the same whether a facility is gas-heated or
5 electric-heated. The maximum incentive offered through this program is \$2,000 per gas
6 or electric heating account for single family homes. Measures eligible for this incentive
7 through the program include: attic insulation, wall insulation, basement/crawl space
8 insulation, rim joist insulation, duct insulation, gas heating system pipe insulation,
9 ductwork leakage testing, ductwork leakage sealing. Air infiltration sealing where
10 applicable will be performed at no charge to the customer. The maximum incentive
11 offered through this program is \$750 per gas or electric heating account for single family
12 homes. Customers will also receive the free installation of water saving devices (low flow
13 showerheads and aerators) for water heated by gas or electricity. These measures will be
14 funded by either electric or gas energy efficiency funds depending on the heating fuel
15 type. Other measures may be added to the program menu, upon demonstration of cost-
16 effectiveness.

17

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

24

25 The Company will begin using a more simplified approach for customer rebates.
26 Contractors will no longer be required to list the incentive in their customer contract.
27 Therefore, customers will see a simplified contract with an overall lower net cost. The

1 contractor will complete all Company paperwork and the incentive will be given directly
2 to the contractor.

3

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

12

13 ***HEAT Loan Program***

14 To assist in helping customers reduce the amount of energy used in homes, the program
15 also offers low interest loans for customers who live in one to two unit facilities to install
16 additional weatherization, including insulation and air sealing. These loans are available
17 to customers with homes heated by electricity, oil, propane, and wood, regardless of their
18 level of electric use. In 2010, the HEAT Loan program, specifically for electric and gas
19 customers in single family homes (up to four units), provides qualified customers who
20 heat with electricity or gas a 0 percent interest loan up to \$15,000 with terms up to seven
21 years and can be applied towards the following energy efficiency upgrades:

- 22 • Insulation/air sealing
- 23 • Duct System Improvements
- 24 • High-efficiency heating systems
- 25 • High-efficiency DHW systems
- 26 • ENERGY STAR[®] -labeled thermostats
- 27 • ENERGY STAR[®] -labeled water heaters

28

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

9

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

15

16 *Gas and Electric Integration*

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

24

25 *Marketing*

26 The program is certified by the Environmental Protection Agency as a “Home
27 Performance with ENERGY STAR[®]” program in the single family sector. This allows

1 the program to use the ENERGY STAR[®] name for marketing purposes, and ensures that
2 the program meets high health and safety standards.

3

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

11

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

13 EnergyWise Multifamily Program also services Public Housing Authority properties and
14 other low income multifamily facilities containing five or greater dwelling units.
15 Depending on income eligibility of the tenants, co-payments may be reduced or waived
16 for these larger facilities. If the facility contains at least 50% or more low income
17 dwelling units, co-payments are usually waived on all measures except refrigerators. All
18 customer co-payments are waived for any measure installed in Public Housing
19 Authorities and other low income state and federally funded multifamily facilities. Over
20 the last five years, Narragansett Electric has served over 7,555 low income multifamily
21 dwelling units through the EnergyWise Program. These conditions apply to National
22 Grid electric and gas customers.

23

24

25

26

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

2 **Overview**

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

10
11 **Eligible Population**

12 Both the Collaborative and the Company want customers who have difficulty paying
13 their energy bills to take full advantage of the Company’s efficiency programs.
14 Customers who are eligible for the Low Income Heating Assistance Program (LIHEAP),¹
15 also known as “fuel assistance,” and who live in 1-4 unit buildings, are eligible for the
16 Income Eligible program.² Unlike other efficiency programs, no co-payment fees are
17 required to take advantage of energy savings in this program.

18
19 **Program Design**

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

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

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

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

7

8 Energy saving measures selected for a participant are identified through a comprehensive
9 review of the customer's electric and gas bills, existing appliances, and energy use
10 patterns through the initial home energy audit. Instant savings measures that can be
11 installed during the energy audit may include water saving devices, such as faucet and
12 shower aerators, room air conditioner timers, and the replacement of any incandescent
13 bulbs with ENERGY STAR[®] compact florescent replacements, up to 45 per home.
14 Furthermore, this program provides for the installation of ENERGY STAR[®] refrigerators,
15 and water heating efficiency measures to help lower customers' electric bills. Eligible
16 gas measures include heating system replacement (on a qualifying basis), safety
17 inspections, and funding the installation of CO detectors in cases where Department of
18 Energy (DOE) funds are not available. Hot water and air heating systems are required to
19 meet Federal weatherization program guidelines. Thermal measures for all participants
20 are installed with a whole-house perspective, to ensure maximum and cost effective
21 savings. These weatherization measures include attic, wall, floor and/or pipe insulation,
22 air sealing, as well basic health and safety inspections to ensure proper ventilation and
23 indoor air quality in the home. Rhode Island CAPs will continue to be responsible for
24 providing energy saving services to eligible participants on behalf of the Company.

25

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

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

7

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

14

15 **Program Development**

16 With the incorporation of the InDemand data tracking in 2009, the Company has “live
17 data” on electric customers being served through this program, as well as what energy
18 savings measures installations are installed in their home. This data is then used for local
19 agencies to quickly gather job totals to bill electronically to the lead administrator. The
20 lead then has the ability to review jobs, fees, and production rates on-line – a system that
21 is much faster than in previous years. Both the lead and the local agencies can be paid
22 more quickly using InDemand compared to systems used in 2008 and prior years. Data
23 from InDemand allows the Company to monitor program production while tracking
24 current energy savings. Using InDemand allows the Company to better examine the
25 program’s progress.

26

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

13
14 With the pending arrival of considerable Federal American Recovery & Reinvestment
15 Act (ARRA) funding into Rhode Island for low income weatherization, and the increase
16 in CAP agency demands to meet those federal weatherization goals, the Company would
17 like the opportunity to explore options where additional qualified energy professionals
18 might also serve eligible customers in 2010. The Company would like this option in the
19 event that ARRA funds create conditions where the local agencies are not able to
20 sufficiently meet Company goals. Production rates will be closely watched in 2010
21 because of ARRA impacts. Decisions to make us of additional weatherization
22 professionals would be need Collaboration agreement.

23
24 To help enlist eligible customers into the program in 2010, the Company will work
25 closely with the Lead Administrator to explore additional venues for customers to take
26 advantage of the program; from including the eligibility of the Company’s discount rate,
27 to ensuring that state median and/or federal poverty guidelines are also considered.

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

6

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

10

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

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

14

15

16

Table 2
Projected Low-Income Participation in 2010 Programs

Program (Gas and Electric)	2010 projected participants	Percentage of Total Residential Participants in 2010
Single Family Low Income	2,247	18%
EnergyWise (Multifamily)	1,160	9%
ENERGY STAR [®] Homes	140	1%

17

18

19

Table 3
Projected Low-Income Expenditures in 2010 Programs

Program (Gas and Electric)	2010 Proposed Low Income Expenditures	Percentage of Total Budget
Single Family Low Income	\$3,848,753	99%
EnergyWise	\$827,350	21%
ENERGY STAR [®] Homes	\$110,000	3%

20

1 **3. ENERGY STAR[®] Homes (Gas and Electric)**

2 **Overview**

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

8

9 **Eligible Population**

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

13

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

21

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

1 **Program Design**

2 In 2010, National Grid will continue to offer three program options that
3 builders/homeowners can choose. The first option, the “Performance Path,” is similar to
4 the previous program and requiring a Maximum Home Energy Rating System (HERS)
5 rating of 85 or less to qualify, A HERS score of 60 or less will qualify for a tier 2
6 incentive. Any builder hoping to access the \$2,000 Federal tax incentive must use this
7 path. The second option is the “Builder Option Package” (BOPs) that allows a builder to
8 qualify as ENERGY STAR[®] by agreeing to install specific equipment and meeting
9 certain measured performance standards. For both these options, incentives of \$325 to
10 \$1000 will be available to builders depending on the new house characteristics, level of
11 efficiency achieved and tier level. The third option is called “Codes Plus.” In this
12 option, the builder will receive specific incentives for energy efficiency improvements
13 above code requirements.

14
15 The “Codes Plus” option is for builders who are learning how to achieve new, more
16 rigorous, ENERGY STAR[®] standards and may not be able to achieve the ENERGY
17 STAR[®] standards immediately. The Codes Plus option ensures that homeowners will
18 receive energy efficiency upgrades above the code during the transition period of the new
19 program. The incentives will be in two categories: Thermal Measures/Practices and
20 Heating/Ventilation/Air Conditioning (HVAC). The incentives are designed to ensure
21 that a builder will not receive more money through this path than through the other two
22 paths. Typically, the builder would only be eligible for one of these; otherwise, the house
23 would meet ENERGY STAR[®] standards. Incentives will be available for the Thermal
24 Measures including compact florescent lights (CFLs) (Installed by the rater and paid for
25 by the company), Air Sealing, Insulation, ENERGY STAR[®] windows, and mechanical
26 ventilation. Incentives will also be available for HVAC upgrades including, Duct Sealing,
27 High Efficiency Heating Systems, ECM Motors, Indirect Water Heating, High Efficiency
28 Air Conditioning, and Quality Installation Verification.

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

9

10 National Grid will continue the existing program and examine opportunities to realign the
11 funding mechanisms for 2011. In 2010, National Grid will look to drive builders towards
12 greater savings. Beginning in 2010, an additional tier (tier2) will also be offered for the
13 first time in 2010 requiring a minimum HERS score of 60 or less to qualify for an
14 incentive of \$1000. In addition a minimum of 75% of all available sockets are now
15 required to utilize CFL's provided by National Grid at no charge to the builder.

16

17 ***Low Income participation in the ENERGY STAR[®] Homes Program***

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

25

26

27

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

2 **Overview**

3 Due to the pending changes of both codes and ENERGY STAR[®] standards in Rhode
4 Island, National Grid will launch a pilot program offering additional technical assistance
5 and incentives (above tier 1 incentives) for projects to be built to 2011 Version 3 levels
6 in 2010. The purpose of the pilot is to create additional experience and understanding in
7 2010 for ENERGY STAR[®] Version 3 levels slated to begin in January 2011.

8

9 **Eligible Population**

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

12

13 **Pilot Design**

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

20

21 **5. ENERGY STAR[®] Homes Vocational Schools Initiative**

22 **Overview**

23 As part of the Energy Efficiency Education Programs that National Grid implements
24 annually, a new educational outreach program will be offered in 2010, targeting the next
25 generation of builders and contractors studying at Rhode Island based technical and
26 comprehensive high schools and colleges. The main goals of this initiative are to
27 introduce participating Rhode Island students to energy efficient building practices that
28 are consistent with the ENERGY STAR[®] Homes Program, to assist in the development

1 of cross-curricular ties between technical schools, professional organizations and post
2 secondary school anchors within the community; and to support the development a state-
3 wide energy efficiency educational infrastructure which supports national efforts to
4 expand energy and building science related education.

5

6 **Program Design**

7 The ENERGY STAR REDUX (ESR) Technical School Outreach Program is designed to
8 support recent revisions to the ENERGY STAR® Homes Program and regional building
9 code standards such as the pending adoption of the energy efficiency provisions found in
10 the 2009 International Residential Code (IRC) and the 2009 International Energy
11 Conservation Code (IECC) that will affect new construction and substantially renovated
12 buildings. Students and teachers participating in the Technical School Outreach (TSO)
13 program will learn valuable knowledge and skills required for today's workplace.

14

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

24

25

26

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

2 **Overview**

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

9

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

13

14 **Eligible Population**

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

19

20 **Program Design**

21 Examples of potential projects include new insulation and weatherization products,
22 advanced heating and water heating products, solar thermal installations, new
23 construction techniques, green homes or very low energy use homes. Specific projects
24 will depend on interest and participation by customers, builders, vendors and
25 manufacturers. Marketing of the program will rely on working with industry vendors

1 developing and/or offering new or underutilized natural gas energy efficiency
2 technologies, as well as other interested organizations.

3

4 **7. Deep Energy Retrofit Pilot**

5 **Overview**

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

13

14 **Eligible Population**

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

18

19 **Pilot Design**

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

1 when supplemented with renewables, water heating efficiency measures and actions and
2 lifestyle actions.

3

4 Pilot outreach will be targeted to; home owners and residential property owners
5 considering renovations and willing to invest in extensive carbon reductions as well as;
6 architect\designers, advanced builders and companies involved in renovation or
7 restoration of residential buildings. Outreach and marketing to identify and interest
8 potential pilot candidates will be performed through internet outreach, pilot website
9 www.powerofaction.com/der, contractor outreach through new homes program, and
10 potentially through home energy raters and other professionals with appropriate skills.
11 Successful outreach and marketing are essential to the success of the pilot, and so a
12 marketing strategy will be developed to ensure that customers who have the greatest
13 likelihood of pursuing a Deep Energy Retrofit are systematically identified and
14 approached about pilot participation. Project selection will be by the Company, based on
15 property owner proposals to participate utilizing a qualified project team with a design
16 that meets program defined criteria for optimal energy performance, health, safety and
17 durability, and other criteria (examples include approaching R-value for walls of R40,
18 Ceiling of R60, windows R5 and appropriate building tightness and mechanical
19 ventilation levels.) The building shell measures, if not implemented to a climate
20 sustainable depth at the time of re-siding, become a relative lost opportunity for the next
21 20 to 100 years once siding is re-applied.

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

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

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

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

22 Pilot program services will consist of outreach through a variety of channels to customers
23 including through *EnergyWise* to homeowners and to contractors through the residential
24 new construction program. Project design details and assistance to the DER contractors
25 doing the work will be handled through technical specialist organizations under contract
26 and/or utilizing ARRA funds. In order for these projects to succeed it will be essential to
27 have extensive technical support and training, since the challenges of retrofitting a
28 building to this degree in a manner that enhances rather than degrades the durability of

1 the structure and the health and safety of the occupants, exceeds to a considerable degree
2 what is involved in *EnergyWise* or new home construction.

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

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

13

1 **RESIDENTIAL EFFICIENT PRODUCTS PROGRAMS**

2 **1. ENERGY STAR® Lighting (Electric only)**

3 **Overview**

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

9

10 Historically, the ENERGY STAR Lighting Program has been successful in moving large
11 quantities of ENERGY STAR-qualified spiral bulbs through large retail distribution
12 channels using negotiated cooperative promotions (NCP). This is no longer the case for
13 several reasons. First, recent studies in states other than Rhode Island suggest that the
14 market for plain spiral CFLs (as opposed to specialty CFLs) may be in the process of
15 being transformed. This means that the effectiveness of the current program design and
16 its heavy emphasis on sales through negotiated cooperative promotion (NCP) participants
17 may be diminishing. Additionally, federal lighting efficiency standards will begin in
18 2012 and it is unclear how industry will respond. Finally, solid state lighting (SSL)
19 technology is innovating rapidly and the lighting program needs to be prepared for
20 additional changes in product availability.

21

22 While the market is changing, the Company still believes there are significant
23 opportunities for customers to install CFLs in their homes. A 2007 impact evaluation
24 found program participants from 2002 had a socket penetration of 16%. The 2009 goal
25 for the CFL distribution was 260,000 bulbs, equivalent to 0.61 bulbs per household – one
26 of the lowest bulbs per household ratios in New England. In the past, limited marketing
27 budgets and participating retailers have made the Rhode Island program less aggressive

1 than neighboring states. The Company is committed to taking on these challenges and
2 increasing the bulbs per household ratio to 0.88 in 2010.

