

Niagara Mohawk Power Corporation d/b/a National Grid

Case 08-E-1014

**Expedited Fast Track Electric Energy Efficiency Programs
Implementation Plans**

March 17, 2009

nationalgrid

Table of Contents

I.	Introduction	1
II.	Implementation Plans	3
A.	Overall Program Budget and Goals	3
B.	Residential High Efficiency Central Air Conditioning Program	6
1.	Goals	6
2.	Budget	6
3.	Eligible measures	9
4.	Target Customer Market and Detailed Marketing Plan	10
5.	Roles and Responsibilities	11
6.	Customer Enrollment	15
7.	Training for Retail Partners.....	15
8.	Contractor Training and Program Orientation Plan	16
9.	Contact Information	18
10.	Quality Assurance Plan	19
11.	Coordination.....	19
12.	Overlap.....	20
13.	Evaluation	20
14.	Logic Model.....	24
C.	Small Business Services Energy Efficiency Program.....	25
1.	Goals	32
2.	Budget	32
3.	Eligible measures	34
4.	Target customer market and detailed marketing plan	35
5.	Roles and Responsibilities	36
6.	Customer Enrollment	40
7.	Training of Retail Partners.....	40
8.	Vendor Training.....	41
9.	Contact Information	42

10.	Quality Assurance Plan	42
11.	Coordination.....	43
12.	Overlap.....	44
13.	Evaluation	44
14.	Logic Model.....	49
III.	Evaluation	50
A.	Administrative Structure	51
B.	Steps to Identify and Mitigate Threats to Data Reliability.	51
C.	Data Collection and Management Process.....	52
D.	Detailed Evaluation Budget	52
E.	Benefit/Cost Ratios	55
IV.	Savings Assumptions	58
A.	Expected Benefits for Residential High Efficiency Central Air Conditioning.....	59
1.	15 or greater SEER AC; 12.5 EER	62
2.	16 or greater SEER AC; 13 EER	63
3.	15 or greater SEER HP; 12.5 EER.....	65
4.	16 or greater SEER HP; 13 EER.....	67
5.	Heat pump water heater	68
B.	Expected Benefits for Small Business Services Energy Efficiency Program.....	70
1.	Evaporator Fan Controls – Small Commercial And Small Industrial.....	71
2.	Anti-Sweat Heater Controls	73
	Appendix A: Documentation of Savings Assumptions	75
A.	Residential High Efficiency Air Conditioning Program Measures.....	75
1.	Quality installation AC	75
2.	Quality installation HP.....	76
3.	Duct and air sealing.....	78
4.	ECM furnace fan	80
5.	ENERGY STAR [®] thermostats	82
B.	Small Business Services Energy Efficiency Program Measures	84
1.	Fluorescent Lighting with Eligible Ballast	84
2.	Compact Fluorescent Lighting.....	86

3.	Occupancy Sensors	88
4.	High Intensity Discharge.....	90
5.	LED Exit Signs	92
6.	Novelty Cooler Shutoff.....	94
Appendix B: Customer and Trade Ally Outreach.....		96
Appendix C: Explanation of Budget Categories.....		102
Appendix D: Executive Summaries of Selected Evaluation Studies		104

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I. Introduction

On January 16, 2009, the New York State Public Service Commission (the “Commission”) issued an order approving Energy Efficiency Portfolio Standard (“EEPS”) “Fast Track” utility-administered electric energy efficiency programs with modifications (the “Order”).¹ The Order required Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”) to submit a compliance filing to the Commission by March 17, 2009 with the following information about the energy efficiency programs that will be offered to customers:

1. Implementation plans that describe in detail the overall programs and how the individual energy efficiency programs operate, including revised evaluation plans and quality assurance plans, comprised of the following elements:
 - a) Overall program annual and cumulative budgets and energy savings goals;
 - b) For both the Residential HVAC Program and the Small Business Program, include:
 - i. cumulative and annual budgets, energy savings, and customer participation goals;

¹ Case 08-E-1014, *et al.*, *Niagara Mohawk Power Corporation, et al.*, Order Approving “Fast Track” Utility-Administered Electric Energy Efficiency Programs with Modifications (issued and effective January 16, 2009).

