

November 7, 2008

#### VIA HAND DELIVERY & ELECTRONIC MAIL

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

Re: Docket 4000 - The Narragansett Electric Company, d/b/a National Grid

**Energy Efficiency Program Plan for 2009** 

**Revised Settlement** 

Dear Ms. Massaro:

Enclosed please find ten (10) copies of a revised Settlement in this docket setting forth the proposed terms of the Demand-Side Management Programs for 2009 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, and The Rhode Island Office of Energy Resources (together, the "Parties"). The Parties hereby submit this revised agreement for the Commission's approval in this proceeding.

We have revised and are re-filing this Settlement agreement because, subsequent to filing, there were two errors that were discovered in the electric energy efficiency plan that required correction. The first error is that the total electric program budget exceeded the available funding by approximately \$85,000, and that budgets for the three sectors did not follow the funding allocation mechanism agreed to by the parties. The second error is that the benefit/cost ratio calculation for the Small and Medium Business Program did not reflect the full customer contribution to this program as required by the Total Resource Cost test. Correcting these errors affects many of the savings, benefits, participation, and incentive values included in Attachment 5, sections of the Plan, and Attachments 2 and 8, which use numbers from Attachment 5. The revised Plan contains no changes to the funding proposal found in the original Plan.

Consequently, we are re-filing the entire Settlement including the plans with the revisions that are described above. The revisions have been agreed to by all the parties to the Settlement filed on November 3, 2008. The revised Plan includes new signature pages from all of the parties indicating their support of the revised Plan.

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

Very truly yours,

Thomas R. Teehan

**Enclosures** 

cc: Docket 3892 Service List

RI DSM Collaborative Members Steve Scialabba, RI Division

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS PUBLIC UTILITIES COMMISSION

	)	
In Re: The Narragansett Electric Company d/b/a	)	
National Grid	)	Docket No. 4000
Energy Efficiency Program Plan for 2009	)	
	)	

# ENERGY EFFICIENCY PROGRAM PLAN FOR 2009 <u>SETTLEMENT OF THE PARTIES</u>

(Revised November 7, 2008)

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#### **ATTACHMENTS**

- 1. Summary of Proposed Changes to Residential Programs for 2009
- 2. 2009 Residential Electric and Gas Energy Efficiency Programs
- 3. Summary of Proposed Changes to the Commercial and Industrial Programs for 2009
- 4. 2009 Commercial and Industrial Electric and Gas Energy Efficiency Programs
- 5. 2009 Electric Energy Efficiency Program Tables
- 6. 2009 Gas Energy Efficiency Program Tables
- 7. Measurement and Verification Plan
- 8. 2009 Electric Energy Efficiency Program Performance Metrics

# I. Introduction and Summary

2 This Energy Efficiency Program Plan ("EE Program Plan") for 2009 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 Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006), 5 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

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and TEC-RI.

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16 This Plan is being jointly submitted as a Stipulation and Settlement ("Settlement"),

Grid on September 2, 2008 with approval and support of the EERMC, the Office of

Energy Resources, the Division of Public Utilities and Carriers, Environment Northeast,

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 Rhode Island Office of Energy Resources, the EERMC, and National Grid (together, the

"Parties"), and addresses all issues raised by members Subcommittee<sup>1</sup> concerning the

22 Company's electric Demand-Side Management ("DSM") Programs for the year 2009.

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<sup>&</sup>lt;sup>1</sup> A DSM collaborative group has been meeting regularly since 1991 to analyze and inform the Company's electric DSM programs. Members of the Subcommittee presently include the Company, the Division, the Rhode Island Office of Energy Resources (RIOER), TEC-RI, ENE, and PP&L with engagement from EERMC members Joe Newsome (low income users), Chris Powell (large industrial users), Dan Justynski (small commercial/industrial users), Joe Cirrillo (energy design and codes), and Sam Krasnow (environmental issues pertaining to energy). 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 energy efficiency programs for all customer segments<sup>2</sup> subject to

3 the budget included in the Settlement filing of November 1, 2007, in Docket No. 3892,

4 which was approved by the Commission in Order 19179 on January 17, 2008, and the gas

5 energy efficiency programs included in the Settlement filing of April 2, 2007, in Docket

6 No. 3790, approved at the Open Meeting on May 23, 2007, and revised in a compliance

7 filing of May 31, 2007.

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

statewide and regional initiatives.

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This Plan has been developed to take the important first step toward the aim of the "The Comprehensive Energy Conservation, Efficiency and Affordability Act of 2006" to secure all cost-effective energy efficiency resources that are lower cost than supply and are prudent and reliable. Furthermore, this plan is designed to be consistent with the "Principles of Program Design," outlined in Section 1.3A of the Commission's "Standards for Energy Efficiency and Conservation Procurement". All customers will have an opportunity to participate in the cost-effective<sup>3</sup> programs and benefit from the low-cost energy efficiency resource. Ramping up of program capability will be done in a manner that ensures quality delivery and is economical and efficient. In addition, the Parties have included an increased emphasis on services for low and moderate income residential consumers as a means of helping these consumers deal with high fuel prices.

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

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

The Parties agree that 2009, as the first year covered by the Energy Efficiency Procurement Plan, is a pivotal year for advancing energy efficiency in Rhode Island. While much of the increase in program savings is expected to come from meeting pent up demand through expansion of ongoing program efforts, we recognize that efforts in 2009 must also lay the groundwork for even greater increases in energy efficiency savings and program innovation in 2010 and 2011. To that end, the Company commits to continue to work on an ongoing basis with the Subcommittee and members of the EERMC's consulting team to explore financing, technological, marketing, integration, and implementation innovations to further advance and deepen energy efficiency for its customers in Rhode Island. Some of the issues this group plans to investigate in 2009 include workforce development (and, through it, job creation), integrated and enhanced marketing, communication pathways to increase customer awareness of the enhanced opportunities for energy efficiency, and ways to achieve greater energy efficiency at each customer site.

In addition to laying this groundwork, this EE Program Plan differs from prior plans in two key areas. The first difference is that this Plan covers both gas and electric energy efficiency. Electric energy efficiency programs have been offered in Rhode Island for over twenty years while natural gas efficiency programs have been offered since mid-2007. Given the continuing integration of gas and electric marketing operations and the Standard's Section 1.3.C.4.b requirement for "integration of electric and natural gas energy efficiency implementation and delivery", this Plan combines gas and electric energy efficiency programs. In order to facilitate the integration of the gas and electric programs, this Program Plan contains funding and goals for the gas programs for the three year period 2009-2011, similar to the timeframe covered by the Least Cost Energy Efficiency Procurement Plan for electric energy efficiency programs.

The second difference is in the unprecedented level of savings National Grid proposes to achieve in 2009, consistent with the objectives of Least Cost Procurement. This will require development of infrastructure to meet increasing goals. It will also require

1 financing, programmatic, and marketing innovations to tap hard to reach market

segments or segments with large savings potentials. National Grid will work with its

collaborative partners—as well as learn from other best practices being used elsewhere—

to develop its programs in these areas in 2009 to help meet its goals in 2009 and beyond.

5 This is in accordance with Section 1.3.A.8 which requires "the Utility shall explore as

part of its plan, new strategies to make available the capital needed to effectively

overcome market barriers and implement projects that move beyond traditional financing

strategies." At the same time, since demand for energy efficiency program services

continues to be strong across all sectors, National Grid is confident that it will meet the

goals for 2009.

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The table below summarizes the goals of this Plan. Subsequent sections highlight the

details of the gas and electric programs for 2009.<sup>4</sup>

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**Table 1: 2009 Energy Efficiency Program Plan Summary** 

	Proposed Utility	Annual				
	Spending in 2009	MWh	Annual kW	Total Benefits		cents/
Electric Programs by Sector	(\$000)	Savings	Savings	(\$000)	B/C Ratio	lifetime kWh
Low Income Residential	\$2,628	1,340	137	\$4,451	1.59	19.2
Non-Low Income Residential	\$7,228	27,729	2,572	\$29,857	3.28	3.4
Commercial and Industrial	\$12,962	<u>50,261</u>	<u>9,764</u>	<u>\$83,094</u>	<u>3.77</u>	<u>3.4</u>
Subtotal	\$22,819	79,331	12,473	\$117,402	3.46	3.6
Gas Programs by Sector	Proposed Utility Spending in 2009 (\$000)	Annual MMBtu Savings		Total Benefits (\$000)	B/C Ratio	
Low Income Residential	\$1,346	13,690		\$2,488	1.71	
Non-Low Income Residential	\$2,047	37,660		\$6,782	2.07	
Commercial and Industrial	\$2,555	<u>89,333</u>		<u>\$9,858</u>	<u>2.27</u>	
Subtotal	\$5,949	140,683		\$19,128	2.11	
Total for Plan	\$28,767	,		\$136,529		

16 17 Notes: (1) Electric program projections in this table vary from values included for 2009 in the Energy Efficiency Procurement Plan because this Program Plan uses an updated (lower) sales forecast resulting in

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<sup>&</sup>lt;sup>4</sup> Section 1.3.B.1 requires "the Utility shall include a detailed budget for the EE Program Plan covering the annual period beginning the following January 1, that identifies the projected costs, benefits, and energy savings goals of the portfolio of each program. The budget shall identify at the portfolio level, the projected cost of efficiency resources in cents/lifetime kWh.

lower funding, while savings estimates incorporate the most recent evaluation results not available at the time the LCP Plan was filed, resulting in greater energy savings and benefits. Together, these result in a higher B/C ratio.

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

# II. 2009 DSM Programs

The DSM programs for 2009 build on the momentum and success of prior DSM programs and services, offering energy efficiency opportunities to all customer segments,<sup>5</sup> with a focus on providing needed services to low and moderate income residential consumers as a means of reducing bills. In addition, the Company will continue to integrate the delivery of electric energy efficiency programs with its natural gas efficiency programs where practical. The Parties agree to the Company's 2009 electric and gas DSM Programs described below<sup>6</sup>:

#### A. Residential Programs

In 2009, the Parties agree to continue the residential programs offered in 2008. The programs are summarized in Table 2 below.

A summary of the proposed changes in these programs from 2008 are provided in Attachment 1. Descriptions of these programs are provided in Attachment 2. Highlights of proposed program changes for 2009 include integration of gas and electric programs and introduction of a refrigerator bounty program.

In order to ensure that residential customers are aware of the Company's energy efficiency programs, Company staff will continue to participate in consumer

<sup>&</sup>lt;sup>5</sup> Standards Section 1.3.A.2 requires "the Utility should consistently design programs and strategies to ensure that all customers have an opportunity to benefit comprehensively, where appropriate, from expanded investments in this low-cost resource."

<sup>&</sup>lt;sup>6</sup> Throughout the program year, the Parties may consider additional enhancements beyond those identified herein as more information becomes available to support an informed review of those potential changes. As part of this process of identifying additional enhancements, in addition to continuing to meet with the Subcommittee, the Company has agreed to regular work sessions with the EERMC's program and policy consultants, the VEIC team.

education seminars sponsored by the Office of Energy Resources and/or the Community Colleges of Rhode Island (CCRI) as it has done in 2008.

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	Table 2. Proposed Residential Energy Efficiency Programs
EnergyWise Program (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 baseload electric use as well as gas and electric heat in all residential
	buildings.
High-Efficiency Heating, Water Heating and Controls Program (Gas Only)	Residential customers who purchase ENERGY STAR® Heating Systems fueled by oil, or high efficiency gas or oil furnaces with high efficiency fans in their existing home are eligible to participate in this program. Incentives are also offered for ENERGY STAR® rated natural gas forced hot water boilers, ECM motors, ENERGY STAR® labeled programmable thermostats, and boiler reset controls.
ENERGY STAR® Homes Program (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.
Single Family Low Income Services (Gas and Electric)	The low income program, marketed as the Appliance Management Program, is delivered by the State Energy Office and local Community Action agencies. It provides the same services as the EnergyWise program, described below, but no customer contribution is required for equipment installation.
Building Practices and Demonstration Program (Gas Only)	Participate in funding for demonstration projects that apply to new or underutilized technologies.
ENERGY STAR® Heating Program (Electric Only)	Homeowners purchasing or replacing an existing oil or propane heating system with a qualifying ENERGY STAR® heating system are eligible to receive a rebate to defray the cost of the higher efficiency system. Funding is provided by the Company and administered by the State Energy Office. (This program is coordinated with gas high efficiency heating program)
ENERGY STAR® Central Air Conditioning Program (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 existing systems.
ENERGY STAR® Lighting (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 through instant rebates, special promotions at retail stores, or a mail order catalog.
ENERGY STAR® Appliances (Electric Only)	Included in this initiative is the ENERGY STAR® Appliance Program which promotes the purchase of high efficiency major appliances (refrigerators, dishwashers, clothes washers, room air conditioners, and dehumidifiers) that bear the ENERGY STAR® Label. It is offered by several utilities throughout the region.
Information and Education (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. The Company also supports the ENERGY STAR® Homes Vocational School Initiative which trains students at the nine Rhode Island Career and Technical schools to be ENERGY STAR® certified builders.

# **Residential Low-Income Programs**

The Company and Subcommittee want customers who have difficulty paying their electric bills to participate in the Company's energy efficiency programs, especially in these times of escalating energy prices. For this reason, in 2009, this segment of the customer base is being designated as a unique sector and funding for this sector will be subsidized by both non-low income residential and commercial and industrial customers using 10% of all available funding for the electric programs and 20% of all available funding for the gas programs<sup>7</sup>, minus commitments. This is a departure from prior years, where low income programs were funded primarily by the residential sector. As a separate sector, it will have its own savings targets for the Company to meet in order to earn a shareholder incentive. This will ensure that this group of customers is well served by the programs.

Several of the Company's proposed programs provide these customers with services that are designed to help reduce their electric bills, including the Single Family Low Income Services Program, the Energy Wise Program, and the ENERGY STAR® 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 Energy Wise Program and the ENERGY STAR® Homes Program. Additional detail about the services offered to economically disadvantaged customers is set forth in Attachment 2.

<sup>7</sup> While low-income customers are very sensitive to high electricity and natural gas costs, especially for space heating, a greater portion of available funding is allocated to the low-income sector for the gas energy efficiency programs because the low-income gas programs are more oriented to savings in space heating than are the electric programs. The Company will use the proposed allocation in 2009 and may reconsider the mechanism for allocating funds to the Low-Income sector in its 2010 Program Plan.

# **B.** Commercial and Industrial Programs

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In 2009, the Parties agree to continue the commercial and industrial programs offered in 2008. The programs are summarized in Table 3 below.

Table 3. Pro	Table 3. Proposed Commercial and Industrial Energy Efficiency Programs				
Small/Medium Business	The Small/Medium Business Program provides direct installation of energy				
Program (Electric Only)	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	Energy Initiative is a comprehensive retrofit program designed to promote the				
Only)	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	Promotes energy efficient design and construction practices in new and renovated				
Only)	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				
	2000 plus 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.				
	Design 2000 <i>plus</i> 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.				

Table 3. Pro	Table 3. Proposed Commercial and Industrial Energy Efficiency Programs			
Commercial Energy	Promotes energy efficient gas technologies for commercial, industrial,			
Efficiency Program (Gas	institutional and large multifamily buildings. Technical assistance services are			
Only)	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, crawlspace) 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			
Commercial High	Promotes energy efficient gas heating and domestic hot water heating equipment			
Efficiency Heating	for commercial, industrial, institutional and large multifamily building.			
Equipment (Gas Only)	Prescriptive incentives are offered for energy efficient heating furnaces, boilers,			
	infrared heaters and domestic hot water systems.			
Comm Building Practices	The purpose of the Building Practices and Demonstration Program is to establish			
& Demonstration Program	successful applications of new or underutilized energy efficient procedures,			
(Gas Only)	processes, or technologies and to evaluate the possibility of introducing them into			
	mainstream markets.			

A summary of the proposed changes in these programs from 2008 are provided in Attachment 3. Descriptions of these programs are provided in Attachment 4. Among the highlights of the changes are the reduction in the number of programs on the gas side and the continued integration of gas and electric energy efficiency in Small/Medium Business Program and in combination gas and electric audits.

In 2009, the Company intends to build on its experience promoting better energy performance in commercial facilities through a number of programmatic changes. The Company will continue to promote best practices in sustainable building design through our Advanced Buildings program and offers a great opportunity to seamlessly integrate our gas and electric energy efficiency offerings in the new construction market. The Company is offering a two tiered rebate for new construction projects that rewards projects that have the potential to save more energy.

#### **Community Based Initiative**

The Company plans to work with community agencies on Aquidneck Island and municipalities of Newport, Middletown, Portsmouth, and Jamestown, as well as

Naval Station -Newport, to explore potential strategies for community based involvement in energy efficiency program implementation, for both residential and commercial and industrial customers. This effort would leverage community involvement in energy efficiency implementation combined with some targeted marketing of program elements in order to assess how these may support the objectives of least cost procurement. Aquidneck Island was selected for this effort since it complements the targeting of this area as part of the System Reliability Procurement Plan. Therefore, in addition to exploring community-based implementation strategies, there may potentially be system reliability benefits from increased energy efficiency in the area.

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

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

# A. 2009 DSM Program Funding Sources

The sources of funding for the 2009 electric DSM Programs are shown in Table E-1. This funding is consistent with the funding plan contained in the LCP Plan and included the following sources: (1) a statutory-based DSM charge of \$0.0032 per kWh (the currently approved \$0.002 per kWh plus the increased \$0.0012 per kWh proposed in the Least Cost Procurement Plan filed September 2, 2008); (2) interest expected to be accrued on the fund balance during the year due to timing differences for collections compared to expenditures; (3) funds expected to be received from Small Business Program co-payments<sup>8</sup> and from large Commercial and Industrial technical assistance co-payments<sup>9</sup> in 2009; (4) Large C&I

<sup>&</sup>lt;sup>8</sup> The Company provides Small Business customers with the opportunity to finance their share of project costs. The Small Business co-pays identified on Attachment 6 refer to the projected amount of funds customers are expected to repay to the Company in calendar year 2008.

<sup>&</sup>lt;sup>9</sup> The Company typically pays the full cost of technical assistance studies for Large Commercial and Industrial program participants and then bills the customer for their share of the technical assistance study

commitments from 2008<sup>10</sup>; (5) carryover of the 2008 fund balance, if any, and (6) revenue generated by programs' demand savings during the transition period leading up to the start of ISO-New England's (ISO-NE) Forward Capacity Market (FCM), as explained below. The projected funding amounts are also shown in Table E-1.

As shown in Table E-1, the Company currently projects that the fund balance at year end 2008 will be (\$125,600). This negative fund balance indicates that funding sources in 2008 are expected to be slightly below levels projected when the 2008 Settlement filing was prepared.

The projected 2009 budget for DSM programs is dependent on a number of projections that inform the amount of funding, including projections of kWh sales of electricity, year-end 2008 large commercial and industrial program commitments, transition period capacity payments received from ISO-NE, and a projection of year-end 2008 spending. With a November 2008 filing date for this Plan, the Company believes it has a good understanding of expected year-end spending and commitments as it develops a projection of available funding for the coming year.

#### **B.** Transferring of Funds

The Parties will regularly review the amount of funds needed and available for each program (as well as any changes to the overall fund balance, as discussed in Section III.A above) and will transfer monies as needed. The Parties propose to use the same methodology that has been used since 2001 for the transfer of funds from one program to another, or from one sector to another, with one change to

cost. The Large Commercial and Industrial co-pays shown on Attachment 6 reflect the projected amount of technical assistance study funds expected to be repaid by customers in 2008.

<sup>&</sup>lt;sup>10</sup> As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

1	establish transfer approval requirements for transfers between small and large
2	business programs. <sup>11</sup> Transfers during the program year may occur as follows:
3	1. Transfers within a Sector:
4	a) For transfers of less than 10% of the originating program's
5	budget, the Company can transfer funds from one program to
6	another program within the same sector without prior approval
7	of the Division.
8	b) For transfers of 10% or more of the originating program's
9	budget, the Company can transfer funds from one program to
10	another program within the same sector with prior approval of
11	the Division.
12	c) For any transfers in the Commercial and Industrial Sector
13	between large commercial and industrial programs (Design
14	2000plus and Energy Initiative) and Small/Medium Business
15	Services programs, Division approval is required. In addition,
16	if a transfer would reduce the originating program's budget by
17	more than 20% in aggregate (over the course of the program
18	year), the transfer would require Commission approval as well.
19	2. Transfers between Sectors. The Company can transfer funds from one
20	sector to another sector with prior approval of the Division. If a
21	transfer would reduce the originating sector's budget by more than
22	20% in aggregate (over the course of the program year), the transfer
23	would require Commission approval as well.
24	
25	For transfers requiring Division, but not Commission, approval, the Parties will
26	inform the Commission about all the transfers, both between sectors and within
27	sectors, in a timely fashion. The Company will not be permitted to adjust its goals

<sup>&</sup>lt;sup>11</sup> In prior years, small and large business program were in separate sectors. They are being combined into a single Commercial and Industrial sector in 2009 to better align with implementation objectives. However, Parties wanted to treat them separately for the purposes of budget transfers.

or incentive target calculations for any transfers between sector budgets except as described in Section IV.A above.

# C. ISO-NE Capacity Market Revenue

Consistent with the Commission's Standards for Energy Efficiency and Conservation Procurement, the Energy Efficiency Procurement Plan, and Commission decisions in Dockets 3779 and 3892, the Company and the Parties recommend that kW demand savings achieved via the electric energy efficiency programs continue to be reported by the Company to ISO-NE as Other Demand Resources (ODR) during the transition period through 2009. All ISO-NE capacity payments received will be used to supplement the energy efficiency program budgets. FCM payments in Table E-1 are projected transition period capacity payments from measures installed through the Company's programs from June 16, 2006 through November 30, 2009<sup>12</sup>.

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

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<sup>&</sup>lt;sup>12</sup> According to transition period rules, demand savings for a month is based on the performance of measures installed through the end of the prior month. Therefore, December 2008 savings will be based on measures installed through the end of November.

In addition, as part of the FCM, all qualified auction participants are required to post Financial Assurance to provide security that the promised resource will deliver the promised MW at the promised time.<sup>13</sup> If, as a result of circumstances beyond the control of the Company<sup>14</sup>, the Company is unable to provide all or a portion of the megawatts of capacity proposed in its qualification packages and capacity auction bids, some or all of the financial assurance monies would be forfeited. Accordingly, the Parties agree that the Company should recover all prudently incurred Financial Assurance expenses from ISO-NE capacity payments generated by the demand savings represented by the Company or the energy efficiency program fund<sup>15</sup>, similar to the procedures described above for administrative and M&V compliance costs.

# D. Budgets

The Parties agree that the portfolio of DSM programs and services for 2008 will have an overall projected budget of approximately \$32.4 million. The Parties agree to segment the budget into three sectors: residential low income, residential non-low income, and commercial and industrial. Proposed sector and program budgets are provided in Table E-2. A comparison of these proposed budgets to the 2008 budget is provided in Table E-3. As seen in this table, funding for all electric programs are proposed to increase significantly over 2008, consistent with the objectives of least cost energy efficiency procurement as the efficiency resource is 3.6 cents/lifetime kWh versus 12.4 cents/kWh for electric supply.

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<sup>&</sup>lt;sup>13</sup> Since the Company was able to qualify its bid as an existing resource rather than a new resource (because of its activity during the transition period), ISO-NE has notified the Company that it will not be required to post security for Forward Capacity Auction 1. However, the Company will be required to post security for all future capacity auctions.

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.
Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as

<sup>&</sup>lt;sup>15</sup> Beginning in 2009, the Company plans to propose setting aside a small portion of the program budget as a contingency fund to cover future Financial Assurance claims that result from the Company's inability to meet its obligation to deliver demand savings due to circumstances beyond its control.

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

#### E. Cost-Effectiveness

The Company has projected cost-effectiveness for the proposed 2008 programs using the Total Resource Cost ("TRC") test. The use of this test was required by the Commission's Standards for Energy Efficiency and Conservation Procurement. The TRC test requires that the total lifetime savings from the efficiency measures will exceed the total costs of the measures (i.e., program and customers costs).

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

Table E-4 provides the calculation of 2009 program year cost-effectiveness. Table E-5 shows the goals based on the proposed budgets. Table E-6 shows a comparison of the goals with the approved program goals for 2008. Table E-4 shows that the proposed portfolio of programs is expected to have a benefit/cost ratio of 3.46 which means that \$3.46 in benefits is expected to be created for each \$1 invested in the programs. This increase in efficiency investment moves

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<sup>&</sup>lt;sup>16</sup> In prior years, the Utility Cost Test was used.

towards a level that is closer to acquiring all energy efficiency resources that are lower cost than supply.

The cost-effectiveness analyses of the proposed programs use avoided energy supply costs that were developed by Synapse Energy Economics as part of a 2007 study that was sponsored by all electric DSM program administrators in New England, as well as some gas program administrators. They reflect current and expected market conditions and are highly influenced by the increasing cost of fossil fuels and expectations about ISO-NE's emerging forward capacity market. Company-specific transmission and distribution capacity values have also been updated to reflect recent data on costs and peak loads. These are the same avoided energy supply costs that were used for the 2008 programs, escalated by one year. The avoided costs used for 2009 are shown in Table E-7.

The avoided costs include the demand reduction induced price effect (DRIPE) benefits that are projected to result from the installation of energy efficiency measures in 2009. These benefits occur when the retail price of electricity is reduced as a result of the reduced long term demand for electricity stemming from the installation of energy efficiency measures. Some amount of DRIPE benefits have been counted in Rhode Island since 2006. While some Collaborative members have expressed concern about whether DRIPE represents a real benefit to Rhode Island consumers, the Parties have agreed to include DRIPE in value and cost effectiveness calculations for energy efficiency programs in 2009.