3
4 To address changing market factors and the need to improve socket penetration in Rhode
5 Island, the program will take the following steps in 2010:

- 6
7 • Use an aggressive marketing budget to attract new and various types of retailers
8 including medium and small-sized stores. The company will also look for new
9 distribution channels including community venues and corporate events.
- 10 • Increase the depth of the program with existing retailers, the Company will work
11 with large retailers to offer lighting promotions over longer periods of time and
12 may request additional tracking information.
- 13 • Expand the product options beyond spirals. In 2010, rebates for specialty bulbs
14 will be increased significantly to make more of an impact in this market (goal of
15 40,000 specialty bulbs). The change broadens the focus of the program from
16 being almost exclusively on plain CFLs to other bulb types, of which we have had
17 less participation.
- 18 • Broaden the customer base by focusing on hard-to-reach lighting customers for
19 the first time, as described below. Hard-to-reach customers are defined as those
20 who have never tried a CFL.
- 21 • Evaluate the lighting program processes and study the state's socket penetration
22 in order to shift program design to meet the state's changing needs in 2011.

23
24 **Eligible Customers**

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

1 **Program Design**

2 The program offers customers the opportunity to purchase ENERGY STAR[®] qualified
3 CFL, fixtures and solid state lighting at substantial discounts. Customers have several
4 options for program participation, including redeeming instant rebate coupons for
5 qualifying products purchased in participating retail stores, purchasing reduced price
6 products at retailers where the manufacturer has received a rebate from the Company and
7 passed on the discount directly to retailers and consumers, using the mail order catalog,
8 and making website purchases.

9

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

16

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

27

1 The Company proposes to continue rebates for ENERGY STAR[®] fixtures and torchieres.
2 Rebates will be \$10 for exterior fixtures and \$15 for interior fixtures, table lamps, and
3 floor lamps and torchieres and continue with \$30 rebates for Light Emitting Diode (LED)
4 lighting and \$25 rebates for higher end lighting fixtures to help move the market.
5 Rebates on fixtures and bulbs may be adjusted to ensure coordination with regional and
6 national program efforts and to reflect changing Rhode Island market conditions. The
7 Company will also continue to work directly with lighting showrooms to encourage the
8 promotion of high efficiency, high fashion residential CFL fixtures.

9

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

22

23 Finally, the Company will introduce a new program focused on hard-to-reach
24 populations. The rebate for hard-to-reach bulbs will be \$3, and the unit goal is 60,000
25 bulbs in the first year. Preliminarily, we consider hard-to-reach populations as elderly,
26 foreign language speakers, and marginalized populations. The Company work to identify
27 hard-to-reach populations and understand why they do not use CFLs. Based on the
28 findings, the Company will create strategies to overcome identified barriers. These

1 strategies may include direct-mail marketing to retirement communities or neighborhoods
2 with a high concentration of foreign language speakers, specialized NCPs for high impact
3 retailers, finding new channels for distribution including food pantries, community
4 organizations, community or corporate events.

5
6 **2. ENERGY STAR[®] Products (Electric only)**

7 **Overview**

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

14
15 This program is part of a regional joint effort by utilities and energy efficiency
16 organizations to encourage the purchase of ENERGY STAR[®] rated major appliances and
17 electronics. The appliances include clothes washers, dishwashers, refrigerators,
18 dehumidifiers, room air conditioners (RAC) and room air purifiers. The electronics
19 include televisions, personal computers and monitors. Manufacturers build their products
20 to meet or exceed energy efficiency performance specifications established by ENERGY
21 STAR[®]. Together with manufacturers, local retailers, the DOE, and EPA, the Company
22 works to help identify and promote the purchase of these high efficiency appliances to its
23 customers. Additionally, the Company will promote advanced power strips and energy
24 efficient pool pumps which currently do not have ENERGY STAR[®] specifications.

1 **Eligible Population**

2 All residential customers are eligible to participate. The Company proposes to serve
3 about 11,150 customers in 2010.

4

5 **Program design**

6 The program provides retailer support, training, advertising, consumer education, codes
7 and standards review and advocacy, and manufacturer labeling. For 2010 the Company
8 proposes to continue to provide consumer education on these products and continue to
9 offer rebates on a variety of ENERGY STAR[®] products. Specifically, the Company
10 proposes to continue to offer an ENERGY STAR[®] refrigerator retail rebate of \$50 and
11 add a \$50 rebate for ENERGY STAR[®] qualified freezers and \$20 for an ENERGY
12 STAR[®] qualified room air cleaner.

13

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

26

27 The Company is proposing to continue its program which seeks to remove second
28 refrigerators and freezers from its residential customer's homes; whereby customers will

1 be given a \$50 bounty for doing so. In MA and RI, the company was the first in the
2 region to begin this program in 2009. This program encourages customers who have
3 second refrigerators or freezers in operation, to have them removed by the program
4 vendor. New for the program in 2010, the Company also proposes to remove primary
5 refrigerators being replaced, so as to prevent them from becoming secondary which
6 would require future removal. The program vendor is responsible for having the
7 refrigerator or freezer recycled properly.

8

9 For pool pumps, the Company plans to offer a tiered incentive rebate in 2010: \$250 for 2-
10 speed pool pumps and \$600 for variable speed pool pumps. The change in rebates was
11 made given the initially slow start of this program in 2009 and additional information on
12 the costs to installing the two-speed and variable speed units. The rebate will be divided
13 between the consumer and the contractor. The Company is working on a CEE working
14 group to help direct the specifications for an ENERGY STAR label for pool pumps.

15

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

24

25 An important part of the program is educating customers about ENERGY STAR[®]. The
26 Company sponsors media advertising that promotes ENERGY STAR[®] and specific
27 ENERGY STAR[®] promotions. Additionally, the retail stores are an integral channel for
28 promoting ENERGY STAR[®]. The Company prints and distributes a wide variety of
29 point-of-purchase materials and signs for display in retail stores. The Company also

1 supports cooperative advertising with retailers in various print and newspaper channels.
2 The Company also develops media stories and public relations opportunities about
3 ENERGY STAR®.

4
5 A nationwide study of consumers' awareness of ENERGY STAR® labeling is conducted
6 annually. The most recent study, "National Awareness of ENERGY STAR® for 2006 –
7 Analysis of CEE Household Survey" indicates that the existence of utility sponsored
8 programs increases the awareness of ENERGY STAR® products. National recognition of
9 the ENERGY STAR® label in high-publicity areas (areas with an active local ENERGY
10 STAR® program sponsored by a utility, state agency, or other organization for two or
11 more continuous years) was 69% compared to 49% in low-publicity areas. When the
12 ENERGY STAR® label is shown, the aided recognition in high-publicity areas rises to
13 79% and in low-publicity areas the value increases to 65%. The Company will inform
14 the Collaborative about future awareness study results.

15
16 **3. High Efficiency Heating, Water Heating & Controls Program (Gas and**
17 **Electric)**

18 **Overview**

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

1 **Eligible Population**

2 The eligible population includes residential customers who purchase high efficiency
3 heating equipment, water heating equipment, and controls fueled by gas, or high
4 efficiency heating equipment fueled by oil or propane. The Company proposes to serve
5 2,175 by customers in 2010 through the program.

6

7 **Program Design**

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

11

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

22

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

- 24 • Increasing market sector awareness of high-efficiency heating/ water heating
25 equipment and controls

- 1 • Increasing customer and trade ally contractor awareness of program offerings,
 2 equipment efficiency enhancements, and maintenance for high efficiency heating and
 3 water heating equipment.
- 4 • Providing product and program training to trade allies such as plumbing and heating
 5 contractors

6
 7 Overall, a strong emphasis is placed on working with builders and contractors who install
 8 heating equipment. Target markets for the program include both new construction and
 9 retrofit. The retrofit market is seen as the primary driver of high-efficiency forced hot
 10 water and steam heating system opportunities, whereas the new construction market is
 11 seen as the primary driver for high-efficiency furnaces.

12
 13 Subject to evaluation screening for cost-effectiveness and budgetary considerations, other
 14 measures may be incorporated into the incentive portfolio. GasNetworks periodically
 15 makes changes to the incentive levels offered for high efficiency equipment. Factors
 16 taken into account include market penetration information, changes in incremental costs,
 17 current program year participation, and budget levels. National Grid proposes to adopt
 18 this practice. See Table 4 for a listing of proposed eligible equipment and incentive
 19 levels.

Table 4: Residential High-Efficiency Heating/Water Heating Program Incentive Table		
Furnaces (forced hot air)	AFUE 92% or greater	\$100 Incentive
Furnaces (forced hot air with ECM or equivalent for systems fueled by natural gas or propane)	AFUE 92% or greater	\$400 Incentive
Furnaces (forced hot air with ECM or equivalent for systems fueled by oil or propane)	AFUE 85% or greater	\$200 Incentive
Boilers (forced hot water)	AFUE 85% or greater	\$500 Incentive
Boilers (forced hot water)	AFUE 90% or greater	\$1000 Incentive
Boilers (steam with electronic ignition)*	AFUE 82% or greater	\$200 Incentive

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Combined high efficiency boiler and water heating unit	AFUE 90% or greater with domestic hot water storage of 2 gallons or less	\$1300 Incentive
Indirect Water Heater	Attached to an ENERGY STAR® rated natural gas forced hot water boiler	\$300
Tankless/On-Demand Water Heater	Energy Factor of 0.82 or greater with an electronic ignition	\$300
Stand Alone Water Heaters	Energy Factor of 0.62 or greater	\$50
Programmable thermostats		\$25
Boiler reset controls		\$100

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

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

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

Overview

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

1 In 2002, the Company participated in a joint study of HVAC market conditions and
2 efficiency potential in Rhode Island, Connecticut, and Massachusetts. The study
3 identified several key target markets including residential customers who are in the
4 market to purchase central air conditioning (AC) or heat pump systems, residential
5 customers with existing air conditioning systems, and HVAC technicians responsible for
6 servicing and installing this equipment. The market research estimates that
7 approximately 4,200 Rhode Island customers are purchasing replacement or new central
8 air conditioners each year. Recent customer surveys by the Company indicate that about
9 23% of Rhode Island residences, or about 95,000 customers, have central air
10 conditioning.

11

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

19

20 **Eligible customers**

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

27

1 **Program design**

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

8

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

13

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

- 17 • Add ENERGY STAR[®] Quality Installation Verification (QIV) component for
18 replacement systems including systems replaced within the past 3 years old with
19 an EPA certificate and \$100 customer incentive through participating program
20 QIV contractors. The EPA requires sizing, duct sealing, and airflow and charge
21 adjustments to specific American National Standards Institute (ANSI) Air
22 Conditioning Contractors of America (ACCA) standards.
- 23 • The duct sealing requirement will be funded through a contractor incentive of \$2
24 per CFM duct leakage reduction up to maximum of 300 CFM.
- 25 • Contractors will receive a \$250 incentive for verification and advanced airflow
26 measurement and an additional \$50 for the installation of a CO detector if needed
27 for safety purposes.

- 1 • If duct modifications (i.e., adding return ducts and/or turning vanes) are needed to
2 meet airflow requirements, contractors may receive an additional \$400 incentive.
- 3 • Expanded Negotiated Cooperative Promotion opportunities in cooperation with
4 Northeast Energy Efficiency Partnerships (NEEP) and other interested program
5 administrators.
- 6 • A standard early replacement contractor rebate component that requires an
7 existing system replacement with a SEER of 9 or 10 replaced with a 14.5 SEER
8 and 12.0 EER or greater (See Tables for Incentive Information).
- 9 • A \$300 customer rebate for eligible equipment that meet the minimum ENERGY
10 STAR[®] standard rating of 14.5 SEER, 12.0 EER.
- 11 • A \$400 customer rebate for higher CEE-tier 2 equipment (SEER of 15, EER of
12 12.5 or higher).
- 13 • A \$250 per ½ ton downsizing contractor incentive. (See Table)
- 14 • A \$500 customer incentive for a SEER of 14.5 or greater, and an HSPF of 8.2 for
15 split ductless air conditioning or air to air heat pumps that use Inverter
16 Technology.
- 17 • A \$300 contractor incentive when a Manual J is completed for ENERGY STAR[®]
18 CS Tier 1 or Tier 2 equipment is sold. A \$100 dollar contractor incentive for
19 contractors not participating in CS Tier 1 or Tier 2. (See Table)
- 20 • Third party verification of optimal refrigerant charge and system air flow can be
21 performed for any new equipment installation regardless of SEER. The
22 contractor incentive for this “system commissioning” is \$175. If this service is
23 performed under CS Tier 1 or CS Tier 2 a \$225.00 rebate is paid to the
24 performing contractor.
- 25 • Customers receive a \$100 instant credit on their bill from the HVAC contractor
26 for the digital check-up when it is part of work done associated with a tune-up or
27 repair of an eligible unit from a participating contractor who must be QIV listed.

- 1 • A contractor incentive of up to \$175 will be provided to cover the \$100 customer
 2 instant credit and \$75 to cover contractor cost associated with the digital check-up
 3 provided the unit passes or meets exception condition where at least charge with
 4 respect to airflow is within acceptable parameters.
- 5 • Provide a customer incentive worth \$450 for the installation and provision of a
 6 BFM fan motor on installations with low supply duct static of less than .07”
 7 external static pressure.
- 8 • Provide a \$200 rebate in partnership with Gas Networks who also contributes
 9 \$200 toward the installation of a gas furnace with an AFUE of 92 percent or
 10 greater, equipped with an ECM or equivalent energy-saving furnace fan (blower)
 11 motor (Tentative on evaluations).

12

13 **Contractor Incentives Available:**

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

16

17 **Required to qualify for CS Tier 1**

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

18

19 **Optional Incentives for CS Tier 1**

Downsizing per ½ ton reduction	\$ 250.00
ESQI with CO Detector	\$ 125.00
Duct modifications to pass QIV or ESQI	Up to \$ 400.00
Duct Sealing in attic spaces that have air	\$ 2.00 per CFM of duct leakage reduction

conditioning and heat in connected ductwork	up to \$ 600.00 max
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1

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

4 **Required to qualify for CS Tier 2**

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

5

6 **Optional Incentives for CS Tier 2**

Downsizing per ½ ton reduction	\$ 250.00
ESQI with CO detector	\$ 125.00
Duct modifications to pass QIV or ESQI	Up to \$ 400.00
Duct sealing in attic spaces that have air conditioning and heat in connected ductwork	\$ 2.00 per CFM of duct leakage reduction up to \$ 600.00 max.

7

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

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

Manual J	\$ 100.00
QIV	\$ 175.00
ESQI with CO detector (QIV included)	\$ 300.00
Downsizing: ½ ton reduction	\$ 250.00
Early Replacement	\$ 100.00
Duct Sealing in attic (Heating and air	\$ 2.00 per CFM reduction up to 300 CFM

conditioning)	
Duct modifications to pass QIV or ESQI airflow requirements	Up to \$ 400.00 max.