- ii. annual budgets by spending category including descriptions of expenditures within each category utilizing budget category definitions provided by Department of Public Service Staff (“Staff”);
- iii. descriptions of roles and responsibilities of the Company and all contractors participating in the program;
- iv. contractor training and program orientation plan;
- v. target customer market and detailed marketing plan, including sample customer and trade ally outreach materials;
- vi. training for retail partners;
- vii. eligible measures and associated customer incentives;
- viii. procedures for customer enrollment;
- ix. contact information for customer inquiries and complaints;
- x. Quality Assurance plan; and
- xi. a description of how efforts will be coordinated with other New York energy efficiency programs, including plans for how the Company will avoid duplication and confusion resulting from overlapping/neighboring programs, and ensure no double-counting of savings achieved and no more than one incentive payment per energy efficiency measure.

2. Within the implementation plans, the inclusion of the following information related to outreach and education (“O&E”)/marketing programs and new budgets:
- a) specific budget amounts for each individual element of the O&E/marketing budget for each year of the program;
 - b) a list and description of the O&E/marketing vehicles to be used;
 - c) an explanation of the target audiences for each program component;
 - d) a timeline for the development, implementation and evaluation of the O&E/marketing efforts;

- e) a description of how the Fast Track O&E/Marketing programs relate to the Company's general O&E/Marketing program; and
 - f) the efforts that will be undertaken by the Company to minimize any overlap and/or customer confusion that may result from O&E/marketing activities in the same or adjacent market areas.
3. Identification of a longer-term process to ensure proper integration with O&E/marketing efforts associated with the 90-day filings, O&E initiatives of the New York State Energy Research and Development Authority ("NYSERDA") and the statewide O&E/marketing effort.²

As the Order also included a requirement for the Company to file by April 1, 2009 a new Residential HVAC Program proposal for potential Commission approval for calendar years 2010 and 2011, the Company's implementation plan herein provides information for calendar year 2009 only for the Residential High Efficiency Central Air Conditioning Program. However, the Company's implementation plan for the Small Business Services Energy Efficiency Program addresses planned efforts over the three-year period, 2009 through 2011.

II. Implementation Plans

The Company has developed implementation plans for two Fast Track programs: Residential High Efficiency Central Air Conditioning and Small Business Services Energy Efficiency Program. The implementation plans follow a discussion of the overall program budgets and goals for these two Fast Track programs.

A. Overall Program Budget and Goals

Annual and cumulative budgets and savings goals for National Grid's Expedited Electric Efficiency Programs are as follows.

² *Id.* at 48-49.

Projected Annual Budget and Savings Goals 2009 - 2011

	2009		2010		2011	
	Annual Utility Cost	Annualized MWh Savings	Annual Utility Cost	Annualized MWh Savings	Annual Utility Cost	Annualized MWh Savings
Electric Programs						
Residential High Efficiency Central Air Conditioning	\$ 582,779	163	\$ -	0	\$ -	0
Small Business Services Energy Efficiency Program	\$ 21,146,664	69,206	\$ 28,195,577	92,275	\$ 28,195,538	92,274
Total	\$ 21,729,444	69,369	\$ 28,195,577	92,275	\$ 28,195,538	92,274

For 2009 the Residential High Efficiency Central Air Conditioning Program has proposed savings of 163 Annual MWh, as compared to the savings goals set forth in Appendix 1, Table 3 of the Order of 148 Annual MWh. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected shareholder incentive for 2009 to be \$586 greater than the projected shareholder incentive in the Order. This causes the 2009 Annual Utility Cost for the Residential High Efficiency Central Air Conditioning Program to be \$586 greater than the 2009 total cost in the Order.

For 2009 – 2011 the Small Business Services Energy Efficiency Program has proposed savings of slightly higher than the savings goals set forth in Appendix 1, Table 3 of the Order. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected shareholder incentive for 2009 – 2011 to be \$43,285 greater than the projected shareholder incentive in the Order. This causes the 2009 - 2011 Annual Utility Cost for the Small Business Services Energy Efficiency Program to be \$43,285 greater than the 2009 – 2011 total cost in the Order.

Projected Cumulative Budget and Savings Goals 2009 - 2011

	2009		2010		2011	
	Cumulative Utility Cost	Cumulative MWh Savings	Cumulative Utility Cost	Cumulative MWh Savings	Cumulative Utility Cost	Cumulative MWh Savings
Electric Programs						
Residential High Efficiency Central Air Conditioning	\$ 582,779	163	\$ 582,779	163	\$ 582,779	163
Small Business Services Energy Efficiency Program	\$ 21,146,664	69,206	\$ 49,342,241	161,481	\$ 77,537,779	253,755
Total	\$ 21,729,444	69,369	\$ 49,925,021	161,644	\$ 78,120,559	253,918

For 2009 the Residential High Efficiency Central Air Conditioning Program has proposed savings of 163 Annual MWh, as compared to the savings goals set forth in Appendix 1, Table 3 of the Order of 148 Annual MWh. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected

shareholder incentive for 2009 to be \$586 greater than the projected shareholder incentive in the Order. This causes the 2009 Annual Utility Cost for the Residential High Efficiency Central Air Conditioning Program to be \$586 greater than the 2009 total cost in the Order.