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

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

# A. 2009 DSM Program Funding Sources

The sources of funding for the 2009 gas DSM Programs are shown in Table G-1. The Parties agree that the 2009 budget should continue to be funded from the following sources: (1) the statutory-based DSM charge of \$0.15 per dekatherm; (2) interest expected to be accrued on the fund balance during the year due to timing differences for collections compared to expenditures; (3) Large C&I commitments from 2008<sup>17</sup>; and (4) carryover of the 2008 fund balance, if any. The projected funding amounts are also shown in Table G-1

As shown in Table G-1, the Company currently projects that the fund balance at year end 2008 will be \$1,673,200. This indicates that participation in the programs since their inception was slower in developing than anticipated.

The projected 2009 budget for DSM programs is dependent on a number of projections that inform the amount of funding, including projections of sales of natural gas, year-end 2008 large commercial and industrial program commitments, and a projection of year-end 2008 spending. With a November filing date for this Settlement, the Company believes it has a good understanding of expected year-end spending and commitments as it develops a projection of available funding for the coming year.

Table G-1 also shows projected funding for 2010 and 2011. As seen in the Table, the company plans to level fund the gas energy efficiency programs in those years, at the full statutory-based DSM charge of \$0.15 per dekatherm. The available funding declines over the three year period chiefly due to the commitments budget. The large commitments budget for each year was set to effectively manage the large commercial and industrial fund balance projected for

<sup>&</sup>lt;sup>17</sup> As directed by the Commission, the Company encumbers current funding to cover the expected cost of projects it has agreed to fund although those projects will be completed after the current program year.

year end 2008 in a way that would result in level implementation funding for the large C&I programs over the three year period.

# B. Exceptions to the Energy Efficiency Surcharge

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

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

# C. Transferring of Funds

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

1	1. Transfers within a Sector:
2	a) For transfers of less than 10% of the originating program's
3	budget, the Company can transfer funds from one program to
4	another program within the same sector without prior approval
5	of the Division.
6	b) For transfers of 10% or more of the originating program's
7	budget, the Company can transfer funds from one program to
8	another program within the same sector with prior approval of
9	the Division.
10	2) Transfers between Sectors. The Company can transfer funds from
11	one sector to another sector with prior approval of the Division. If
12	a transfer would reduce the originating sector's budget by more
13	than 20% in aggregate (over the course of the program year), the
14	transfer would require Commission approval as well
15	
16	For transfers requiring Division, but not Commission, approval, the Parties will
17	inform the Commission about all the transfers, both between sectors and within
18	sectors, in a timely fashion. The Company will not be permitted to adjust its goals
19	or incentive target calculations for any transfers between sector budgets.
20	
21	D. Budgets
22	The Parties agree that the portfolio of gas DSM programs and services for 2008
23	will have an overall projected budget of approximately \$9.1 million. The Parties
24	agree to segment the budget into three sectors: low-income residential, non-low
25	income residential, and commercial and industrial. Proposed sector and program
26	budgets are provided in Table G-2. A comparison of these proposed budgets to
27	the 2007-08 budget filed with the Commission is also provided in Table G-3.

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

#### E. Cost-Effectiveness

The Company proposes to use the Total Resource Cost Test for determining the cost effectiveness of the 2009 gas energy efficiency programs. This would treat gas and electric programs comparably and contribute to the Standards for Energy Efficiency and Conservation Procurement's requirement for program integration. The TRC test requires that the total lifetime savings from the efficiency measures will exceed the total costs of the measures (i.e., program and customers costs).

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

Table G-4 provides the calculation of 2008 program year cost-effectiveness. Table G-5 shows the benefits and goals based on the proposed budgets. Table G-6 shows a comparison of the goals with the approved program goals for 2007-08, annualized to allow for an effective comparison. Table G-4 shows that the proposed portfolio of programs is expected to have a benefit/cost ratio of 1.80 which means that \$1.80 in benefits is expected to be created for each \$1 invested in the programs.

The cost-effectiveness analyses of the proposed programs use the avoided energy supply costs developed by Synapse Energy Economics as part of a 2007 study that was sponsored by all electric DSM program administrators in New England, as well as some gas program administrators. They reflect current and expected market conditions and are highly influenced by the increasing cost of fossil fuels. The avoided gas costs are shown in Table G-7.

Table G-8 shows a summary of the projected benefits and costs for the three year gas program planning horizon. The second and third year of the planning horizon are very similar to 2009 because of the assumption of level funding.

#### V. Measurement and Verification Plan

The Measurement and Verification Plan for 2009 is presented in tabular form in Attachment 7. The areas proposed for study in 2009 have been chosen based on a number of factors: the relative amount of savings in that program or end use, the vintage of the most recent evaluation study, the relative precision of the recent evaluation study, the available evaluation budget. In addition, some new program areas are designated for both impact (savings) and process evaluations. This list may be added to as the year progresses and different evaluation priorities are identified. In particular, the parties will consider adding Rhode Island-specific impact or process evaluations, as appropriate, that will help inform the Company's efforts towards achieving the goals of least cost procurement.

# VI. Reporting Obligations

# A. Summary of Reporting Obligations

1. During 2009, the Company will provide quarterly reports to the EERMC, the Division and the Commission on the most currently available program performance for both gas and electric efficiency programs. These reports will include a comparison of budgets and

1		goals by program to actual expenses and savings on a year-to-date
2		basis, as well as information about the number of customers who
3		may be waiting for energy efficiency program services.
4	2.	The Company will provide to the Parties and file with the
5		Commission its 2009 Year-End Report no later than May 31, 2010.
6	3.	The Company will provide to the Parties a summary of evaluation
7		results together with a memorandum summarizing the impact of
8		those results on the Company's 2008 programs no later than
9		September 30, 2009.
10	4.	The Company will file with the Commission updated savings goals
11		and metric targets for 2009, reflecting the results of completed
12		evaluation studies, no later than September 30, 2009.
13	5.	The Company will report on 2009 metric results, achieved gas and
14		electric energy savings in 2009, and earned incentives in its Year-
15		End Report for 2009, to be filed no later than May 31, 2010
16		
17	VII. Incentive	
18	The proposed share	eholder incentive mechanism applicable to Company DSM efforts in
19		ncentive mechanism applicable to the 2008 electric energy efficiency
20		et No. 3892 and the 2007-08 gas efficiency programs in Docket No.
21	3790.	
22		
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23		ms, the shareholder incentive mechanism will continue to include two
24	_	Wh savings targets by sector and (2) performance-based metrics. For
25	gas programs, the i	ncentive will be based on MMBtu savings alone.
26		
27		
28		

# A. kWh Savings

The Parties have agreed to retain a target incentive rate of 4.40% in 2009 applied to the eligible spending budget for 2009. The projected spending budget for 2009 is approximately \$23.5 million (see Table E-8). The total target incentive for 2009 is 4.40% of the approved spending budget, or approximately \$1.036 million (see Table E-9). Of this total, \$150,000 will be the target incentive for the performance-based metrics and the remainder will be for the kWh savings target.

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

The incentive cap on energy savings will be equal to 125% of the target incentive amount for energy savings. If the Company achieves this level of exemplary performance, Rhode Island consumers will realize additional savings. Given budget control requirements, this will provide the Company with an incentive to improve the efficiency of its program implementation efforts while providing Rhode Island consumers with value in excess of the incremental incentive that may be earned by the Company. That is, the Company will have an incentive to increase consumers' savings and consumers will realize 95.6% of the savings originally and then all of the savings after the incentive cap is reached.

Table E-8 provides the derivation of the eligible spending budget that is used to determine the amount of the incentive that the Company may earn if it is successful in achieving its goals for both energy savings and performance metrics.

Table E-9 provides a summary of the incentive related to performance metrics and the incentive related to annual energy savings goals by sector. Energy savings goals by sector reflect the expected cost of savings in each sector informed by evaluation studies and have been adjusted to take into account changing rebate policies and the changing market being served. These goals have been carefully reviewed by the Collaborative to ensure that they represent reasonable and challenging goals for the year.

There are two circumstances that would necessitate the recalculation of the threshold, calculated cap, and incentive for a particular sector.

- 1. If the assumptions used to develop savings goals change as a result of evaluation studies completed by September 30, 2009, the Company will recalculate savings goals to account for those evaluation findings and will report actual savings on the same basis.
- 2. If the actual spending in a sector at year end is greater than or less than the spending budget by more than five percent, the savings goal for that sector will be adjusted by the ratio of actual spending to the spending budget.

None of these changes will affect the target incentive dollars associated with performance metrics. The Company will report program results compared to these revised budgets and goals in its Year-End Report regarding 2009 DSM Program efforts.

# B. MMBtu Savings

For gas efficiency programs, the proposed target incentive is equal to 4.40% of the eligible budget. The eligible budget includes all program expenses shown in Table G-2, except for the commitments budget and the amount budgeted for the

target shareholder incentive. Therefore, the total target incentive for 2007 - 2008 is 4.40% of approximately \$6.2 million, or \$267,000, as shown in Table G-9.

The threshold performance level for energy savings by sector will be set at 60% of the annual energy savings goal for the sector. The Company must attain at least this threshold level of savings in the sector before it can earn an incentive related to achieved energy savings in the sector. The Company will have the ability to earn an incentive for each MMBTU saved, once threshold savings for the sector are achieved, up to 100% of the target savings. The incentive per MMBTU saved by sector is provided in Table G-8.

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

The threshold, calculated cap, and incentive for a particular sector will be recalculated if the assumptions used to develop savings goals change because of completed evaluation studies. If that occurs, the Company will recalculate savings goals to account for those evaluation findings and will report actual savings on the same basis. The Company will report final program results compared to these revised budgets and goals in its May 31, 2010, Report regarding 2009 Gas Energy Efficiency Program efforts.

# **C.** Electric Program Performance Metrics

The Parties have agreed to the inclusion of five performance-based metrics for 2009. These metrics include two that relate to the Non-Low Income Residential sector and three that relate to the Commercial and Industrial sector. Each of the proposed performance-based metrics is described in Attachment 6. The Parties

agree that the Company will have the ability to earn \$30,000 for each performance metric it successfully achieves in 2009 with an opportunity to earn a portion of the incentive for partially achieving goals for three of the metrics as shown in Attachment 6. The total potential incentive for performance metrics is capped at \$150,000.

Attachment 8 includes a framework for establishing the goals for the proposed metrics based on currently available information. As detailed in Attachment 6, the Company, with agreement of the Parties, will file with the Commission no later than September 30, 2009, a supplement to this Settlement that provides final goals for each metric. Finalizing the numeric performance targets at a later date will have no impact on the shareholder incentives established for these performance-based metrics. If the Parties are unable to reach agreement about the specific performance goals, the Company reserves the right to file recommended goals with the Commission for its approval by September 30, 2009.

#### VIII. Miscellaneous Provisions

#### A. Other Miscellaneous Provisions

- 1. Other than as expressly stated herein, this Settlement establishes no principles and shall not be deemed to foreclose any Party from making any contention in future proceeding or investigation.
- 2. This Settlement is the product of settlement negotiations. The content of those negotiations is privileged and all offers of settlement shall be without prejudice to the position of any Party.
- 3. Other than as expressly stated herein, the approval of this Settlement by the Commission shall not in any respect constitute a determination as to the merits of any issue in any other proceeding.
- 4. The Parties agree that the Subcommittee shall meet no less than six times in 2009 to review the status and performance of the

1	Company's 2009 DSM programs and advise on potential energy
2	efficiency programs for 2010.
3	
4	The Parties respectfully request the Commission approve this Stipulation and Settlement
5	as a final resolution of all issues in this proceeding.
6	
7	Respectfully submitted,
8	THE NARRAGANSETT ELECTRIC COMPANY D/B/A
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12	Thomas Teehan, Esq. Date
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6	William K. Lueker, Specia	al Assistant Attorney Genera	1

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THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 4000 Attachment 1 Page 1 of 2

# SUMMARY OF PROPOSED CHANGES TO RESIDENTIAL PROGRAMS FOR 2009

Program	Changes
Energy Wise	Approved contractor list to customers for air sealing and insulation work.
	Site assessments can be charged to gas or electric budgets
	Additional/on going BPI training
	• Incentives for weatherization measures installed in gas and electrically heated home and facilities have been standardized to 50% up to \$1500 per gas or electric heating account for insulation, duct insulation and duct sealing. The Company will pay 100% of the cost of air sealing in these facilities. The participant will be responsible for paying 100% of any required attic/building ventilation as required by code when insulation and air sealing are installed.
Low Income	Combine the Electric and Gas Low Income Services Programs
Services	• Significantly increase frequency of CFLs installed in each home by changing hours of use criteria for existing lights
ENERGY	Remove the ENERGY STAR® Clothes Washer Rebate
STAR®®	• Add a \$50 refrigerator retail rebate for a limited time
Appliances	• Implement a second refrigerator bounty Program
	• Add rebates of \$250 for pool pump replacement and to
High Efficiency	Add \$10 rebates for electronics and Smart Strips.  Combine and allocation represents.
Heating	<ul><li>Combine gas and electric programs.</li><li>Adjust incentive levels</li></ul>
Treating	<ul> <li>A \$50 rebate for stand alone water heater tanks with an energy factor of 0.62 or greater</li> </ul>

# THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 4000 Attachment 1 Page 2 of 2

Program	Changes
COOL SMART  ENERGY STAR® Central Air Conditioning and Heat Pumps	<ul> <li>Add ENERGY STAR®®</li> <li>Quality Installation verification for replacement systems including systems replaced within the past 3 years with an Environmental Protection Agency (EPA) certificate and \$100 customer incentive through participating contractors. The EPA requires sizing, duct sealing, and airflow and charge adjustments to specific American National Standards Institute/Air Conditioning Contractors of America (ACCA) standards.</li> <li>If duct modifications (i.e., adding return ducts and/or turning vanes) are needed to meet airflow requirements, contractors may receive an additional \$400 incentive.</li> <li>Replacement of the minimum standard for eligible equipment with the new ENERGY STAR® standards described above for the \$300 incentive as of April 1, 2009.</li> <li>Add a \$400 customer incentive for higher CEE-tier 2 equipment (SEER of 15, EER of 12.5 or higher)</li> <li>Add a \$500 customer incentive for a SEER of 14.5 or greater, and HSPF of 8.2 for split ductless air conditioning or air-to-air heat pump systems with inverter technology</li> <li>A \$200 customer incentive and a \$100 contractor incentive when sizing is completed for 2009 ENERGY STAR® or CEE-tier 2 equipment</li> <li>Increase downsizing incentive to \$500 per ½ ton split 50/50 between customer and contractor.</li> </ul>
ENERGY STAR® Lighting	<ul> <li>Add a \$30 rebate for LED lighting</li> <li>Add a \$25 rebate for higher end lighting fixtures</li> <li>Increase CFL and mercury recycling efforts</li> </ul>
Energy Efficiency Educational Programs	No Changes
ENERGY STAR® Homes	No changes
Building Practices and Demonstration	No changes

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#### **2009 RESIDENTIAL PROGRAMS**

The Company proposes a comprehensive set of residential energy efficiency programs for implementation in 2009. Proposed program changes for 2009 are summarized in Attachment 1. The depth of the programs will significantly expand for 2009. 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.

#### Residential Programs

The Company is proposing to implement a broad range of gas and electric energy efficiency programs for its residential customers. Wherever possible the gas and electric programs will be combined but funded by separate budgets. 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. The Company will continue to monitor national and regional initiatives for future consideration in our programs.

A brief description of each proposed residential program is provided in the following table. The Residential programs planned for implementation in 2009 are described in further detail following the table.

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	Table 1. Proposed Residential Energy Efficiency Programs
EnergyWise Program	The EnergyWise program offers single and multi-family customers free home energy
(Funded by Gas and	audits of their homes and information on their actual electric and gas usage.
Electric)	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 baseload electric use as well as gas and electric heat in all residential
	buildings.
High-Efficiency	\$1000 incentive for ENERGY STAR® labeled boilers (90% AFUE), \$500 incentive
Heating, Water	for ENERGY STAR® labeled boilers (85% AFUE), (the incentive is awarded based on
Heating and Controls	AFUE, not solely the ENERGY STAR® label) \$200 incentive for steam boilers (with
Program (Funded by	electronic ignition, 82% AFUE), \$400¹ incentive for high efficiency furnaces (92%)
Gas Only)	AFUE) with ECM Motor or equivalent and \$100 incentive on furnaces (92% AFUE).
Gas Olly)	Incentives are also offered for ENERGY STAR® rated natural gas forced hot water
	boilers, ECM motors, ENERGY STAR® labeled programmable thermostats, and boiler
ENERGY STAR®	reset controls. Incentives are also available for high efficiency gas water heaters.
	Homeowners purchasing or replacing an existing oil or propane heating system with a qualifying heating system are eligible to receive a \$200 rebate to defray the cost of the
Heating Program (Funded by Electric	higher efficiency system. A rebate is also available for high efficiency fans for gas or
Only)	
Omy)	oil furnaces. (The incentive is awarded based on AFUE, not solely the ENERGY
ENERGY STAR®	STAR® label.) (This program is coordinated with gas high efficiency heating program)
	The ENERGY STAR® Homes Program promotes the construction of energy efficient
Homes Program	homes by offering technical and marketing assistance, as well as cash incentives to
(Funded by Gas and	builders of new energy efficient homes that comply with the program's performance
Electric)	standards.
Single Family Low	The low income program, marketed as the Appliance Management Program, is
Income Services Funded	delivered by the Office Energy Resources and local Community Action agencies. It
by Gas and Electric)	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
Duilding Dugations and	for equipment installation.  Participate in funding for demonstration projects that apply to new or underutilized
<b>Building Practices and Demonstration</b>	technologies.
	technologies.
<b>Program</b> (Funded by Gas Only)	
ENERGY STAR®	This program promotes the installation of high efficiency central air conditioners. The
Central Air	program provides training of contractors in installation, testing of the high efficiency
Conditioning Program	systems, tiered rebates for new ENERGY STAR® systems, and incentives for checking
(Funded by Electric	• · · · · · · · · · · · · · · · · · ·
•	new and existing systems.
Only) ENERGY STAR®	This is an initiative implemented jointly with other regional william. To accord
	This is an initiative implemented jointly with other regional utilities. It provides
Lighting (Funded by	discounts to customers for the purchase of ENERGY STAR® compact fluorescent
Electric Only)	lamps and fixtures through instant rebates, special promotions at retail stores, or a mail
ENERGY STAR®	order catalog.  Included in this initiative is the ENERGY STAR® Appliance Program which promotes
Appliances (Funded by	the purchase of high efficiency major appliances (refrigerators, dishwashers, clothes
Electric Only)	washers, room air conditioners, and dehumidifiers) that bear the ENERGY STAR®
	Label. It is offered by several utilities throughout the region.

<sup>1 \$200</sup> of this incentive will be funded through the ENERGY STAR® heating program.

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Table 1. Proposed Residential Energy Efficiency Programs		
Information and	The Company promotes energy education in schools through the National Energy	
<b>Education</b> (Funded by	Education Development (N.E.E.D) Program. This program provides curriculum	
Electric Only)	materials and training for a comprehensive energy education program. The Company	
	also supports the ENERGY STAR® Homes Vocational School Initiative which trains	
	students at the nine Rhode Island Career and Technical schools to be ENERGY	
	STAR® certified builders.	

Additional details about each proposed program are provided below.

#### 1. EnergyWise Program (Gas and Electric)

#### Overview

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

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

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

by gas and electric.

For 2009, the Company proposes to implement a new delivery mechanism for 1- 4 unit homes heated with gas and electric. Customers in eligible homes who participate in Energy *Wise* will be able to select an approved contractor to complete their air sealing and insulation work. The Company will monitor these contractors to determine if they have advanced enough technically to begin to expand their roles in future years. To assist in this transformation, the Company will also work with these contractors to determine the possibility of offering those who are interested more advanced BPI training as described below.

To be eligible for an incentive, a National Grid pre-qualified contractor must be chosen to install program measures. Contractors wishing to become pre-qualified must provide proof of insurance in amounts and coverage acceptable to National Grid. National Grid will perform a background check to verify the contractor's good standing, and to determine if there have been complaints or other issues that would render the contractor ineligible.

Additionally, the contractor must meet other requirements including certification or accreditation by the Building Performance Institute (BPI). BPI credentialed companies are trained to take into account the complex interactions that affect health, safety, comfort, energy performance, and the durability of homes. BPI standards include

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1 comprehensive diagnostic testing, measurement and verification that the work is completed properly, and quality assurance. The Company has reached out to the 2 contractor community and has provided training and assistance in purchasing diagnostic 3 equipment. Additional quality control will be required as contractors begin working with 4 the program, including third party verification. In the interest of achieving high quality 5 6 installations, the Company, subject to contract terms and available trained personnel, will work toward a system where, when verification is done, the contractor that does the 7 8 installation is from a different organization than the contractor doing the verification.

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It will be the responsibility of the installation contactor to complete and submit all Company required data with proper supporting documentation. Do-it-yourself work will not be permitted through the program. Work completed through the program must meet all applicable state and local code requirements. It is anticipated that all measures installed will meet ENERGY STAR® guidelines, where applicable.

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For the most recent calendar year that data is available, 21% of all households that were audited in 2007 contracted directly with the program implementation contractor to make efficiency improvements. This does not include measures that were recommended but for which the customer arranged for installation through other vendors than the program implementation contractor. The Company may conduct a process evaluation of the Energy *Wise* program in 2009 to determine ways to increase customer follow-through on audit recommendations.

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#### **Eligible Population**

- 25 All residential customers in 1-4 unit buildings are eligible to participate. Multifamily
- 26 facilities of five or more units are eligible if they have not previously participated in the

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program in the past five years. The Company proposes to serve 8,437 gas and electric

customers (dwelling units) through the Energy Wise program in 2009.

#### **Program Design**

The program will provide incentives covering up to 50% of the cost of installing certain weatherization measures in electric and gas heating single family (1 to 4 dwelling units) homes and multifamily facilities of 5 or greater dwelling units. In 2009, the incentive structure will be the same whether a facility is gas-heated or electric-heated. The maximum incentive offered through this program is \$1,500 per gas or electric heating account. Measures eligible for this incentive through the program include: attic insulation, wall insulation, basement/crawl space insulation, rim joist insulation, duct insulation, gas heating system pipe insulation, ductwork leakage testing, ductwork leakage sealing. Air infiltration sealing where applicable will be performed at no charge to the customer. Customers will also receive the free installation of water saving devices (low flow showerheads and aerators) for water heated by gas or electric. These measures will be funded by either electric or gas energy efficiency funds depending on the heating fuel type. Other measures may be added to the program menu, upon demonstration of cost-effectiveness2.

Eligible customers and/or building managers or associations receive a comprehensive energy audit, energy education, and the installation of low cost efficiency measures (e.g. hot water measures, air sealing for electrically and gas heated facilities, compact fluorescent light bulbs) at no direct cost. Single family and multifamily facilities heated

<sup>&</sup>lt;sup>2</sup> Participation and spending for Gas EnergyWise will increase from 2008 to 2009 while the savings are projected to decrease. 2007/2008 Gas EnergyWise savings projections were based on data available at the time. Those savings numbers assumed that every participant totally air sealed and insulation their homes. The Company learned, from the first 18-months of program implementation, that this was not the case—that the measure mix of actual installations differed significantly from the initial assumption. Additionally, the incentive has been increased from 20% to 50% and co-payments will be waived for Low Income participants, both of which also increase the spending relative to savings.

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1	with fuels other than gas and electricity are eligible to participate. All facilities are
2	eligible to have lighting upgrades and refrigerator replacement measures as identified
3	through the home assessment. The contractor puts major measures out to competitive
4	bid in facilities that have greater than twenty units. Major measures include lighting
5	upgrades, electric heat thermostats, replacement of inefficient refrigerators, heat pump
6	testing and upgrades, duct sealing and insulation for electrically and gas heated facilities.
7	The Company will provide incentives of \$200-\$300 to encourage customers to replace
8	inefficient refrigerators. The Company does not require a co-payment for lighting
9	fixtures or lamps installed in single family homes nor the living units of multifamily
10	facilities in order to avoid lost opportunities.
11	
12	The program is certified by the Environmental Protection Agency as a "Home
13	Performance with ENERGY STAR®" program in the single family sector. This allows
14	the program to use the ENERGY STAR® name for marketing purposes, and ensures that
15	the program meets high health and safety standards. The energy audit looks at the house
16	as a system, so that the customer can consider all energy efficiency measures as well as
17	occupant health and safety.
18	
19	The program is marketed through direct contact with interested customers and owners,
20	property owners' associations, bill inserts, customer newsletters, the National Grid
21	website, as part of the Gas Energy Efficiency programs, and other methods. There is
22	often a waiting list for multifamily program services, though the program is usually able
23	to serve customers within the year the participation request is made.
24	
25	For multifamily buildings, the comprehensive building analysis will be funded by either
26	gas or electric energy efficiency funds but not both. Electric or gas funds will be used to

provide funding for electric or gas weatherization measures including, insulation,

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showerheads, aerators, air sealing, duct insulation and duct sealing. The program will

2 provide an incentive covering up to 50% of the cost of installing insulation, duct

3 insulation and duct sealing.

4

For multifamily facilities the program will target both public housing authorities and 5 privately-owned properties. Through the program, multifamily properties will receive 6 7 either a prescriptive or custom audit depending on the size of the property or complexity of the project. Incentives described in the Residential High-Efficiency Heating and the 8 Residential High-Efficiency Water Heating Program descriptions will apply to 9 multifamily facilities and condominiums which contain gas heating systems and/or 10 11 domestic hot water systems that serve individual dwelling units. This type of facility would also be eligible for the single family type GasNetworks ENERGY STAR® 12 Thermostat and Gas Boiler Reset incentive programs. Incentive levels for these 13

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There is a barrier to participation in multifamily facilities due to the landlord's perception of a split incentive between the landlord and the tenant (in other words, that they will not see the benefit of a project occurring in their facility) for certain program offerings, and occasional landlord unwillingness to allow implementation personnel into their facilities. The Company and the Parties will continue to study ways to overcome these barriers and

prescriptive measures may vary for income qualified facilities. Copayments are typically

required for insulation, common area lighting, refrigerators, and heat pump tune-ups.