1

2 **Customer Incentives:**

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

3

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

10

11 These measures are proposed to further support market transformation towards ENERGY
12 STAR[®] and recently adopted ACCA Quality Installation standard. The extra incentive for
13 duct modifications is to offset costs involved in a particularly difficult aspect of that
14 standard. It is critical to provide incentives directly to contractors to reimburse them for
15 the additional costs associated with this work, and also to underline the importance of
16 these advanced installation practices. We have also implemented a Tier program so that

1 contractors will be compensated in a manner that will encourage high quality installation
2 and commissioning of systems. This is not a required component for 2010, but in future
3 years this may become a required component depending on how fast the contractor base
4 moves and integrates to the new model. We will offer technical and educational training
5 to expedite the move toward the “CS Tier Installations.”

6
7 The Company has focused its efforts on both customer education and outreach via bill
8 inserts, fact sheets, and targeted mailings to high users in summer months; contractors’
9 education and outreach via phone calls, mailings, one-on-one meetings, trainings on
10 technical issues, usage of sizing software, and up-selling to high efficiency equipment;
11 and working closely with contractors to encourage participation in the program and
12 installing the air conditioning systems properly. The company will promote whenever
13 possible utilizing manufacturer/distributor training infrastructure as a platform to further
14 educate contractors and wholesalers. These opportunities will be in conjunction with gas
15 programs when possible.

16
17 Although new central air conditioning equipment that is properly sized and operating is
18 critical to the energy efficiency of the equipment, HVAC technicians do not, as a
19 standard practice, perform all the needed calculations and tests. The Company has
20 assisted technicians by providing hands-on training and technical support on third party
21 verification of charge and airflow of systems. We have provided training on proper
22 installation and set-up of Brushless Fan Motor (BFM) motors for the replacement of PSC
23 motors. Technicians have also received training on duct work repair and sealing.

24
25 We are offering a Heat Pump Water Heater pilot in Massachusetts for 2010; and we plan
26 on offering a pilot in RI. We will be able to use the combined data to establish whether
27 Heat Pump Water Heaters are a viable technology for the northeast.

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

13
14 **5. Heat Pump Water Heaters Pilot**

15 **Overview**

16 The company plans on offering a Heat Pump Water Heater pilot in RI to investigate the
17 impact of new water heater models being released by three major suppliers in October
18 2009. The company plans on offering this pilot through a larger regional pilot program
19 organized by NEEP. Under the current plan, the regional pilot program will include six
20 installations in Rhode Island.

21
22 **Eligible Population**

23 To be determined by NEEP.

24
25 **Pilot Design**

26 Pilot will offer no cost of low cost (\$250) installations of heat pump water heaters in six
27 Rhode Island homes. During the pilot the following points of interest will be monitored:

1 flow rate, power consumed by the electric elements, power consumed by the heat pump,
2 space temperature, humidity, and cycling times. Other data points may also be measured.
3 The information gathered through this pilot will be used to determine if Heat Pump Water
4 Heaters save energy and are a dependable appliance for RI consumers.

5

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

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

14

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

19

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

23

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

Electric Programs

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

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Category	Large Commercial Retrofit (formerly Energy Initiative)	Commercial New Construction (formerly Design 2000plus)
HVAC	<ul style="list-style-type: none"> • Still to be determined 	<ul style="list-style-type: none"> • Still to be determined. Possibly add a prescriptive incentive for turbo-core chiller technology.
Compressed Air	<ul style="list-style-type: none"> • Changes to prescriptive incentives to be determined. Compressed air system assessment will be incorporated into the Industrial Initiative. See description under gas programs below 	<ul style="list-style-type: none"> • Changes to prescriptive incentives to be determined. Compressed air system assessment will be incorporated into the Industrial Initiative. See description under gas programs below
Custom	<ul style="list-style-type: none"> • We will offer an Industrial Initiative targeted at process improvement. • Other changes to custom are still being discussed 	<ul style="list-style-type: none"> • We will offer an Industrial Initiative targeted at process improvement • Other changes to custom are still being discussed
Advanced Buildings and Comprehensive Design Approach (CDA)	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • A revised “Core Performance” manual is under development.

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

Small Business Direct Installation Program	The name of the program has been changed to the Small Business Direct Installation program. We intend on offering a “Customer Directed” option should the customer prefer to use their own installation contractors and equipment distributors. Also, gas measures will be installed as part of this service
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Gas Programs

<p>Commercial New Construction / Large Commercial Retrofit Program (formerly CEEP)</p>	<ul style="list-style-type: none"> • An Industrial Initiative will be launched in 2010 under the company’s existing Large Commercial Retrofit and Commercial New Construction programs. The initiative will be designed to incorporate measures like heat recovery and process improvements that bring energy savings. It will also incorporate the existing steam assessment and saving program. Non-gas/electric energy benefits or additional costs related to improvements will be quantified to the extent possible. Examples of additional benefits might be; raw material, scrap and increased thru-put • Prescriptive incentives will continue in 2010 for commercial kitchen equipment. • Rebate for high efficiency commercial fryers and commercial steamers will be reduced from \$2,000 to \$1,000. • Convection ovens and high efficiency combination ovens $\geq 40\%$ efficiency) at \$1,000 will be added. • Conveyor ovens ($\geq 40\%$ efficient) and rack ovens ($\geq 50\%$ efficiency) will be added at \$1,000 rebates. • Griddles will be added at \$500 rebates. 											
<p>Commercial New Construction/Large Commercial Retrofit Program (formerly the High Efficiency Heating Program)</p> <p>The following changes are proposed for 2010:</p>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Product</th> <th style="text-align: center;">Change</th> </tr> </thead> <tbody> <tr> <td data-bbox="558 1182 933 1325">Hydronic Boilers (under 300 MBtuh)</td> <td data-bbox="938 1182 1559 1325">Incentive has been changed from \$700 ($< 175\text{MBtuh}$) and \$1,000 (175 to 300MBtuh) to \$750</td> </tr> <tr> <td data-bbox="558 1325 933 1430">Condensing stand alone water Heater ($>95\%$ TE, $>75,000$ but $<300,000$ BTUh)</td> <td data-bbox="938 1325 1559 1430">Added to program at \$500 rebate</td> </tr> <tr> <td data-bbox="558 1430 933 1535">Integrated water heater/condensing boiler (0.9 EF, 90% AFUE)</td> <td data-bbox="938 1430 1559 1535">Added to program at \$1,600 rebate</td> </tr> <tr> <td data-bbox="558 1535 933 1629">Integrated water heater/condensing boiler (0.86 EF, 85% AFUE)</td> <td data-bbox="938 1535 1559 1629">Added to program at \$1,000 rebate</td> </tr> </tbody> </table>	Product	Change	Hydronic Boilers (under 300 MBtuh)	Incentive has been changed from \$700 ($< 175\text{MBtuh}$) and \$1,000 (175 to 300MBtuh) to \$750	Condensing stand alone water Heater ($>95\%$ TE, $>75,000$ but $<300,000$ BTUh)	Added to program at \$500 rebate	Integrated water heater/condensing boiler (0.9 EF, 90% AFUE)	Added to program at \$1,600 rebate	Integrated water heater/condensing boiler (0.86 EF, 85% AFUE)	Added to program at \$1,000 rebate	
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These proposed enhancements continue to reflect the Company’s objectives to improve the way buildings are designed, constructed and operated.

1 Commercial Retrofit, Commercial New Construction and Small Business Direct
2 Installation programs, we anticipate being able to provide more efficient, flexible
3 and comprehensive treatment for customers that builds on one solution for
4 incorporating their energy efficiency goals and objectives in their operations.
5 There are still two integration issues that will be resolved over the next year.
6 First, an integrated gas and electric screening model will need to be released; for
7 now gas and electric program elements will be screened separately. Second, the
8 gas programs (formerly CEEP and HEHE) will appear as two budget line items in
9 2010 to conform to existing accounting. Budgets for the former electric energy
10 efficiency programs will still appear under their original names: Energy Initiative,
11 Design 2000plus and Small Business Services. These issues will not affect the
12 customer's overall experience with the programs.

13 ▪ An Industrial Initiative will be launched in 2010 under the company's gas and
14 electric energy efficiency programs. The program is aimed at treating industrial
15 energy savings opportunities comprehensively and quantifying all costs and
16 savings streams possible. The initiative will target heat recovery, process
17 improvements, steam assessment and savings as well as other industrial
18 application measures that will provide significant energy savings from this
19 industrial sector. Non-gas/electric energy benefits or additional costs related to
20 improvements will be quantified to the extent possible. Examples of additional
21 benefits might be; raw material, scrap and increased thru-put. While this is not
22 really a program change, we plan to target industrial opportunities more
23 aggressively and quantify the non-energy benefits of EE measures compared to
24 the past. In addition customers will be educated about these benefits.

25 ▪ The Industrial Initiative is an example of a segmented approach to certain
26 customer types. Other segments we are addressing include schools, commercial
27 laboratories, data centers and economically challenged areas.

- 1 ▪ New technologies will be addressed that offer enhanced potential for energy
2 savings as well as support for furthering market transformation. In addition LED
3 lighting, advance whole building controls, plug load controls, condensing water
4 heaters and additional kitchen equipment will be offered to customers to expand
5 their achievable energy savings potential.

- 6 ▪ The company will develop an initiative that targets commercial offices at the time
7 a space is leased and fitted out to a new tenant. This is a market sector that
8 traditionally has been a challenge to transform. However with a new targeted
9 approach we believe we will be able to maximize energy efficiency addressed by
10 this initiative through the application of advanced lighting design, controls, re-
11 commissioning of key HVAC system elements and working closely with tenants
12 and owners.

- 13 ▪ A combined gas and electric cost effectiveness screening tool will be developed
14 that will aid in assessing energy efficiency opportunities in equipment and
15 systems that save both gas and electric energy. This will be important for both
16 industrial systems as well as HVAC.

- 17 ▪ The Small Business Direct Installation program will now be expanded to create
18 more depth and appeal for customers by installing a number gas measures
19 appropriate for retrofit applications.

- 20 ▪ The Company will explore more opportunities to work with distributors through
21 incentives applied “upstream” to manufacturers and distributors so that energy
22 efficient equipment is stocked. This ensures that energy efficient equipment is
23 available for smaller unplanned projects where the smaller quantities are involved
24 and projects occur on a shorter schedule.

- 25
- 26
- 27

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

3 **Overview**

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

15

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

23

24 **Eligible Population**

25 The Commercial New Construction program is available to all non-residential customers.
26 It is available for new construction and remodeling projects such as a new building,
27 expansion or renovation of an existing building, change in the use or function of the

1 building space, new equipment or systems for a new process or expanded operation,
2 replacement of failed equipment, or planned replacement of equipment or systems.

3

4 **Program Design**

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

14

15 **Incentives**

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

26 The structure of incentives for electric and gas measures varies. However, all projects
27 will be presented to customers as a single package of measures with a single incentive

1 offer, simplifying the process for customers. The differing incentive structures are
2 explained in the following.

3 Electric incentives

4 In general, incentives for electric energy saving opportunities are designed either to cover
5 60 to 75% of the incremental cost between standard and premium efficiency equipment
6 and systems or to buy down the cost of equipment to the customer to a one and a half
7 year payback, whichever is less. For Comprehensive Design Approach and
8 Comprehensive Chiller projects (described below), incentives cover up to 80% of the
9 incremental cost or buy the cost of the equipment and systems down to a one year
10 payback, whichever is less. Core Performance is a comprehensive track under
11 Commercial New Construction but for smaller buildings. Core performance is described
12 later in this section.

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

20 Gas Incentives

21

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

25

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

1 project, up to \$250,000 for new construction comprehensive and up to \$150,000 per
2 eligible CHP project.

3

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

9

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

16

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

22

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

26

27

1 Marketing

2 The Company markets the Commercial New Construction program through extensive
3 personal communication by account managers with customers, vendors, contractors,
4 design professionals, seminars, training sessions and other direct marketing approaches.
5 For 2010 the Company will continue to build on this marketing effort by implementing a
6 broader communications plan to customers to underscore the value of implementing
7 energy efficiency solutions in their facilities to control their electricity costs and reduce
8 their building operating costs. It is anticipated that circuit riders will be called on to
9 actively educate and train large segments of these trade ally groups to ensure higher
10 levels of participation and savings. The ceiling for achieving greater results has been
11 raised and the necessity of increasing the number of trade allies through increased direct
12 contact will be critical to success. Development of these approaches coupled with direct
13 mail and response campaigns will be part of the overall communications and outreach
14 initiatives planned for 2010.

15

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

24

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

27

1 A. Technical Assistance Services Initiatives

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

11

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

18

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

1 customers and their design teams for new construction and major renovation, TA studies
2 are also done for customers with existing buildings that focus on specific equipment or
3 systems.

4

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

9

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

15

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

20

21 The Company offers the Project Expediter service, which uses pre-qualified contractors
22 to market efficiency services to customers, provides energy assessments of customers'
23 facilities and arranges for the purchase and installation of energy efficient equipment.
24 Under this service, Project Expeditors are authorized by the Company to analyze projects
25 and offer customers incentives without Company pre-approval. Project Expeditors are
26 firms that have proven to the Company they do quality work, understand Company
27 programs, and make accurate offers and promises to customers. The Company maintains

1 lists of qualified Project Expeditors and refers customers as appropriate, as well as
2 provides a list on its website. These firms are selected through a competitive bidding
3 process.

4

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

9

10 The Company's Key Account Executives, Energy Efficiency Consultants and Technical
11 Representatives will assist customer in identifying opportunities. In addition, a vendor is
12 available to provide scoping studies to help identify gas savings opportunities at no
13 charge. This service, referred to as "Energy Assessment/Custom Assessment" is
14 provided to customers interested in evaluating energy efficiency measures but who
15 require assistance estimating savings and incentive levels. If these assessments
16 determine that a more detailed analysis is needed, this will be done through the Technical
17 Assistance program described previously.

18

19 **B. Best Practices Initiatives**

20 **a. Advanced Buildings, LEED and Sustainable Design**

21 The Company is supporting Core Performance developed by the New Buildings Institute
22 (NBI) in cooperation with US EPA, ASHRAE, the US Green Buildings Council and the
23 National Building Operators and Managers Association. Core Performance is a suite of
24 technical resources and design guides that help design professionals create commercial
25 buildings that are energy efficient and provide a healthy work environment for occupants.
26 Core Performance complements the Comprehensive Design Approach with a special
27 emphasis on smaller buildings. Core Performance also serves to promote better

1 commercial design practices such that advancements in the Rhode Island building code
2 can be implemented at an accelerated rate. The Company has played a lead role
3 nationally in the development and refinement of Advance Buildings along with other
4 stakeholders and utilities.

5
6 Core Performance uses a prescriptive approach to new building design elements aimed at
7 achieving energy savings that are at least 20% better than the Rhode Island state energy
8 code.

9
10 For 2010, the Company will continue to build on the success of the Core Performance we
11 have been promoting for four years in Rhode Island to address the gas and electric
12 efficiency needs of new construction projects for commercial buildings less than 75,000
13 sq. ft. National Grid launched this effort in 2006 in Rhode Island with several training
14 programs on the topic. Numerous projects have been designed in the state using Core
15 Performance and we expect the number to grow as architects and their clients realize that
16 buildings designed this way are practical and cost effective.