For 2009 – 2011 the Small Business Services Energy Efficiency Program has proposed savings of slightly higher than the savings goals set forth in Appendix 1, Table 3 of the Order. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected shareholder incentive for 2009 – 2011 to be \$43,285 greater than the projected shareholder incentive in the Order. This causes the 2009 - 2011 Annual Utility Cost for the Small Business Services Energy Efficiency Program to be \$43,285 greater than the 2009 – 2011 total cost in the Order.

B. Residential High Efficiency Central Air Conditioning Program

The purpose of this program is to promote the effective operation of existing central air conditioning equipment and the installation of high efficiency central air conditioning equipment by residential customers.

1. Goals

Annual and cumulative customer participation and savings goals for the Residential High Efficiency Central Air Conditioning Program follow:

Projected Annual Customer Participation and Savings Goals 2009

	2009	
	Annual Customer Participation	Annualized MWh Savings
Electric Programs		
Residential High Efficiency Central Air Conditioning	544	163
Total	544	163

For 2009 the Residential High Efficiency Central Air Conditioning Program has proposed savings of 163 Annual MWh, as compared to the savings goals set forth in Appendix 1, Table 3 of the Order of 148 Annual MWh.

2. Budget

Per the Commission’s Order, the Company is planning to implement the Residential High Efficiency Central Air Conditioning Program through year-end 2009. The budget for the Residential High Efficiency Central Air Conditioning Program follows:

Projected Residential High Efficiency Central Air Conditioning Budget 2009

<u>Cost Category</u>	<u>2009</u>
<u>General Administration</u>	<u>\$40,000</u>
<u>Program Planning</u>	<u>\$10,000</u>
<u>Program Marketing</u>	<u>\$176,762</u>
<u>Trade Ally Training</u>	<u>\$19,640</u>
<u>Incentives and Services</u>	<u>\$251,225</u>
<u>Direct Program Implementation</u>	<u>\$50,000</u>
<u>Program Evaluation</u>	<u>\$28,823</u>
<u>Shareholder Incentive</u>	<u>\$6,329</u>
<u>Total Utility Cost</u>	<u>\$582,779</u>
<u>Participant Cost</u>	<u>(\$25,123)</u>
<u>Total Cost</u>	<u>\$557,657</u>

Participant cost is negative for this program after the free-ridership net spillover adjustment to participant cost. National Grid’s benefit cost model eliminates both the costs and savings related to free-riders and it adds both the savings and costs associated with spillover. It does this by adjusting participant costs to account for both free-ridership and spillover. This is done by subtracting (1-free-ridership + spillover) multiplied by total incremental cost from "gross" participant costs to arrive at net participant costs. For the Residential High Efficiency Central Air Conditioning Program the adjustment for free-ridership net of spillover is greater than the participant cost, resulting in a negative participant cost.

The budgeted shareholder incentive is equal to \$38.85 per projected annual MWh savings for the program.

For 2009 the Residential High Efficiency Central Air Conditioning Program has proposed savings of 163 Annual MWh, as compared to the savings goals set forth in Appendix 1, Table 3 of the Order of 148 Annual MWh. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected shareholder incentive for 2009 to be \$586 greater than the projected shareholder incentive in the Order. This causes the 2009 Annual Utility Cost to be \$586 greater for the

Residential High Efficiency Central Air Conditioning Program than the 2009 total cost in the Order.

An explanation of budget categories is provided as attached Appendix C, “Budget Categories for Energy Efficiency Programs,” provided to the Company in a February 20, 2009 letter from Staff’s Floyd Barwig to National Grid’s Bruce Johnson.