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Facilities larger multifamily facilities with central heating plants and domestic hot water systems that are interested in upgrading to high efficient gas systems will be served through the Gas Commercial High-Efficiency Heating and Commercial Energy

increase program participation through its incentives and financing options.

27 Efficiency Programs.

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- The program also offers low interest loans for customers who live in one to two unit
- 2 facilities to install additional weatherization, including insulation and air sealing. These
- loans are available to customers with homes heated by electricity, oil, propane, and wood,
- 4 regardless of their level of electric use.

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- 6 The Company will make an up-front payment to write down the interest on an unsecured
- 7 loan. It will plan to provide funds to lower the interest rate to approximately six percent.
- 8 The Company may adjust the loan rate during the year to respond to market conditions
- 9 and customer demand. The participating bank will determine loan approval. The
- 10 Company is researching alternative financing avenues.

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- 12 The Energy Wise program also services Public Housing Authority properties and other
- low income multifamily buildings.

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

- As noted above the Energy *Wise* Multifamily Program also services Public Housing
  Authority properties and other low income multifamily facilities containing five or
- greater dwelling units. Depending on income eligibility of the tenants, co-payments may
- be reduced or waived for these larger facilities. If the facility contains at least 50% or
- 20 more low income dwelling units, co-payments are usually waived on all measures except
- 21 refrigerators. All customer co-payments are waived for any measure installed in Public
- 22 Housing Authorities and other low income state and federally funded multifamily
- facilities. Over the last five years, Narragansett Electric has served over 6,940 low
- income multifamily dwelling units through the EnergyWise Program. These conditions
- 25 apply to National Grid electric and gas customers.

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

#### Overview

- 3 Electric and heating bills are typically a big burden to low income customers, who often
- 4 pay a high percentage of their income to cover these bills. Customers who are unable to
- 5 pay are at great risk for shut-off of services. All customers bear these costs through
- 6 paying for collection and shut-off visits and the write off of bad debt. Efforts to lower
- 7 energy bills for low-income customers benefit them directly and all ratepayers indirectly.

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#### Eligible Population

- 10 Customers who are eligible for the Low Income Heating Assistance Program (LIHEAP)<sup>3</sup>,
- also known as fuel assistance, and live in 1-4 unit buildings, are eligible for this
- program<sup>4</sup>. There is no co-payment requirement. Over the last six years, Narragansett
- 13 Electric has served over 5,594 low income dwelling units through single family low
- income program offerings. The Company proposes to serve 1,439 customers (dwelling
- units) in 2009.

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- 17 The Collaborative and Company want customers who have difficulty paying their electric
- bills to receive assistance from the energy efficiency programs. While the average
- savings of \$149 per year through the electric measure component and the average savings
- of \$620 per year through the gas measure component of the program may not be enough
- 21 to help these customers avoid shut-off, it will certainly provide some assistance and
- 22 increased control of electric and gas usage. The Collaborative and the Company believe
- 23 the targeted approach described below is the best way to reach these at risk customers.

<sup>3</sup>The federal government has set an income level, tied to the median income of each state, which defines the uppermost income boundary for LIHEAP participation. Individual states have some flexibility in defining income eligibility as long as it is not set above the federally defined maximum. Eligibility in this program will track the eligibility for LIHEAP set by the State of Rhode Island.

<sup>&</sup>lt;sup>4</sup> In previous years, this program was known as the Appliance Management Program (AMP).

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1	In 2009, the Company will continue to work with the Office of Energy Resources (OER)
2	to offer services to low income customer addresses where shut-offs have occurred. In
3	2005, the Company identified approximately 1,400 addresses where shut-offs have
4	occurred and electric usage was at least 10 kWh per day in the non-heating months.  The
5	Company provided electronic mailing lists and labels for outreach to these customers and
6	the local agencies contacted the customers.  Depending on the area, about ten to fifteen
7	percent of customers contacted requested services through the program. For 2009, the
8	Company will provide an updated list and encourage local agencies to make follow-up
9	outreach phone calls to targeted customers.

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#### **Program Design**

The Company contracts with the Rhode Island Office of Energy Resources (OER) and local weatherization agencies for the delivery of energy efficiency services to eligible customers. OER will continue to maintain a list of eligible clients who are qualified for low income services, who have requested services, and are not yet scheduled to be served.

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The agencies delivering program services focus on both electric energy efficiency opportunities and selected non-electric energy efficiency opportunities. Electric measures are identified through a comprehensive review of the customer's electric and gas bills, existing appliances, and electric and gas use patterns. The Single Family Low Income Services Program provides for the installation of ENERGY STAR® refrigerators and lighting, and cost-effective custom measures to replace inefficient equipment and help lower customers' electric bills. In addition, the Company installs electric and gas water heating energy efficiency measures at no cost for participating customers. Eligible gas measures include, heating system replacement (on a qualifying basis), safety inspections,

and funding the installation of CO detectors when DOE funds are not available.

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1 The Company also funds weatherization work for these customers in one to four unit homes where the primary heating fuel is electricity, gas, oil, propane or wood. This 2 funding supplements federal dollars received by the Office of Energy Resources (OER) 3 for weatherization work. In 2005 and 2007 the Company also began to fund oil and gas 4 heating system replacements respectively through the OER and plans to continue this in 5 2009.5 The new hot water and air heating systems are required to meet Federal 6 weatherization program guidelines and have an Annual Fuel Use Efficiency (AFUE) of at 7 least 80% for oil systems and 85% for gas. Installed steam systems have a minimum 8 9 efficiency of 82%. The Company proposes to continue to work with local Community 10 Action Agencies and the OER to provide no-cost services to income eligible customers in 1-4 unit facilities. 11

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The Company will market the program through direct contact with eligible customers via Company brochures, bill inserts, and the National Grid website. One marketing effort consists of contacting, by mail and/or telephone, customers subscribing to Narragansett Electric's low income rates who have not previously received program services. The program may also be marketed through direct contact with eligible customers by OER and local CAP agencies to customers it serves through state, federal, or local low income programs.

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

- 22 The table below summarizes the participation by low-income customers in the
- 23 Company's programs

<sup>&</sup>lt;sup>5</sup> Natural gas-fired systems are not eligible for replacement under this program. There are other programs, including those sponsored by the Company, that cover gas-fired systems.

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**Table 2** 

Projected Low-Income Participation in 2009 Programs and Participation History

Program	2009 projected	Percentage of	Number of low
_	participants	Total Participants	income participants
		in 2009	2002-2007
Single Family Low Income	1,439	100%	5,594
EnergyWise	1,097	13%	10,682
ENERGY STAR® Homes	114	30%	749

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Table 3
Projected Low-Income Expenditures in 2009 Programs and Expenditure History

Program	2009 Proposed	Percentage of	Low Income
	Low Income	Total Budget	Spending for years
	Expenditures	_	2002-2007
Single Family Low Income	\$2,628,200	100%	\$9,224,929
EnergyWise	\$725,200	18%	\$4,311,475
ENERGY STAR® Homes	\$258,000	30%	\$1,515,118

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# 3. ENERGY STAR® Homes (Gas and Electric)

### Overview

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

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#### **Eligible Population**

Anyone building a home in Rhode Island can participate, regardless of type of heating fuel. The Company plans to serve 380 customers through this program in 2009.

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#### **Program Design**

For 2009 National Grid will continue to offer three program options that builders/homeowners can choose. The first option, the "Performance Path", is similar to the previous program and requires a minimum HERS rating of 0.85 to qualify. Any builder hoping to access the \$2,000 Federal tax incentive must use this path. The second option is the "Builder Option Package" (BOPs) that allows a builder to qualify as ENERGY STAR® by agreeing to install specific equipment and meeting certain measured performance standards. For both these options, incentives of \$325 to \$500 will be available to builders depending on the new house characteristics and the level of efficiency achieved. The third option is called "Codes Plus". In this option, the builder will receive specific incentives for energy efficiency improvements above Code requirements. 

The "Codes Plus" option is for builders who are learning how to achieve the new more rigorous ENERGY STAR® standards and may not be able to achieve the ENERGY STAR® standards immediately. The Codes Plus option ensures that homeowners will receive energy efficiency upgrades above the code during the transition period of the new program. The incentives will be in two categories: Thermal Measures/Practices and Heating/Ventilation/Air Conditioning. The incentives are designed to ensure that a builder would not receive more money through this path than through the other two paths. Typically, the builder would only be eligible for one of these; otherwise, the house would meet ENERGY STAR® standards. An incentive of up to \$1500 will be available for the Thermal Measures including CFLs, Air Sealing, Insulation, ENERGY STAR® windows, and mechanical ventilation. An incentive of up to \$1,500 will be available for HVAC upgrades including CFLs, Duct Sealing, High Efficiency Heating Systems, ECM Motors, Indirect Water Heating, High Efficiency Air Conditioning, and Quality Installation Verification.

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- National Grid will explore opportunities to utilize lessons learned from Massachusetts'
- 2 experience with the Zero Energy Challenge.

3

- 4 National Grid will provide training and technical assistance to builders to help them meet
- 5 these standards. Additionally, in order to help builders with the program transition, the
- 6 Company plans to offer rebates for specific energy measure upgrades including duct
- 7 sealing, high efficiency furnaces, blower door verified air tightness and mechanical
- 8 ventilation, high efficiency air conditioning, and lighting upgrades. Though the existing
- 9 training structure, National Grid will continue to support the further needs to improve
- 10 code, as well as promoting current code awareness.

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- The 2009 program offered by National Grid and funded through the electric DSM charge
- provides services to all residential new construction, regardless of fuel type. National
- Grid will continue the existing program and examine opportunities to realign the funding
- mechanisms for 2009. In 2009 National Grid will look to drive builders towards greater
- savings. Options for offering further incentives for increased savings will continue to be
- 17 reviewed.

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# Low Income participation in the ENERGY STAR® Homes Program

- 20 The Company works closely with Rhode Island Housing and developers of affordable
- 21 housing in Rhode Island to encourage participation in the ENERGY STAR® Homes
- 22 program. Currently Rhode Island Housing encourages developers to receive ENERGY
- 23 STAR® Home certification. About 30% of the homes completed each year through the
- 24 ENERGY STAR® Homes program are for low income families. The Company also
- 25 plans to continue to work with Rhode Island Housing and the Rhode Island Office of
- 26 Energy Resources (OER) to support the energy efficiency of Rhode Island's affordable
- 27 housing programs.

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#### 4. High Efficiency Heating Program (Gas and Electric)

#### 2 Overview

- 3 A typical residential customer spends approximately 44% of his or her energy budget on
- 4 heating and cooling. To address heating costs, the ENERGY STAR® Heating Program
- 5 and the Company's Residential High-Efficiency Gas Heating program will be combined
- 6 to provide heating system rebates to all eligible customers.

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#### Eligible Population

- 9 Residential customers who purchase ENERGY STAR® Heating Systems fueled by oil, or
- 10 high efficiency gas or oil furnaces with high efficiency fans in their existing home are
- eligible to participate in this program. The Company proposes to serve about 1240
- customers in 2009. About 1100 of these customers will receive heating system rebates
- and about 140 will receive ECM motor rebates.

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#### **Program Design**

- 16 The Company will continue to offer incentives to customers who purchase ENERGY
- 17 STAR® Heating Systems that are fueled by oil and gas. We will market the program
- through, contact with air conditioning/heating equipment contractors, our website and
- word of mouth. In order to encourage higher efficiency and positively reinforce market
- 20 changes, the Company proposes to continue the rebate in 2009 for ENERGY STAR® oil
- 21 heating systems at \$200. The efficiency requirements are an Annual Fuel Use Efficiency
- Rating (AFUE) of at least 85x% for forced hot air systems, at least 85% for forced hot
- water systems, and at least 82% for steam systems. In 2009, oil-fired forced hot air
- 24 systems are also required to be equipped with an electronically commutated permanent
- 25 magnet (ECM) motor.

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- For 2009 the Company proposes continuing the Residential High-Efficiency Gas Heating
- 2 program which will be jointly operated with GasNetworks and is available to the
- 3 Company's residential heating customers. Program goals include, but are not limited to:
- Increasing market sector awareness of high-efficiency gas heating equipment
- 5 Increasing market sector awareness of efficiency enhancements and maintenance to
- 6 gas heating equipment
- Providing product training and program training to trade allies such as plumbing and
- 8 heating contractors
- Increasing customer knowledge of where to obtain high-efficiency heating products
- Examining new or underutilized energy efficient heating technologies for potential
- 11 residential program development
  - Monitoring customer perception of the performance and reliability of high-efficiency
- gas heating equipment and the savings achieved

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Table 4: Residential High-Efficiency Heating Program: Incentive Table			
Furnaces (forced hot air)	AFUE* 92% or greater	\$100 Incentive	
Furnaces (forced hot air with ECM or equivalent)	AFUE* 92% or greater	\$400 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	

AFUE = Annual Fuel Utilization Efficiency

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The Gas Rebate Program will be promoted through a variety of means including, but not limited to, direct mail campaigns, bill inserts, trade ally events, and contractor job site visits. Program brochures, builder packets and incentive applications will be the primary marketing material utilized. The program will be promoted through the National Grid and GasNetworks websites, where consumers and contractors will have the opportunity to

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- download program incentive applications and learn about program announcements,
- 2 updates or changes.

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

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- The incentive is available to residential heating customers (builders and/or homeowners)
- worth up to \$1000, depending on the type of heating equipment installed. This incentive
- level is in accordance with the GasNetworks incentive levels offered throughout New
- 13 Hampshire, Maine, and Massachusetts. Subject to cost-effectiveness, other heating
- 14 related measures will also be incorporated in the incentive portfolio. The incentive
- encourages customers to choose a high-efficiency model by influencing a consumer in
- two ways: bringing attention and perceived value to the high-efficiency equipment as an
- option as well as offsetting a portion of the higher initial purchase cost of a high-
- efficiency model compared to a standard-efficiency model. On September 1<sup>st</sup> of each
- 19 year, GasNetworks typically makes changes to the incentive levels of the High-Efficiency
- 20 Heating Program in conjunction with the members of the GasNetworks collaborative.
- National Grid proposes to adopt this practice. Factors taken into account include market
- 22 penetration information, changes in incremental costs of high-efficiency equipment, and
- current program year participation and budget levels. See Table 1 for a listing of eligible
- 24 equipment under the program and the current incentive level.

- For 2009 the Company proposes continuing an incentive of \$200 for high efficiency gas
- furnaces equipped with an advanced ECM motor or equivalent energy saving furnace fan

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- 1 (blower) motor, subject to budget limitations. ECM motors in gas or oil furnaces save
- 2 about 600 kWh of electricity per year for consumers. The Collaborative will monitor any
- 3 developments in this area.

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#### Residential High-Efficiency Water Heating Program (Gas Only)

- 6 The Company's Residential High-Efficiency Water Heating program will be jointly
- 7 operated with GasNetworks and will be available to the Company's residential water
- 8 heating customers. Similar to the Company's Residential High-Efficiency Heating
- 9 program, program goals include, but are not limited to:
- Increasing the demand for residential high-efficiency natural gas water heaters.
- Increasing customer and trade ally awareness of the benefits of high-efficiency natural
- gas water heaters.
- Providing training on products and programs to trade allies such as plumbing and
- 14 heating contractors.
- Increasing customer knowledge of where to obtain high-efficiency water heating
- 16 products.
- Monitoring customer perception of the performance and reliability of high-efficiency
- gas water heating equipment and the savings achieved.

- 20 Program marketing will consist of direct mail campaigns and outreach to contractors,
- builders, affordable housing developers, community development corporations, and
- 22 public housing authorities, bill inserts to residential customers, attendance at trade ally
- training events, radio, and promotion via National Grid's and GasNetwork's websites.
- 24 While direct customer marketing will generate a portion of the leads for this program, a
- 25 significant emphasis will be placed on meeting with heating and plumbing contractors at
- 26 trade shows, training sessions and job sites to encourage contractors to influence
- 27 consumer purchasing behavior toward this type of product.

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- The program incentive will be \$300 to residential water heating customers who install an
- 2 indirect water heater to an ENERGY STAR® rated natural gas forced hot water boiler.

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- 4 The Company will also provide incentives for on-demand tankless water heaters as an
- 5 energy saving alternative to the stand alone water heaters. The Company will provide a
- 6 \$300 incentive for on-demand, tankless water heaters that have a 0.82 Energy Factor with
- 7 an electronic ignition. The Company is considering higher rebate tiers for higher
- 8 efficiency on-demand water heaters.

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- The Company also proposes to offer a \$50 rebate for stand alone water heater tanks with
- an energy factor (EF) 0.62 or greater effective 01/01/09, ENERGY STAR® will formally
- announce the creation of a 0.62 EF tier for stand alone water heaters as a first step to
- encourage efficiency in this product segment.

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- 15 The Company proposes to promote all these technologies and will work with the
- 16 contractor community to assist it on how to identify the most appropriate application to
- 17 reap the most energy savings.

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# **ENERGY STAR® Programmable Thermostat & Controls (Gas Only)**

- 20 The ENERGY STAR® Programmable Thermostat Rebate for gas heat will provide home
- 21 heating customers with an incentive for the purchase and installation of ENERGY
- 22 STAR® labeled programmable thermostats. Through this program, customers will be
- eligible for a \$25 mail-in incentive for the installation of up to two ENERGY STAR®
- 24 qualified programmable thermostats. When applying for a thermostat incentive,
- 25 residential customers will be required to submit proof-of-purchase for the unit. The
- 26 ENERGY STAR® website lists and updates all eligible thermostat models. Eligible
- 27 thermostats may be installed by homeowners, heating contractors or energy auditors. In
- addition to mail-in incentives, instant incentives, in the form of point-of-sale discounts,
- 29 will be available through heating contractors and energy auditors.

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1	The Company	will promote this EN	NERGY STAR®	Programmable	Thermostat R	ebate m
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- via its website, both its thermostat and heating incentive forms, direct mail, bill inserts,
- and through Energy Wise program auditors. The Company will do outreach to stores such
- 4 as The Home Depot<sup>®</sup>, Lowe's<sup>®</sup>, and regional hardware stores. The retailer outreach effort
- 5 will provide training of these retailers' sales personnel regarding the incentive program
- and coordinate the ongoing distribution of program incentive forms at these stores. The
- 7 retailer outreach will be coordinated with that of the ENERGY STAR® Lighting and
- 8 Appliance Programs.

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- Rebates of \$100 will be offered for add on outdoor gas boiler reset controls. The
- modulating outdoor reset control senses the outdoor temperature and keeps the boiler
- water only as hot as needed reducing consumption 5% to 10% annually. The rebate will
- cover up to 66% of the cost of the reset.

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## 5. 2009 ENERGY STAR®® Central Air Conditioning Program (Electric only)

#### 16 **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
- 19 STAR<sup>®</sup> Central Air Conditioning Program provides funding to offer ENERGY STAR<sup>®</sup>
- 20 central air conditioning system rebates.

- 22 In 2002, the Company participated in a joint study of HVAC market conditions and
- 23 efficiency potential in Rhode Island, Connecticut, and Massachusetts. The study
- 24 identified several key target markets including residential customers who are in the
- 25 market to purchase central air conditioning (AC) or heat pump systems, residential
- 26 customers with existing air conditioning systems, and HVAC technicians responsible for

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1	servicing and installing this equipment. The market research estimates that
2	approximately 4,200 Rhode Island customers are purchasing replacement or new central
3	air conditioners each year. Recent customer surveys by the Company indicate that about
4	23% of Rhode Island residences, or about 95,000 customers, have central air
5	conditioning.

6

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

14

15

#### Eligible customers

Any residential customer installing, servicing or replacing a central air conditioning or heat pump system in an existing home is eligible to participate. Incentives for ENERGY STAR® heating and cooling are included in the ENERGY STAR® Homes program for new construction. The Company plans to continue ENERGY STAR® equipment rebates add an ENERGY STAR® Quality Installation component and further expand the scope of program measures and proposes to serve 546 customers in 2009.

22

23

#### Program design

The Company began the program in the fall of 2002. The Company has provided rebates to customers for properly installed ENERGY STAR® central air conditioning and heat pump systems in existing homes in 2003 throughout 2006. In February of 2006 the program merged with the COOL SMART program in Massachusetts in order to reduce

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- administrative and marketing costs. This also provides consistency for HVAC contractors
- 2 and distributors which operate in both states.

3

- 4 The ENERGY STAR® specification will be changed to require 14.5 Seasonal Energy
- 5 Efficiency Ratio (SEER) and 12 EER as of January 1, 2009. The Company plans to
- 6 phase the ENERGY STAR® rebate of \$300 on April 1, 2009 and offer an incentive of
- 5 \$300 for the new standard on that date plus \$200 additional to consumers and \$100 to
- 8 contractors when a Manual J sizing is properly completed.

- 10 The Company plans to offer rebates that are consistent with those offered throughout the
- region. The following is a summary of the Company's proposed tiers and rebate levels
- for 2009, which are subject to change to be consistent with the regional program:
- Add ENERGY STAR® QIV Quality Installation Verification component for
- replacement systems including systems replaced within the past 3 years old with
- an Environmental Protection Agency (EPA) certificate and \$100 customer
- incentive through participating program QIV contractors. The EPA requires
- sizing, duct sealing, and airflow and charge adjustments to specific American
- National Standards Institute ANSI/Air Conditioning Contractors of America
- 19 ACCA standards.
- The duct sealing requirement will be funded through the current contractor
- 21 incentive of \$1 per CFM of duct leakage reduction.
- Contractors will receive a \$250 incentive for verification and advanced airflow
- 23 measurement instead of a standard QIV incentive.
- If duct modifications (i.e., adding return ducts and/or turning vanes) are needed to
- 25 meet airflow requirements, contractors may receive an additional \$400 incentive.
- Expanded Negotiated Cooperative Promotion opportunities in cooperation with
- NEEP and other interested program administrators.

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1	•	Expand the Early- Replacement component from a seasonal promotion to a
2		standard offer. Enhance the qualifying equipment eligibility criteria to require an
3		existing SEER of 9 or 10.

- Phase out the \$300 consumer rebate for the purchase and installation of high efficiency central air conditioning equipment and air source heat pumps that meet
   the existing ENERGY STAR® standard SEER rating of 14, EER of 11.5 effective
   April 1, 2009. This is to allow time for customers and contractors to become more
   aware of the new ENERGY STAR® standard for 2009.
- Problem Replacement of the minimum standard for eligible equipment with the new ENERGY STAR® standard (SEER 14.5, EER 12) described above for the \$300 incentive as of April 1, 2009.
- A \$400 customer incentive for higher CEE-tier 2 equipment (SEER of 15, EER of 12.5 or higher).
- A \$500 customer incentive for a SEER of 14.5 or greater, an EER of 11.5 or greater, and an HSPF of 8.2 ENERGY STAR®—rated Split Ductless Air to Air Heat Pump systems with Inverter Technology.
- A \$200 customer incentive and a \$100 contractor incentive when sizing is completed for 2009 ENERGY STAR® or CEE-tier 2 equipment.
- Third party verification of optimal refrigerant charge and system air flow can be performed for any new equipment installation regardless of SEER. The contractor incentive for this "system commissioning" is \$175.
- Customers receive a \$100 instant credit on their bill from the HVAC contractor for the digital check-up when it is part of work done associated with a tune-up or repair of an eligible unit from a participating contractor who must be QIV listed.
- A contractor incentive of up to \$175 will be provided to cover the \$100 customer instant credit and \$75 to cover contractor cost associated with the digital check-up provided the unit passes or meets exception condition where at least charge with respect to airflow is within acceptable parameters.

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- A contractor incentive of \$1 per CFM of duct leakage reduction. Typically this is expected to average 100 CFM per home that receives this measure.
- In addition, we plan to investigate the opportunity to replace standard permanent split capacitor (PSC) motors with brushless furnace fan motors (BFMs) in central air conditioning systems, and develop an appropriate incentive.
  - We also plan to investigate the opportunity to replace fixed orifice coils with thermal expansion valve (TXV) coils at the time of a digital checkup, and to develop an appropriate incentive

Recent program recommendations from the U.S. Environmental Protection Agency (EPA) and the Air Conditioning Contractors of America (ACCA) include ensuring that the air flow across the indoor coil has been measured and set to correct levels, that ducts are sealed and sized directly, and that the refrigerant charge is at correct levels. For homes where the duct system is currently not operating properly, fixing the ductwork provides additional kW savings.

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

The Company has focused its efforts on both customer education and outreach via bill inserts, fact sheets, and targeted mailings to high users in summer months; contractors' education and outreach via phone calls, mailings, one-on-one meetings, trainings on technical issues, usage of sizing software, and up-selling to high efficiency equipment; and working closely with contractors to encourage participation in the program and installing the air conditioning systems properly.

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1	Although now control	Lour conditioning	aguinment that ic	nronoria 01700	I and anarating i
	Although new central		emmoniem mai is	DICHELLY SIZE	ranci oderanny i

- 2 critical to the energy efficiency of the equipment, HVAC technicians do not, as a
- 3 standard practice, perform all the needed calculations and tests. The Company has
- 4 assisted technicians by providing hands-on training and technical support on third party
- 5 verification of charge and airflow of systems.

6

- 7 In 2009, the Company proposes to continue activities to educate customers and
- 8 contractors, to promote installation quality, and to offer the third party verification of the
- 9 results for central air conditioning tune-ups, including incentives for customers and
- 10 contractors.

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

#### Overview

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

20

21

#### **Eligible Customers**

- 22 All residential customers are eligible to participate in this program. The Company
- proposes to serve about 69,000 lighting customers. While this program has been
- 24 available for a number of years, there are still significant opportunities to encourage
- 25 customers to use ENERGY STAR® lighting. An evaluation study conducted in
- 26 Massachusetts in early 2008 found that 21% of all sockets are filled with Compact

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- Fluorescent Lighting (CFL), indicating that a large market potential for energy efficient
- 2 lighting still exists in customer homes.