17
18 The program will continue to be expanded in 2010 to reach more projects and more
19 design firms with additional staff and through further training and promotional efforts.
20 Also, National Grid continues to work closely with the New Buildings Institute, the
21 national organization that manages and promotes and maintains Advanced Buildings
22 across the country to continually add powerful new features to the program that will
23 increase its appeal and market penetration. New for 2010 is a revised Advanced Lighting
24 Design Guide that complements Core Performance.

25
26 National Grid will support customers with designs that incorporate the U.S. Green
27 Building Council's "Leadership in Energy and Environmental Design (LEED) Green

1 Building Rating System™” in their new construction projects using our staff LEED
2 Accredited professionals. For many this will include providing a basic understanding of
3 LEED requirements and guiding them through the process of assembling a qualified
4 design team. Beyond this we will guide customers to the best path for achieving LEED
5 points for Energy and Atmosphere, by providing technical support along with financial
6 incentives.

7

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

15

16 b. Trade Ally Training Initiative

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

20

21 The Company will support and undertake a wide range of training events in collaboration
22 with GasNetworks¹, the ENERGY STAR® Homes Joint Management Committee,
23 Northeast Energy Efficiency Partnerships (NEEP), RI Chapter of the US Green Building

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

1 Council, manufacturing training representatives and other trade allies as well as regular
2 visits by company personnel to area distributors. Outreach will extend to contractors,
3 engineers, builders, landlords, realtors, facility managers and housing authorities.

4
5 Training activities will be promoted via Company newsletters and direct mail campaigns
6 to contractors, in addition to meeting with trade allies at public events. The GasNetworks
7 website (www.gasnetworks.com) will also be used as a vehicle for promotion, offering
8 trade allies a central source of information on special event training efforts, in addition to
9 joint energy efficiency programs.

10
11 The budget for the Trade Ally Training Initiatives will be included within each program's
12 budget

13 *c. Industrial Initiative*

14 An Industrial Initiative will be launched in 2010. Opportunities found through this
15 initiative may be served under the Commercial New Construction or Large Commercial
16 Retrofit programs. This initiative is discussed in more detail under the Large
17 Commercial Retrofit program description.

18
19 *d. Comprehensive Chiller Initiative*

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

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e. Commercial / Industrial Economic Development Initiatives

Stimulating Business Growth in Rhode Island

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

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

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

- 4
5 ▪ Identify commercial and residential companies, agencies and not-
6 for-profit organizations that are actively performing energy efficiency
7 services in Rhode Island.
- 8
9 ▪ Provide an estimate of additional companies, agencies and not-for-
10 profit organizations that are in industry categories that could potentially
11 perform energy efficiency services in Rhode Island.
- 12
13 ▪ Estimate the size and composition of Rhode Island's commercial
14 and residential "energy efficiency workforce" (based on returned employer
15 surveys).
- 16
17 ▪ Identify specific job titles/professions which employers report are
18 "in demand" and a shortage of which might serve as a barrier to Rhode
19 Island's efforts to achieve energy efficiency objectives.
- 20
21 ▪ Provide recommendations to utilities, energy efficiency companies,
22 state agencies and the state's education/job training system re: meeting
23 identified workforce needs.

24
25 **Economic Redevelopment Program for Communities**

26 The Economic Redevelopment Program for Communities is designed to
27 improve energy efficiency and reduce energy costs while also helping to foster
28 the rehabilitation of buildings, storefronts and neighborhoods in areas that are
29 in need. Additionally, the program can provide financial incentives and

1 resources to help community based organizations and non-profits increase the
2 energy efficiency of their facilities and reduce their operating costs. Through
3 the program, the Company will work with Chambers of Commerce, economic
4 redevelopment organizations, non-profit organizations, as well as private
5 development corporations and businesses to facilitate the installation of eligible
6 building shell and other measures that increase the energy efficiency of
7 business districts, K-12 public school systems, and public and private
8 subsidized housing. One of the program's objectives is to leverage energy
9 efficiency funds with other investments that are being made for community
10 development purposes.

11
12 Funding through the Economic Redevelopment Program for Communities will
13 focus on projects that demonstrate a strong community impact. A project has a
14 strong community impact when it provides for site rehabilitation, creates jobs,
15 provides housing solutions or is integral in providing community based
16 programs.

17
18 The program will be open to all Company multifamily, commercial and
19 industrial customers that meet the program's intent. Incentives for all cost
20 effective gas and electric energy efficiency measures will be provided through
21 the Commercial New Construction, Large Commercial Retrofit and Small
22 Business Direct Installation programs. Recognizing the need to save on
23 heating energy use and depending on the comprehensiveness of gas energy
24 efficiency projects, incentives offered for gas measures may be as high as
25 \$3.00 per annual therm saved (vs. \$1.50 for typical C&I gas measures). For
26 gas measures, maximum funding per project will still be \$100,000, with a
27 minimum of 50% matching funds required by the customer. Applications for
28 funding must include a description of the redevelopment project, information

1 on the sponsoring organization, identification of additional funding sources,
2 types of energy conserving measures to be installed, estimated energy savings
3 and project schedule. Each application for funding will be evaluated and an
4 analysis will be performed to identify cost-effective opportunities for reducing
5 a customer's energy usage. The analysis performed will lead to a report
6 summary of recommendations and a detailed description of the alternatives
7 evaluated, including: total installation costs, annual energy costs, annual
8 savings and simple payback periods.
9

10 C. Market Transformation Initiatives

11 The Commercial New Construction program has a large market transformation
12 component that supports the program toward better performance. By familiarizing the
13 large commercial and industrial segment with higher energy efficiency standards, the
14 Commercial New Construction program creates new efficiency standards for
15 construction. The Company actively supports regional and national market
16 transformation programs designed to transform markets for a broad range of energy
17 efficient equipment and services. These activities are discussed below.
18

19
20 a. Regional Energy Efficient Motors and Unitary HVAC initiatives

21 As a feature of the Commercial New Construction program, the Company has supported
22 the MotorUp premium efficiency motor initiative since 1998, a regional market
23 transformation initiative that promotes motor management of high efficiency motors and
24 quality repair of motors to maintain high efficiency. In the past, the MotorUp program
25 was delivered through a joint effort by participating utilities and energy efficiency
26 agencies in New England, New York and New Jersey through the Northeast Energy
27 Efficiency Partnerships. This extended regional group has decided to end the joint
28 delivery of MotorUp. In its place for 2007, a Motors program was developed by a group

1 that encompasses a smaller region consisting of Massachusetts and Rhode Island utilities.
2 The regional program also called MotorUp has continued to offer consistent equipment
3 efficiency requirements for qualifying “NEMA Premium” motors. Uniform rebates and
4 application forms are used throughout the region. For 2010, Massachusetts and Rhode
5 Island utilities will continue to coordinate the use of a contracted circuit rider to provide
6 outreach to motor dealers, trade allies, vendors and distributors. Since 2003, the regional
7 initiative has provided instant rebates at motor dealer sites through participation in
8 MotorUp. The Company expects to continue with this approach in 2010. Additionally,
9 the Company is continuing an effort that was initiated in 2006 and expanded in 2007 for
10 smaller businesses, through the vendors that provide Project Expeditor services, to
11 transform their purchasing practices through motor management best practices, to include
12 larger C&I customers. The Company will work with the customer to facilitate audits of
13 their motor inventory and to develop a motor management plan and purchasing policy to
14 optimize energy efficiency by replacing new or failed motors with a NEMA Premium™
15 motor.

16

17 The Company has participated in Cool Choice since 1999, a regional program that
18 focuses on promoting the installation of energy efficient unitary HVAC equipment
19 through Commercial New Construction. In 2007, the Company (as well as other regional
20 sponsors) decided to withdraw from Cool Choice. Since then, the Company has
21 coordinated with utilities in Massachusetts in their effort to operate a joint state-wide
22 program, sharing a rebate worksheet form, a single circuit rider, and a 1-800 information
23 line, similar to what is described above for motors. The program features consistent
24 efficiency rebate levels revised to follow CEE’s new Tier 2 specifications for >5.4 Ton to
25 <63 Ton units. Incentives are also offered for dual enthalpy economizer controls,
26 demand control ventilation and electronically commutated motors (ECM fan motors) in
27 packaged air conditioners and gas furnaces. The rebates are expected to remain
28 unchanged in 2010.

1

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

4

5 b. *High Performance Commercial Lighting Design/DesignLights™ Consortium*

6 In an attempt to continue to promote high quality, high performance lighting with
7 commercial and industrial customers the Company will utilize a series of specialized
8 tools, under development by the USDOE Commercial Lighting Design initiative. For
9 2010 the Company will continue to provide additional outreach on the benefits of high
10 quality lighting design to various lighting equipment vendors throughout Rhode Island.
11 The Company proposes to accomplish this through visits, workshops and breakfast
12 meetings with these vendors and with lighting specifiers. These meetings will be
13 educational but also provide an opportunity for these market players to promote high
14 quality, energy efficient lighting that qualifies for rebates to their customers. As part of
15 this outreach, the Company will also promote best design practices under development by
16 the Advanced Energy Office collaboration and design tools being developed by the
17 USDOE's Commercial Lighting Initiative. Office of the Future is targeted at
18 opportunities that arise at the time leased office space is fitted out for a new tenant. In
19 addition to lighting, plug load controls, advanced energy management controls and retro-
20 commissioning of HVAC distribution systems will be promoted. Standard incentives for
21 new equipment will apply.

22

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

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

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

16

17 c. High Performance Schools

18 The Company proposes to continue offering a special initiative targeted to public schools
19 through the Commercial New Construction program. While Commercial New
20 Construction has been effective in reaching public schools, a majority of schools have not
21 participated due to a broad range of market barriers including limited funding and
22 competitive bidding requirements. This program's intent is to help schools minimize the
23 hurdles posed by these market barriers during a time when Rhode Island is seeing an
24 unprecedented level of investment in new and renovated schools.

25

26 The Company proposes to fund the full cost for technical assistance studies for new
27 construction or renovation under Commercial New Construction. All qualifying

1 cost-effective electric and gas energy saving measures would be addressed through
2 comprehensive treatment. It is anticipated that most projects will involve lighting. A key
3 requirement for this initiative is that projects follow the Comprehensive Design Approach
4 (CDA) track which entails an interactive analysis of proposed measures utilizing whole
5 building simulation tools and that the building is at least 20% more efficient than code.
6 As an alternative to CDA, smaller school projects may follow the New Buildings Institute
7 Core Performance standards described previously.

8

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

15

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

20

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

22

23 d. *Building Codes and State Standards*

24 The Parties agree to support work at national and local levels to develop codes and
25 standards that continue to upgrade building energy efficiency. In cooperation with the
26 codes community, including the Building Code Commission, the Company will work

1 with this and other agencies to offer continued improvement on proposed building codes
2 and standards that lead to the future revisions of the Rhode Island State Building Code.
3 This will address cost-effective electric and gas revisions to the code.

4
5 Continually refining these codes and standards, which complement existing programs
6 such as Commercial New Construction and Large Commercial Retrofit, has a significant
7 impact on institutionalizing progress made through utility programs. Therefore, this
8 initiative focuses on (1) working with national code development organizations such as
9 ASHRAE to upgrade building efficiency codes and (2) working at the local level with
10 Rhode Island and other states in the development of state efficiency codes and standards.
11 The Company will offer support to this effort which will be coordinated primarily
12 through the Northeast Energy Efficiency Partnerships (NEEP) and the New Buildings
13 Institute (NBI), organizations with the goal of assisting states and others with the
14 development of codes and standards that are practical and enforceable. For instance, in
15 2007 Rhode Island upgraded its state energy code to the “2006 International Energy
16 Conservation Code” (IECC-2006) with amendments drafted by NBI. The Company will
17 continue to pursue additional upgrades to the present code through NBI. Part of this
18 effort includes facilitating and supporting the training and education efforts for code
19 enforcers, designers and builders.

20
21 e. Federal Standards

22 Ultimately, markets are transformed towards higher efficiency when newer efficient
23 equipment supplants older inefficient equipment to an extent that the latter is either no
24 longer produced, becomes unattractive to end users or is excluded from the marketplace
25 as the result of various standard-setting processes. Some of these standard-setting
26 processes are industry-driven and voluntary; others produce mandatory codes or
27 standards promulgated by federal or state governments.

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

8

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

14

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

17

18 f. Combined Heat and Power

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

1 or targeting smaller systems on the order of less than a MW. All CHP projects are
2 currently screened under the Company's benefit/cost model.

3
4 2010 will represent a transition year for CHP. While the program offering starting
5 January 2010 will continue the practices discussed above, the Company, EERMC and its
6 Consultants, and other parties will work during 2010 as a continuation of the "CHP Task
7 Force" to substantially modify the CHP effort. This process will begin after this filing
8 and, depending on timing, some changes may go into effect in early 2010, while others
9 may not be completed until the beginning of 2011. The CHP Task Force will consider all
10 aspects of the CHP initiative including but not limited to: program design, monitoring
11 and verification, free ridership, funding and leveraging of non-ratepayer funds, data
12 tracking, efficiency criteria, and program eligibility. Some specific priority areas the CHP
13 Task Force will address are:

- 14
- 15 • **Funding allocations.** Based on a traditional view of DSM, CHP is fundamentally
16 an electric efficiency fuel switching measure. CHP typically results in a large
17 electric savings on the Company's system, while increasing the net retail sales on
18 the gas system. In addition, the electric program funds are much larger than the
19 gas funds. Further, legislation calls for investment of all cost-effective electric
20 efficiency including CHP. The CHP Task Force will consider issues related to
21 funding allocations, including whether electric ratepayers should contribute some
22 or all of costs of CHP promotion.
 - 23 • **Eligible measures.** The Task Force will consider the availability and cost-
24 effectiveness of residential CHP systems, as well as C&I small packaged and
25 large custom systems. It will also consider program funding abilities, the
26 opportunities to leverage funds from the AGT program, as well as other sources.
27 Based on this review, additional products or eligibility criteria may be developed.
28 Special attention will be paid to issues such as monitoring and verification of
29 system performance, and the sufficiency of funding levels to ensure low free

1 ridership among very large CHP systems. The Task Force will also consider the
2 limits of promoting cost-effective on-site generation, if any, from equipment or
3 situations that diverge from traditional CHP. For example, CHP fired by other
4 fuels, customers producing greater than 100% of their electric needs, cost-
5 effective alternative fuel generation units that do not provide thermal benefits,
6 merchant systems designed for sale directly to the power grid, etc.

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

1 The Company will offer a modified custom incentive for eligible CHP installations.
2 Under this application, CHP systems will receive incentives based upon \$0.75 per first
3 year of estimated therm savings with a project cap of \$100,000. Higher efficiency CHP
4 systems will receive an incentive of \$1.50 per first year of estimated therm savings with a
5 project cap of \$150,000.