3. Eligible measures

Eligible measures and associated customer incentives for the Residential High Efficiency Central Air Conditioning Program, consistent with the measures and rebates in the Order, follow:

<u>MEASURE</u>	<u>ELIGIBILITY</u>	<u>REBATE</u>
Central Air Conditioning	SEER \geq 15 EER \geq 12.5 Plus "Quality Installation"	\$400
Central Air Conditioning	SEER \geq 16 EER \geq 13.0 Plus "Quality Installation"	\$600
Central Air Source Heat Pump	SEER \geq 15 EER \geq 12 HSPF \geq 8.5 Plus "Quality Installation"	\$400
Central Air Source Heat Pump	SEER \geq 16 EER \geq 13.0 HSPF \geq 9.0 Plus "Quality Installation"	\$600
Duct and Air Sealing	Blower Door and Duct Blaster assisted sealing by certified contractors	\$600
ECM Furnace Fan	Electronically Controlled Motor (ECM) Fan	\$200
Electric Heat Pump Water Heater	Energy Factor > 2.0	\$400
Energy Star Thermostats	Energy Star	\$25
Quality Installation	Installation by BPI-certified contractor and documentation that an ACCA Manual J calculation has been completed to determine proper sizing	Contractor Incentive of \$200

4. Target Customer Market and Detailed Marketing Plan

There are several target markets for Residential High Efficiency Central Air Conditioning as follows. All participating customers will be residential customers on residential rates.

- New construction
- New systems in existing homes
- Replacement systems in existing homes
- Improvements in operational systems in existing homes
- Contractors and technicians responsible for installing and servicing HVAC equipment
- Manufacturers, suppliers and distributors of HVAC equipment
- New home builders and remodeling contractors
- Home improvement retailers

An integrated marketing plan is utilized for outreach and education of this program.

Individual vehicles include direct mail, collateral materials, www.thinksmarthinkgreen.com website, search engine marketing, email newsletters, bill inserts, print advertisements, events and outreach. Efforts are directed to both customers and trade partners, who influence the customer's decision to install high efficiency equipment.

Ongoing communication and training with trade allies will develop the awareness, comfort-level and acceptance of energy efficient equipment by installers. Marketing to trade allies includes direct mailings, collateral, website, email newsletter, distributor signage, education and training events, and as well as trade association sponsorships. Costs for planned outreach and education efforts are summarized in the following table:

Residential High Efficiency Central Air Conditioning Program Outreach & Education Budget Summary		
Method	Frequency / Description	Estimated cost
<i>O&E to Customers</i>		
Direct mail & bill inserts	1X annually – Q3	\$116,762
Collateral & Distributor Signage	15,000 rebate forms	\$ 20,000
Online efforts: Website, Search engine marketing and email newsletter	New pages for these programs, additional key works and E-action newsletter	\$ 15,000
Events/outreach, Education/training and sponsorships	6 events, Seminars held quarterly	\$ 25,000
	Total Cost	\$176,762

A timeline for planned efforts follows:

Marketing Timeline

Residential High Efficiency Central Air Conditioning	Q2 2009	Q3 2009	Q4 2009
Direct Mail & Bill Inserts	X	X	X
Collateral & Dist. Signage	Ongoing beginning in April 2009		
Website & SEM	Ongoing beginning in April 2009		
Email Newsletters	X	X	X
Events/Outreach/Training	Ongoing beginning in April 2009		

Samples of customer and trade ally outreach materials are provided as attached Appendix B.

5. Roles and Responsibilities

National Grid Program Management

As part of its program management, National Grid has local management and program managers that oversee this program from its Syracuse, New York offices. These employees are responsible for the Company's energy efficiency programs including

delivery, contractor oversight, coordination of marketing efforts, regulatory support, and coordination with NYSERDA and other New York utilities regarding their respective energy efficiency programs. National Grid closely tracks spending, achieved savings, and participation compared to budget, savings goals and participation goals in order to achieve desired program objectives at or below budgeted costs. Program managers oversee the planning, coordination, resource management, project execution, and project performance and progress of the programs. National Grid's program managers responsible for program implementation work closely with implementation vendors to ensure that all reasonable efforts are being undertaken to achieve desired program goals and work through any issues that vendors encounter in the field.

National Grid also has program management functions that are performed for the Niagara Mohawk program from its Waltham, Massachusetts offices. This includes supervision and regulatory support for the Syracuse staff.

Program Evaluation Staff

Employees in the Energy Efficiency Evaluation & Regulatory Affairs Department at National Grid have no program implementation responsibilities. These National Grid employees, located in Waltham, Massachusetts, are responsible for defining the scope of program evaluation study efforts, developing Requests for Proposals ("RFPs") to hire independent evaluation consultants to conduct studies, reviewing bidders' responses to RFPs and selecting vendors, managing the efforts of vendors under contract, and communicating results with program implementation team members and other key stakeholders. These employees provide copies of completed evaluation studies to program implementation personnel and often include program implementation personnel in the presentation of final evaluation study results. Employees in the Energy Efficiency Evaluation & Regulatory Affairs Department also routinely attend program implementation staff meetings to stay current on issues that are affecting the efficiency programs. Program evaluation staff report to the Director of Energy Efficiency Evaluation & Regulatory Affairs. Program implementation staff report to the Director of Energy Efficiency Implementation.