3

4

#### **Program Design**

- 5 For 2009 the Company proposes to continue offering its residential lighting programs as
- 6 part of the regional joint efforts. The program offers customers the opportunity to
- 7 purchase compact fluorescent bulbs (CFL) and fixtures at substantial discounts.
- 8 Customers have several options for program participation, including redeeming instant
- 9 rebate coupons for qualifying products purchased in participating retail stores, purchasing
- reduced price products at retailers where the manufacturer has received a rebate from the
- 11 Company and passed on the discount directly to retailers and consumers, using the mail
- order catalog, and making website purchases.

13

- 14 The Company will continue to work with manufacturers and retailers to offer a good mix
- of standard, innovative, and specialized CFL product. CFL rebates will be offered in the
- \$0.60 \$4.00 range, depending on the style and technology of the bulb (standard,
- dimmable, 3-way, etc.).

- 19 The Company has found that the "Negotiated Cooperative Promotions" (NCPs) through
- 20 NEEP are an excellent way to lower rebate costs and encourage retailers and
- 21 manufacturers to pay for marketing and promotion through their regular channels. Active
- promotions in 2008 have included retailers: Stop and Shop, Rocky's, Benny's, Shaw's,
- 23 Whole Foods, and Home Depot. Manufacturers who have participated in Negotiated
- 24 Cooperative Promotions include: General Electric, Osram Sylvania, TCP, Maxlite, Feit,
- and Globe. In 2009, the Company will look to expand mercury recycling efforts in
- 26 Rhode Island by working with retailers.

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1	The Company 1	proposes to	continue re	ebates for	ENERGY	STAR <sup>®</sup>	fixtures ar	nd torchieres
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- 2 Rebates will be \$10 for exterior fixtures and \$15 for interior fixtures, table lamps, and
- 3 floor lamps and torchieres and to add \$30 rebates for LED lighting and \$25 rebates for
- 4 higher end lighting fixtures to help move the market. Rebates on fixtures and bulbs may
- 5 be adjusted to ensure coordination with regional and national program efforts and to
- 6 reflect changing Rhode Island market conditions. The Company will also continue to
- work directly with lighting showrooms to encourage the promotion of high efficiency,
- 8 high fashion residential CFL fixtures. The Company will continue to support local
- 9 retailers with promotional materials (signs, coupons, displays) training, and regular sales
- 10 visits.

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# 7. ENERGY STAR® Appliances (Electric only)

#### Overview

- 14 ENERGY STAR® is the national program sponsored by the United States Department of
- 15 Energy and the Environmental Protection Agency to promote energy efficient products to
- help reduce energy use and prevent air pollution. Energy efficient choices can save
- families about a third on their energy bill with similar savings of greenhouse gas
- emissions, without sacrificing features, style or comfort.

19

- 20 Earning the ENERGY STAR® means products meet strict energy efficiency guidelines
- set by the US Environmental Protection Agency (EPA) and the Department of Energy
- 22 (DOE).

- 24 This program is part of a regional joint effort by utilities and energy efficiency
- organizations to encourage the purchase of ENERGY STAR® rated major appliances.
- 26 These appliances include clothes washers, dishwashers, refrigerators, dehumidifiers, and

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- room air conditioners (RAC). Manufacturers build their products to meet or exceed
- 2 energy efficiency performance specifications established by ENERGY STAR®.
- 3 Together with manufacturers, local retailers, the DOE, and EPA, the Company works to
- 4 help identify and promote the purchase of these high efficiency appliances to its
- 5 customers.

6

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#### **Eligible Population**

- 8 All residential customers are eligible to participate. The Company proposes to serve
- 9 about 7,600 customers in 2009

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#### Program design

The program provides retailer support, training, advertising, consumer education, codes and standards review and advocacy, and manufacturer labeling. For 2009 the Company proposes to continue to provide consumer education on these products and continue to offer rebates for ENERGY STAR® room air conditioners. The Company proposes to offer a refrigerator retail rebate of \$50. The Company proposes to offer a room air conditioner rebate of \$30, and it may be paid directly to industry partners rather than to consumers. The Company, and other sponsors in Vermont and Massachusetts, has issued a request for proposal to work with manufacturers and retailers directly to encourage increased stocking of ENERGY STAR® room air conditioners relative to less efficient models on retail shelves. Customer purchase behavior is largely influenced by what air conditioners are available for purchase at local retailers. It may be that working directly with industry partners is more effective than direct consumer rebates in increasing the market share of ENERGY STAR® room air conditioners. The rebates may be adjusted to ensure coordination with regional and national program efforts and to reflect changing Rhode Island market conditions.

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1	The Company is proposing to implement a program to remove second refrigerators from
2	homes whereby customers will be given a \$30 bounty for doing so. This program will
3	encourage customers who have operating refrigerators to have a vendor remove their
4	second refrigerator. The vendor will be responsible for having the refrigerator recycled
5	properly.
6	
7	The Company is proposing to add rebates of \$250 for pool pump replacement and to add
8	\$10 rebates for electronics and Smart Strips. Smart strips allow some electronics to be
9	turned off while others stay on. Smart strips are a good way to teach customers to turn off
10	appliances. Electronics account for up to 15% of a home's electric usage and is growing
11	as a percentage of household usage.
12	
13	An important part of the program is educating customers about ENERGY STAR®. The
14	Company sponsors media advertising that promotes ENERGY STAR® and specific
15	ENERGY STAR® promotions. Additionally, the retail stores are an integral channel for
16	promoting ENERGY STAR®. The Company prints and distributes a wide variety of
17	point-of-purchase materials and signs for display in retail stores. The Company also
18	supports cooperative advertising with retailers in various print and newspaper channels.
19	The Company also develops media stories and public relations opportunities about
20	ENERGY STAR <sup>®</sup> .
21	
22	A nationwide study of consumers' awareness of ENERGY STAR® labeling is conducted
23	annually. The most recent study, "National Awareness of ENERGY STAR® for 2006 –
24	Analysis of CEE Household Survey" indicates that the existence of utility sponsored
25	programs increases the awareness of ENERGY STAR® products. National recognition of
26	the ENERGY STAR® label in high-publicity areas (areas with an active local ENERGY
27	STAR® program sponsored by a utility, state agency, or other organization for two or
28	more continuous years) was 69% compared to 49% in low-publicity areas. When the
29	ENERGY STAR® label is shown, the aided recognition in high-publicity areas rises to

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1 79% and in low-publicity areas the value increases to 65%. The Company will inform

2 the Collaborative about future awareness study results.

3

4

#### 8. Building Practices and Demonstration Program

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

11

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

15

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

- 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.

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- 1 Marketing of the program will rely on working with industry vendors developing and/or
- 2 offering new or underutilized natural gas energy efficiency technologies, as well as other
- 3 interested organizations.

4

5

#### 9. Energy Efficiency Educational Programs

#### 6 Overview

- 7 All the residential energy efficiency programs include customer education as a primary
- 8 element of the program design. In addition, the Company also sponsors educational
- 9 programs for children and young adults who are among Rhode Island's future ratepayers,
- 10 builders, and contractors. The budget for educational programs includes three
- components described below, including a new component that provides general education
- to all customers about low cost energy efficiency actions they can take.

13

14

#### Eligible Population

- 15 The first two energy efficiency educational initiatives are targeted toward students. All
- residential customers can benefit from the public education initiative.

17

18

#### Program Design

19 The three programs are described in detail below.

#### 20 a) National Energy Education Development (NEED) Project

- 21 The National Energy Education Development (NEED) Project is a nonprofit education
- 22 association that works with thousands of schools nationwide to promote an energy
- conscious education. NEED is a strategic partner of Rebuild America and **EnergySmart**
- 24 Schools, programs of the U.S. Department of Energy. NEED creates networks of
- 25 students, educators, and business, government and community leaders to design and
- 26 implement objective energy education programs. The Rhode Island EnergySmart

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- Schools program includes educational materials for kindergarten to twelfth grade that
- 2 provide comprehensive, objective information about energy production and consumption,
- 3 the major energy sources, and their impact on the environment, economy, and society.
- 4 Services offered include kits and curriculum for students from kindergarten through high
- 5 school, student/teacher training programs, workshops, and conferences, a summer camp
- 6 program, scholarships to national energy educational conferences, and youth awards.

7

8

# b) ENERGY STAR® Homes Vocational Schools Initiative

- 9 The Company currently works with all nine Rhode Island Career and Technical schools
- on this initiative: Chariho, Coventry, Cranston, Davies, East Providence, Hanley,
- Newport, Warwick, and Woonsocket. It provides training to vocational school students
- on building ENERGY STAR® homes. These homes are then sold as affordable housing.

13

- Originally, only Woonsocket and Warwick were participating in the program. In the past
- 15 year, the other schools were encouraged to participate in cooperation with the Skill USA
- national competition for vocational schools. Working with the Woonsocket Area Career
- and Technical Center, the Community College of Rhode Island, and the Rhode Island
- Builders Association, the Company sponsored a Rhode Island Energy Efficient Building
- 19 Competition to help students improve performance in the national competition. In
- 20 preparation, on-site training was provided at all schools on energy efficient building
- 21 practices. The Company will continue this outreach effort because it will improve
- 22 Rhode Island's energy efficiency for years to come.

23

24

# c) Public Education Initiative

- During 2009, the Subcommittee will discuss how to continue the Company's public
- 26 education effort to promote energy conservation during times of high energy costs. This
- 27 may include an advertising campaign to educate customers about low cost steps they can

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- take to lower their electric bills and giving customers a contact number and/or website to
- 2 get more information about energy efficiency programs and additional low cost energy
- 3 saving tips.

THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 4000 Attachment 3 Page 1 of 4

# SUMMARY OF PROPOSED CHANGES TO THE COMMERCIAL & INDUSTRIAL PROGRAMS FOR 2009

**Large Business Programs** 

Category	<b>Energy Initiative</b>	Design 2000plus
General	<ul> <li>An "on-bill" payment option will be available to cities and towns. A community will be able to pay for their cost share for electric energy efficiency measures on the bill in up to 24 monthly installments with no interest.</li> <li>Incentives for cities and towns will be increased from 45% to 70% of the total installed cost of eligible measures or 1.5 year payback to the customer whichever is less.</li> </ul>	
Lighting	No changes	Design 2000plus prescriptive lighting is being revised significantly to address the current Rhode Island Energy Code. A detailed analysis is underway.
Motors	N/A – prescriptive rebates are not offered under Energy Initiative	No change
HVAC	No change	No change
Compressed Air	No changes	No changes

# THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 4000 Attachment 3 Page 2 of 4

Category	Energy Initiative	Design 2000plus
Custom	<ul> <li>Provide short term enhanced incentives for new technologies (e.g. conversion of constant volume fume hood exhaust to variable volume with effluent sensing controls).</li> <li>Change cap so we pay 45% of cost down to a 1.5 year payback rather than the current 45% down to a 2 year payback. This is expected to be helpful for some very attractive projects in manufacturing that are being missed.</li> </ul>	<ul> <li>Provide short term enhanced incentives for new technologies (e.g. conversion of constant volume fume hood exhaust to variable volume with effluent sensing controls).</li> <li>Comprehensive Chiller - Allow compressor only replacement (retain existing shell and tubes) to qualify for the enhanced incentives provided under Comprehensive Chiller. Eligibility criteria will be set such that compressor efficiency is in line with those available from frictionless bearing type compressors. Air and water cooled chillers shall be eligible.</li> </ul>
Advanced Buildings and Comprehensive Design Approach (CDA)	N/A	A \$\$ per square foot incentive is under development.

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

Small/Medium Business	No changes.
Program	

# **Gas Programs**

Commercial Energy	<ul> <li>Custom Level 1 incentives have been increased from \$0.75 per</li> </ul>			
Efficiency Program	first year estimated therm savings to \$1.50. Level 2 incentives			
	have been increased from \$1.50 per first year estimated therm			
	savings to \$3.00 and applies to solar hot water measures only			
	<ul><li>Incentives for combined heat and power remain at 2008 levels</li></ul>			
	(\$0.75 and \$1.50 per annual estimated therm saved for Level 1			
	and Level 2 respectively). However, new eligibility criteria has			
	been developed. See Attachment 4 for details			
	<ul> <li>Prescriptive incentives were added in 2008 for commercial</li> </ul>			
	kitchen equipment and will continue in 2009. Customers buying			

# THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid R.I.P.U.C. Docket No. 4000 Attachment 3 Page 3 of 4

	<ul> <li>high efficiency commercial fryers and commercial steamers can receive and incentive of \$2,000.</li> <li>Windows, which were previously prescriptive measures will now be custom measures</li> <li>The Steam Assessment and Savings program, will be rolled out in 2009.</li> </ul>						
Commercial High Efficiency	Product Change						
Heating Program	Furnaces (up to 150 MBtuh)	■ Threshold of > 90% AFUE has been					
		raised to >=92%					
The following changes are proposed for 2009:		■ Incentive has been increased from \$150 to \$300					
r · r	Furnaces	■ Incentive has been increased from \$400 to \$500					
	Steam Boilers (up to 300 MBtuh)	Incentive has been increased from \$200 to \$700					
	Hydronic Boilers (under 300 MBtuh)	Incentive has been increased from \$500 (< 175MBtuh) and \$700 (175 to 300MBtuh) to					
	## \$1,000 Hydronic Boilers (301to 499 Incentive has been increased from \$1,000 MBtuh)						
	Hydronic Boilers (500 to 999 MBtuh)	Incentive has been increased from \$2,000 to \$2,500					
	Hydronic Boilers (1000 to 1700 MBtuh)	Incentive has been increased from \$3,000 to \$3,500					
	Hydronic Boilers (1701 MBtuh and larger)	Incentive has been increased from \$4,000 to \$5,000					
	Condensing Boilers (under 175 MBtuh)	<ul> <li>Incentive has been increased from \$600 (&lt; 175MBtuh) and \$1,000 (175 to 300MBtuh) \$2,000</li> <li>Threshold of &gt; 90% AFUE has been raised to &gt;=92%</li> </ul>					
	Condensing Boilers (301 to 499 MBtuh)	<ul> <li>Incentive has been increased from \$1,500 to 3,000</li> <li>Threshold of &gt; 90% thermal efficiency has been raised to &gt;=92%</li> </ul>					
	Condensing Boilers (500 to 999 MBtuh)	<ul> <li>Incentive has been increased from \$3,000 to \$5,000</li> <li>Threshold of &gt; 90% thermal efficiency has been raised to &gt;=92%</li> </ul>					
	Condensing Boilers (1000 to 1700 MBtuh)	<ul> <li>Incentive has been increased from \$4,500 to \$10,000</li> <li>Threshold of &gt; 90% thermal efficiency has been raised to &gt;=92%</li> </ul>					

# THE NARRAGANSETT ELECTRIC COMPANY d/b/a National Grid

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Condensing MBtuh and 1	Boilers (1701 arger)>	Incentive has been increased from \$6,000 to \$15,000 Threshold of > 90% thermal efficiency has been raised to >=92%
On Demand	Tankless Water Incent	tive has been increased from \$300 to \$500
Heater		

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

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# 2009 COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY PROGRAMS

2 AND INITIATIVES

- 3 The proposed electric and natural gas energy efficiency programs for commercial and
- 4 industrial ("C&I") customers described herein reflect the Company's plans to offer
- 5 integrated energy efficiency solutions to its commercial and industrial C&I customers.
- 6 The depth of the programs will significantly expand for 2009. Paramount to this are two
- 7 objectives: 1) ensuring that the programs are capable of ramping up energy savings in
- 8 order to address the goal of least cost procurement and 2) integrating the gas and electric
- 9 programs so that delivery will be seamless to customers.

10

11

- Increasing Savings Targets. Least cost procurement in Rhode Island is a great
- 12 opportunity to expand and accelerate energy efficiency programs in Rhode Island.
- While the programs as they are currently structured will meet some increased demand,
- the Company will look at ways to increase the programs' appeal and penetration. Some
- of these enhancements are:
- 16 Cities and towns participating in Energy Initiative will now be offered incentives 17 that will pay up to 70% of the installed cost of a measure, similar to the 18 Small/Medium Business Program. Also, cities and towns will be able to pay their 19 share of the cost through their electric bill in up to 24 monthly installments with 20 no interest. First cost is a significant barrier to cities and towns which this 21 initiative is expected to overcome. In addition the Company's Whole Building 22 Assessment (WBA) initiative has proven to be a valuable service for these cities 23 and towns. WBA uses the combination of benchmarking municipal buildings with 24 technical assistance and incentives to encourage these municipalities to take 25 action on incorporating energy efficiency strategies that lead to reduced energy 26 costs.

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- A targeted approach to direct services to particular customer segments or building types will be considered. Currently the Company is looking at programs targeted at laboratories and data centers where there is significant potential to save energy. Also, the Company is already offering a commercial kitchen equipment gas program which can be expanded to marketing other opportunities like energy efficient kitchen hoods that save both electric and gas and for efficient lighting opportunities.
  - As mentioned in the following paragraphs, refining the integration of gas and electric programs will increase the depth and appeal of programs, which will generate additional savings.
  - Existing buildings present an opportunity to mine savings in large way from the inefficient lighting that has been installed in these facilities over many years. With the advent of high performance lighting technology and control systems on the market, the company expects to ramp us these services to address better lighting practices with the latest advanced lighting practices. These would include the next generation of surface mounted high performance fixtures and controls.

Gas and Electric Program Integration. The delivery of gas and electric energy efficiency services in 2009 will be integrated such that it is seamless to the customer, so that a customer will understand all of the options—both gas and electric—for energy efficiency available to them. Some elements of the programs are already well integrated, for example, in Comprehensive Design Approach or Core Performance projects where gas and electric energy efficiency measures appear in the same technical assistance studies and offer customers high performance equipment selections for both gas and electric systems. However, the programs may not appear integrated in some situations due to differing delivery mechanisms and Company and vendor organizational

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1 structures. This is not an impediment to many gas or electric projects that might involve

only one technology, for example, for a replacement older boiler or failed motor.

The paths toward integration that customers take can be simplified whether they are delivered through a vendor and/or account management process. Pivotal to this integration will be effective coordination and training of National Grid field personnel and marketing of the programs. Examples of how this integration may play out are in new construction so that the customer and the practitioners designing the building will have knowledge of and access to all program offerings through one source. In smaller new construction or renovation projects, a lead might come through a vendor of one discipline, for example an electric contractor seeking information on rebates for lighting systems. The Company would then have to find out the scope of the project so opportunities in building envelope and HVAC can be addressed. Thus, gas and electric programs and services can be delivered seamlessly to customers.

In this section, descriptions of electric and gas programs appear separately. This is practical for a regulatory filing because there is a need to tie budget line items to their description in this filing. Even though the public will see these as integrated, electric measures will be funded through the electric energy efficiency program; while natural gas measures will be funded through the natural gas energy efficiency program. National Grid is committed to full, appropriate integration of gas and electric efficiency programs. However, given the current infrastructure, organization, and implementation procedures, this will be an on-going process. We have taken significant steps in this direction in this Plan, but also commit to working closely over 2009 with the Subcommittee and EERMC Consultant team to achieve much more comprehensive integration of efficiency services.

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<sup>&</sup>lt;sup>1</sup> Electric programs have historically been delivered by Company staff while gas programs are primarily outsourced except for larger and more comprehensive projects.

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# **Electric Programs**

# 1. Design 2000plus

# Overview

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4 Offered to commercial and industrial customers since 1988, Design 2000plus encourages 5 energy efficiency in new construction, renovations, remodeling, planned replacement of 6 aging equipment and replacement of failed equipment through financial incentives and 7 technical assistance to developers, manufacturers, vendors, customers and design 8 professionals. Financial incentives reduce the incremental cost barrier to investing in 9 efficiency. Technical assistance reduces barriers to more efficient design by providing 10 education and information to participants in the use of energy-efficient engineering 11 practices, including identifying and analyzing potential efficiency opportunities. Design 12 2000 plus will be integrated with the Commercial Energy Efficiency and High Efficiency 13 Heating Equipment (gas) programs that serve time dependent opportunities. Newly 14 constructed buildings in particular offer the greatest opportunity to integrate all gas and 15 electric energy efficiency offerings, as these projects need to purchase all new equipment. 16 However, even within existing buildings, the programs will now be able to address 17 multiple measures across energy types, including combined heat and power systems as 18 part of a single project.

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#### Eligible Population

Design 2000*plus* is available to all non-residential customers. It is available for new construction and remodeling projects such as a new building, expansion or renovation of an existing building, change in the use or function of the building space, new equipment or systems for a new process or expanded operation, replacement of failed equipment, or planned replacement of equipment or systems.

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# **Program Design**

- 2 Design 2000*plus* provides technical consulting and incentives for the installation of many
- 3 different kinds of energy efficient equipment and systems. Energy efficiency measures
- 4 which are eligible for incentives include premium efficiency lighting, motors, variable
- 5 speed drives, heating, ventilating and air conditioning systems (HVAC), refrigeration,
- 6 industrial process, compressed air, combined heat and power (gas), or any other
- 7 qualifying efficiency improvement.

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# Incentives

There are three specific types of incentives. (1) Prescriptive incentives are standardized in terms of incentive level and minimum efficiency criteria, and address specific equipment measures addressing lighting, motors, DHW (gas), compressed air, and HVAC. Incentives for high efficiency alternative equipment and systems are offered to customers on a per unit basis. (2) Custom incentives are offered for any qualifying costeffective efficiency opportunity, based on the unique energy savings and cost criteria of a project. (3) Comprehensive incentives are based upon evaluation of the whole building and the benefits that come from examining an integrated engineering approach. The latter are primarily, but not solely, applicable to new construction and major renovation among large (>75,000 sq. ft.) buildings. In general, incentives are designed either to cover 60 to 75% of the incremental cost between standard and premium efficiency equipment and systems or to buy down the cost of equipment to the customer to a one and a half year payback, whichever is less. For Comprehensive Design Approach and Comprehensive Chiller projects (described below), incentives cover up to 80% of the incremental cost or buy the cost of the equipment and systems down to a one year payback, whichever is less. Core Performance is a comprehensive track under Design 2000plus but for smaller buildings. Core performance is described later in this section.

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- 1 Most incentives will be unchanged in 2009. Attachment 3 details specific changes to
- 2 measure incentives. The Company will also explore offering upstream incentives to
- 3 design professionals which will be design to foster more comprehensive projects sooner
- 4 in the design process.

# Marketing

The Company markets Design 2000*plus* through extensive personal communication by account managers with customers, vendors, contractors, design professionals and, seminars, training sessions and other direct marketing approaches. For 2009 the Company will continue to build on this marketing effort by implementing a broader communications plan to customers to underscore the value of implementing energy efficiency solutions in their facilities to control their electricity costs and reduce their building operating costs. It is anticipated that circuit riders will be called on to actively educate and train a large segments of these trade ally groups to ensure higher levels of participation and savings results. The ceiling for achieving greater results has been raised and the necessity of increasing the number of trade allies through increased direct contact will be critical to success. Development of these approaches coupled with direct mail and response campaigns will be part of the overall communications and outreach initiatives planned for 2009.

In 2009, the Company will also be targeting specific customer segments and building types that might have both unique needs and significant opportunity to reduce energy consumption. With greater need for improved processing of information, it is expected that data centers furnishing this information will offer chances to reduce energy use through improved ventilation and cooling. The Company is currently developing program elements that will look at laboratories and data centers. We will add to these target markets as new ones are identified.

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- 1 The proposed changes to the Design 2000plus program for 2008 are summarized in
- 2 Attachment 3.

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# 4 A. Services

- 5 For new construction and major renovation, the earlier in the design process the
- 6 Company becomes involved, the more likely it is that a comprehensive solution will be
- 7 possible. For example, if the customer begins participation in Design 2000plus before
- 8 making final design decisions, there is the advantage that comes from investigating
- 9 reduced cooling requirements through improved lighting systems. Moreover this
- 10 improvement may lead to selecting smaller HVAC equipment and contribute to greater
- 11 efficiency and lower building operating costs. Once the Company identifies an
- 12 appropriate Design 2000plus project, the Company offers technical assistance services,
- integrated with the customer's design team if they have one.

14

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

- 22 These technical assistance services include gas and electric engineering evaluations that
- 23 support best practices in building design and consider energy efficient measure
- 24 identification, equipment metering or monitoring, improved technical design solutions,
- 25 customer presentations, and design and construction assistance. Technical assistance
- 26 provides customers and their design professionals, if any, with detailed engineering

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1 studies that identify alternative energy systems that support lower operating costs in the 2 buildings and the operational benefits that come from this selection. The costs of these 3 energy efficiency studies are usually cost shared at 50% with customers. Technical 4 assistance is available for all customers. While the focus is often early engagement with 5 customers and their design teams for new construction and major renovation, TA studies 6 are also done that focus on specific equipment or systems for existing customers. 7 8 To ensure that energy savings features are installed and operated as designed, the 9 Company provides a commissioning service. This service is an independent third party 10 verification that complex building systems, such as HVAC projects involving energy 11 management systems or other controls, are operating as designed. 12 13 In some circumstances customers may wish to use their own engineer in lieu of a 14 technical assistance (TA) vendor supplied by the Company. In these cases, these 15 companies must adhere to the same standards and criteria for a technical analysis as 16 engineers supplied by National Grid and their work will be reviewed and approved by the 17 Company's technical support consultant. 18 19 Financing for the customer portion of the Design 2000plus project is available to 20 Financing is generally arranged with Citicorp Vendor Financing, and customers. 21 includes nominal application and documentation fees, a limited up-front cash requirement 22 of no more than the first month's lease payment, flexible repayment terms of two to 23 seven years, and a simple application process. The amounts available range from \$5,000 24 to \$4,000,000. This arrangement benefits not only the specific customer in need of 25 financing, but also more generally is introducing energy efficiency lending to the

financial community, which considers this type of loan unconventional.