6

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

9

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

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

21 In order for a project to qualify for Tier 2, Tier 1 requirements must be met in
22 addition to the following:²

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

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

- 1 ▪ Sum of all usable electric energy must constitute at least 20% of the
2 technology's total usable energy output.
- 3 ▪ The project must be an application of technologies that achieve an average
4 annual fuel conversion efficiency meeting or exceeding the following levels:
 - 5 ○ For systems with a total usable energy output of less than 1 MWt+e
6 (thermal plus electric) per hour, an efficiency of 60%
 - 7 ○ For systems with a total usable energy output of 1 MWt+e, but less
8 than 100 MWt+e, and efficiency of 63%
 - 9 ○ For systems with a total usable energy output of 100 MWt+e or
10 greater, an efficiency of 66%

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

13

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

16 **Overview**

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

1 **Eligible Population**

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

5

6 **Program Design**

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

17

18 Electric incentives

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

22

23 Gas Incentives

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

26

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

4
5 Custom Incentives for cost effective gas technologies will be based upon \$1.50 per first
6 year of estimated therm savings. Examples of typical custom projects are redesigns of
7 HVAC systems, energy recovery ventilation, most heat recovery applications, building
8 automation/energy management systems, and advanced technology burners and/or
9 burner controls.

10
11 Solar heating technologies will receive incentives based upon \$3.00 per first year of
12 estimated therm savings. Few applications are expected to reach this threshold. In 2010
13 the Company will build upon its experiences in other jurisdictions and offer customers
14 the opportunity to incorporate solar thermal technologies such as solar DHW heating,
15 solar pool heating, and solar space heating into the program. Incentives may not be
16 applied toward normal maintenance costs and must offset existing or potential gas usage.

17
18 In some cases, a particular measure may save both gas and electric energy (e.g. demand
19 control ventilation). For these cases, the Company will pay no more than 100% of the
20 total cost of the measure.

21
22 As stated under Commercial New Construction, the Company will look at targeting
23 opportunities for specific market segments and building types. The Company will
24 implement programs targeting opportunities in laboratories and data centers where there
25 is potential to achieve significant energy savings.

26

1 The Office of Energy Resources (RIOER) continues to promote an Energy Services
2 Company (ESCO) initiative to encourage efficiency improvements in Rhode Island's
3 state and municipal facilities. The Rhode Island Department of Education (RIDE) is also
4 promoting this as a way to help cities and towns fund the balance of school
5 improvements and new schools partially funded through state housing aid. The Company
6 will continue to support the delivery of this service by coordinating its Large Commercial
7 Retrofit program services (including incentives) with the ESCOs as they develop
8 technical assessments for these customers. Incentives provided for gas and electric
9 equipment will help the municipality buy down their obligation to the ESCO. For 2010,
10 the RIOER, RIDE and the Company will continue to help municipalities participate in
11 this initiative.

12
13 The Company will continue an on-bill finance option for cities and towns. Through this
14 finance option, customers are able to pay their balance for the cost of their work for up
15 to 24 month period in equal monthly installments on their bill. This is similar to the on-
16 bill financing and incentives provided by the Small Business Direct Installation
17 program. Municipal facilities with an average monthly demand of 200 kW or less will
18 still be treated under the Small/Medium Business program. The Company is exploring
19 the potential to partner with outside lending institutions to support this intended on-bill
20 payment option that enables municipalities to more easily manage their customer costs
21 and achieve energy savings in their operations.

22

23

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

26

27 A. Services

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

7

8 The Company's Key Account Executives, Energy Efficiency Consultants and Technical
9 Representatives will assist customer in identifying opportunities. In addition, a vendor is
10 available to provide scoping studies to help identify gas savings opportunities at no
11 charge. This service is provided to customers interested in evaluating energy efficiency
12 measures but who require assistance estimating savings and incentive levels. If these
13 assessments determine that a more detailed analysis is needed, this will be done through
14 the Technical Assistance program described previously.

15

16 **B. Best Practices Initiatives**

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

27

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

8

9 Industrial Initiative

10 An Industrial Initiative will be launched in 2010. The program is aimed at treating
11 industrial energy savings opportunities comprehensively and quantifying all costs and
12 savings streams possible. The initiative will incorporate measures like heat recovery and
13 process improvements that bring energy savings. It will also incorporate the Steam
14 Assessment and Savings Initiative. Non-gas/electric energy benefits or additional costs
15 related to improvements will be quantified to the extent possible. Examples of additional
16 benefits might be; raw material, scrap and increased thru-put. Opportunities found
17 through this program may be served under the Commercial New Construction or Large
18 Commercial Retrofit program

19

20 C. Market Transformation Initiatives

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

23

24

25 a. Steam Assessment and Savings Initiative

26 Over 45% of all the fuel burned by U.S. manufacturers is consumed to raise steam.
27 Steam is used to heat raw materials and treat semi-finished products. It is also a power
28 source for equipment, as well as for building heat and electricity generation. Many of

1 these facilities can recapture energy through the installation of more efficient steam
2 equipment and processes. The Steam Assessment and Savings Initiative has been
3 developed to help these facilities manage their utility expenses through capital
4 improvements via incentives on high efficiency equipment as well as through proper
5 maintenance "best practices" by providing incentives for steam system assessments and
6 steam trap surveys.

7
8 b. Compressed Air Challenge

9 The Company will continue its active sponsorship of the national Compressed Air
10 Challenge (CAC). The CAC is a broad based collaborative of government agencies,
11 compressed air specialists, equipment manufacturers, end-use consumers and utilities
12 whose objective is to promote the substantial energy savings improvements available by
13 means of a comprehensive, systems approach to compressed air system design and
14 operation. The CAC educational and technical materials being disseminated by the
15 Company are intended to increase customer awareness of, and demand for, products and
16 services that encompass a comprehensive, "systems optimization" approach. Coupled
17 with this increased demand for enhanced services from customers, regional compressed
18 air equipment and service vendors will be exposed in depth to the technical approaches
19 promoted by the CAC.

20
21 Over the past few years the Company has been actively coordinating local workshops
22 that have been developed by the CAC. These workshops reflect consensus approaches to
23 a variety of technical issues associated with the comprehensive system approach to
24 compressed air quality, reliability, and efficiency. The first workshop, entitled
25 "Fundamentals of Compressed Air Systems," has been very well received by industrial
26 customers and vendors who have attended to date. The second is a more advanced two-
27 day workshop entitled "Advanced Management of Compressed Air Systems." This
28 complementary workshop is primarily targeted at larger, more sophisticated customers as

1 well as regional vendors and engineering consultants. The Company anticipates that
2 these workshops will result in an increased number of applications under the Company's
3 programs that address more comprehensive solutions to system efficiency. The Company
4 expects to hold one Level 1 workshop in Rhode Island. We will also target Rhode Island
5 Customers and compressed air vendors for Level 1 and Level 2 classes that are offered in
6 Eastern Massachusetts.

7
8 In addition to promoting the two levels of CAC training currently available, the Company
9 will also be providing comprehensive compressed air system O&M initiative for large
10 industrial compressed air users as described below, as well as identify cost-effective
11 compressed air efficiency opportunities in Technical Assistance studies. The Company
12 will offer customers incentives to implement the measures once they have been
13 identified.

14
15 The budget for this initiative is included in the overall budget for Large Commercial
16 Retrofit

17
18 c. Compressed Air Operations & Maintenance Improvement Program

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

26

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

9
10 One measure that might be identified during a compressed air assessment is the
11 opportunity to recover heat generated by the compressor that could be applied to an
12 industrial process that heats with gas.

13
14 The budget for this initiative is included in the overall budget for Large Commercial
15 Retrofit.

16
17 d. Building Operator Training and Certification (BOTC)

18 The Building Operator Training and Certification (BOTC) initiative is a collaborative
19 effort among gas and electric utilities in the region. Through this effort a training and
20 certification program is administered and conducted by a third party and offered to
21 commercial and industrial customers. The Company has offered Level 1 of the BOTC
22 initiative for the past six years.

23 As stated previously, the Rhode Island Department of Education is requiring BOTC
24 training for all districts that receive state housing aid for capital and O&M projects at
25 schools. In support of this, the Company hosted a class in Cranston for schools building
26 operators in 2009 and will start other classes in Rhode Island or near Rhode Island for
27 2010.

1

2

3

4 The BOTC's objectives include:

5 • Increasing O&M personnel knowledge and skills in operating and maintaining
6 commercial and industrial buildings for efficiency, comfort, and safety.

7 • Expanding market awareness of the benefits of improved building performance.

8 • Building market demand for resource-efficient O&M services.

9 • Distinguishing resource-efficient practices, service providers, and knowledgeable
10 building operators in the marketplace.

11 • Establishing a Training and Certification program that will become financially self-
12 sustaining in the future.

13

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

18

19 e. Whole Building Assessment and Retro-Commissioning

20 For 2010, the Company will continue to benchmark the gas and electric energy use of
21 large commercial and municipal customers through the Whole Building Assessment
22 Initiative to assist them in setting priorities and promote the installation of energy
23 efficiency measures in their facilities. In addition, the Company will continue offering a
24 retro-commissioning initiative to help commercial and industrial customers understand

1 how their equipment is operating and make adjustments to improve performance and
2 efficiency.

3

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

12

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

19

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

25

- 26 • The Company’s *Energy Profiler On-Line (EPO)*. This is a tool that is used
27 effectively to identify energy use patterns within large commercial or industrial

1 facilities. It helps to identify energy and demand savings potential by offering
2 detail on current load duration as well as daily and historical building energy use.
3 EPO can provide an account manager an accurate snapshot of the facility before
4 meeting with the customer. The service can frame discussions to influence better
5 energy use practices and /or further technical assistance to validate the potential of
6 new energy efficient strategies and opportunities.

7

- 8 • *Commercial and Municipal Benchmarking Services* available through the EPA’s
9 Energy Star Portfolio Manager. This is a tool that provides a comparison of the
10 level of annual energy consumption for commercial or institutional customers to
11 that of other facilities with the same function. The buildings are ranked in
12 comparison to the other buildings in a national database, corrected for climate and
13 other key variables. The analysis considers all purchased energy types used in the
14 facility. The customer will be responsible for providing the utility data, and
15 tracking resource consumption and costs. The EPA’s Energy Star Benchmarking
16 system utilizing Portfolio Manager is used for this effort. The Company utilizes
17 the benchmarking data to qualify the customer and access the energy intensity of
18 the building. The Company then arranges a lighting and mechanical walk through
19 of the building. The Company then furnishes a written action plan identifying
20 efficiency cost and savings opportunities resulting from the benchmarking. The
21 process recognizes that a customer may be motivated by a comparison to peers as
22 well as the comparison to previous period’s consumption. The Company will use
23 the services of a Project Expediter and Technical Assessment vendor to generate
24 opportunity assessment, analysis and follow up services to steer the customer
25 toward an installation of efficiency measures.

26

27 Retro-commissioning is a process of testing, troubleshooting, and adjusting systems in an
28 existing building with the expectation to raise existing performance standards. The retro-

1 commissioning process can significantly reduce energy consumption with little financial
2 investment. Experience suggests that the cost of retro-commissioning can be paid back
3 through improved system performance, reduced energy costs, and improved occupant
4 comfort.

5

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

- 7 • Commercial and industrial buildings that have an electric demand greater than
8 500 kW, although smaller facilities may be good candidates for this service.
- 9 • HVAC and process systems
- 10 • Desire to reduce operating costs
- 11 • Use an energy management system

12 The objective of the Retro-commissioning Initiative is to:

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

17

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

24

THE NARRAGANSETT ELECTRIC COMPANY
d/b/a National Grid
R.I.P.U.C. Docket No. 4116
Attachment 4
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1 The Company will continue to review the results of the Retro-commissioning Initiative
2 with the Collaborative. We will consider forming a sub-committee of the Collaborative
3 to follow retrocommissioning projects and look at how to expand this offering.

4

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

9

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

26

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

3 **Overview**

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

10

11 **Eligible Population**

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

15

16 **Program Design**

17 The Small Business Direct Installation program offers incentives for the installation of
18 energy efficient fluorescent ballasts, lamps, and fixtures; hard-wired and screw-in
19 compact fluorescent systems; high intensity discharge systems; LED lighting, occupancy
20 sensors; energy management systems; thermostats, insulation, hot water reset and other
21 gas measures to be determined; and refrigeration measures such as evaporator fan
22 controls, efficient evaporator fan motors, automatic door closers and door heater control
23 devices for walk-in coolers. The Company arranges the equipment purchase through a
24 material vendor and installation with an administrative contractor. Continuing for 2010,
25 the Small Business Direct Installation program creates broader program depth and appeal
26 to customers by offering comprehensive energy efficiency opportunities intended to
27 install all cost-effective gas and electric opportunities through a turn-key direct

1 installation process. As stated previously, select cost-effective gas saving measures will
2 be added to the program, both a set of “standard” measures as well as installation of
3 “custom” gas measures that are deemed cost-effective for a particular customer. This
4 expansion provides customers the benefit to build on their potential energy savings by
5 examining a broader array of energy efficient opportunities outside the current available
6 measures. For example, LED lighting measures are being offered for customers with
7 case/display refrigeration units as a custom option which will be continued in 2010.

8
9 Rebates cover 70% of both labor and material costs. Customers may finance the
10 remainder for up to 24 months interest-free through their electric bill. If customers pay
11 their portion up front, they receive a 15% discount off the amount due (i.e. 15% off of the
12 30% co-pay amount).

13
14 The Small Business Direct Installation program leverages the audit conducted as part of
15 the former electric energy efficiency program to identify opportunities for customer
16 participation in what was previously the gas energy efficiency program. Program staff
17 have been trained to identify opportunities for gas efficiency. The customer may be
18 referred to other gas energy efficiency offerings, such as through the Commercial New
19 Construction program, if their needs cannot be satisfied through this program.

20
21 In 2010, the Small Business Direct Installation program will continue to offer a broad
22 selection of comprehensive measures, as well as the ability to install any site-specific
23 custom measures that are cost-effective. While potential for significant energy savings in
24 small/medium business rests on improving lighting energy use, the proposed
25 improvements to the program support more comprehensiveness in customers’ facilities
26 and build on the experience gained from delivering these services in prior years. These
27 additional energy efficiency measures will include but not be limited to non-prescriptive

1 lighting measures, motor and drive power improvements and other custom energy
2 efficiency opportunities.

3

4

5

6

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

	Projection
Projected kWh Sales:¹	
Low Income Residential	220,730,591
Non-Low Income Residential	2,816,251,537
Commercial & Industrial	<u>4,530,622,566</u>
Total	7,567,604,695
DSM Revenue per kWh²	\$0.0038
Projected DSM Revenues (\$000)	
Low Income Residential	\$838.7
Non-Low Income Residential	\$10,701.7
Commercial & Industrial	<u>\$17,216.3</u>
Total	\$28,756.7
Other Sources of DSM Revenues (\$000):	314
Projected DSM Fund Balance Interest in 2010	
Low Income Residential	\$0.0
Residential	\$18.2
Commercial & Industrial	<u>\$461.7</u>
Total	\$479.9
Projected Co-Payments by Customers in 2010: ³	
Low Income Residential	\$0.0
Residential	\$0.0
Commercial & Industrial	<u>\$0.0</u>
Total	\$0.0
Projected DSM Commitments at Year-End 2009:	
Low Income Residential	\$0.0
Residential	\$0.0
Commercial & Industrial	<u>\$5,310.7</u>
Total	\$5,310.7
Projected 2009 Fund Balance: ⁴	
Low Income Residential	\$0.0
Residential	(\$2,343.0)
Commercial & Industrial	<u>\$3,686.3</u>
Total	\$1,343.3
Projected Payments from ISO-NE During Transition Period and FCA1:	
Low Income Residential	\$40.6
Residential	\$517.8
Commercial & Industrial	<u>\$833.1</u>
Total ⁵	\$1,391.5
Projected Payments from RGGI in 2010:	
Low Income Residential	\$190.2
Residential	\$2,572.4
Commercial & Industrial	<u>\$3,903.0</u>
Total ⁶	\$6,665.6
Subtotal - Other Sources of DSM Revenues:	
Low Income Residential	\$230.8
Residential	\$765.4
Commercial & Industrial	<u>\$14,194.8</u>
Total	\$15,191.0
Total funding available in 2010 minus commitments coming in	
Low Income Residential	\$1,069.5
Residential	\$11,467.1
Commercial & Industrial	<u>\$26,100.4</u>
Total	\$38,637.0
Projected Total Funding Available in 2010:	
Low Income Residential	\$1,069.5
Residential	\$11,467.1
Commercial & Industrial	<u>\$31,411.1</u>
Total	\$43,947.7

Notes:

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

² DSM revenue per kWh is below the LCPP estimate of \$0.0044 for 2010.