Marketing and Training Staff

The training and marketing staff are part of the larger communication team, which also oversees energy efficiency events and outreach. The group is organized under two managers. Marketing reports to the Communications Manager and is responsible for all states served by National Grid affiliates. This team develops marketing plans, advertising, direct mail, collateral, bill inserts, etc. This group maintains the website, www.thinksmarthinkgreen.com, and coordinates email and search engine marketing campaigns. The communication specialists also oversee cooperative advertising with trade allies and develop trade communications.

The training, events and outreach functions report to the Manager of Training and Events. This group develops training plans for internal and external audiences including the professional development of energy efficiency staff and trade allies. Workforce development is also a goal of this area. Events and outreach efforts include community, business, trade and industry events aimed at building awareness of energy efficiency programs and stimulating participation.

Program and Policy Staff

National Grid employees, who are not part of the Company's energy efficiency organization, independently review energy efficiency charges in the general ledger accounts after-the-fact to verify that only appropriate charges have been directed to these energy efficiency implementation and evaluation accounts. Employees in this area report to the Director of Program and Policy and are located in Waltham, Massachusetts.

National Grid uses an activity-based accounting system that supports the tracking of both implementation-related expenses and evaluation-related expenses by program. The Company's general ledger system is used to track expenses by activity, project and expense type. When an employee with the appropriate authority approves an invoice for payment, they must supply the activity, project and expense type that the invoice should be charged to, in addition to authorizing payment of the invoice. Each of the proposed energy

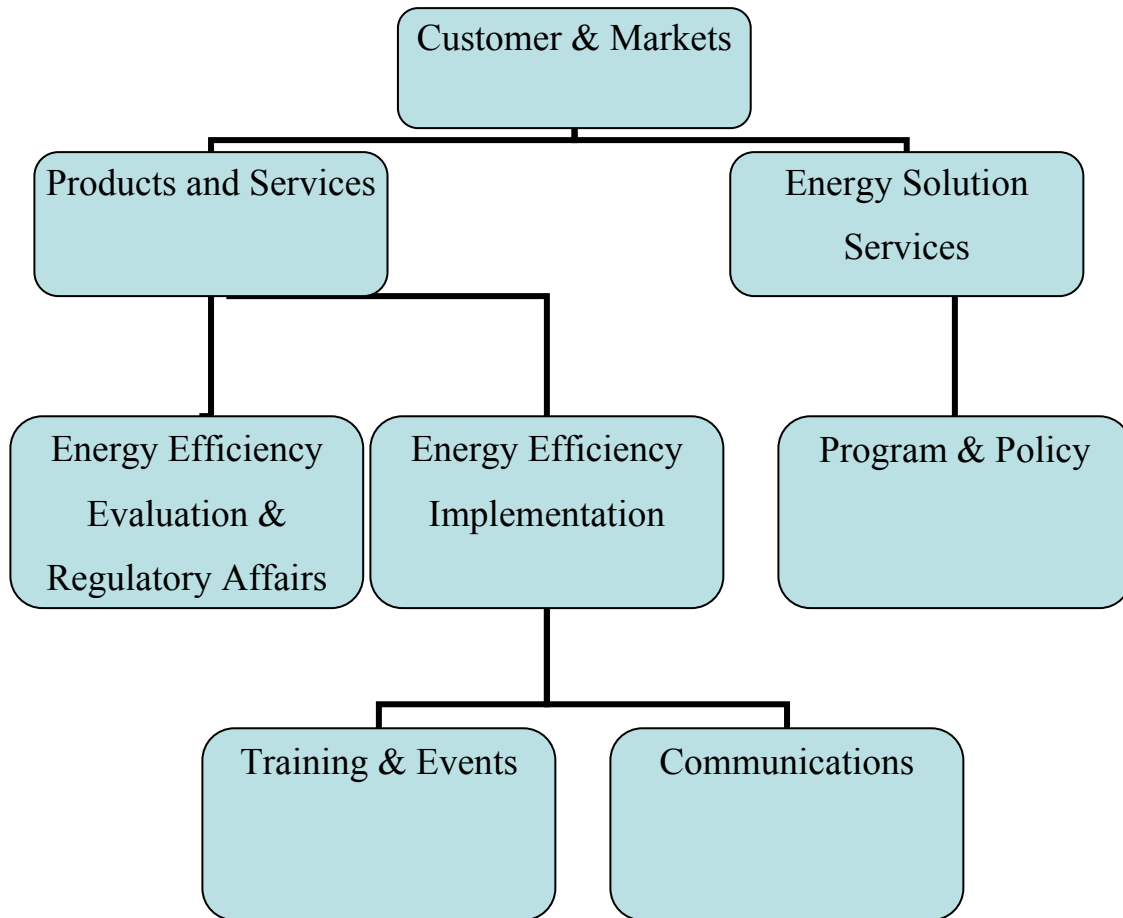
efficiency programs has a separate project in the general ledger system. Evaluation and implementation have separate activity types in the general ledger system.