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- 1 Design 2000plus provides free ballast recycling to customers installing energy efficient
- 2 lighting under Design 2000*plus*, if necessary. The purpose of this service is to ensure that
- 3 all ballasts (some of which may contain polychlorinated biphenyls or PCBs) are disposed
- 4 of in an environmentally sound manner.

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- 6 The Company offers the Project Expediter service, which uses pre-qualified contractors
- 7 to market efficiency services to customers, audit customers' facilities and arrange for the
- 8 purchase and installation of energy efficient equipment. Under this service, Project
- 9 Expediters are authorized by the Company to analyze projects and offer customers
- incentives without Company preapproval. Project Expediters are firms that have proven
- 11 to the Company they do good quality work, understand the Company programs, and
- 12 accurately make offers and promises to customers. The Company maintains lists of
- 13 qualified Project Expediters and makes referrals to customers as appropriate, as well as
- provides a list on its website. As with most of the other services listed here, Project
- 15 Expediter is available for both Design 2000*plus* and Energy Initiative, described below.
- 16 Usually, these installations are retrofits, however, and therefore qualify under Energy
- 17 Initiative.

18

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# 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
- buildings that are energy efficient and provide a healthy work environment for occupants.
- 26 Core Performance complements the Comprehensive Design Approach and Commercial
- 27 Energy Efficiency Program (gas) with a special emphasis on smaller buildings. Core

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1	Performance also serves to promote better commercial design practices such that
2	advancements in the Rhode Island building code can be implemented at an accelerated
3	rate. The Company has played a lead role nationally in the development and refinement
4	of Advance Buildings along with other stakeholders and utilities. For 2009, the
5	Company will continue to build on the success of the Core Performance we have been
6	promoting for three years in Rhode Island to address the efficiency needs of new
7	construction projects for commercial buildings less than 75,000 sf. National Grid
8	launched this effort in 2006 with several training programs on the topic offered in RI.
9	Numerous projects have been design in the state using Core Performance and we expect
10	the number to grow as architects and their clients realize that buildings designed this way
11	are practical and cost effective.

The program will continue to be expanded in 2009 to reach more projects and more design firms with additional staff and through further training and promotional efforts. Also, National Grid continues to work closely with the New Buildings Institute the national organization that manages and promotes and maintains Advanced Buildings across the country to add powerful new features to the program that will increase its appeal and market penetration.

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

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1	
2	The Company expects to incorporate a major outreach effort to architects and other trade
3	allies in its marketing plan under development. This will be necessary to ramp up
4	penetration of Core Performance into the New Construction market. This outreach will
5	include relying on both in-house and outsourced professionals calling on architectural
6	and engineering firms directly as well as providing support materials that identify the
7	value of better performing buildings and the practices necessary to achieve these cost
8	reduction results.
9	
10	Core Performance is also supported by the Company's gas Commercial Energy
11	Efficiency Program.
12	
12	1. C
13	b. <u>Comprehensive Chiller Program</u>
13 14	b. <u>Comprehensive Chiller Program</u> Design 2000plus also assists customers in optimizing their building operating systems at
14	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at
14 15	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12
14 15 16	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may either optimize the performance of their existing
14 15 16 17	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may either optimize the performance of their existing older building systems or receive technical guidance and recommendations regarding the
14 15 16 17 18	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may either optimize the performance of their existing older building systems or receive technical guidance and recommendations regarding the proper size and efficiency for a replacement chiller plant. This program component,
14 15 16 17 18	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may either optimize the performance of their existing older building systems or receive technical guidance and recommendations regarding the proper size and efficiency for a replacement chiller plant. This program component, called the Comprehensive Chiller initiative, also helps to reduce peak summer generation
14 15 16 17 18 19 20	Design 2000 <i>plus</i> also assists customers in optimizing their building operating systems at the time of their federally mandated replacement or conversion of CFC (R-11, R-12 refrigerant) chillers. Customers may either optimize the performance of their existing older building systems or receive technical guidance and recommendations regarding the proper size and efficiency for a replacement chiller plant. This program component, called the Comprehensive Chiller initiative, also helps to reduce peak summer generation

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c. Economic Development

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1	Design 2000plus offers a significant opportunity for economic development in Rhode
2	Island by helping businesses save on their electric costs while at the same time
3	supporting them in their investments in new energy efficient equipment and system
4	improvements to their facilities. To this end, for 2009 the Company will continue to
5	work closely with various economic development groups in the state, including the
6	Rhode Island Economic Development Corporation (RIEDC), to seek ways the Company
7	may provide focused efficiency services. This effort builds on the relationships first
8	established in 2005, and may create a more favorable climate for doing business in Rhode
9	Island. In addition, this effort has afforded the opportunity to coordinate with the gas
10	Economic Development effort. Businesses moving to Rhode Island and businesses that
11	might be expanding, for example, are referred to the Company by the RIEDC. The
12	Company will explain its energy efficiency programs and offer to provide technical
13	assistance and other services.
14	
15	Another economic development initiative the Company will undertake in 2009 is to help
16	expand the capability of business that serve the energy efficiency industry in Rhode
17	Island. This will be necessary in order to meet ever increasing demand for our energy
18	efficiency programs.
19	
20	This is an effort that will look at the energy efficiency services industry serving both
21	residential and commercial/industrial customers. This workforce development effort
22	will:
23	
24	<ul> <li>Identify commercial and residential companies, agencies and not-for-profit</li> </ul>

organizations that are actively performing energy efficiency services in Rhode

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Island.

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1	<ul> <li>Provide an estimate of additional companies, agencies and non-for-profit</li> </ul>
2	organizations that are in industry categories that could potentially perform energy
3	efficiency services in Rhode Island.
4	
5	■ Estimate the size and composition of Rhode Island's commercial and residential
6	"energy efficiency workforce" (based on returned employer surveys).
7	
8	<ul> <li>Identify specific job titles/professions which employers report are "in demand"</li> </ul>
9	and a shortage of which might serve as a barrier to Rhode Island's efforts to
10	achieve energy efficiency objectives.
11	
12	<ul> <li>Provide recommendations to utilities, energy efficiency companies, state agencies</li> </ul>
13	and the state's education/job training system re: meeting identified workforce
14	needs.
15	
16	C. Market Transformation Initiatives
17	Design 2000plus has a large market transformation component that supports the new
18	construction program toward better performance. By familiarizing the large commercial
19	and industrial segment with higher energy efficiency standards, Design 2000plus creates
20	new efficiency standards for construction. The Company actively supports regional and
21	national market transformation programs designed to transform markets for a broad range
22	of energy efficient equipment and services. These activities are discussed below.
23	
24	a. Regional Energy Efficient Motors and Unitary HVAC initiatives
25	As a feature of the Design 2000plus Program, the Company has supported the MotorUp
26	premium efficiency motor initiative since 1998, a regional market transformation

initiative that promotes motor management of high efficiency motors and quality repair

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1	of motors to maintain high efficiency. In the past, the MotorUp program was delivered
2	through a joint effort by participating utilities and energy efficiency agencies in New
3	England, New York and New Jersey through the Northeast Energy Efficiency
4	Partnerships. This extended regional group has decided to end the joint delivery of
5	MotorUp. In its place for 2007, a Motors program was developed by a group that
6	encompasses a smaller region consisting of Massachusetts and Rhode Island utilities.
7	The regional program also called MotorUp has continued to offer consistent equipment
8	efficiency requirements for qualifying "NEMA Premium" motors. Uniform rebates and
9	application forms are used throughout the region. For 2009, Massachusetts and Rhode
10	Island utilities will continue to coordinate the use of a contracted circuit rider to provide
11	outreach to motor dealers, trade allies, vendors and distributors. MotorUp also features a
12	1-800 number for technical assistance, and a central clearing house for application
13	processing. Since 2003, the regional initiative has provided instant rebates at motor
14	dealer sites through participation in MotorUp. The Company expects to continue with
15	this approach in 2009. Additionally, the Company is continuing an effort that was
16	initiated in 2006 and expanded in 2007 for smaller businesses, through the vendors that
17	provide Project Expeditor services, to transform their purchasing practices through motor
18	management best practices, to include larger C&I customers. The Company will work
19	with the customer to facilitate audits of their motor inventory and to develop a motor
20	management plan and purchasing policy to optimize energy efficiency by replacing new
21	or failed motors with a NEMA Premium <sup>TM</sup> motor.

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The Company has participated in Cool Choice since 1999, a regional program that focuses on promoting the installation of energy efficient unitary HVAC equipment through Design 2000plus. In 2007, the Company (as well as other regional sponsors) decided to withdraw from Cool Choice. Since then, the Company has coordinated with utilities in Massachusetts in their effort to operate a joint state-wide program, sharing a rebate worksheet form, a single circuit rider, and a 1-800 information line, similar to

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- 1 what is described above for motors. The program features consistent efficiency rebates
- 2 level revised to follow CEE's new Tier 2 specifications for <5.4 Ton to <20 Ton units.
- 3 Incentives are also offered for dual enthalpy economizer controls, demand control
- 4 ventilation electronically commutated motors (ECM fan motors) in packaged units. The
- 5 rebates are expected to remain unchanged in 2008.

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- 7 The budgets for these initiatives are included in the overall Design2000plus program
- 8 budget.

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# b. <u>High Performance Commercial Lighting Design/DesignLights<sup>TM</sup> Consortium</u>

- In an attempt to continue to promote high quality, high performance lighting with
- 12 commercial and industrial customers the Company will utilize a series of specialized
- guidelines, called the *knowhow*<sup>TM</sup> series, that have been developed by the DesignLights
- 14 Consortium to help customers with their lighting design decisions. For 2009 the
- 15 Company will continue to provide additional outreach on the benefits of high quality
- lighting design to various lighting equipment vendors throughout Rhode Island. The
- 17 Company proposes to accomplish this through visits, workshops and breakfast meetings
- with these vendors and with lighting specifiers. These meetings will be educational but
- 19 also provide an opportunity for these market players to promote high quality, energy
- 20 efficient lighting that would be eligible for rebate to their customers. As part of this
- 21 outreach, the Company will also promote best design practices under development by the
- Office of the Future collaboration and design tools being developed by the USDOE's
- 23 Commercial Lighting Initiative

- 25 In 2009, the Company will continue to seek out and promote emerging technologies for
- 26 energy efficient lighting technologies. For example, the Company is following advances

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1	in LED	lighting	technology	and is	already	granting	rebates	for LE	D lighting	in	grocery

- 2 store refrigeration units. As more of this technology emerges, the Company will promote
- 3 this to customers.

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- 5 The company has been offering a "performance lighting" option which offers an
- 6 incentive based on the ability of a project to achieve lighting power densities (watts per
- 7 sq foot) more efficient than what's required by the Rhode Island State Energy Code.
- 8 This program targets architect, building design engineers and lighting equipment
- 9 suppliers who have to ensure that installed lighting meets the code. Performance lighting
- achieves two things: 1. makes the practitioner more aware of lighting power density
- requirements in the code and 2. Introduces them to technologies and design that will help
- their project deliver a lighting power density 15% or more less than code. The Company
- will continue to offer a "performance lighting" option in 2009 but expand its penetration
- in the new construction market by offering expanded technical assistance and outreach to
- 15 lighting practitioners.

16

- 17 The Company expects to hire a dedicated lighting program manager in 2009 to advance
- 18 the initiatives described above.

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# c. High Performance Schools

- 21 The Company proposes to continue offering a special initiative targeted to public schools
- 22 through Design 2000plus. While Design 2000plus has been effective in reaching public
- 23 schools, a majority of schools have not participated due to a broad range of market
- barriers including limited funding and competitive bidding requirements. This program's
- intent is to help schools minimize the hurdles posed by these market barriers during a

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1 time when Rhode Island is seeing an unprecedented level of investment in new and 2 renovated schools. 3 4 The Company proposes to fund the full cost for technical assistance studies for new 5 construction or renovation under Design 2000plus. All qualifying cost-effective electric 6 energy saving measures would be addressed through comprehensive treatment. It is 7 anticipated that most projects will involve lighting. A key requirement for this initiative 8 is that lighting must follow the DesignLights<sup>TM</sup> Consortium guidelines for schools as 9 outlined in "Classroom Lighting knowhow<sup>TM</sup>" guide published by the DesignLights<sup>TM</sup> 10 Consortium and that projects follow the Comprehensive Design Approach (CDA) track 11 which entails an interactive analysis of proposed measures utilizing whole building 12 simulation tools. As an alternative to CDA, smaller school projects may follow the New 13 Buildings Institute Core Performance standards described previously. 14 15 The Company will also continue to participate in the Rhode Island High Performance 16 Schools working group. Its mission is to promote "green" schools design elements to 17 districts considering new schools and to the design community that serves Rhode Island. 18 A circuit rider, funded through a grant from the Henry P. Kendall Foundation and the 19 Company, will work with prospective districts that are considering a high performance 20 school. 21 22 Funding for this initiative is included in the overall Design2000*plus* program budget. 23 24 d. Building Codes and State Standards

The Parties agree to support work at national and local levels to develop codes and

standards that continue to upgrade building energy efficiency. In cooperation with the

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- 1 codes community, including the Building Code Commission, the Company will work
- 2 with this and other agencies to offer continued improvement on proposed building codes
- 3 and standards that lead to the future revisions of the Rhode Island State Building Code.

4

- 5 Continually refining these codes and standards, which complement existing programs
- 6 such as Design 2000plus and Energy Initiative, has a significant impact on
- 7 institutionalizing progress made through utility programs. Therefore, this initiative
- 8 focuses on (1) working with national code development organizations such as ASHRAE
- 9 to upgrade building efficiency codes and (2) working at the local level with Rhode Island
- and other states in the development of state efficiency codes and standards. The
- 11 Company will offer support to this effort which will be coordinated primarily through the
- Northeast Energy Efficiency Partnership (NEEP) and the New Buildings Institute (NBI),
- organizations with the goal of assisting states and others with the development of codes
- and standards that are practical and enforceable. For instance, in 2007 Rhode Island
- upgraded its state energy code to the "2006 International Energy Conservation Code"
- 16 (IECC-2006) with amendments drafted by NBI. The Company will continue to pursue
- 17 additional upgrades to the present code through NBI. Part of this effort includes
- 18 facilitating and supporting the training and education efforts for code enforcers, designers
- 19 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
- longer produced, becomes unattractive to end users or is excluded from the marketplace
- as the result of various standard-setting processes. Some of these standard setting
- 26 processes are industry-driven and voluntary; others produce mandatory codes or
- standards promulgated by federal or state governments.

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

8

- 9 As Federal standards are raised, participation requirements for Design 2000plus and
- 10 Energy Initiative will be elevated accordingly, pulling the market toward successively
- 11 higher efficiency strata. The Company believes that active participation in the elevation
- of energy efficiency standards is an integral part of any transition strategy in respect to
- 13 ratepayer funded market transformation initiatives.

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15

Associated costs for this initiative are included in the Design2000*plus* program budget.

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# 2. Energy Initiative

# Overview

- 19 Offered since 1988, Energy Initiative encourages the replacement of existing equipment
- and systems with energy efficient alternatives. Its structure is very similar to Design
- 21 2000plus, offering financial incentives, technical assistance, and other ancillary services
- such as commissioning, comprehensive chiller assistance, financing, and ballast disposal.

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# **Eligible Population**

- 2 Energy Initiative is available to all non-residential customers, although customers with
- 3 demand below 200 kW are also eligible to participate in the Small/Medium Business
- 4 program.

5

6

1

# **Program Design**

- 7 Energy Initiative provides incentives for the installation of many different types of
- 8 energy efficient equipment, including lighting, motors, energy management systems,
- 9 programmable thermostats, variable speed drives, refrigeration, industrial process,
- 10 compressed air, and process cooling. The Company's delivery of Energy Initiative is
- similar to its delivery of Design 2000plus. Energy Initiative offers two types of
- 12 incentives, prescriptive and custom. Prescriptive incentives are fixed and offered on a
- per unit basis. Custom incentives are based on the unique energy savings criteria of
- projects. Both are based on average at 40% of the total installed cost (including labor and
- equipment) or at a level that buys the equipment down to a two-year payback to the
- 16 customer, whichever is less.

17

- 18 As stated under Design 2000plus, the Company will look at targeting opportunities for
- 19 specific market segments and building types. The Company is developing programs
- 20 around opportunities in laboratories and data center where there is potential to achieve
- 21 significant energy savings.

- 23 The Office of Energy Resources (RIOER) continues to promote an Energy Services
- 24 Company (ESCO) initiative to encourage efficiency improvements in Rhode Island's
- 25 state and municipal facilities. The Company will continue to support the delivery of this
- service by coordinating its Energy Initiative program services (including incentives) with

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1	the ESCOs as t	nev develor	technical	assessments for	r these	customers.	For 2009.	. th

- 2 RIOER and the Company will explore ways to help municipalities participate in this
- 3 initiative. Our gas energy efficiency program offerings will help ESCOs broaden the
- 4 scope of their services.

5

- 6 New for 2009 will be an option for on-bill finance option for cities and towns. Through
- 7 this finance option, customers are able to pay their balance for the cost of their work for
- 8 up to 24 month period in equal monthly installments on their bill. In addition, the
- 9 incentive will be increased to up to 70% of the total installed cost of measures for cities
- and towns. This is similar to the on-bill financing and incentives provided by the
- 11 Small/Medium Business program. Municipal facilities with and average monthly
- demand of 200 kW or less will still be treated under the Small/Medium Business
- 13 program.

14

15 The proposed changes to Energy Initiative for 2009 are shown in Attachment 3.

16

# 17 A. <u>Services</u>

- 18 Technical Assistance services are also available to participants in Energy Initiative.
- 19 These technical assistance services include engineering evaluations of unique or complex
- 20 process and system improvements. Technical assistance provides customers with
- 21 detailed engineering studies that provide customers with detailed engineering studies that
- 22 identify cost effective energy efficient improvements that can be made to building
- 23 systems and industrial processes. Energy efficient gas opportunities may be addressed
- 24 simultaneously.

25

26

# B. Best Practices Initiatives

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1	Energy Initiative offers a significant opportunity for economic development in Rhode
2	Island by helping businesses save on their electric costs while at the same time
3	supporting them in their investments in new energy efficient equipment and system
4	improvements to their facilities. To this end, for 2009 the Company intends to continue
5	to work closely with various economic development groups in the state including the
6	Rhode Island Economic Development Corporation in an attempt to provide focused
7	efficiency services. This effort may lead to fostering a more favorable business climate
8	in Rhode Island to retain businesses in the state. This effort is being coordinated closely
9	with the Economic Development initiative offered under the gas energy efficiency
10	programs.

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The Company also will continue a public education campaign to promote energy efficiency, especially during peak periods. The Company expects to develop brochures and other informational literature and disseminate these to C&I customers through bill inserts, direct mail, e-mail equipment vendors and account managers. Some of the literature and information that can be used is already available from E Source and the American Council for an Energy Efficient Economy, organizations that feature the benefits to customers available from improving their energy use practices.

19

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# C. Market Transformation Initiatives

- 21 Similar to Design 2000plus, the Company's retrofit program includes a strong market
- transformation component to include the following activities.

23

24

# a. <u>Compressed Air Challenge</u>

- 25 The Company will continue its active sponsorship of the national Compressed Air
- 26 Challenge (CAC). The CAC is a broad based collaborative of government agencies,

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compressed air specialists, equipment manufacturers, end-use consumers and utilities whose objective is to promote the substantial energy savings improvements available by means of a comprehensive, systems approach to compressed air system design and operation. The CAC educational and technical materials being disseminated by the Company are intended to increase customer awareness of, and demand for, products and services that encompass a comprehensive, "systems optimization" approach. Coupled with this increased demand for enhanced services from customers, regional compressed air equipment and service vendors will be exposed in depth to the technical approaches promoted by the CAC.

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

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- 1 In addition to promoting the two levels of CAC training currently available, the Company
- 2 will also be providing comprehensive compressed air system O&M initiative for large
- 3 industrial compressed air users as described below.

4

5 The budget for this initiative is included in the overall budget for Energy Initiative

6

- 7 b. <u>Compressed Air Operations & Maintenance Improvement Program</u>
- 8 The Company will continue to offer an O&M program targeted at industrial customers
- 9 with compressed air systems with a goal of helping them reduce compressed air costs and
- 10 to promote long term reliability and efficiency in the future. One of the key elements of
- 11 the O&M program is the repair of widespread compressed air leakage in distribution
- 12 systems. Experience indicates that air leakage typically wastes 25% of total compressed
- air produced by a system, wasting significant electric energy. Energy cost savings
- resulting from the repair of leakage typically produces paybacks as short as 5 months.

15

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

24

25 The budget for this initiative is included in the overall budget for Energy Initiative.

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1	c.	Building	<b>Operator</b>	Training	and Certi	fication	(BOTC)

- 2 The Building Operator Training and Certification (BOTC) initiative is a collaborative
- 3 effort among gas and electric utilities in the region. Through this effort a training and
- 4 certification program is administered and conducted by a third party and offered to
- 5 commercial and industrial customers. The Company has offered Level 1 of the BOTC
- 6 initiative for the past six years. The Company hosted one class in Massachusetts in
- 7 2008 that was open to Rhode Island customers and plans for 2009 to offer at a minimum
- 8 one BOTC class.

9

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

- 20 In 2007, the Northeast Energy Efficiency Partnerships decided not renew its license for
- 21 BOC. The company is currently exploring the continuation of a program like BOC
- 22 along with other energy efficiency program providers in the region and expects to offer a
- program in 2009. Funding will also be available through the gas energy efficiency
- program budget

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d. Whole Building Assessment and Retro-Commissioning

In 2009, the Company will continue to benchmark the energy use of large Commercial and Municipal customers through the Whole Building Assessment initiative to assist them in setting priorities and promote the installation of energy efficiency measures in their facilities. Also, the Company will continue offering a retro-commissioning initiative to help commercial and industrial customers understand how their equipment is

8 operating and make adjustments to improve performance and efficiency

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

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

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

• The Company's *Energy Profiler On-Line (EPO)*. This is a tool that is used effectively to identify energy use patterns within large commercial or industrial facilities. It helps to identify energy and demand savings potential by offering detail on current load duration and daily and historical building energy use. EPO can provide an account manager an accurate snapshot of the facility before meeting with the customer. The service can frame discussions to influence better energy use practices and /or further technical assistance to validate the potential of new energy efficient strategies and opportunities.

• Commercial and Municipal Benchmarking Services available through the EPA's Energy Star Portfolio Manager. This is a tool that provides a comparison of the level of annual energy consumption for commercial or institutional customers to that of other facilities with the same function. The buildings are ranked in comparison to the other buildings in a national database, corrected for climate and other key variables. The analysis considers all purchased energy types used in the facility. The customer will be responsible for providing the utility data, and tracking resource consumption and costs. The EPA's ENERGY STAR Benchmarking system utilizing Portfolio Manager is used for this effort. The Company utilizes the benchmarking data to qualify the customer and access the energy intensity of the building. The Company then arranges a lighting and mechanical walk through of the building. The Company then furnishes a written

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action plan identifying efficiency cost and savings opportunities resulting from the benchmarking. The process recognizes that a customer may be motivated by a comparison to peers as well as the comparison to previous period's consumption. The Company will use the services of a Project Expediter and Technical Assessment vendor to generate opportunity assessment, analysis and follow up services to steer the customer toward an installation of efficiency measures.

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

- 17 The Retro-commissioning Initiative is bested suited for the following:
- Commercial and industrial buildings that have an electric demand greater than 0.5
- 19 MW.
- HVAC and process systems
- Desire to reduce operating costs
- Use an energy management system
- 23 The objective of the Retro-commissioning Initiative is to:
- Reduce operating costs during peak and off peak periods

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1	Develop a comprehensive and acceptable operation and maintenance plan
2	• Identify capital projects that can lead to substantial energy savings
3	• Educate the building personal how to operate the building efficiently
4	
5	Retro-commissioning will entail an assessment of the major building systems effecting
6	energy used. Data is collected on how the systems operate presently and how they were
7	originally designed to operate. Recommendations on where changes should be made to
8	set points, maintenance practices or new energy efficient equipment are presented in a
9	report.
10	
11	The Company proposes to perform retro-commissioning services as outlined above with
12	two to three commercial or industrial customers. Incentives will be paid to encourage
13	customers to implement the operations and maintenance (O&M) measures that have a
14	simple payback of less than 2 years. The Company will continue to review the results of
15	the Retro-commissioning Initiative with the Collaborative.
16	
17	The expected cost of these retro-commissioning projects is \$40,000. These funds will
18	pay for technical assistance on retrocommissioning studies. Where efficiency
19	opportunities are identified in the studies, they will be processed through the appropriate
20	rebate program.
21	Experience gained by the company over the past several years in offering to over 50
22	customers across New England these expanded services suggest that continuing to
23	develop and enhance Whole Building Assessment and retro-commissioning services to
24	customers to help identify more efficiency options in operating their facilities that will
25	provide additional savings that may be missed without a targeted whole building effort.

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1 Many of the measures identified offer immediate to six months paybacks, are low costs 2 and generally involve some degree of control strategies for the buildings. To build on 3 these early results the company plans to continue to offer customers incentives for Whole 4 Building Assessment and retro-commissioning measures that may have less than a 2 year 5 simple payback- a threshold that is currently in place to be eligible for incentives. In 6 addition we believe it makes sense to also include a demand response evaluation to see if 7 we can bundle both Whole Building Assessment and retro-commissioning services with 8 demand response opportunities in the facility studies. We are also interested in 9 determining for 2009 the benefits of working with customer's controls company that 10 would combine a full assessment that includes gas and electrical savings and demand 11 response. This approach will bundle services under one project working with a controls 12 vendor.