³ Company accounting for copayments changed in 2009.

⁴ Fund Balance currently tracked by Residential and Commercial and Industrial Sectors; Low-income fund balance and interest not separated out, data is from July 2009. A projected negative fund balance at year end indicates that projected spending

⁵ The total projection of FCM revenue is allocated by kWh sales to each sector.

⁶ Projected RGGI Funding based on 60% of projected \$7M for 2010, plus \$2.47M anticipated carryover from 2009.

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

	Program Planning & Administration				Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
	External	Internal	Marketing				
Non-Low Income Residential							
ENERGY STAR [®] Homes	\$344.3	\$34.2	\$29.4	\$670.0	\$36.1	\$1,114.0	
ENERGY STAR [®] Central Air Conditioning	\$23.4	\$9.2	\$63.0	\$602.7	\$27.2	\$725.6	
ENERGY STAR [®] Heating	\$0.0	\$78.8	\$50.0	\$156.5	\$22.3	\$307.6	
EnergyWise	\$442.0	\$89.0	\$100.0	\$4,310.1	\$22.3	\$4,963.4	
ENERGY STAR [®] Lighting	\$240.0	\$99.5	\$329.3	\$1,010.0	\$177.7	\$1,856.6	
ENERGY STAR [®] Appliances	\$277.0	\$94.8	\$365.0	\$963.0	\$83.5	\$1,783.3	
EERMC - Residential	\$155.8	\$0.0	\$0.0	\$0.0	\$0.0	\$155.8	
Energy Efficiency Educational Programs	\$50.0	\$0.6	\$50.0	\$0.0	\$0.0	\$100.6	
Pilots	\$20.0	\$12.2	\$9.0	\$296.0	\$145.9	\$483.1	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$454.1	
Subtotal - Non-Low Income Residential	\$1,552.5	\$418.3	\$995.7	\$8,008.3	\$515.1	\$11,944.1	
Low Income Residential							
Single Family - Low Income Services	\$51.0	\$118.7	\$85.8	\$3,473.9	\$22.3	\$3,751.6	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$145.8	
Subtotal - Low Income Residential	\$51.0	\$537.0	\$85.8	\$3,473.9	\$22.3	\$3,897.4	
Commercial & Industrial							
Design 2000 ^{plus} ¹	\$425.2	\$538.5	\$28.2	\$8,646.7	\$256.8	\$9,895.3	
Energy Initiative ¹	\$456.1	\$565.6	\$37.6	\$7,165.7	\$147.8	\$8,372.7	
Small and Medium Business Program	\$312.5	\$90.5	\$65.0	\$7,641.7	\$56.0	\$8,165.7	
EERMC - C&I	\$344.3	\$0.0	\$0.0	\$0.0	\$0.0	\$344.3	
Shareholder Incentive	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$903.1	
Subtotal - Commercial & Industrial	\$1,538.1	\$1,194.6	\$130.7	\$23,454.1	\$460.5	\$27,681.2	
SRPP²						\$425.0	
Grand Total³	\$3,141.5	\$2,149.9	\$1,212.2	\$34,936.3	\$998.0	\$43,947.7	

Notes:

(1) Includes commitments for Design 2000^{plus} and for Energy Initiative:

Total Commitments for 2010 are expected to be \$7,667,300. The allocation between Energy Initiative and Design 2000^{plus} is

Design 2000^{plus} Commitments: \$5,567.3

Energy Initiative Commitments: \$2,100.0

These commitments reflect agreements with customers to provide funding for approved energy efficiency projects that will be completed after year-end 2009.

The split of commitments between the large C&I programs reflects the thinking that more of the commitments will be made in Design 2000^{plus} as projects become more comprehensive. This assumption will be re-assessed through the year.

(2) System Reliability Procurement Plan (SRPP) budget is for the C/I Audit and Automation Demand Response activities described in Docket 3931, page 22.

For more information, please see page 10 in this plan.

(3) Energy Action: Aquidneck Island budget for 2010 comes from 2009 RGGI funds, it is therefore not reflected in the 2010 budget.

Table E-3
Proposed 2010 Budget Compared to Approved 2008 Budget (\$000)

	Proposed Budget (2010)	Approved Budget (2009)	Change Compared to 2009
Non-Low Income Residential			
ENERGY STAR [®] Homes	\$1,077.9	\$860.6	\$217.3
ENERGY STAR [®] Central Air Conditioning	\$698.4	\$429.0	\$269.3
ENERGY STAR [®] Heating	\$285.3	\$209.9	\$75.4
EnergyWise	\$4,941.1	\$3,050.1	\$1,891.0
ENERGY STAR [®] Lighting	\$1,678.8	\$980.0	\$698.8
ENERGY STAR [®] Appliances	\$1,699.8	\$1,472.6	\$227.2
EERMC - Residential ¹	\$155.8	\$125.1	\$30.7
Energy Efficiency Educational Programs	\$100.6	\$100.9	(\$0.3)
Pilots	\$337.2	NA	NA
Subtotal - Non-Low Income Residential	\$10,974.9	\$7,228.2	\$3,746.7
Low Income Residential			
Single Family - Low Income Services	\$3,729.3	\$2,628.3	\$1,101.1
Commercial & Industrial			
Design 2000plus	\$9,638.5	\$7,440.2	\$2,198.3
Energy Initiative	\$8,224.9	\$6,896.4	\$1,328.5
Small and Medium Business Program	\$8,109.7	\$6,252.1	\$1,857.7
EERMC - C&I	\$344.3	\$189.9	\$154.4
Subtotal Commercial & Industrial	\$26,317.5	\$20,778.6	\$5,538.9
OTHER EXPENSE ITEMS			
Company Incentive	\$1,503.0	\$1,036.0	\$467.0
Program Design, Evaluation and Planning	\$998.0	\$700.2	\$297.8
SRPP ²	\$425.0	\$0.0	\$425.0
Subtotal Other Items	\$2,926.0	\$1,736.2	\$1,189.8
TOTAL BUDGET	\$43,947.7	\$32,371.2	\$11,576.4

¹ Includes EERMC allocation for Low Income Residential

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

	TRC Benefit/ Cost (2)	Total Benefit	Program Implementation Expenses	Customer Contribution (3)	Evaluation Cost	Shareholder Incentive (4)	¢/Lifetime kWh
Commercial & Industrial							
Design 2000 <i>plus</i>	6.13	\$32,015.2	\$4,071.210	\$891.4	\$256.8	NA	2.2
Energy Initiative	4.49	\$63,707.8	\$6,124.941	\$7,907.2	\$147.8	NA	3.3
Small and Medium Business ¹	4.04	\$31,282.4	\$6,046.476	\$1,641.4	\$56.0	NA	4.1
Energy Efficiency and Resources Management Council - Large C&I			\$344.300	\$0.0	\$0.0	NA	
SUBTOTAL	4.47	\$127,005.4	\$16,586.9	\$10,440.0	\$460.5	\$903.1	3.3
Low Income Residential							
Single Family - Low Income Services	2.08	\$8,114.9	\$3,729.3	\$0.0	\$22.3	\$145.8	16.7
Non-Low Income Residential							
ENERGY STAR [®] Homes	2.44	\$2,992.1	\$792.387	\$400.2	\$36.1	NA	21.5
ENERGY STAR [®] Central Air Conditioning	1.28	\$956.7	\$698.351	\$19.5	\$27.2	NA	12.9
ENERGY STAR [®] Heating	3.58	\$1,107.3	\$285.341	\$1.5	\$22.3	NA	187.1
EnergyWise	1.68	\$8,413.0	\$4,941.057	\$37.9	\$22.3	NA	6.7
ENERGY STAR [®] Lighting	5.81	\$13,135.6	\$1,678.814	\$404.4	\$177.7	NA	2.2
ENERGY STAR [®] Products	1.85	\$3,859.7	\$1,699.765	\$299.9	\$83.5	NA	6.7
Energy Efficiency Education Programs			\$100.648	\$0.0	\$0.0	NA	NA
Energy Efficiency and Resources Management Council - Residential			\$155.800	\$0.0	\$0.0	NA	NA
Pilots			\$337.206	\$0.0	\$145.9	NA	
SUBTOTAL	2.38	\$30,464.4	\$10,689.369	\$1,163.4	\$515.1	\$454.1	5.8
TOTAL	3.67	\$165,584.7	\$31,005.633	\$11,603.4	\$998.0	\$1,503.0	4.1

Notes:

- (1) Small Business program expenses are net of the projected customer co-pay for 2010 installations. These costs are included in the Customer Contribution column.
(2) TRC B/C Test = (Energy + Capacity + Resource Benefits) /
(Program Implementation + Evaluation Costs + Customer Contribution + Shareholder Incentive)
Also includes effects of free-ridership and spillover

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

	Benefits (000's)													Load Reduction in kW			MWh Saved		
	Total	Capacity			Energy					Non Electric		Summer	Winter	Lifetime	Maximum Annual	Lifetime			
		Generation		Trans	MDC	DRIPE	Winter		Summer		Resource						Non Resource		
		Summer	Winter				Peak	Off Peak	Peak	Off Peak								DRIPE	
Commercial & Industrial																			
Design 2000plus	\$32,015	1,638	\$0	\$1,424	\$3,362	\$1,224	\$8,309	\$3,824	\$4,254	\$1,806	\$6,117	\$0	\$58	3,463	2,059	54,066	15,208	236,437	
Energy Initiative	63,708	2,852	0	2,559	6,043	2,745	14,974	7,010	7,612	3,300	13,710	725	2,178	7,762	4,439	96,534	34,344	425,927	
Small and Medium Business	31,282	1,379	0	1,246	2,941	1,364	8,211	1,875	4,171	883	6,598	0	2,615	3,857	2,098	46,450	15,690	188,941	
SUBTOTAL	\$127,005	\$5,869	\$0	\$5,229	\$12,346	\$5,333	\$31,494	\$12,709	\$16,037	\$5,990	\$26,425	\$725	\$4,851	15,082	8,595	197,050	65,242	851,305	
Low Income Residential																			
Single Family - Low Income Services	8,115	89	\$0	\$54	\$126	\$67	\$526	\$614	\$259	\$291	\$636	\$3,477	\$1,976	199	386	2,573	1,887	23,331	
SUBTOTAL	\$8,115	\$89	\$0	\$54	\$126	\$67	\$526	\$614	\$259	\$291	\$636	\$3,477	\$1,976	199	386	2,573	1,887	23,331	
Non-Low Income Residential																			
	\$314																		
ENERGY STAR® Homes	2,992	234	\$0	\$119	\$281	\$79	\$126	\$149	\$65	\$71	\$138	\$1,705	\$24	223	160	4,964	414	5,704	
ENERGY STAR® Central Air Condition	957	127	\$0	\$79	\$187	\$90	\$206	\$54	\$148	\$46	\$137	-\$134	\$17	274	44	3,788	340	5,775	
ENERGY STAR® Heating	1,107	0	\$0	\$0	\$0	\$0	\$5	\$4	\$2	\$2	\$4	\$1,091	\$0	0	3	8	9	165	
EnergyWise	8,413	236	\$0	\$95	\$225	\$193	\$1,619	\$1,980	\$888	\$912	\$1,993	\$152	\$119	547	1,361	7,103	5,622	74,417	
ENERGY STAR® Lighting	13,136	358	\$0	\$33	\$316	\$422	\$2,342	\$2,721	\$1,146	\$1,281	\$3,804	\$0	\$713	1,194	2,389	11,032	11,173	102,929	
ENERGY STAR® Appliances	3,860	41	\$0	\$27	\$64	\$43	\$703	\$808	\$370	\$389	\$1,415	\$0	\$0	155	160	1,170	4,952	31,286	
SUBTOTAL	\$30,464	\$996	\$0	\$354	\$1,075	\$828	\$5,001	\$5,716	\$2,618	\$2,701	\$7,491	\$2,813	\$872	2,393	4,117	28,064	22,509	220,277	
TOTAL	\$165,585	\$6,953	\$0	\$5,636	\$13,548	\$6,228	\$37,020	\$19,039	\$18,913	\$8,981	\$34,552	\$7,015	\$7,699	17,674	13,098	227,688	89,637	1,094,913	

Table E-6
Comparison of Goals to Prior Year

Program	Proposed 2010		2009		Difference	
	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh) (1)	Participants	Annual Energy Savings (MWh)	Participants
Commercial & Industrial						
Design 2000 <i>plus</i>	15,208	348	10,423	239	4,784	110
Energy Initiative	34,344	292	28,808	245	5,537	47
Small and Medium Business	15,690	1,188	11,030	835	4,659	353
SUBTOTAL	65,242	1,828	50,261	1,319	14,980	509
Low Income Residential						
Single Family - Low Income Services	1,887	2,161	1,340	1,439	547	722
SUBTOTAL	1,887	2,161	1,340	1,439	547	722
Non-Low Income Residential						
ENERGY STAR® Homes	414	300	648	380	(234)	(80)
ENERGY STAR® Central Air Conditioning Program	340	1,487	93	546	247	941
ENERGY STAR® Heating	9	314	83	250	(74)	64
EnergyWise	5,622	8,122	4,392	6,194	1,229	1,928
ENERGY STAR® Lighting	11,173	110,330	18,074	68,548	(6,902)	41,782
ENERGY STAR® Appliances	4,952	11,150	4,439	7,600	513	3,550
SUBTOTAL	22,509	131,703	27,729	83,518	-5,221	48,185
TOTAL	89,637	135,693	79,331	86,276	10,306	49,417

Notes:

- (1) Net Savings calculated under Total Resource Cost Test.
- (2) Lower MWh per participant for Low Income Services due to 2009 evaluation findings.
- (3) Lower MWh per participant for Energy Star Heating due to a correction in measure mix.
- (4) Lower MWh per participant for Energy Star Lighting due to lower inputs for free-ridership, spillover rate, and in-service rate.