Vendor Program Implementation

National Grid hires vendors who have demonstrated experience and expertise to provide the services that are required in the any given energy efficiency program. Currently, the Company proposes to work with a vendor who will provide direct services for the Niagara Mohawk Residential High Efficiency Central Air Conditioning Program. The vendor will operate and manage a telephone call center to answer program inquiries from customers, respond to customer interest, installation problems, provide technical assistance, and answer general energy efficiency educational questions. This call center will operate from the hours of 8:00 a.m. to 6:00 p.m. EST, Monday through Friday. During other hours, an answering service will be available for customers to leave messages requesting return calls. The vendor will provide toll-free phone numbers for National Grid customers to contact the call center, operating separate toll-free numbers for each region as needed. The vendor is responsible for processing and associated administration of all customer rebates. The vendor will verify customer eligibility for participation in the program, maintain customer participation records, and disburse rebates to customers.

Organizational Chart

The below organizational chart shows various entities involved with the energy efficiency programs at National Grid and their relationships to each other.



6. Customer Enrollment

Customers enroll in the Residential High Efficiency Central Air Conditioning Program by filling out the National Grid Upstate New York Residential Electric Energy Efficiency Rebate Application. The form is available at the www.thinksmarthinkgreen.com website and also provided in attached Appendix B. National Grid’s vendor is authorized to review the form for correctness, contact customers as needed for further information, and pay eligible incentives.

7. Training for Retail Partners

The company has hired ICF International (“ICF” or the “vendor”) to provide supply chain outreach support services related to the Residential High Efficiency Central Air

Conditioning Program. National Grid has had a successful relationship with ICF in its downstate service territory relative to interim gas energy efficiency programs and given the timeline to implement the Residential High Efficiency Central Air Conditioning Program quickly, the Company expanded this contract. The vendor has assigned an Account Manager to work within the Niagara Mohawk service territory to provide support to supply houses to promote the program, provide program updates, maintain stocking of program materials and supplies, address technical training information needs, and maintain supplier interest in the program. The vendor may also participate in supply house events, dealer meetings, and manufacturer events. The Niagara Mohawk Account Manager will work closely with the implementation team, National Grid Trade Ally Managers, and NYSERDA to support the Residential High Efficiency Central Air Conditioning Program.

8. Contractor Training and Program Orientation Plan

National Grid hires vendors who have demonstrated experience and expertise to provide the services that are required in the applicable program. These vendors provide training to contractors and their employees working directly in the field, including quality assurance inspectors. These vendors typically provide the detailed orientation and training plans on behalf of National Grid as part of their contracted services to the Company. The National Grid rebate application form and the information found at www.thinksmarthinkgreen.com are the basic training materials used, augmented by a particular vendor's experience and/or required accreditation. ICF was selected by competitive bid for the Company's downstate New York interim gas energy efficiency programs at a time when there were no upstate New York efficiency programs. Currently, National Grid has no plans to hire any additional vendors for contractor training and program orientation.

For the Residential High Efficiency Central Air Conditioning Program, National Grid has hired a vendor who will work directly with the mid-market players in the HVAC supply chain, i.e., HVAC equipment distributors and supply houses. National Grid's affiliates have found that concentrating on this market segment has helped to transform the marketplace for energy-efficient products and services in New England. The mid-market

players are often not aware of the differences in energy performance of competing products, and tend not to stock or promote higher-cost equipment. Outreach, education, and training in how to sell premium-performance equipment have resulted in significant increases in the stocking, promotion, and sales of energy-efficient equipment in New England.