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### C. Small and Medium Business Program

### Overview

- For over ten years, this program has provided direct retrofit installation of energy efficient lighting, refrigeration and other energy efficient measures to small commercial
- and industrial customers, including houses of worship and other smaller non-profit
- 19 organizations.

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### Eligible Population

- 22 Any customer with an average monthly demand of less than 200 kW or annual energy
- usage of less than 483,600 kWh is eligible for this program.

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### **Program Design**

2	The Small/Medium Business Program offers incentives for the installation of energy
3	efficient fluorescent ballasts, lamps, and fixtures; hard-wired and screw-in compact
4	fluorescent systems; high intensity discharge systems; LED lighting, occupancy sensors;
5	energy management systems; and refrigeration measures such as evaporator fan controls,
6	efficient evaporator fan motors, automatic door closers and door heater control devices
7	for walk-in coolers. The Company arranges the equipment purchase through a material
8	vendor and installation with an administrative contractor. Continuing for 2009, the
9	Small/Medium Business Program creates broader program depth and appeal to customers
10	by offering the more comprehensive energy efficiency opportunities. This expansion
11	provides customers the benefit to build on their potential energy savings by examining a
12	broader array of energy efficient opportunities outside the current available measures.
13	For example, LED lighting measures are being offered for customers with case/display
14	refrigeration units as a custom option which will be expanded in 2009.

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

The Small/Medium Business Program leverages the audit conducted as part of the electric energy efficiency program to identify opportunities for customer participation in the gas energy efficiency programs. Electric program staff have been trained to identify opportunities for gas efficiency, and arrangements are made for follow-up in-depth gas efficiency evaluations where customer interest warrants. (The gas program does not offer a direct install program similar to the electric program.) In the case of measures like energy management systems that can result in both gas and electric savings, the

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1 customer is provided a single analysis, quantifying the combined project savings and

2 payback.

3

- 4 In 2009, the Small/Medium Business Services program will continue to offer a broad
- 5 selection of comprehensive measures. While potential for significant energy savings in
- 6 small/medium business rests on improving lighting energy use, the proposed
- 7 improvements to the program support more comprehensiveness in customers' facilities
- 8 and build on the experience gained from delivering these services in prior years. These
- 9 additional energy efficiency measures will include but not be limited to non-prescriptive
- 10 lighting measures, motor and drive power improvements and other custom energy
- 11 efficiency opportunities.

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### Gas Programs

### 1. Commercial Energy Efficiency Program

### 16 **Overview**

- 17 The Commercial Energy Efficiency Program is designed to provide support services and
- 18 financial incentives that encourage the Company's commercial and industrial customers
- 19 to install energy efficient natural gas equipment. Virtually any energy efficient gas fueled
- 20 technology or system design that exceeds the minimum requirements of the local energy
- 21 code, and which is not covered by another Company program offering, may be eligible
- for an incentive under this program. This program complements the Company's Design
- 23 2000plus.

### Eligible Population

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- 1 The program will be open to all gas sales customers on a commercial tariff, including
- 2 multifamily facilities. Incentives provided through the program must be pre-approved by
- 3 the Company and/or the administrative vendor prior to delivery or installation of
- 4 product(s) or service(s).

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### **Program Design**

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This program will provide financial assistance to customers to help defray the cost of an energy audit by providing co-funding for engineering studies and financial incentives to help fund qualifying energy saving measures. Customers may apply for program services or incentives via a variety of channels including Company representatives, plumbing and heating contractors, engineering firms, energy service companies or equipment vendors. After reviewing the customer's energy efficiency needs, the customer will be offered the appropriate program services. There are three specific categories of incentives. (1) Prescriptive incentives are available for common energy efficiency measures including programmable thermostats, boiler reset controls, steam trap replacements, pipe and/or duct insulation, and building shell (walls, roof, floor, crawlspace) insulation. (2) Prescriptive incentives are available for energy efficient gas fired commercial kitchen equipment. (3) Custom Incentives will be available for projects that demonstrate the use of natural gas more efficiently than typical industry practices, or more efficiently than the minimum building code requirements.

- 23 Prescriptive incentives will be targeted toward all commercial and industrial customers.
- 24 The Company will rely primarily upon contractors and trade allies to locate candidate
- 25 facilities and to install the eligible prescriptive measures. This effort will be supported
- by an extensive outreach and education effort to these trade allies, as well as promotions
- 27 directed to the customers themselves. Energy audits will not be required for

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1 participation. However, pre-approval of the contractor's proposals and the available 2 prescriptive incentive will be required. 3 4 Prescriptive incentives are available to institutional, hospitality and restaurants for high 5 efficient gas steamers and gas fryers. These offerings may be expanded as new technologies are identified through the Building Practices and Demonstration Program 6 7 8 Custom incentives will be limited to no more than 50% of the eligible installed project 9 costs, and the Company's contribution will be capped at \$100,000 per site and/or 10 project, up to \$250,000 for new construction comprehensive and up to \$150,000 per 11 eligible CHP project. 12 13 Custom Incentives will be classified as either Level One or Level Two. Level One 14 projects will involve less complex technologies and/or highly cost effective 15 technologies and will receive incentives based upon \$1.50 per first year of estimated therm savings<sup>2</sup>. Examples of Level One projects are redesigns of HVAC systems, 16 17 energy recovery ventilation, most heat recovery applications, building 18 automation/energy management systems, and advanced technology burners and/or 19 burner controls. 20 21 Level Two projects are solar heating technologies and will receive incentives based upon 22 \$3.00 per first year of estimated therm savings. Few applications are expected to reach 23 this threshold. In Program Year 1 the Company will build upon its experiences in other 24 jurisdictions and offer customers the opportunity to incorporate solar thermal 25 technologies such as solar DHW heating, solar pool heating, and solar space heating into

<sup>&</sup>lt;sup>2</sup> The Company analyzed the relatively low level of penetration in 2007/08 and determined that the incentive rate of \$0.50/therm was only covering about 20% to 25% of the typical project cost. The increase in incentive is designed to cover more of the project cost and increase penetration.

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1	the program. Incentives may not be applied toward normal maintenance costs and must
2	offset existing or potential gas usage
3	
4	The Company recognizes the need to promote cost effective gas fired co-generation
5	systems, also called combined heat and power (CHP) where the heat by-product of a gas
6	reciprocating engine or gas turbine can be used to supplement a process heat load in an
7	industrial or institutional facility and also provides electric energy.
8	
9	The Company will offer a modified custom incentive for eligible CHP installations.
10	Under this application, CHP systems will receive incentives based upon \$0.75 per first
11	year of estimated therm savings with a project cap of \$100,000. Higher efficiency CHP
12	systems, will receive an incentive of \$1.50 per first year of estimated therm savings with
13	a project cap of \$150,000.
14	
15	In 2008, a CHP Task Force made up of outside parties and the Company was convened to
16	develop eligibility criteria for CHP for projects.
17	
18	In order to qualify for Tier 1, the project must meet the following requirements:
19	<ul> <li>The project must be cost effective</li> </ul>
20	■ The project must lead to improvements in energy efficiency or reduction in
21	energy consumption in comparison to a typical facility using New England
22	grid power and an average new boiler (this requirement will be implemented
23	when more data becomes available from studies on the regional power grid
24	that will be published later this year.)

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1	■ The system must be designed to demonstrate that a minimum of 10% of the
2	thermal energy output is utilized in an effective manner and optimized to
3	increase the efficiency beyond what it would be under a standard design with
4	separate heating system and electric utility distribution
5	In order for a project to qualify for Tier 2, Tier 1 requirements must be met in
6	addition to the following: <sup>3</sup>
7	• Sum of all usable thermal energy products must constitute at least 20% of the
8	technology's total usable energy output
9	■ Sum of all usable electric energy must constitute at least 20% of the
10	technology's total usable energy output.
11	■ The project must be an application of technologies that achieve an average
12	annual fuel conversion efficiency meeting or exceeding the following levels:
13	o For systems with a total usable energy output of less than 1 MWt+e
14	(thermal plus electric) per hour, an efficiency of 60%
15	o For systems with a total usable energy output of 1 MWt+e, but less
16	than 100 MWt+e, and efficiency of 63%
17	o For systems with a total usable energy output of 100 MWt+e or
18	greater, an efficiency of 66%
19	The company will spend no more than \$300,000 per year in incentives for all CHP
20	projects in Rhode Island.
21	
22	A. <u>Services</u>
23	

 $<sup>^3</sup>$  From: USCHPA and ACEEE, Proposed Legislation for Combined Heat and Power: Introduction and Legislative Language.

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Energy Auditing services are for customers intending to proceed with energy efficiency improvements but who require assistance estimating savings and incentive levels. Most participants in this category will be small to medium customers with energy efficiency applications, or large customers with relatively simple energy efficiency projects. It is not required for customers to obtain an energy audit before proceeding with prescriptive

energy efficiency measures, nor does the Company intend to provide Energy Auditing

services for such projects. This service is provided with no direct cost to the customer.

Technical Assistance services will be used to evaluate more complex projects that involve technologies associated with mechanical equipment, process equipment, and/or underutilized or emerging green technologies. These types of technologies may include boiler or chiller plant redesigns, heat recovery systems, digital energy management systems, process efficiency improvement projects, and Comprehensive Design Approach or Core Performance projects with associated green building technologies. Services provided under the program will include technical analysis and engineering support for medium to large customers who need assistance evaluating and/or designing complex projects. The Company will cost share these services with the customer up to 50% of the reasonable fees related to the efficiency project, not to exceed \$10,000. An administrative vendor will be capable of providing Engineering services to the customer under contract with the Company at negotiated rates to be established via a competitive bid process.

Where electric and gas energy savings opportunities exist, such as through a Comprehensive Design Approach or Core Performance project, the Technical Assistance service will address these opportunities simultaneously as mentioned previously in the electric program descriptions.

### B. Economic Redevelopment Program

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

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

The program will be open to all Company multifamily, commercial and industrial customers that meet the program's intent. Maximum funding per project will be \$100,000, with a minimum of 50% matching funds requirement by customer. Applications for funding must include a description of the redevelopment project, information on the sponsoring organization, identification of additional funding sources, types of energy conserving measures to be installed, estimated energy savings and project schedule. Each application for funding will be evaluated and an analysis will be performed to identify cost-effective opportunities for reducing a customer's energy usage. The analysis performed will lead to a report summary of recommendations and a

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detailed description of the alternatives evaluated, including: total installation costs,

2 annual energy costs, annual savings and simple payback periods.

3

4

### C. Market Transformation Initiatives

- 5 a. Trade Ally Training Program
- 6 Energy efficiency awareness by the Company's trade allies is crucial to reducing barriers
- 7 to energy efficiency and increasing acceptance of new technologies. Education activities
- 8 to this segment will be a critical piece of the Company's promotion efforts.

9

- 10 The Company will support and undertake a wide range of training events in collaboration
- 11 with GasNetworks<sup>4</sup>, the ENERGY STAR® Homes Joint Management Committee,
- 12 Northeast Energy Efficiency Partnerships (NEEP), manufacturing training
- 13 representatives and other trade allies. Outreach will extend to contractors, engineers,
- builders, landlords, realtors, facility managers and housing authorities.

15

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

<sup>&</sup>lt;sup>4</sup> GasNetworks is a regional collaborative of natural gas distribution companies that coordinate natural gas energy efficiency programs throughout 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 are consistent wherever they have been offered. 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.

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1	The budget for the Trade Ally Training Program will be included within each program's
2	budget
3	
4	b. Steam Assessment and Savings Program
5	
6	Over 45% of all the fuel burned by U.S. manufacturers is consumed to raise steam.
7	Steam is used to heat raw materials and treat semi-finished products. It is also a power
8	source for equipment, as well as for building heat and electricity generation. Many of
9	these facilities can recapture energy through the installation of more efficient steam
10	equipment and processes. The Steam Assessment and Savings program has been
11	developed to help these facilities manage there utility expenses through capital
12	improvements via incentives on high efficiency equipment as well as through proper
13	maintenance "best practices" by providing incentives for steam system & steam trap
14	surveys.
15	
16	c. Building Operator Training and Certification (BOTC)
17	
18	Funding through the gas program budget is available to support the BOCT. This program
19	is described previously under the electric program descriptions under Energy Initiative.

# 2. Commercial High-Efficiency Heating Program

### 21 Overview

- 22 The Commercial High-Efficiency Heating program will provide incentives to
- 23 commercial, industrial, governmental, institutional, non-profit and multifamily facilities
- 24 that install high-efficiency heating equipment. The incentives will be provided to reduce
- 25 the incremental cost between standard and high-efficiency equipment.

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# **Eligible Population**

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- 4 The program will be open to all gas sales customers on a commercial tariff, including
- 5 multifamily facilities. Incentives provided through the program must be pre-approved by
- 6 the Company and/or the administrative vendor prior to delivery or installation of
- 7 product(s) or service(s)

8

9

## Program Design

- 10 The Commercial High-Efficiency Heating program is a lost opportunity program
- intended to provide prescriptive incentives for new heating equipment during a planned
- 12 replacement or for new construction. Prescriptive incentives are available for furnaces,
- boilers, infrared heaters and domestic hot water systems.

14

- 15 The Commercial High-Efficiency Heating program will be promoted primarily to
- architects, engineers, equipment vendors, contractors and other trade allies. Since many
- of the trade allies overlap in the residential and smaller multifamily and commercial
- markets, the program will often be promoted together with the Residential High-
- 19 Efficiency Heating program. Trade ally awareness will be increased through direct mail,
- trade publications, newspapers, trade shows/seminars, and site visits. A lot of outreach
- 21 for this program will be accomplished through Trade Ally Training Program, described
- 22 previously under the Commercial Energy Efficiency Program.

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1  7	The program'	s incentive	schedule	will	apply	to a	variety	of	product	types	and a	a br	oad
------	--------------	-------------	----------	------	-------	------	---------	----	---------	-------	-------	------	-----

- 2 range of equipment sizes that are appropriate for the commercial market segments. This
- 3 range provides an opportunity to participate regardless of customer size. There will also
- 4 be incentives for natural gas fired, low intensity infrared heaters, high efficiency
- 5 condensing unit heaters and direct fired make-up air systems that are appropriate for the
- 6 larger commercial and industrial segments. Boiler incentives will be available in a two-
- 7 tiered matrix: Tier One for high-efficiency non-condensing boilers and Tier Two for
- 8 high-efficiency fully condensing boilers.

9

- 10 The Commercial High-Efficiency Heating Incentive Program efficiency ratings for
- smaller heating equipment (up to 300,000 Btuh input) are measured using AFUE ratings.
- 12 Efficiency ratings for larger heating equipment, which exceeds the size ranges for AFUE,
- are measured using a thermal efficiency or steady state rating.

14

15

# 3. Building Practices and Demonstration Program

16

- 17 The purpose of the Building Practices and Demonstration Program is to establish
- 18 successful applications of new or underutilized energy efficient procedures, processes, or
- 19 technologies. Interested parties may file applications for financial and technical
- 20 assistance directly with the Company. Applications must include a description of the
- scope of work and an estimate of the savings and benefits to be realized. Participants are
- required to allow monitoring of the installation and/or results, tours of the installation by
- 23 potential users or other interested stakeholders, and publication of the results in case
- 24 study format.

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1	To market the program, the Company will rely on industry vendors developing and/or
2	offering new or underutilized natural gas energy efficiency technologies as well as the
3	efforts of Company employees.
4	
5	The focus will be technologies that have low customer awareness or market penetration,
6	and the end uses may include cooling, refrigeration, process heat, cooking, thermal
7	measures, cogeneration, load control, or heat recovery. The program may also look at
8	exemplary energy efficient designs or practices as demonstrations.
9	
10	Some of the technologies and practices being examined for 2009 include:
11	<ul> <li>High efficiency convection ovens</li> </ul>
12	<ul> <li>High efficiency combination ovens</li> </ul>
13	<ul> <li>Transport membrane condensers for large steam boilers</li> </ul>
14	
15	Other new energy efficient gas technologies will be addressed as they are identified
16	
17	The Company will develop relationships with key partners and organizations like the
18	Consortium for Energy Efficiency (CEE) Commercial Kitchens Group and the Energy
19	Solutions Center (ESC), to increase its access to new technology information.
20	

### Table E-1 National Grid Electric DSM Funding Sources in 2009 by Sector

	Projection
Projected kWh Sales <sup>1</sup> :	
Low Income Residential	207,328,343
Non-Low Income Residential	2,920,487,437
Commercial & Industrial	4,747,631,672
Total	7,875,447,453
DSM Revenue per kWh (proposed in LCP)	\$0.0032
Projected DSM Revenues (\$000)	
Low Income Residential	\$663.4
Non-Low Income Residential Commercial & Industrial	\$9,345.5
Total	\$15,192.4 \$25,201.3
	Q20,201.0
Other Sources of DSM Revenues (\$000):	
Projected DSM Fund Balance Interest in 2009 <sup>2</sup>	
Low Income Residential	\$0.0
Residential	\$217.6
Commercial & Industrial Total	\$330.4
Total	\$548.0
Projected Co-Payments by Customers in 2009:	
Low Income Residential	\$0.0
Residential	\$0.0
Commercial & Industrial	\$1,165.4
Total	\$1,165.4
Projected DSM Commitments at Year-End 2008:	
Low Income Residential	\$0.0
Residential	\$0.0
Commercial & Industrial	\$4,500.0
Total	\$4,500.0
Projected 2008 Fund Balance <sup>2</sup> :	
Low Income Residential	\$0.0
Residential	(\$1,449.1)
Commercial & Industrial	\$1,323.5
Total <sup>3</sup>	(\$125.6)
Projected Payments During Transition Period From ISO-NE <sup>4</sup> :	
Low Income Residential	\$28.5
Residential	\$401.5
Commercial & Industrial	\$652.7
Total	\$1,082.7
Subtotal - Other Sources of DSM Revenues:	
Low Income Residential	\$28.5
Residential	-\$830.0
Commercial & Industrial	\$7,972.0
Total	\$7,170.5
Total funding available in 2009 minus commitments	
Low Income Residential	\$691.9
Residential	\$8,515.5
Commercial & Industrial	\$18,664.4
Total	\$27,871.8
Projected Total Funding Available in 2009:	
Low Income Residential	\$691.9
Residential	\$8,515.5
Commercial & Industrial	\$23,164.4
Total	\$32,371.8

### Notes:

<sup>&</sup>lt;sup>1</sup> Projected streetlighting and sales for resale kWh sales have been allocated to each sector based on the percentage of sales in each sector excluding expected streetlighting sales.
<sup>2</sup> Fund Balance currently tracked by Residential and Commercial

<sup>&</sup>lt;sup>2</sup> Fund Balance currently tracked by Residential and Commercial and Industrial Sectors; Low-income fund balance and interest not separated out. Fund balance data from September 2008.

separated out. Fund balance data from September 2008.

A projected negative fund balance at year end indicates that projected spending and commitments for 2008 are greater than the actual funding available in 2008.

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

Table E-2 National Grid 2009 Electric Energy Efficiency Program Budget (\$000)

	Program Planning	& Administration				
	External	Internal	Marketing	Rebates and Other Customer Incentives	Evaluation & Market Research	Grand Total
Non-Low Income Residential						
ENERGY STAR® Homes	\$49.0	\$31.7	\$21.0	\$758.9	\$19.2	\$879.8
ENERGY STAR® Central Air Conditioning	\$15.0	\$22.7	\$38.7	\$352.7	\$9.7	\$438.7
ENERGY STAR® Heating	\$0.0	\$6.9	\$1.5	\$201.5	\$0.0	\$209.9
EnergyWise	\$225.0	\$97.3	\$100.0	\$2,627.8	\$94.9	\$3,145.0
ENERGY STAR® Lighting	\$100.0	\$32.4	\$177.8	\$669.9	\$22.0	\$1,002.0
ENERGY STAR® Appliances	\$18.4	\$34.0	\$212.0	\$1,208.3	\$53.9	\$1,526.5
EERMC - Residential	\$125.1	\$0.0	\$0.0	\$0.0	\$0.0	\$125.1
Energy Efficiency Educational Programs	\$50.0	\$0.9	\$50.0	\$0.0	\$0.0	\$100.9
Shareholder Incentive	\$0.0	\$339.1	\$0.0	\$0.0	\$0.0	\$339.1
Subtotal - Non-Low Income Residential	\$582.5	\$564.8	\$600.9	\$5,819.0	\$199.7	\$7,767.0
Low Income Residential						
Single Family - Low Income Services	\$35.7	\$78.9	\$60.0	\$2,453.7	\$67.3	\$2,695.6
Shareholder Incentive	\$0.0	\$100.2	\$0.0	\$0.0	\$0.0	\$100.2
Subtotal - Low Income Residential	\$35.7	\$179.1	\$60.0	\$2,453.7	\$67.3	\$2,795.7
Commercial & Industrial						
Design 2000plus <sup>1</sup>	\$340.5	\$502.4	\$21.7	\$6,575.6	\$122.2	\$7,562.4
Energy Initiative <sup>1</sup>	\$350.8	\$535.5	\$13.5	\$5,996.7	\$168.1	\$7,064.5
Small and Medium Business Program	\$240.4	\$83.4	\$50.0	\$5,878.2	\$142.9	\$6,395.0
EERMC - C&I	\$189.9	\$0.0	\$0.0	\$0.0	\$0.0	\$189.9
Shareholder Incentive	\$0.0	\$596.8	\$0.0	\$0.0	\$0.0	\$596.8
Subtotal - Commercial & Industrial	\$1,121.6	\$1,718.1	\$85.1	\$18,450.5	\$433.2	\$21,808.5
Grand Total	\$1,739.8	\$2,461.9	\$746.0	\$26,723.3	\$700.2	\$32,371.2

### Notes:

Total Commitments for 2009 are expected to be \$6,310,700. The allocation between Energy Initiative and Design 2000 plus is

Design 2000 plus Commitments: \$4,210.7 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.

 $<sup>^{\</sup>rm 1}\,$  Includes commitments for Design 2000 plus and for Energy Initiative:

Table E-3
Proposed 2009 Budget Compared to Approved 2008 Budget (\$000)

	Proposed Budget (2009)	Approved Budget (2008)	Change Compared to 2008
Non-Low Income Residential			
ENERGY STAR® Homes	\$860.6	\$716.3	\$144.2
ENERGY STAR® Central Air Conditioning	\$429.0	\$297.8	\$131.2
ENERGY STAR® Heating	\$209.9	\$99.6	\$110.3
EnergyWise EnergyWise	\$3,050.1	\$1,662.7	\$1,387.4
ENERGY STAR® Lighting	\$980.0	\$625.9	\$354.1
ENERGY STAR® Appliances	\$1,472.6	\$309.1	\$1,163.5
EERMC - Residential <sup>1</sup>	\$125.1	\$124.1	\$1.0
Energy Efficiency Educational Programs	\$100.9	\$31.2	\$69.7
Subtotal - Non-Low Income Residential	\$7,228.2	\$3,866.8	\$3,361.4
Low Income Residential			
Single Family - Low Income Services	\$2,628.3	\$1,475.1	\$1,153.1
Commercial & Industrial			
Design 2000plus	\$7,440.2	\$3,828.9	\$3,611.2
Energy Initiative	\$6,896.4	\$6,340.5	\$556.0
Small and Medium Business Program	\$6,252.1	\$4,263.9	\$1,988.2
EERMC - C&I	\$189.9	\$192.3	(\$2.4)
Subtotal Commercial & Industrial	\$20,778.6	\$14,625.6	\$6,153.0
OTHER EXPENSE ITEMS			
Company Incentive	\$1,036.0	\$647.7	\$388.3
Program Design, Evaluation and Planning	\$700.2	\$400.0	\$300.2
Subtotal Other Items	\$1,736.2	\$1,047.7	\$688.5
TOTAL BUDGET	\$32,371.2	\$21,015.2	\$11,356.0

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

Table E-4 Calculation of 2009 Program Year Cost-Effectiveness Summary of Benefit, Expenses, Evaluation Costs (\$000)