Table E-7
Annual Electric Avoided Costs for Rhode Island

Year	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL
	Existing Heating	New Heating	Hot Water	All	Non Heating	Heating	All	
	3-mon.	5-mon.	annual	6-mon.	annual	5-mon.	6-mon.	5-mon.
2007	13.42	13.19	11.96	12.82	9.92	11.16	10.79	12.04
2008	14.51	14.27	12.96	13.88	10.93	12.23	11.84	13.12
2009	13.94	13.70	12.44	13.32	10.40	11.67	11.29	12.56
2010	13.34	13.11	11.88	12.74	9.85	11.08	10.71	11.97
2011	12.82	12.60	11.40	12.24	9.37	10.56	10.21	11.45
2012	12.43	12.21	11.04	11.86	9.01	10.17	9.83	11.06
2013	11.71	11.50	10.38	11.16	8.34	9.46	9.13	10.35
2014	11.78	11.56	10.44	11.23	8.41	9.53	9.20	10.42
2015	11.73	11.51	10.39	11.18	8.36	9.48	9.14	10.37
2016	11.89	11.67	10.53	11.33	8.50	9.63	9.30	10.52
2017	314.00	11.95	10.80	11.61	8.77	9.92	9.57	10.81
2018	12.08	11.86	10.72	11.52	8.69	9.83	9.49	10.72
2019	12.03	11.81	10.67	11.47	8.64	9.78	9.44	10.67
2020	12.17	11.95	10.80	11.61	8.76	9.91	9.57	10.80
2021	12.29	12.06	10.91	11.72	8.87	10.03	9.69	10.92
2022	12.57	12.35	11.17	12.00	9.14	10.32	9.97	11.20
2023	12.70	12.47	11.28	12.12	9.23	10.42	10.06	11.32
2024	12.83	12.60	11.40	12.24	9.32	10.52	10.17	11.43
2025	12.95	12.72	11.51	12.36	9.42	10.63	10.27	11.54
2026	13.08	12.85	11.63	12.49	9.51	10.73	10.37	11.66
2027	13.21	12.98	11.74	12.61	9.61	10.84	10.47	11.78
2028	13.35	13.11	11.86	12.74	9.70	10.95	10.58	11.89
2029	13.48	13.24	11.98	12.86	9.80	11.06	10.68	12.01
2030	13.61	13.37	12.10	12.99	9.90	11.17	10.79	12.13
2031	13.75	13.51	12.22	13.12	10.00	11.28	10.90	12.25
2032	13.89	13.64	12.34	13.25	10.10	11.39	11.01	12.38
2033	14.03	13.78	12.46	13.39	10.20	11.51	11.12	12.50
2034	14.17	13.91	12.59	13.52	10.30	11.62	11.23	12.63
2035	14.31	14.05	12.72	13.65	10.40	11.74	11.34	12.75
2036	14.45	14.19	12.84	13.79	10.51	11.86	11.45	12.88
2037	14.60	14.34	12.97	13.93	10.61	11.98	11.57	13.01
2038	14.74	14.48	13.10	14.07	10.72	12.10	11.68	13.14
2039	14.89	14.62	13.23	14.21	10.82	12.22	11.80	13.27
2040	14.42	14.21	13.01	13.85	11.73	12.92	12.57	13.51

From the 2009 Avoided Cost Study

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

	Proposed 2010 Budget (\$000)	Commitments (\$000)	Other Funding Excluded From the Eligible Spending Budget	Eligible Sector Spending Budget (\$000)
Non-Low Income Residential				
ENERGY STAR [®] Homes	\$1,114.0			
ENERGY STAR [®] Central Air Conditioning	\$725.6			
ENERGY STAR [®] Heating	\$307.6			
EnergyWise	\$4,963.4			
ENERGY STAR [®] Lighting	\$1,856.6			
ENERGY STAR [®] Appliances	\$1,783.3			
EERMC - Residential	\$155.8		\$155.8	
Energy Efficiency Educational Programs	\$100.6			
Pilots	\$483.1			
Shareholder Incentive	\$454.1		\$454.1	
Subtotal - Residential	\$11,944.1	\$0.0	\$609.9	\$11,334.2
Low Income Residential				
Single Family - Low Income Services	\$3,751.6			
Shareholder Incentive	\$145.8	\$314.0	\$145.8	
Subtotal - Low Income Residential	\$3,897.4	\$0.0	\$145.8	\$3,751.6
Commercial & Industrial				
Design 2000plus	\$9,895.3	\$5,567.3		
Energy Initiative	\$8,372.7	\$2,100.0		
Small and Medium Business	\$8,165.7	\$0.0		
EERMC - C&I	\$344.3		\$344.3	
Shareholder Incentive	\$903.1		\$903.1	
Subtotal - Commercial & Industrial	\$27,681.2	\$7,667.3	\$1,247.4	\$18,766.4
Grand Total	\$43,947.7	\$7,667.3	\$2,003.1	\$33,852.3

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

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sector	Spending Budget	Incentive Rate	Target Incentive	Target Incentive for Performance Metrics	Target Incentive - Annual kWh Savings	Annual kWh Savings Goal	Threshold kWh Savings	Target Incentive Per kWh	Incentive Cap Annual kWh Savings
Low Income Residential	\$3,751,645		\$148,449	\$0	\$148,449	1,886,826	1,132,095	\$0.079	\$185,561
Non-Low Income Residential	\$11,334,199		\$508,483	\$60,000	\$448,483	22,508,901	13,505,341	\$0.020	\$560,604
Commercial & Industrial	\$18,766,423		\$832,568	\$90,000	\$742,568	65,241,586	39,144,952	\$0.011	\$928,210
Total	\$33,852,267	4.40%	\$1,489,500	\$150,000	\$1,339,500	89,637,313	53,782,388		\$1,674,375

Notes:

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

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

	2010
Gas Energy Efficiency Surcharge per Dth	\$0.150
Forecasted Use (Dth):	
TOTAL THROUGHPUT	
Low Income Residential Non-Heating	44,195
Low Income Residential Heating	1,382,587
Low-Income subtotal	1,426,782
Residential Non-Heating	463,155
Residential Heating	15,995,481
Residential subtotal	16,458,636
Small C&I	2,543,761
Medium C&I	5,755,122
Large LLF	2,818,229
Large HLF	1,097,728
Extra Large LLF	1,280,531
Extra Large HLF	5,253,872
Opt out eligible	-1,266,565
Non Firm	10
C&I Subtotal	17,482,678
TOTAL THROUGHPUT	35,368,095
Collections by Sector:	
Uncollectible percentage (from Gas Rate Case)	2.46%
Residential Low Income Surcharge Collections	\$208,700
Low Income Weatherization in Base Rates	\$200,000
Total Collections - Low-Income Residential	\$408,700
Total Collections - Non-Low Income Residential	\$2,408,000
Total Collections - Commercial and Industrial	\$2,557,800
TOTAL PROJECTED COLLECTIONS	\$5,374,500
OTHER SOURCES OF FUNDING	
Prior Year Fund Balance by Sector¹	
Low Income Residential	\$0
Non-Low Income Residential	(\$2,186,286)
Commercial and Industrial	\$1,013,897
Projected DSM Fund Balance Interest in Year	
Low Income Residential	\$0
Non-Low Income Residential	(\$15,678)
Commercial and Industrial	\$53,005
Projected DSM Commitments at Prior Year-End	
Low Income Residential	\$0
Non-Low Income Residential	\$0
Commercial and Industrial	\$1,184,000
SUBTOTAL OTHER SOURCES	
Low Income Residential	\$0
Non-Low Income Residential	(\$2,201,965)
Commercial and Industrial	\$2,250,901
POTENTIAL TOTAL FUNDING AVAILABLE MINUS COMMITMENTS	
Low Income Residential	\$408,700
Non-Low Income Residential	\$206,035
Commercial and Industrial	\$3,624,701
	\$4,239,437
POTENTIAL TOTAL FUNDING AVAILABLE	
Low Income Residential	\$408,700
Non-Low Income Residential	\$206,035
Commercial and Industrial	\$4,808,701
Total	\$5,423,437

¹ Fund Balance currently tracked by Residential and Commercial and Industrial Sectors; Low-income fund balance and interest not separated out. Fund balance data from August 2009.

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

Program	External	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
NON LOW-INCOME RESIDENTIAL:						
ENERGY STAR® Homes	10,920	26,401	0	0	14,391	51,712
Building Practices and Demonstration Program	0	4,984	0	24,072	0	29,056
Residential High-Efficiency Heating Program	10,691	98,716	37,435	368,581	39,975	555,398
EnergyWise	9,760	23,335	33,630	809,043	0	875,768
EERMC - Residential	52,300					52,300
Shareholder Incentive						67,700
Subtotal - Non-Low Income Residential	83,671	153,435	71,065	1,201,696	54,366	1,631,933
LOW-INCOME RESIDENTIAL:						
Single Family Low Income Services	0	20,110	0	374,753	0	394,863
10						18,700
Subtotal - Low Income Residential	0	20,110	0	374,753	0	413,563
COMMERCIAL AND INDUSTRIAL:						
Commercial High Efficiency Heating Program	30,950	131,985	56,000	407,431	36,900	663,266
Commercial Energy Efficiency Program	296,211	328,665	169,165	1,420,000	108,733	2,322,774
Building Practices & Demonstration Program	0	0	0	0	0	0
EERMC - C&I	55,900	0	0	0	0	55,900
Commitments				445,000		445,000
Shareholder Incentive						128,900
Subtotal - Commercial & Industrial	383,061	460,650	225,165	2,272,431	145,633	3,615,840
Grand Total	466,732	634,196	296,230	3,848,880	199,999	5,661,337

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

	Proposed Budget (2010)¹	Approved Budget (2009)	Change Compared to 2009
Non-Low Income Residential			
Residential High-Efficiency Heating, Water-Heating, Controls Program	\$515	\$912	-\$396
EnergyWise	\$876	\$1,032	-\$156
Building Practices and Demonstration Program	\$29	\$38	-\$9
ENERGY STAR [®] Homes	\$37	\$15	22
EERMC - Residential	52	54	-2
Subtotal - Non-Low Income Residential	1,510	2,052	-542
			0
Low Income Residential			0
Low Income	395	1,341	-946
Subtotal - Low Income Residential	395	1,341	-946
			0
Commercial & Industrial			0
Commercial High Efficiency Heating Equipment	626	381	245
Commercial Energy Efficiency Program	2,214	2,053	161
Comm Building Practices & Demonstration Program	0	73	-73
EERMC - C&I	56	48	8
Subtotal Commercial & Industrial	2,896	2,555	341
		10	-10
OTHER EXPENSE ITEMS			0
Company Incentive	\$214	\$267	-\$52
Program Design, Evaluation and Planning	\$200	\$221	-\$21
Subtotal Other Items	\$414	\$488	-\$74
TOTAL BUDGET	\$5,216	\$6,437	-\$1,221

¹ Does not include commitments. Commitments projected to be \$445,000 in 2010.

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

	Rhode Island Benefit/ Cost	Total Benefit	Program Implementation Expenses	Customer Contribution	Evaluation Cost	Shareholder Incentive
Residential Programs						
Residential High-Efficiency Heating, Water-Heating, Controls Program	3	3,704	555	721	40	NA
Energy Wise	3	2,769	767	286	0	NA
Energy Star Homes	NA	NA	15	0	14	NA
Building Practices and Demonstration Program	NA	NA	29	0	0	NA
EERMC Assessment-Residential	0	0	52	0	0	NA
SUBTOTAL	3	6,473	1,419	1,007	54	71
Low Income Programs						
Low Income	1	413	286	0	0	20
Large Commercial & Industrial						
Commercial Energy Efficiency Program	2	9,894	2,214	2,193	109	NA
Commercial High Efficiency Heating Equipment	3	1,701	626	-63	37	NA
EERMC Assessment-C&I	0	10	56	0	0	NA
SUBTOTAL	2	11,595	2,896	2,130	146	135
TOTAL	2.26	18,480.8	4,601.0	3,136.9	200.0	224.8

Notes:

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

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

	Benefits (\$000)			MMBTU Gas Saved	
	Total(1)	Natural Gas(2)	Participant Resource(3)	Annual(4)	Lifetime(5)
Commercial & Industrial					
Commercial Energy Efficiency Program	9,894	9,894	2,193	82,198	986,381
Commercial High Efficiency Heating Equipment	1,701	1,701	-63	8,624	172,482
EERMC - C&I	NA	NA	NA	NA	NA
SUBTOTAL	11,595	11,595	2,130	90,823	1,158,863
Low Income Residential					
Low Income	413	378	0	1,569	31,372
SUBTOTAL	413	378	0	1,569	31,372
Non Low Income Residential					
Energy Star Homes	0	0	0	0	0
Energy Wise	2,769	2,769	286	11,478	229,553
Residential High-Efficiency Heating, Water-Heating, Controls Program	3,704	3,704	721	17,278	309,149
Building Practices and Demonstration Program	0	10	0	0	0
EERMC - Residential	NA	NA	NA	NA	NA
SUBTOTAL	\$6,473	\$6,483	\$1,007	28,756	538,702
TOTAL	\$18,481	\$18,456	\$3,137	121,147	1,728,936

Notes:

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

Table G-6
Comparison of Goals with Prior Year
2010

Program	Proposed 2010		Proposed 2009		Difference	
	Annual Energy Savings (MMBTU Natural Gas)	Participants	Annual Energy Savings (MMBTU Natural Gas)	Participants	Annual Energy Savings (MMBTU Natural Gas)	Participants
Commercial & Industrial						
Commercial Energy Efficiency Program	82,198	430	82,198	305	0	125
Commercial High Efficiency Heating Equipment	8,624	250	5,683	150	2,941	100
Comm Building Practices & Demonstration Program	0	0	1,451	1	-1,451	-1
EERMC - C&I						
SUBTOTAL	90,823	680	89,333	456	1,490	224
Low Income Residential						
Low Income	1,569	86	13,690	319	-12,121	-233
SUBTOTAL	1,569	86	13,690	319	-12,121	-233
Non-Low Income Residential						
Energy Star Homes	0	0	0	0	0	0
Energy Wise	11,478	1,679	15,020	2,243	-3,542	-564
Residential High-Efficiency Heating, Water-Heating, Controls Progr	17,278	1,861	22,641	2,370	-5,363	-509
Building Practices and Demonstration Program	0	10	0	10	0	0
EERMC - Residential						
SUBTOTAL	28,756	3,550	37,660	4,623	-8,905	-1,073
TOTAL	121,147	4,316	140,683	5,398	-19,537	-1,082

Note:

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

**Table G-7
Avoided Costs
2010**

Used in B/C Model for Rhode Island

	RESIDENTIAL				COMMERCIAL & INDUSTRIAL			ALL RETAIL
	Heating		Hot Water	All	Non Heating	Heating	All	
Year			annual	6-mon.	annual	5-mon.	6-mon.	5-mon.
2,007								
2,008								
2,009	12		9	11	7	9.05	8.41	9.46
2,010	13		10	12	8	10.34	9.72	10.76
2,011	14		11	13	9	11.03	10.40	11.45
2,012	14		11	13	10	11.52	10.91	11.96
2,013	14		11	13	10	11.55	10.93	11.98
2,014	14		11	13	10	11.63	11.02	12.06
2,015	14		11	13	10	11.74	11.12	12.17
2,016	15		11	14	10	11.89	11.26	12.31
2,017	15		12	14	10	12.09	11.46	12.51
2,018	15		12	14	10	12.32	11.69	12.74
2,019	15		12	14	11	12.42	11.81	12.86
2,020	10		12	14	10	12.24	11.63	12.68
2,021	15		12	14	10	12.09	11.47	12.52
2022	14.88		11.77	13.87	10.23	12.19	11.57	12.61
2023	15.10		11.94	14.08	10.40	12.41	11.77	12.82
2024	15.51		12.34	14.49	10.81	12.82	12.18	13.23
2025	15.64		12.46	14.61	10.92	12.95	12.31	13.35
2026	15.76		12.58	14.73	11.04	13.08	12.43	13.48
2027	15.89		12.70	14.86	11.17	13.21	12.56	13.60
2028	16.02		12.82	14.98	11.29	13.34	12.69	13.73
2029	16.15		12.94	15.11	11.41	13.47	12.82	13.86
2030	16.28		13.06	15.24	11.54	13.60	12.95	13.99
2031	16.41		13.19	15.37	11.66	13.74	13.08	14.12
2032	16.55		13.31	15.50	11.79	13.87	13.21	14.25
2033	16.68		13.44	15.63	11.92	14.01	13.35	14.39
2034	16.81		13.57	15.77	12.05	14.15	13.48	14.52
2035	16.95		13.70	15.90	12.18	14.29	13.62	14.66
2036	17.09		13.83	16.04	12.31	14.43	13.76	14.79
2037	17.23		13.96	16.17	12.45	14.57	13.90	14.93
2038	17.37		14.09	16.31	12.58	14.72	14.04	15.07
2039	17.51		14.23	16.45	12.72	14.86	14.18	15.21
2040								

From 2009 Avoided Costs Study

Table G-8
Target 2010 Shareholder Incentive
2010

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)
Sector	Budget	Target Incentive	Annual Savings Goal (MMBTU)	Threshold Savings (MMBTU)	Target Incentive Per MMBTU
Low Income Residential	\$394,863	\$18,700	1,569	941	\$11.921
Non-Low Income Residential	\$1,511,933	\$67,700	28,756	17,253	\$2.354
Commercial & Industrial	\$2,986,040	\$128,900	90,823	54,494	\$1.419
Total	4,892,837	215,300	121,147	72,688	

Notes:

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

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

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

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

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

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

1 **Pilots -- Deep Energy Retrofit, Energy Star Homes V3, Heat Pump Hot Water**
2 **Heaters.** Evaluation studies of new pilot programs to be started in 2010. These will
3 include process and impact evaluations if programs have served enough customers to
4 make the studies worthwhile.