The experience of National Grid affiliates in New England indicates that HVAC contractors who install central air conditioning equipment have a major influence on the purchasing decisions made by their customers. A contractor's willingness to quote high-efficiency equipment and their ability to explain the consumer benefits is typically a function of their knowledge of and comfort with the technology, and their ability to explain the benefits of this equipment to their customers. Supply houses and distributors where contractors purchase central air conditioning equipment are one step higher on the supply chain. These mid-market actors are the primary information source for the installation contractors and play a critical role in bringing the high-efficiency message to the marketplace.

The basic approach National Grid's vendor will employ is to make supply house sales and sales counter employees available for program training and information, display program information, and assist in developing lists of qualifying equipment. The vendor will ask supply houses to sign a Participation Agreement similar to the one currently being used for National Grid's downstate gas high efficiency heating programs. National Grid's experience in other programs has shown that having a signed agreement results in more effective and consistent efforts by mid-market partners.

Training of both inside and outside sales staff at supply houses is instrumental in bringing the high-efficiency message to the marketplace. Sales staff training provided by the vendor will cover the following:

- Explaining the differences between standard and higher efficiency central air conditioning equipment for the residential market.
- Describing National Grid’s rebate programs for the Niagara Mohawk service territory and the equipment eligible for rebates.
- Showing how supply houses can teach contractors the benefits from promoting the higher efficiency equipment to end-users.
- Showing how contractors can “up-sell” customers from standard equipment, by showing the value proposition to the customer.

9. Contact Information

Customers with inquiries and complaints relating to the Residential High Efficiency Central Air Conditioning Program are first directed to the Company’s fulfillment house vendor:

National Grid Energy Efficiency
40 Washington Street, Suite 2000
Westborough, MA 01581
Tel: 800-292-2032

If complaints are unresolved, the fulfillment house vendor will contact:

Ms. Lisa Tallet
National Grid
Manager, Residential Electric and Gas Energy Efficiency Programs
300 Erie Blvd. West
Syracuse, NY 13202
Tel: 315-460-1103

The Manager of Residential Electric and Gas Energy Efficiency Programs or a designee will then have the responsibility of contacting the customer to ensure that complaints are resolved.

10. Quality Assurance Plan

National Grid's fulfillment house vendor will randomly select 10% of the completed rebate forms for a follow-up inspection. The fulfillment house will contract with a BPI-certified organization and that organization will contact the customer. National Grid will hire a vendor to perform inspections of these randomly selected customer installations. The inspection vendor must have previous experience in inspecting HVAC systems. The inspection will ensure that the correct equipment was installed for which the customer received the rebate and that there are no obvious health and safety violations. The standard will be to verify that the installation contractor adhered to state and local laws in installing the equipment.

National Grid will inform the customer and installation contractor in writing of problems discovered, if any, with the installation. National Grid will contact the customer to ensure that problems are resolved. However, as the contract for the equipment installation work is between the customer and the contractor, it will ultimately be the customer's responsibility to pursue resolution through consumer protection laws and/or any other means available to the extent that the customer is not satisfied. National Grid will inform the Building Performance Institute ("BPI") of any unresolved contractor problems, if applicable.

11. Coordination

National Grid will coordinate with other energy efficiency program providers, including NYSERDA, to avoid duplication and confusion resulting from overlapping/neighborhood programs and ensure no double-counting of savings achieved and no more than one incentive payment is provided for an energy efficiency measure under any residential HVAC program. National Grid's program manager communicates with NYSERDA every few weeks to ensure that both parties are aware of any issues or new marketing campaigns. National Grid will inform its contractors and customers that they must choose between the NYSERDA and National Grid programs in order to receive services. As part of the Company's inspection process, National Grid will check to see if the customer has participated in any other energy efficiency programs. National Grid will also share participation data with NYSERDA, assuming NYSERDA will also share participation data

with National Grid. As part of the Company's evaluation efforts, National Grid will check to see if the customer has participated in any of the NYSERDA energy efficiency programs.

Customers may also participate in residential HVAC programs sequentially, in which case there will not be a problem. For example, a customer might first participate in National Grid's Residential High Efficiency Central Air Conditioning Program and then participate in NYSERDA's Home Performance with ENERGY STAR[®] Program. In that situation, there should be no double-counting because National Grid will only count savings related to rebate measures, and NYSERDA's quality control process should ensure that its contractor is accurately reporting other HVAC measures.