	TRC		D				
	Benefit/	Total	Program Implementation	Customer	Evaluation	Shareholder	¢/Lifetime kWh
	Cost (2)	Benefit	Expenses	Contribution (3)	Cost	Incentive (4)	¢/Lifetille kwii
Commercial & Industrial	Cost (2)	Belletit	Expenses	Contribution (3)	Cost	meentive (4)	
Design 2000plus	4.82	\$19,544.0	\$3,229.5	\$703.3	\$122.2	NA	2.5
Energy Initiative	4.01	\$43,858.7	\$4,796.4	\$5,971.9	\$168.1	NA	3.0
Small and Medium Business (1)	3.14	\$19,691.4	\$4,746.4	\$1,373.0	\$142.9	NA	4.7
Energy Efficiency and Resources Management Council - Large C	NA	NA	189.9	NA	NA	NA	NA.
SUBTOTAL	3.77	\$83,094.1	\$12,962.2	\$8,048.1	\$433.2	\$596.8	3.4
Single Paininy - Low income Services	1.37	\$ <del>4</del> , <del>4</del> 30.5	\$2,026.3	φυ.υ	\$07.5	\$100.2	17.
Single Family - Low Income Services	1.59	\$4,450.9	\$2,628.3	\$0.0	\$67.3	\$100.2	19.2
Non-Low Income Residential							
	3.00	\$2,639.3	\$860.6	\$0.0	\$19.2	NA	12.1
ENERGY STAR <sup>®</sup> Homes	3.00 1.16	\$2,639.3 \$500.4	\$860.6 \$429.0	\$0.0 -\$8.7	\$19.2 \$9.7	NA NA	
ENERGY STAR® Homes ENERGY STAR® Central Air Conditioning		. ,					33.6
ENERGY STAR® Homes ENERGY STAR® Central Air Conditioning ENERGY STAR® Heating	1.16	\$500.4	\$429.0 \$209.9	-\$8.7	\$9.7	NA	33.6 15.0
ENERGY STAR® Homes ENERGY STAR® Central Air Conditioning ENERGY STAR® Heating	1.16 1.34	\$500.4 \$299.3	\$429.0 \$209.9 \$3,050.1	-\$8.7 \$14.0	\$9.7 \$0.0	NA NA	33.6 15.0 5.7
ENERGY STAR® Homes  ENERGY STAR® Central Air Conditioning  ENERGY STAR® Heating  EnergyWise  ENERGY STAR® Lighting	1.16 1.34 1.66	\$500.4 \$299.3 \$5,173.9	\$429.0 \$209.9 \$3,050.1 \$980.0	-\$8.7 \$14.0 -\$27.7	\$9.7 \$0.0 \$94.9	NA NA NA	33.6 15.0 5.7 0.9
ENERGY STAR® Homes  ENERGY STAR® Central Air Conditioning  ENERGY STAR® Heating  EnergyWise	1.16 1.34 1.66 11.85	\$500.4 \$299.3 \$5,173.9 \$17,046.9	\$429.0 \$209.9 \$3,050.1 \$980.0	-\$8.7 \$14.0 -\$27.7 \$436.0	\$9.7 \$0.0 \$94.9 \$22.0	NA NA NA NA	33.6 15.0 5.7 0.9
ENERGY STAR® Homes  ENERGY STAR® Central Air Conditioning  ENERGY STAR® Heating  EnergyWse  ENERGY STAR® Lighting  ENERGY STAR® Appliances  Energy Efficiency Education Programs	1.16 1.34 1.66 11.85 1.71	\$500.4 \$299.3 \$5,173.9 \$17,046.9 \$4,197.0	\$429.0 \$209.9 \$3,050.1 \$980.0 \$1,472.6	-\$8.7 \$14.0 -\$27.7 \$436.0 \$930.0	\$9.7 \$0.0 \$94.9 \$22.0 \$53.9	NA NA NA NA	33.6 15.0 5.7 0.9 6.9 NA
ENERGY STAR® Central Air Conditioning  ENERGY STAR® Heating  EnergyWise  ENERGY STAR® Lighting  ENERGY STAR® Appliances	1.16 1.34 1.66 11.85 1.71 NA	\$500.4 \$299.3 \$5,173.9 \$17,046.9 \$4,197.0 NA	\$429.0 \$209.9 \$3,050.1 \$980.0 \$1,472.6 \$100.9 \$125.1	-\$8.7 \$14.0 -\$27.7 \$436.0 \$930.0 NA	\$9.7 \$0.0 \$94.9 \$22.0 \$53.9 NA	NA NA NA NA	33.6 15.0 5.7 0.9 6.9 NA
ENERGY STAR® Homes  ENERGY STAR® Central Air Conditioning  ENERGY STAR® Heating  EnergyWise  ENERGY STAR® Lighting  ENERGY STAR® Appliances  Energy Efficiency Education Programs  Energy Efficiency and Resources Management Council - Residen	1.16 1.34 1.66 11.85 1.71 NA	\$500.4 \$299.3 \$5,173.9 \$17,046.9 \$4,197.0 NA	\$429.0 \$209.9 \$3,050.1 \$980.0 \$1,472.6 \$100.9 \$125.1	-\$8.7 \$14.0 -\$27.7 \$436.0 \$930.0 NA	\$9.7 \$0.0 \$94.9 \$22.0 \$53.9 NA	NA NA NA NA NA	12.1 33.6 15.0 5.7 0.9 6.9 NA NA

### Notes:

- tes:

  1) Small Business program expenses are net of the projected customer co-pay for 2009 installations (\$1,505,699).
  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

  3) Negative customer contribution reflects interaction of free-ridership and spillover costs

  4) See Table E-9

#### Table E-5 2009 Program Year Goals Summary of Benefits, kW, and kWh by Program

						Benefit	ts (000's)						· ·	Load	Reduction	in kW	MWh	Saved
				Capacity					Energy			Non E	lectric					
		Gene					Wir		Sum								Maximum	
	Total	Summer	Winter	Trans	MDC	DRIPE	Peak	Off Peak	Peak	Off Peak	DRIPE	Resource	Non Resource	Summer	Winter	Lifetime	Annual	Lifetime
Commercial & Industrial																		
Design 2000plus	\$19,544	3,827	\$0	\$811	\$1,914	\$636	\$5,060	\$2,138	\$2,686	\$1,022	\$1,388	\$0	\$61	2,301	1,251	37,016	10,423	162,34
Energy Initiative	43,859	6,327	0	1,388	3,277	1,334	11,964	4,851	6,298	2,307	3,851	500	1,762	4,823	3,642	60,154	28,808	358,57
Small and Medium Business	19,691	3,324	0	734	1,734	730	5,465	1,096	2,869	522	1,568	0	1,650	2,641	1,525	31,585	11,030	131,92
SUBTOTAL	\$83,094	\$13,478	\$0	\$2,933	\$6,925	\$2,701	\$22,488	\$8,086	\$11,852	\$3,850	\$6,807	\$500	\$3,473	9,764	6,418	128,754	50,261	652,843
Low Income Residential Single Family - Low Income Services	4,451	158	\$0	\$35	\$84	\$37	\$151	\$161	\$330	\$306	\$174	\$2,174	\$840	137	303	1,567	1,340	14,54
SUBTOTAL	\$4,451	\$158	\$0	\$35	\$84	\$37	\$151	\$161	\$330	\$306	\$174	\$2,174	\$840	137	303	1,567	1,340	14,54
Non-Low Income Residential																		
ENERGY STAR® Homes	2,639	406	\$0	\$84	\$198	\$55	\$118	\$118	\$113	\$109	\$82	\$1,319	\$38	197	149	4,217	648	7,25
ENERGY STAR® Central Air Conditioning	500	197	\$0	\$44	\$105	\$45	\$18	\$4	\$54	\$14	\$15	\$0	\$3	173	6	1,973	93	1,28
ENERGY STAR® Heating	299	19	\$0	\$4	\$10	\$3	\$57	\$14	\$24	\$6	\$11	\$151	\$0	10	1	188	83	1,49
EnergyWise	5,174	544	\$0	\$120	\$283	\$117	\$1,120	\$1,198	\$632	\$556	\$532	\$21	\$51	424	1,151	5,244	4,392	54,42
ENERGY STAR® Lighting	17,047	1,123	\$0	\$262	\$618	\$328	\$1,963	\$1,930	\$3,792	\$3,735	\$2,332	\$0	\$964	1,184	4,457	10,864	18,074	165,14
ENERGY STAR® Appliances	4,197	517	\$0	\$123	\$291	\$161	\$435	\$429	\$837	\$830	\$573	\$0	\$0	582	443	5,040	4,439	35,78
SUBTOTAL	\$29,857	\$2,807	\$0	\$637	\$1,504	\$709	\$3,711	\$3,693	\$5,451	\$5,252	\$3,545	\$1,491	\$1,057	2,572	6,208	27,527	27,729	265,37
TOTAL	\$117,402	\$16,443	\$0	\$3,605	\$8,513	\$3,446	\$26,350	\$11.941	\$17,633	\$9,409	\$10,526	\$4,164	\$5,370	12,473	12,929	157,848	79,331	932,7€

Attachment 5 (2009 Electric attachments.xls) Revised Page 5 of 9

Table E-6 Comparison of Goals to Prior Year

	Propose	ed 2009	20	008	Diffe	erence
	Annual		Annual		Annual	
	Energy		Energy		Energy	
	Savings		Savings		Savings	
	(MWh) (1)	Participants	(MWh) (1)	Participants	(MWh)	Participants
Program						
Commercial & Industrial						
Design 2000plus	10,423	239	9,157	159	1,267	80
Energy Initiative	28,808	245	21,039	145	7,769	100
Small and Medium Business	11,030	835	8,698	542	2,332	293
SUBTOTAL	50,261	1,319	38,894	846	11,367	473
Low Income Residential						
Single Family - Low Income Services	1,340	1,439	945	806	395	633
SUBTOTAL	1,340	1,439	945	806	395	633
Non-Low Income Residential						
ENERGY STAR® Homes	C40	200	524	225	114	45
	648	380		335	114	45
ENERGY STAR® Central Air Conditioning Program	93	546	116	620	(23)	(74)
ENERGY STAR® Heating	83	250	50	423	33	(173)
EnergyWise	4,392	6,194	1,875	2,962	2,517	3,232
ENERGY STAR® Lighting	18,074	68,548	11,974	51,650	6,100	16,898
ENERGY STAR® Appliances	4,439	7,600	415	3,750	4,024	3,850
SUBTOTAL	27,729	83,518	14,964	59,740	12,766	23,778
						1
TOTAL	79,331	86,276	54,803	61,392	24,528	24,883

<sup>(1)</sup> Net Savings for 2008 calculated under "Rhode Island Benefit/Cost Test"; Net savings for 2009 calculated under Total Resource Cost Test.

Table E-7
Annual Electric Avoided Costs for Rhode Island

		1	2	3	4	5	6	7	8	9	10	11	12	13
		Winter Peak Energy (\$/kWh)		Summer Peak Energy (\$/kWh)	Summer Off Peak Energy (\$/kWh)	Summer Generation (\$/kW)	Winter Generation (\$/kW)	Capacity DRIPE (\$/kW)	Winter Peak Energy DRIPE (\$/kW)	Winter Off- Peak Energy DRIPE (\$/kWh)	Summer Peak Energy DRIPE (\$/kWh)	Summer Off Peak Energy DRIPE (\$/kWh)	Transmission (\$/kW)	Distribution (\$/kW)
1	2009	\$0.100	\$0.077	\$0.101	\$0.070	\$0.00	\$0.00	\$0.00	\$0.015	\$0.012	\$0.025	\$0.011	\$24.74	\$58.42
2	2010	\$0.099	\$0.074	\$0.101	\$0.067	\$62.82	\$0.00	\$0.00	\$0.044	\$0.036	\$0.073	\$0.033	\$24.74	\$58.42
3	2011	\$0.095	\$0.070	\$0.099	\$0.065	\$113.30	\$0.00	\$0.00	\$0.042	\$0.034	\$0.069	\$0.031	\$24.74	\$58.42
4	2012	\$0.091	\$0.067	\$0.094	\$0.063	\$126.76	\$0.00	\$145.37	\$0.025	\$0.021	\$0.042	\$0.019	\$24.74	\$58.42
5	2013	\$0.084	\$0.060	\$0.089	\$0.059	\$134.61	\$0.00	\$93.45	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
6	2014	\$0.087	\$0.059	\$0.088	\$0.058	\$134.61	\$0.00	\$41.53	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
7	2015	\$0.083	\$0.058	\$0.090	\$0.055	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
8	2016	\$0.084	\$0.059	\$0.090	\$0.058	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
9	2017	\$0.086	\$0.059	\$0.092	\$0.057	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
10	2018	\$0.083	\$0.058	\$0.088	\$0.056	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
11	2019	\$0.082	\$0.055	\$0.090	\$0.054	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
12	2020	\$0.080	\$0.055	\$0.089	\$0.054	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
13	2021	\$0.081	\$0.056	\$0.092	\$0.053	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
14	2022	\$0.085	\$0.056	\$0.094	\$0.055	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
15	2023	\$0.087	\$0.057	\$0.096	\$0.056	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
16	2024	\$0.088	\$0.058	\$0.097	\$0.057	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
17	2025	\$0.090	\$0.059	\$0.099	\$0.058	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
18	2026	\$0.091	\$0.060	\$0.101	\$0.059	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
19	2027	\$0.093	\$0.061	\$0.102	\$0.061	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
20	2028	\$0.094	\$0.062	\$0.104	\$0.062	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
21	2029	\$0.096	\$0.063	\$0.106	\$0.063	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
22	2030	\$0.098	\$0.065	\$0.108	\$0.064	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
23	2031	\$0.099	\$0.066	\$0.110	\$0.065	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
24	2032	\$0.101	\$0.067	\$0.111	\$0.066	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42
25	2033	\$0.103	\$0.068	\$0.113	\$0.068	\$134.61	\$0.00	\$0.00	\$0.000	\$0.000	\$0.000	\$0.000	\$24.74	\$58.42

ENERGY AND GENERATION CAPACITY VALUES (Columns 1 through 11) FROM 2007 AVOIDED ENERGY SUPPLY COMPONENT STUDY, EXHIBIT E-1 RI-C\$ TRANSMISSION AND DISTRIBUTION CAPACITY VALUES (12 and 13) FROM COMPANY ANALYSIS, IN 2007\$
All values escalated 1.9% real to 2009\$ and loss factors added

Table E-8
Derivation of the 2009 Spending Budget for Shareholder Incentive Calculation

	Proposed 2009 Budget (\$000)	Commitments and Copays (\$000)	Other Funding Excluded From the Eligible Spending Budget	Eligible Sector Spending Budget (\$000)
Non-Low Income Residential		Transport (1 to 2)	- Programme	and green (1999)
ENERGY STAR® Homes	\$879.8			
ENERGY STAR® Central Air Conditioning	\$438.7			
ENERGY STAR® Heating	\$209.9			
EnergyWise	\$3,145.0			
ENERGY STAR® Lighting	\$1,002.0			
ENERGY STAR® Appliances	\$1,526.5			
EERMC - Residential	\$125.1		\$125.1	
Energy Efficiency Educational Programs	\$100.9			
Shareholder Incentive	\$339.1		\$339.1	
Subtotal - Residential	\$7,767.0	\$0.0	\$464.2	\$7,302.8
Low Income Residential				
Single Family - Low Income Services	\$2,695.6			
Shareholder Incentive	\$100.2		\$100.2	
Subtotal - Low Income Residential	\$2,795.7	\$0.0	\$100.2	\$2,695.6
Commercial & Industrial				
Design 2000plus	\$7,562.4	\$4,210.7		
Energy Initiative	\$7,064.5	\$2,100.0		
Small and Medium Business	\$6,395.0	\$1,165.4		
EERMC - C&I	\$189.9		\$189.9	
Shareholder Incentive	\$596.8		\$596.8	
Subtotal - Commercial & Industrial	\$21,808.5	\$7,476.1	\$786.7	\$13,545.8
Grand Total	\$32,371.2	\$7,476.1	\$1,351.0	\$23,544.2

Table E-9
Target 2009 Shareholder Incentive

Incentive Rate: 4.40%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Target	Target				
				Incentive for	Incentive -			Target	Incentive Cap
	Spending	Incentive	Target	Performance	Annual kWh	Annual kWh	Threshold	Incentive	Annual kWh
Sector	Budget	Rate	Incentive	Metrics	Savings	Savings Goal	kWh Savings	Per kWh	Savings
Low Income Residential	\$2,695,573		\$101,432	\$0	\$101,432	1,340,133	804,080	\$0.076	\$126,790
Non-Low Income Residential	\$7,302,804		\$334,797	\$60,000	\$274,797	27,729,471	16,637,683	\$0.010	\$343,496
Commercial & Industrial	\$13,545,787		\$599,714	\$90,000	\$509,714	50,261,312	30,156,787	\$0.010	\$637,143
Total	\$23,544,164	4.40%	\$1,035,943	\$150,000	\$885,943	79,330,917	47,598,550		\$1,107,429

### 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 evaluation results and 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 2009-2011

				Total
	2009	2010	2011	2009-2011
Gas Energy Efficiency Surcharge per Dth	\$0.150	\$0.150	\$0.150	
Forecasted Use (Dth):				
TOTAL THROUGHPUT	46.606	46 100	45.657	120.541
Low Income Residential Non-Heating Low Income Residential Heating	46,696 1,459,104	46,188	45,657	138,541
Low-Income subtotal	1,505,801	1,444,929 <b>1,491,117</b>	1,431,119 <b>1,476,776</b>	4,335,152 <b>4,473,693</b>
Residential Non-Heating	517,104	484,039	451,362	1,452,505
Residential Heating	16,579,696	16,716,729	16,852,211	50,148,636
Residential subtotal	17,096,800	17,200,768	17,303,573	51,601,141
Small C&I	2,370,642	2,397,012	2,423,243	7,190,896
Medium C&I	5,300,473	5,423,110	5,545,745	16,269,328
Large LLF	2,655,646	2,655,646	2,674,059	7,985,351
Large HLF	1,034,400	1,034,400	1,040,961	3,109,762
Extra Large LLF	1,206,657	1,206,657	1,569,327	3,982,641
Extra Large HLF	4,948,537	4,950,777	5,806,625	15,705,938
Opt out eligible	(1,193,497)	(1,193,497)	(1,193,497)	(3,580,491)
C&I Subtotal	16,322,858	16,474,104	17,866,463	50,663,425
TOTAL THROUGHPUT	34,925,459	35,165,989	36,646,811	106,738,259
Collections by Sector:				
Uncollectible percentage (from Gas Rate Case)	2.46%	2.46%	2.46%	¢654.400
Residential Low Income Surcharge Collections Low Income Weatherization in Base Rates	\$220,300	\$218,100	\$216,000	\$654,400
Total Collections - Low-Income Residential	\$200,000 <b>\$420,300</b>	\$200,000 <b>\$418,100</b>	\$200,000 <b>\$416,000</b>	\$600,000 <b>\$1,254,400</b>
Total Collections - Non-Low Income Residential	\$2,501,400	\$2,516,600	\$2,531,600	\$7,549,600
Total Collections - Commercial and Industrial	\$2,388,100	\$2,310,000	\$2,614,000	\$7,412,400
Total Conceions - Commercial and Industrial	ψ2,000,100	ψ2,410,500	ψ2,014,000	ψ7,412,400
TOTAL PROJECTED COLLECTIONS	\$5,309,800	\$5,345,000	\$5,561,600	\$16,216,400
OTHER SOURCES OF FUNDING				
Prior Year Fund Balance by Sector <sup>1</sup>				
Low Income Residential	\$0	\$0	\$0	\$0
Low Income Residential Non-Low Income Residential	\$0	\$0	\$0	\$0
Low Income Residential				
Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0	\$0	\$0	\$0
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year	\$0 \$1,673,200	\$0 \$0	\$0 \$0	\$0 \$1,673,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential	\$0 \$1,673,200 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$1,673,200 \$0
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$1,673,200 \$0 \$274,500
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential	\$0 \$1,673,200 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$1,673,200 \$0
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$1,673,200 \$0 \$274,500
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End	\$0 \$1,673,200 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$1,500 \$168,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$0 \$0 \$91,500	\$0 \$1,673,200 \$0 \$274,500
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$0 \$0 \$91,500 \$168,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$378,000 \$91,500	\$0 \$0 \$91,500 \$168,400 \$0 \$1,184,000 \$0 \$1,184,000	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential	\$0 \$1,673,200 \$91,500 \$168,400 \$0 \$378,000	\$0 \$0 \$91,500 \$168,400 \$0 \$1,184,000	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$0 \$2,007,000
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$378,000 \$91,500 \$2,219,600	\$0 \$0 \$91,500 \$168,400 \$0 \$1,184,000 \$91,500 \$1,352,400	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$0 \$274,500
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M	\$0   \$1,673,200   \$0   \$91,500   \$168,400   \$0   \$378,000   \$91,500   \$2,219,600   \$IINUS COMMIT	\$0   \$0   \$0   \$0   \$91,500   \$1,184,000   \$91,500   \$1,352,400   \$1,3	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$0 \$274,500 \$4,185,400
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$10 \$2,219,600 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$	\$0   \$0   \$0   \$0   \$91,500   \$168,400   \$0   \$0   \$1,184,000   \$0   \$91,500   \$1,352,400   \$1,352,400   \$1,418,100   \$1,4	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$2,007,000 \$4,185,400 \$1,254,400
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$10,500 \$2,2592,900 \$2,592,900	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$100 \$2,592,900 \$4,229,700	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100 \$2,782,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100 \$9,590,800
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$10,500 \$2,2592,900 \$2,592,900	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$100 \$2,592,900 \$4,229,700	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100 \$2,782,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100 \$9,590,800
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Non-Low Income Residential	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$100 \$2,592,900 \$4,229,700	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100 \$2,782,400	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100 \$9,590,800
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$91,500 \$2,219,600 \$10,2592,900 \$4,229,700 \$7,242,900	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,500 \$168,400 \$0 \$0 \$1,184,000 \$0 \$1,352,400 \$1,352,400 \$2,508,100 \$2,578,700 \$5,604,900	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100 \$2,782,400 \$5,821,500	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$1,254,400 \$1,254,400 \$7,824,100 \$9,590,800 \$18,669,300
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M COMMERCIAL TOTAL FUNDING AVAILABLE M Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$10,500 \$2,29,700 \$7,242,900 \$4,229,700 \$7,242,900 \$1,20,300 \$1	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$0 \$0 \$91,500 \$168,400 \$0 \$445,000 \$91,500 \$613,400 \$416,000 \$2,623,100 \$2,782,400 \$5,821,500	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$2,007,000 \$4,185,400 \$1,254,400 \$9,590,800 \$18,669,300
Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Fund Balance Interest in Year Low Income Residential Non-Low Income Residential Commercial and Industrial  Projected DSM Commitments at Prior Year-End Low Income Residential Non-Low Income Residential Commercial and Industrial  SUBTOTAL OTHER SOURCES Low Income Residential Non-Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Commercial and Industrial  POTENTIAL TOTAL FUNDING AVAILABLE M Low Income Residential Commercial and Industrial	\$0 \$1,673,200 \$0 \$91,500 \$168,400 \$0 \$0 \$378,000 \$0 \$2,219,600 \$10,500 \$2,592,900 \$4,229,700 \$7,242,900 \$2,592,900 \$2,592,900 \$4,29,700 \$7,242,900 \$1,242,	\$0 \$0 \$0 \$0 \$0 \$0 \$91,500 \$168,400 \$0 \$0 \$0 \$1,184,000 \$1,352,400 \$1,352,400 \$2,578,700 \$5,604,900 \$418,100 \$2,608,100 \$2,608,100 \$2,578,700 \$5,604,900	\$0 \$0 \$0 \$0 \$0 \$91,500 \$168,400 \$0 \$0 \$0 \$0 \$445,000 \$0 \$0 \$445,000 \$0 \$2,623,100 \$2,782,400 \$5,821,500 \$416,000 \$2,623,100 \$2,623,100 \$0 \$0,623,100 \$0,62	\$0 \$1,673,200 \$0 \$274,500 \$505,200 \$0 \$2,007,000 \$2,007,000 \$4,185,400 \$1,254,400 \$7,824,100 \$9,590,800 \$18,669,300

<sup>&</sup>lt;sup>1</sup> Fund Balance currently tracked by Residential and Commercial and Industrial Sectors; Low-income fund balance and interest not separated out. Fund balance data from October 2008. \$1,673,200

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Table G-2 National Grid Gas Energy Efficiency Program Budget (\$000) 2009

				Rebates and Other	Evaluation	
				Customer	& Market	
Program	External	Internal	Marketing	Incentives	Research	<b>Grand Total</b>
NON LOW-INCOME RESIDENTIAL:						
ENERGY STAR® Homes	15,000	187			2,032	17,219
Building Practices and Demonstration Program	2,000	4,170	10,000	22,000	21,010	59,180
Residential High-Efficiency Heating Program	15,100	50,935	293,028	552,780	18,170	930,013
Energy Star Heating System		38,249	175,508	418,860	18,170	650,787
High-Efficiency Water Heating Program	9,600	6,778	71,200	112,500		200,078
ENERGY STAR® Programmable Thermostat Program	5,500	5,908	25,000	21,420		57,828
Gas Networks			21,320			21,320
EnergyWise	13,785	55,411	47,500	915,505	41,538	1,073,739
EERMC - Residential						54,434
Shareholder Incentive						91,527
Subtotal - Non-Low Income Residential	45,885	110,703	350,528	1,323,722	82,750	2,226,112
LOW-INCOME RESIDENTIAL:						
Single Family Low Income Services		17,502		1,323,722	44,767	1,385,991
Shareholder Incentive						60,984
Subtotal - Low Income Residential	0	17,502	0	1,323,722	44,767	1,446,975
COMMERCIAL AND INDUSTRIAL:						
Commercial High Efficiency Heating Program	43,500	42,620	56,000	239,250	23,333	404,703
Commercial Energy Efficiency Program	260,000	204,305	169,165	1,420,000	49,544	2,103,014
Building Practices & Demonstration Program	4,400	6,121	4,000	58,333	21,010	93,864
EERMC - C&I						47,762
Commitments				1,184,000		1,184,000
Shareholder Incentive						114,470
Subtotal - Commercial & Industrial	307,900	253,045	229,165	2,901,583	93,887	3,947,812
Grand Total	353,785	381,250	579,693	5,549,028	221,404	7,620,899

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Table G-3
Proposed 2009 Budget Compared to Approved 2008 Budget (\$000)

	Proposed Budget	Approved	Change Compared to
	$(2009)^1$	<b>Budget</b> (2008)	2008
Non-Low Income Residential			
Residential High-Efficiency Heating, Water-Heating, Controls Program	\$911.9	\$601.2	\$310.6
EnergyWise	\$1,032.2	\$631.8	\$400.4
Building Practices and Demonstration Program	\$38.2	\$35.7	\$2.5
ENERGY STAR® Homes	\$15.2	\$141.4	(\$126.2)
EERMC - Residential	\$54.4	\$52.2	\$2.2
Subtotal - Non-Low Income Residential	\$2,051.8	\$1,462.3	\$589.6
Low Income Residential			
Low Income	\$1,341.2	\$933.5	\$407.8
Subtotal - Low Income Residential	\$1,341.2	\$933.5	\$407.8
Commercial & Industrial			
Commercial High Efficiency Heating Equipment	\$381.4	\$268.1	\$113.3
Commercial Energy Efficiency Program	\$2,053.5	\$1,169.2	\$884.2
Comm Building Practices & Demonstration Program	\$72.9	\$201.1	(\$128.2)
EERMC - C&I	\$47.8	\$36.5	\$11.3
Subtotal Commercial & Industrial	\$2,555.5	\$1,674.9	\$880.6
OTHER EXPENSE ITEMS			
Company Incentive	\$267.0	\$179.4	\$87.6
Program Design, Evaluation and Planning	\$221.4	\$95.5	\$125.9
Subtotal Other Items	\$488.4	\$274.9	\$213.5
TOTAL BUDGET	\$6,436.9	\$4,345.5	\$2,091.4

<sup>&</sup>lt;sup>1</sup> Does not include commitments. Commitments projected to be \$1,184,000 in 2009

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

Ī				1		
	TRC		Program			
	Benefit/	Total	Implementation	Customer	Evaluation	Shareholder
	Cost(1)	Benefit	Expenses(2)	Contribution	Expenses(2)	Incentive(3)
Commercial & Industrial						
Commercial Energy Efficiency Program	2.45	\$8,763.2	\$2,053.5	\$1,468.7	\$49.5	NA
Commercial High Efficiency Heating Equipment	1.85	\$919.3	\$381.4	\$93.5	\$23.3	NA
Comm Building Practices & Demonstration Program	1.48	\$175.7	\$72.9	\$25.0	\$21.0	NA
EERMC - C&I	NA	NA	\$47.8	NA	NA	NA
SUBTOTAL	2.27	\$9,858.2	\$2,555.5	\$1,587.2	\$93.9	\$114.5
Low Income EERMC - Low Income Residential	1.79	\$2,487.6	\$1,341.2 \$4.4	\$0.0	\$44.8	NA
Low Income Residential						
				0.0	44.0	
SUBTOTAL	1.71	2,487.6	1,345.6	0.0	44.8	61.0
Non Low Income Residential						
Energy Star Homes	NA	NA	\$15.2	\$0.0	\$2.0	NA
Energy Wise	2.07	\$2,967.9	\$1,032.2	\$361.4	\$41.5	NA
Residential High-Efficiency Heating, Water-Heating, Controls Progra	2.35	\$3,814.1	\$911.9	\$690.2	\$18.2	NA
Building Practices and Demonstration Program	NA	NA	\$38.2	\$0.0	\$21.0	NA
EERMC - Residential	NA	NA	\$50.0	NA	NA	NA
SUBTOTAL	2.07	\$6,781.9	\$2,047.4	\$1,051.6	\$82.8	\$91.
			,			
TOTAL	2.11	\$19,127.6	\$5,948.5	\$2,638.8	\$221.4	\$267.0

### 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) See Table G-9

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Table G-5 Summary of Benefits and Savings by Program

		Benefits (\$000)		MMBTU (	Gas Saved
Commercial & Industrial	Total(1)	Natural Gas(2)	Participant Resource(3)	Annual(4)	Lifetime(5)
Commercial Energy Efficiency Program	\$8,763,158	\$8,763,158	\$0	82,198	986,381
Commercial High Efficiency Heating Equipment	\$919,267	\$919,267	\$0	5,683	113,664
Comm Building Practices & Demonstration Program	\$175,735	\$175,735	\$0	1,451	20,317
EERMC - C&I	NA	NA	NA	NA	NA
SUBTOTAL	\$9,858,159	\$9,858,159	\$0	89,333	1,120,361
Low Income  Low Income  SUBTOTAL	\$2,487,554 <b>\$2,487,554</b>		\$0 <b>\$0</b>	13,690 13,690	246,418 <b>246,418</b>
Non Low Income Residential Energy Star Homes	\$0	\$0	\$0	ol	0
Energy Wise	\$2,967,877	7.7	\$0 \$0	15,020	300,394
Residential High-Efficiency Heating, Water-Heating, Controls Program	\$3,814,054		\$98,938	22,641	374,263
Building Practices and Demonstration Program	\$0		\$0	0	0
EERMC - Residential	NA	NA	NA	NA	NA
SUBTOTAL	\$6,781,931	\$6,682,993	\$98,938	37,660	674,657
TOTAL	\$19,127,644	\$19,028,707	\$98,938	140,683	2,041,436

### 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, 2007, 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 2009
- 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.