5
6 **NEEP EM&V Forum.** Includes studies to done in conjunction with other states in the
7 Northeast with the goals of reducing costs and providing results using more common
8 methodologies. The studies include: assessment of commercial and industrial lighting
9 persistence through on-site surveys; collection of lighting and HVAC load shape data
10 through metering and data sharing; development of common evaluation techniques for
11 gas and electric technologies and programs; development of improved estimates of
12 measure incremental costs for common measures; and various miscellaneous planning
13 studies.

14
15 **Commercial Energy Efficiency Program (CEEP)/Custom.** Impact evaluation of
16 Custom gas efficiency measures such as boiler controls and larger process boilers.

17
18 **Residential High Efficiency Heating Equipment (HEHE).** Impact evaluation of the
19 residential heating and water heating equipment using billing analysis. This project will
20 be done in conjunction with the GasNetworks consortium. An RFP for this project has
21 already gone out. Results are expected in the second quarter of 2010.

22
23 **Combined Heat and Power (CHP).** Includes the metering of combined heat and power
24 projects. The metering will include gas consumption, electric output and measurement of
25 useful heat recovered. An RFP has been sent out for the first site.

26
27 **C&I High Efficiency Heating Equipment.** Impact evaluation of the large commercial
28 heating equipment using billing analysis and possibly end-use metering.

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

2010 PERFORMANCE METRICS

Introduction

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

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

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

* Targets described below are not final

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

1 Where metric targets are not final, performance targets will be based on 2009 results. As
2 2009 results are not yet available, this Attachment provides a process and framework for
3 the calculation of metric targets once results are available. For one metric (Core
4 Performance Buildings), the targets may be set early in 2010. For the two non-lighting
5 metrics, preliminary MWh targets are included here consistent with the program savings
6 estimates provided in the Settlement, Table E-5.

7
8 Where partial credit is recommended, the Parties agree that, partial credit will be awarded
9 for performance that does not meet the specific numeric target, in recognition of the
10 Company's effort and in recognition that Rhode Island consumers benefit from even
11 partial progress toward the metric's objective. No extra incentive will be awarded for
12 exceeding the numeric target.

13
14 The performance level at which partial achievement will be credited is the "threshold."
15 For the one metric structured with partial credit in 2010 that is continuing from 2009, the
16 threshold will be greater than or equal to final 2009 performance after consideration of
17 the unique attributes of the metric. This provides continuity in the structure of the metric
18 at the same time as creating a clear standard for the Company from which it must
19 improve in order to receive an incentive.

20
21 The performance level at which the full incentive will be credited is the "target." The
22 incentive for two metrics will be linearly scaled between the threshold and the target. For
23 the Industrial metric that does not allow for this kind of scaling, the incentive will be
24 credited for incremental levels of performance.

25
26 **Residential Metric 1: ENERGYWISE FOLLOW UP MEASURES**

27 Metric: In 2010, the Company will calculate the number of follow-up measures, defined
28 as weatherizations, installed by EnergyWise Single Family household customers divided

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1 by the number of measures recommended in the Energy Wise audit. The Company will
 2 increase the percentage of customers installing follow-up measures by 10% over the
 3 2008-2009 baseline penetration of 30%.

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

6
 7 Discussion: The EnergyWise Program began in 1998. In 2007, it became an integrated
 8 gas and electric program. From January 2008 until September 2009, 30% of
 9 recommended follow-up measures were installed by customers. The following chart
 10 illustrates baseline data:

Measure	Recommended	Installed	Percent
2008 Electric Heat Weatherization	41	33	
2008 Gas Heat Weatherization	1246	405	
2009 Electric Heat Weatherization through 9/09	63	28	
2009 Gas Heat Weatherization through 9/09	1329	330	
1.5 Year Total	2679	796	30%

11
 12 In 2010, the Company proposes to audit 3,763 electric and non-electric Single Family
 13 households.

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

ENERGYWISE FOLLOW UP MEASURES			
	Penetration %	Incentive	% of Incentive
Threshold	35% (2009 percent + 5%)	\$10,000	33%
Target	40% (2009 rate +10%)	\$30,000	100%

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

2
3 Metric: The Company will secure \$2 million dollars in outside funding for application in
4 some combination of residential, commercial, and low-income, gas and electric programs
5 in 2010. This funding will only be used to increase loan and financing funds relative to
6 2009. Funding counted toward success in this metric can not be funds used to increase
7 overall savings or the shareholder incentive. Funding counted toward success in this
8 metric can also not be funds that will be used to offset future DSM charges. The funds
9 need to be secured in 2010, but need not be spent in 2010 to fulfill the objective of the
10 metric (funds secured but not allocated in 2010 will be used in 2011).

11
12 Objective: The metric supports expanding and transforming the ways the Company
13 secures energy efficiency funding. The Company shall be incentivized for raising funds
14 from outside sources because these funds help diminish the rate at which the DSM
15 Charge increases. Additionally, creating sustainable loan funds can diminish DSM
16 increases over a long term period.

17
18 Discussion: Outside sources of funding may come from the RGGI 40% Innovation
19 funding, ARRA awards, or other sources of funding.

20
21 Partial Performance: Securing at least 60% of the \$2 million dollars in outside funding is
22 the proposed threshold. The incentive for performance between the threshold and the
23 target will be scaled proportionately.

24

RESIDENTIAL AND COMMERCIAL OUTSIDE FUNDING			
Performance	Funding	Incentive	% of Incentive
Threshold	\$1,200,000	\$10,000	33%
Target	\$2,000,000	\$30,000	100%

25

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

3
4 Metric: The Company will achieve a target amount of MWh savings from subprograms
5 other than prescriptive lighting in the Energy Initiative program in 2010. The target will
6 be calculated as the net annual MWh savings from all other subprograms¹ estimated as
7 part of the planned savings for the Energy Initiative program in 2010.

8
9 Objective: This metric encourages the Company to seek comprehensive retrofit projects
10 in existing Commercial and Industrial customer facilities that go beyond prescriptive
11 lighting.

12
13 Discussion: The percentage of savings from prescriptive lighting in the Energy Initiative
14 Program has been increasing over the past few years. This type of measure distribution
15 has helped the Company achieve savings goals but this has perhaps been achieved at the
16 expense of measure diversity. This metric complements and reinforces the overall
17 program savings goals by establishing a performance metric focusing on other
18 subprogram savings. The metric incentive will only be earned only if other subprogram
19 savings meets or exceeds 100% of the kWh savings built into the savings goals.

20
21 As mentioned above, the proposed target is 100% of the MWh savings from all Energy
22 Initiative subprograms except prescriptive lighting consistent with the savings goals for
23 2010. The goal is set as a MWh target for savings, rather than a percentage of program
24 savings, because this provides a clearer target than a percentage, which would be affected
25 by how much prescriptive lighting savings are achieved. There is no threshold for this
26 metric. Without a threshold, this becomes an “all-or-nothing” performance metric. The
27 parties propose this treatment because it efficiently complements the MWh savings

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

1 incentive for this sector. The Company will share quarterly subprogram MWh savings
2 information with the Collaborative to track metric performance.

3
4 Metric Performance: The following is for achievement of the target savings from Energy
5 Initiative other than prescriptive-lighting.

6

ENERGY INITIATIVE OTHER SUBPROGRAM SAVINGS			
Performance	MWh Savings	Incentive	% of Incentive
Target	7.944 MWh	\$30,000	100%

7 There is no threshold for this metric.

8
9 **C&I Metric 2: Comprehensive Industrial Integration of Gas and Electric Measures**

10
11 Metric: The Company will work with 2 more industrial customers than year-end 2009 to
12 sign an comprehensive agreement that includes both a gas and an electric measure.
13 Qualifying customers will be customers that have a completed TA study that identifies at
14 least three gas and three electric energy efficiency measures, and commit in 2010 to
15 installing at least one gas and one electric measure. A commitment will be in the form of
16 a signed rebate application; installation need not be in 2010.

17
18 Objective: Demonstrate the Company is integrating gas and electric industrial programs.

19
20 Discussion: For 2010, the Company is proposing a focus on integrated gas and electric
21 industrial energy efficiency. The Company will develop a technical assistance (TA)
22 study for large industrial clients interested in energy efficiency initiatives. The TA study
23 will identify both gas and electric measures. After the technical analysis study is
24 completed, the Company will offer rebates to the customer for potential projects. If the
25 customer commits to the energy efficiency projects, they will sign the rebate application,
26 making a commitment to install the selected measures.

27

1 At year-end 2009, the Company will update the number of commitments signed for this
2 metric in 2009 in order to establish a threshold. The target will be the year-end number
3 plus two more signed agreements. This metric will track only those commitments which
4 include at least one gas and electric measure. The incentive for performance between the
5 threshold and the target will be scaled proportionately.

6

COMPREHENSIVE INDUSTRIAL INTEGRATION			
Performance	Signed Agreements	Incentive	% of Incentive
Threshold	X (2009 Participation)	\$10,000	33%
Target	X+2	\$30,000	100%

7

8

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

10

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

15

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

21

22 Discussion: As noted in Attachment 4, Core Performance is a suite of technical resources
23 and design guides that help design professionals create commercial buildings that are
24 energy efficient and provide a healthy work environment for occupants. The Company
25 has been promoting Core Performance in Rhode Island since 2006 to address the

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1 efficiency needs of new construction projects for commercial buildings less than 75,000
2 sf. This effort has featured several training programs on the topic offered in RI.

3

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

15

16 The Company projects that it will sign 3 or 4 agreement during 2009. At year-end, the
17 Company will update the number of signed agreements. The 2010 threshold will be the
18 same number of agreements signed in 2009, and the target will be an additional two
19 agreements.

20

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

24

CORE PERFORMANCE BUIDLINGS			
Performance	Signed Agreements	Incentive	% of Incentive
Threshold	X (2009 Participation)	\$10,000	33%
Target	X+2	\$30,000	100%

25

26

1 experts to create new strategies that market their services and products to a community.
2 Essentially, new programs offering are not created. This design supports our long term
3 goal for replicating the program in additional communities.

4

5 **A. Community Partnerships**

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

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

1 energy efficiency outreach across the islands. Creating such a wide variety of
2 partnerships will enable to company to cast a wide net as well as to test which types of
3 community partnerships are most effective.

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

8

9 **B. Company-led Marketing**

10 Concurrent with the grassroots community work, the company will push it's own
11 marketing for a full-circle approach.

12 These include:

- 13 • “Ambassador Kits” that can be distributed to high profile and influential citizens
14 on both the residential and business sides. These kits will give them digestible
15 information on energy efficiency that they can share with their circle.
- 16 • A micro-site branded for this community, with local events, pictures, and news.
17 www.powerofaction.com/aquidjames/
- 18 • Radio and Advertising through local media: Newport Daily News, Sakonnet
19 Times, Jamestown Weekly, and WADK.
- 20 • Door Hangers for homes and businesses on the most constrained areas of the Grid
- 21 • Bill-stuffers for residential and small business customers
- 22 • E-mail blasts to residential and commercial customers
- 23 • PR efforts to get coverage of high-profile citizens and local businesses who
24 participate
- 25 • Energy Efficiency tip-sheets for local rental companies

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

9

10 **Cooperation with Transmission and Distribution**

11 The company is also applying for ARRA funds to conduct a smart grid test in the

12 Newport area to address certain transmission and distribution issues. In the coming year,

13 the company will explore strategies to coordinate and maximize returns from the two

14 efforts occurring in this geographic space. Potential synchronization includes shared

15 marketing materials and targeted marketing to customers on constrained feeders.

16

17 **Program Goals**

18 Program goals were established after calculating 2008 participation and savings through

19 National Grid energy efficiency programs. It should be noted that using 2008 for a

20 baseline is ambitious – participation already increased in 2008 due to high gas prices. In

21 light of overall state goals for 2010, however, the company feels it is prudent to stretch in

22 this initiative. While absolute savings goals still remain modest, the goals do reflect a

23 tripling of electric savings, and in some cases, more than tripling the baseline

24 participation levels.

25 In regards to Gas C&I savings, goals reflect a change in the marketplace. Of 5340 C&I

26 electric customers, only 1688 are also gas customers. Most previous C&I gas savings on

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1 Aquidneck has come from large businesses. Because of that, many of the massive savings
 2 opportunities with large customers have already been realized. The community initiative
 3 will take advantage of this situation to improve our integrated gas and electric offerings
 4 on the small business level. We will push direct install on thermostats and spray valves in
 5 small businesses, particularly restaurants and hotels.

6
7

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

8

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

12

13 **Evaluation**

14 During second quarter 2010, a program evaluation is planned to begin in order to study
 15 process and savings impact. The evaluation will determine the cost effectiveness of the
 16 program by measuring increased participation in existing programs, investigate whether
 17 there are any transmission and distribution deferral benefits from the increase in energy

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1 efficiency activity in the area, and assess the overall impact of the new strategies
2 including the marketing campaign. The evaluation will also collect best practices in
3 order to inform expansion to additional communities in time for the 2011 planning
4 period.

5