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Table G-6 Comparison of Goals with Prior Year

	Proposed	1 2009	Proposed	2008 (2)	Differ	ence
	Annual Energy Savings (MMBTU Natural Gas)(1)(3)	Participants	Annual Energy Savings (MMBTU Natural Gas)(1)(3)	Participants	Annual Energy Savings (MMBTU Natural Gas)(1)	Participants
Program						
Commercial & Industrial						
Commercial Energy Efficiency Program	82,198	305	59,819	462	22,379	-157
Commercial High Efficiency Heating Equipment	5,683	150	5,667	150	17	0
Comm Building Practices & Demonstration Program	1,451	1	6,769	3	-5,318	-2
EERMC - C&I	NA	NA	NA	NA	NA	NA
SUBTOTAL	89,333	456	72,255	615	17,078	-159
Low Income Residential						
Low Income	13,690	319	9,643	224	4,047	95
SUBTOTAL	13,690	319	9,643	224	4,047	95
Non-Low Income Residential					1 0	0
Energy Star Homes	0	0	NA	NA	NA NA	NA
Energy Wise	15,020	2,243	28,421	1,259		984
Residential High-Efficiency Heating, Water-Heating, Controls Progr	22,641	2,370	22,047	2,167	593	203
Building Practices and Demonstration Program	0	10	239	3	-239	7
EERMC - Residential	NA	NA	NA	NA	NA	NA
SUBTOTAL	37,660	4,623	50,707	3,429	-13,046	1,194
TOTAL	140.683	5,398	132,605	4,267	8.078	1,130

- 1) MMBtu savings for 2009 from Table G-5 and for 2008 from Attachment 8 (Compliance Filing), Page 2 of 3.
  2) 2008 was an 18 month filing (July 2007-December 2008); for comparison with 2009, values here are 2/3 of what 18 month targets were
- 3) Net Savings for 2008 calculated under "Rhode Island Benefit/Cost Test"; Net savings for 2009 calculated under Total Resource Cost Test.

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Table G-7
Natural Gas Avoided Costs for Rhode Island
Used in B/C Model for Rhode Island

	R	ESIDENTI	AL	COMME	RCIAL & IN	DUSTRIAL
	Existing	New	Hot	Non		
	Heating	Heating	Water	Heating	Heating	All
	3-mon.	5-mon.	annual	annual	5-mon.	6-mon.
Year	\$/Dth	\$/Dth	\$/Dth	\$/Dth	\$/Dth	\$/Dth
2009	14.47	14.23	12.91	10.80	12.12	11.72
2010	13.85	13.61	12.34	10.23	11.50	11.12
2011	13.31	13.08	11.84	9.73	10.97	10.60
2012	12.91	12.68	11.46	9.35	10.57	10.20
2013	12.16	11.94	10.77	8.66	9.83	9.48
2014	12.23	12.01	10.84	8.73	9.90	9.55
2015	12.18	11.95	10.79	8.68	9.84	9.50
2016	12.34	12.11	10.94	8.83	10.00	9.65
2017	12.64	12.41	11.21	9.10	10.30	9.94
2018	12.55	12.32	11.13	9.02	10.21	9.85
2019	12.49	12.26	11.08	8.97	10.15	9.80
2020	12.64	12.41	11.21	9.10	10.29	9.94
2021	12.76	12.53	11.32	9.21	10.41	10.06
2022	13.06	12.82	11.60	9.49	10.71	10.35
2023	13.19	12.95	11.72	9.58	10.82	10.45
2024	13.32	13.08	11.83	9.68	10.93	10.56
2025	13.45	13.21	11.95	9.78	11.04	10.66
2026	13.59	13.34	12.07	9.88	11.15	10.77
2027	13.72	13.48	12.19	9.97	11.26	10.88
2028	13.86	13.61	12.31	10.07	11.37	10.98
2029	14.00	13.75	12.44	10.17	11.48	11.09
2030	14.14	13.88	12.56	10.28	11.60	11.20
2031	14.28	14.02	12.69	10.38	11.71	11.32
2032	14.42	14.16	12.81	10.48	11.83	11.43
2033	14.57	14.31	12.94	10.59	11.95	11.54

Avoided Cost of Natural Gas Delivered to Retail Customers in Southern N.E. by End Use in 2009\$ FROM 2007 AVOIDED ENERGY SUPPLY COMPONENT STUDY 2007\$ escalated 1.9% real to 2009\$

Table G-8 Summary of Gas Program Benefit, Costs, Savings (\$000) 2009-2011 Energy Efficiency Procurement Plan

	Total Portfolio					
	2009	2010	2011	3 Year Total		
NPV Net Benefits (\$000)	\$10,052	\$10,421	\$10,890	\$31,363		
NPV Utility Costs (\$000)	\$6,170	\$5,896	\$5,646	\$17,711		
TRC Benefit / Cost	2.11	2.20	2.30	2.20		
<b>Annual Energy Savings (MMBTUs)</b>	140,683	139,779	139,209	419,671		
Lifetime MMBTUs	2,041,436	2,026,309	2,016,026	6,083,771		
Cost / Lifetime MMBTUs	\$4.446	\$4.300	\$4.165	\$4.304		

net benefits = benefits - (participant costs + utility costs+incentive) utility costs exclude shareholder incentive

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Table G-9
Target 2009 Shareholder Incentive

Incentive Rate: 4.40%

	(1)	(2)	(2)	(4)	( <b>F</b> )
	(1)	(2)	(3)	(4)	(5)
			Annual		Target
			Savings	Threshold	Incentive
		Target	Goal	Savings	Per
Sector	Budget	Incentive	(MMBTU)	(MMBTU)	MMBTU
Low Income Residential	\$1,385,991	\$60,984	13,690	8,214	\$4.455
Non-Low Income Residential	\$2,080,160	\$91,527	37,660	22,596	\$2.430
Commercial & Industrial	\$2,601,580	\$114,470	89,333	53,600	\$1.281
Total	\$6,067,731	\$266,981	140,683	84,410	

### **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)

				National			]
				Grid			
		Process/		Estimated			
		Impact/	New or	Consultant			
Program	Study	Other	Carryover	Cost in 2009	RI?	RI	
Residential Electric	v	Other	curryover	C05t III 2009	Y	141	
ES Appliances	Process and cost-effectiveness evaluation of new measures	P	New	\$70,000	Y	\$15,400	
EWise	Impact Evaluation (Gas and Electric)	I	N	\$100,000	Y	\$22,700	
C&I Electric				,,	Y	. /	
Lighting	Lighting Persistence (EM&V Forum)	I	С	\$25,000	Y	\$5,500	
EI	Benchmarking Process Evaluation	P	С	\$40,000	Y	\$8,800	
Custom	2006 CDA	I	С	\$15,000	Y	\$3,300	
Custom	2007 Process	I	С	\$70,000	Y	\$15,400	
Custom	2008 Lighting	I	N	\$50,000	Y	\$11,000	
Custom	2008 Process	I	N	\$80,000	Y	\$17,600	
Custom	2008 HVAC	I	N	\$67,500	Y	\$14,900	will carryover to 2010
Custom	Sample Design/Data Analysis	I		\$25,000	Y	\$5,500	
SBS	Plug Load Study	О	N	\$25,000	Y	\$5,500	
Other Electric					Y		
	Portfolio Level Precision and Confidence	О		\$30,000	Y	\$6,600	
	Savings Load Shape (EM&V Forum)	О		\$35,000	Y	\$7,700	
	Aquidneck Island/Community Evaluation	О		\$50,000	Y	\$50,000	
	2009 Avoided Energy Supply Component Study (75% Elec)	О		\$60,000	Y	\$13,200	
Gas					Y	\$0	
CEEP	Commercial Energy Efficiency Program (CEEP)	I/P	N	\$100,000	Y	\$26,000	
HEHE	Res High Eff Heating Equipment (HEHE)	I/P	N	\$30,000	Y	\$7,800	
	Free ridership and spillover	О	N	\$100,000	Y	\$26,000	
Weatherization	Res Wx	I/P	N	\$100,000	Y	\$26,000	
	Combined Heat and Power (CHP)	I		\$50,000	Y	\$14,600	
	MicroCHP Evaluation	I		\$50,000	Y	\$14,600	
	Building Practices & Demonstration	I		\$50,000	Y	\$14,600	
EWise	Ewise Impact Evaluation	I	N	\$25,000	Y	\$25,000	
	2009 Avoided Energy Supply Component Study (25% gas)	0		\$20,000	Y	\$5,200	
	Total			\$1,687,500		\$362,900	
	Electric Subtotal			\$1,162,500		\$203,100	
	Gas Subtotal			\$525,000		\$154,600	

Note: RI Tech Pot Study being paid for through EERMC.

d/b/a National Grid R.I.P.U.C. Docket No. 4000 **Attachment 8 (revised)** Page 1 of 10

2009 PERFORMANCE METRICS
--------------------------

1 2	2009 PERFORMANCE METRICS
3 4	Introduction
5	Since 2004, a portion of the incentive under the shareholder incentive mechanism for the
6	DSM programs has been reserved for incentivized performance metrics. These
7	performance metrics are established for initiatives offered in Rhode Island for market
8	transformation objectives or for significant improvements in program offerings. In all
9	cases, the metrics are designed to be straightforward measures of progress for initiatives
10	believed worthy of a special targeted focus.
11 12	For 2009, the Company proposes performance metrics for five initiatives. For four of
13	these, the essential objective of the individual initiative is not changing from 2008. This
14	reflects the Parties agreement that the metrics are still valid as well as the fact that, for
15	many such initiatives, progress is achieved over time and that it is worthwhile to maintain
16	the focus of program implementation on the policy objective defined by the metric over
17	more than one year.
18 19	The Company proposes the performance targets for 2009 described on the following
20	pages. The proposed targets reflect current market conditions and will require significant
21	Company effort to achieve desired results.
22	
23	Final Metric Targets
24	
25	Threshold performance for all five metrics will be based on 2008 results. As 2008 results
26	are not yet available, this Attachment provides a process and framework for the
27	calculation of metric targets once results are available. For three metrics (ENERGY
28	STAR® Homes, High Performance Schools, and Core Performance Buildings), the
29	targets may be set early in 2009. For the other two metrics, preliminary MWh targets are

included here consistent with the program savings estimates provided in the Settlement,

Table E-5. 31

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1	However, if the assumptions used to develop metric MWh targets change as the result of
2	completed evaluation studies, the Parties agree that the performance metric MWh targets
3	may be adjusted accordingly. The Company will recalculate metric targets to account for
4	those evaluation findings and provide them to the Collaborative for review. If the
5	adjusted metric MWh targets vary by more than 5% from the targets included below,
6	Division review and approval will be required. The incorporation of evaluation study
7	results is typically not completed until August of the program year, i.e., the results from
8	evaluation of the 2008 programs will not be incorporated until August 2009. Therefore,
9	the Company proposes to calculate and file revised metric targets, if any, no later than
10	September 30, 2009.
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# **Partial Credit**

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The Parties agree that, for three of the metrics, partial credit will be awarded for performance that does not meet the specific numeric target, in recognition of the Company's effort and in recognition that Rhode Island consumers benefit from even partial progress toward the metric's objective. No extra incentive will be awarded for exceeding the numeric target.

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The performance level at which partial achievement will be credited is the "threshold." For the three metrics structured with partial credit in 2009, the threshold will be greater than or equal to final 2008 performance after consideration of the unique attributes of the metric. This provides continuity in the structure of the metric at the same time as creating a clear standard for the Company from which it must improve in order to receive an incentive.

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The performance level at which the full incentive will be credited is the "target." The incentive for two metrics will be linearly scaled between the threshold and the target. For

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1	the schools	metric t	that does	not	allow	for	this	kind	of	scaling,	the	incentive	will	b
2.	credited for	incremer	ntal levels	ofr	erforn	nanc	e							

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# **Residential Metric 1: ENERGY STAR® Homes**

- Metric: In 2009, the Company will conduct plans analyses and home ratings and sign ENERGY STAR® builders' agreements for new homes being built in Rhode Island. It will increase the penetration of signed builders agreements in 2009 by 3 percentage points compared to the penetration achieved in 2009. Penetration will be calculated as the number of signed agreements divided by the number of permits for new dwelling
- Objective: The metric supports market transformation in the construction of new homes by giving an incentive for an increase in market penetration. This is a leading indicator
- of future savings in the program.

units issued.

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- <u>Discussion:</u> In 2006 the ENERGY STAR<sup>®</sup> Homes program was redesigned at the national level to increase efficiency requirements. Signing up builders and home buyers to the more stringent updated ENERGY STAR<sup>®</sup> Homes program requires builders to agree to a significant change in their building practices, so the trend in penetration can be viewed beginning with that year. Penetration levels for 2006 and 2007 were 15.8% and 19.6% respectively. Note that these values include only those who sign ENERGY STAR<sup>®</sup> agreements; participants through the Code Plus feature of the program will not be counted toward the metric.
- For 2009, the threshold for this metric is set at 1 percentage point greater than 2008 year-
- 24 end penetration and the target level of performance is an increase of 3 percentage points
- 25 over the penetration achieved in 2008. The increase of 3% over year end 2008
- penetration is comparable to the penetration increase that was observed in 2001-03, when
- 27 the previous program design was in its initial years of deployment.

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- 1 <u>Partial Performance:</u> The following is proposed for partial achievement toward the target
- 2 of a 3 percentage point increase in penetration. The incentive for performance between
- 3 the threshold and the target will be scaled proportionately.

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ENERGY STAR <sup>®</sup> HOMES									
	Penetration % Incentive % of Incentive								
Threshold	XX.X%	\$10,000	33%						
	(2008 penetration + 1%)								
Target	XX.X%	\$30,000	100%						
	(2008 penetration +3%)								

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# Residential Metric #2: Savings from Programs other than Residential Lighting

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Metric: The Company will achieve a target amount of MWh savings from residential non-low income programs other than Residential Lighting in 2009. The target will be calculated as the net annual MWh savings goal for all residential non-low income programs excluding the net annual MWh savings from the Residential Lighting program.

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<u>Objective</u>: This metric encourages the Company to provide sufficient focus on achieving savings objectives in all of its residential energy efficiency programs.

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<u>Discussion:</u> The Company's proposed savings goals for 2009 include objectives that focus on energy efficiency opportunities beyond energy efficient lighting in the Residential Lighting Program. This metric complements and reinforces these other objectives by focusing Company efforts on all residential non-low income programs. The metric incentive will be earned only if savings from programs other than Residential

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Annual MWh savings will be counted for all residential non-low income programs, excluding Residential Lighting. The proposed target is set at 100% of the net annual

Lighting meet or exceed the combined threshold savings goal for those programs.

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1 MWh savings goal from programs other than Residential Lighting. The goal is set as a

2 MWh target for savings from programs other than Residential Lighting, rather than a

percentage of sector savings, because of the individual characteristics of the various

4 programs. There is no threshold for this metric. Without a threshold, this becomes an

"all-or-nothing" performance metric. The parties propose this treatment because it

6 efficiently complements the MWh savings incentive for this sector. Recognizing the

difficulty in predicting customer demand for program services in these residential

8 programs, this will be a challenging goal to achieve.

<u>Metric Performance:</u> The following is for achievement of the target savings from residential programs other than the Residential Lighting Program.

RESIDENTIAL OTHER PROGRAM SAVINGS								
Performance	Annual MWh Savings	Incentive	% of Incentive					
Target	9,655 MWh (100% of MWh goal) <sup>1</sup>	\$30,000	100%					

There is no threshold for this metric.

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# C&I Metric 1: Savings Other Than Prescriptive Lighting Savings in the Energy

# **Initiative Program**

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Metric: The Company will achieve a target amount of MWh savings from subprograms other than prescriptive lighting in the Energy Initiative program in 2009. The target will be calculated as the net annual MWh savings from all other subprograms<sup>2</sup> estimated as part of the planned savings for the Energy Initiative program in 2009.

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<sup>1</sup> This target is based on program savings estimates contained in Table E-5; it may be changed by September 30, 2009, as noted above.

<sup>&</sup>lt;sup>2</sup> For the 2009 Energy Initiative Program, subprograms include Compressed Air, Custom, HVAC, Lighting, Motors, and VSDs.

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1 <u>Objective:</u> This metric encourages the Company to seek comprehensive retrofit projects

2 in existing Commercial and Industrial customer facilities that go beyond prescriptive

3 lighting.

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<u>Discussion:</u> The percentage of savings from prescriptive lighting in the Energy Initiative Program has been increasing over the past few years. This type of measure distribution has helped the Company achieve savings goals but this has perhaps been achieved at the expense of measure diversity. This metric complements and reinforces the overall program savings goals by establishing a performance metric focusing on other

subprogram savings. The metric incentive will only be earned only if other subprogram

savings meets or exceeds 100% of the kWh savings built into the savings goals.

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As mentioned above, the proposed target is 100% of the MWh savings from all Energy Initiative subprograms except prescriptive lighting consistent with the savings goals for 2007. The goal is set as a MWh target for savings, rather than a percentage of program savings, because this provides a clearer target than a percentage, which would be affected by how much prescriptive lighting savings are achieved. There is no threshold for this metric. Without a threshold, this becomes an "all-or-nothing" performance metric. The parties propose this treatment because it efficiently complements the MWh savings incentive for this sector. The Company will share quarterly subprogram MWh savings information with the Collaborative to track metric performance.

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24

<u>Metric Performance:</u> The following is for achievement of the target savings from Energy Initiative other than prescriptive-lighting.

25

ENERGY INITIATIVE OTHER SUBPROGRAM SAVINGS							
Performance MWh Savings Incentive % of Incentive							
Target	5,254 MWh (2009 plan) <sup>3</sup>	\$30,000	100%				

<sup>&</sup>lt;sup>3</sup> This target is based on program savings estimates embedded in Table E-5; it may be changed by September 30, 2009, as noted above. There is no threshold for this metric.

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# **C&I Metric 2: High Performance Schools**

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- 3 Metric: The Company will contract with public or private school projects through
- 4 Design 2000plus to provide full incremental cost for high performance design and
- 5 construction practices for new construction or major renovations with a special focus on
- 6 high quality energy efficient lighting. It shall contract with 2 schools in 2009 more than
- 7 were contracted with in 2008.

8

- 9 <u>Objective:</u> This market capitalizes on the window of opportunity available when school
- 10 facilities are being built or renovated to increase program participation and energy
- savings. It assists a portion of the municipal sector that faces continuing funding
- 12 challenges.

13

- 14 <u>Discussion:</u> Schools present unique opportunities to not only adopt energy efficiency but
- 15 to enhance student learning through better classroom design. This metric provides
- technical and financial support from the very beginning of school construction projects,
- emphasizes thermal, acoustic, and visual comfort, especially in lighting design, and helps
- 18 cities and towns construct new schools that are high quality, environmentally sensitive,
- and cost less to operate.

20

- 21 According to documents from the Department of Education, on average, funding is
- 22 approved for approximately 15 public school projects per year. In the period 2001
- 23 through 2006, 11 schools, or 12% (of approximately 90 schools), have participated in the
- 24 Schools Initiative.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Some of the approved public school projects may be for projects that may not be suitable for the Schools Initiative, in other words, projects that do not involve new construction or major renovation. These may be for partial facility construction, minor renovations, or equipment replacement at the end of its useful life. Many of these have received rebates through the Design 2000*plus* program. In fact, over 75% of the funded public school projects received Design2000*plus* rebates in this period.

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The Company placed under contract 1 school in each of 2004 and 2005, zero schools in 2006, and two schools in 2007. This indicates the continuing difficulty in recruiting customers to this initiative considering the small number of new schools built each year, the long project development schedules, and the current economic climate, particularly for municipalities. The parties agree to set the threshold equal to the final number of number of schools placed under contract in 2008 and the target at the 2008 participation

7 level plus two additional schools.

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For 2009, the Company will continue to work with the Rhode Island Department of Elementary and Secondary Education to help identify additional participants. The Company has not yet been able to identify a single source of data that tracks funding of private school construction. Nevertheless, the Company will use the same level of effort to offer the program to private schools as to public schools and include contracts with private schools in the performance metric for 2009.

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<u>Partial Performance</u>: Based on historic performance, the small size of the eligible market and the uncertainty about the potential in the private school sector, the following is proposed for partial achievement toward the target of three schools.

19

SCHOOLS INITIATIVE								
Performance	Signed Agreements	Incentive	% of Incentive					
Threshold	2008 participation	\$10,000	50%					
Intermediate	2008 participation + 1 school	\$20,000	75%					
Target	2008 participation + 2 schools	\$30,000	100%					

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

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- 3 Metric: The Company will contract with design professionals (architects, engineers,
- 4 builders) to commit to apply the Core Performance guidelines in the design and
- 5 construction of new commercial buildings less than 75,000 square feet in area. The
- 6 Company will sign agreements covering 4 buildings in 2009.

7

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

13

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

- 21 For 2009, we expect the number to grow as architects and their clients realize that
- buildings designed this way are practical and cost effective. The program will continue
- 23 to be expanded in 2009 to reach more projects and more design firms through further
- training and promotional efforts. Also, National Grid continues to work closely with the
- New Buildings Institute, the national organization that manages and promotes and
- 26 maintains Advanced Buildings across the country to add powerful new features to the
- 27 program that will increase its appeal and market penetration. Furthermore, the Company
- 28 is revising the incentive structure for Core Performance to be on a \$/sq. ft. basis—the

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- same benchmark used by developers. The Company plans to monitor the effectiveness of
- 2 reaching developers through this new this new incentive strategy and use data gathered to
- 3 inform future program and metric design.

4

- 5 The Company projects that it will sign one agreement during 2008. The threshold for the
- 6 2009 performance metric builds on this achievement and the target establishes a stretch
- 7 goal to sign additional agreements.

8

- 9 <u>Partial Performance:</u> The following is proposed for partial achievement toward the
- 10 target.

11

CORE PERFORMANCE BUIDLINGS								
Performance Signed Agreements Incentive % of Incentive								
Threshold	2	\$10,000	33%					
Target	4	\$30,000	100%					

- The incentive for performance between the threshold and the target will be scaled
- 14 proportionately.