12. Overlap

National Grid will make every effort to minimize any overlap and/or customer confusion that may result from marketing activities in the same or adjacent market areas related to residential HVAC energy efficiency programs. The Company's Residential High Efficiency Central Air Conditioning Program offers are posted on www.thinksmarthinkgreen.com, a site dedicated solely to National Grid's energy efficiency programs. Direct mailings, email notices and bill inserts will clearly direct customers to that website and the dedicated energy efficiency toll-free telephone number. National Grid's messaging on energy efficiency always ties back to the thinksmarthinkgreen website and/or specific telephone numbers to eliminate customer confusion.

13. Evaluation

Since National Grid's Residential High Efficiency Central Air Conditioning Program is for 2009 only and has a relatively small evaluation budget based on 5% of the total program spending, the evaluation activities for calendar year 2009 will be limited. The expanded

program offerings in the proposed new 2010-2011 program,³ along with an expanded evaluation budget in those years, will permit a comprehensive evaluation scope in those years.

For 2009 the Company will conduct a process evaluation of the Residential High Efficiency Central Air Conditioning Program towards the end of the calendar year. In addition, the Evaluation Advisory Group (“EAG”) has been discussing the implementation of a joint metering study of residential HVAC equipment and a study of baseline practices for the residential sector. National Grid proposes to participate in these joint studies which are likely to be initiated either in 2009 or 2010.

Additional details about process and impact evaluations follow.

Process Evaluation

In 2009 National Grid will conduct a process evaluation of the Residential High Efficiency Central Air Conditioning Program. This evaluation will focus on identifying how the program is operating during the start-up phase, with the objective of identifying improvements that can be made to the implementation process, with a focus on findings that will lead to improved efforts in the new program that the Company will propose for implementation in 2010 and 2011 in compliance with the Order. National Grid anticipates hiring an independent process evaluation consultant through a competitive solicitation to conduct this study. The Company understands the value of getting early feedback so that any needed program modifications can be identified and implemented quickly, resulting in improved results and value to customers. To meet this objective, interim reports from the selected contractor will be requested so that modifications to the implementation effort can be adopted quickly where it appears that a change is likely to lead to improved results in the program.

³ See Order at 50 where the Commission directed the Company to “file a new Residential HVAC Program proposal by April 1, 2009 for potential Commission approval for calendar years 2010 and 2011.”

This first year process evaluation will document program processes during the start-up and at a minimum will gather the following information:

- Level of customer satisfaction
- Vendor selection process
- Company staff and vendor training
- Effectiveness of the program delivery mechanism
- Effectiveness of program promotion
- Remaining barriers to program participation including an assessment of why some customers choose to not participate in the program
- Review of measures offered through the program, i.e., are they acceptable, appealing and valued by the customers
- Identification of lessons learned and specific actionable recommendations for program improvement
- A review of program tracking databases to ensure that data that will likely be required to support future program evaluation efforts, including impact evaluations, are being collected

A survey of participating and non-participating customers and vendors will be conducted in support of study objectives. The Company will design the survey sample such that results have a precision of +/- 10% at 90% confidence as specified by Staff's Evaluation Guidelines.

A final report summarizing results from the process evaluation of the Residential High Efficiency Central Air Conditioning Program will likely be completed by year-end 2009.

The estimated cost of the process evaluation study is \$30,000.

Impact Evaluation

Given the limited evaluation budget for this program in anticipation that the program will be revised in 2010 (subject to Commission approval), the impact evaluation effort will focus on conducting joint studies with the other New York program administrators. The two studies under consideration by the EAG's studies subcommittee include an hours-of-use study of equipment runtime and a baseline study of all residential measures, both of which will include central air conditioning and heat pumps.

The overall objectives of the runtime study are to:

- Provide annual full load equivalent hours, annual kWh usage and electric demand load profiles for central air conditioning and heat pump measures in New York, taking into account climate differences across the state;
- Energy and peak demand savings estimates for the installation of high efficiency central air conditioning and heat pump measures; and
- Provide more detailed descriptions of central air conditioning and heat pump units as installed (e.g. refrigerant charge, airflow, type of thermostats, over-sizing practices, maintenance practices, etc.).

The Company expects the runtime study will be initiated in 2009 and will be completed in 2010.

The objectives of the baseline study are to develop better estimates of the baseline efficiencies of central air conditioning and heat pump equipment that are currently being installed without program influence. The estimated cost of initiating both the runtime and baseline studies is approximately \$30,000 in 2009. The total cost to complete these studies (in 2010) is expected to be approximately \$200,000.

To determine net energy and demand savings, National Grid will use the results of a survey of free-ridership and spillover to be conducted in 2010. The methodology used for that survey will be developed jointly in consultation with the EAG and Staff. The Company plans to design the survey sample such that free-ridership and spillover results

have a precision of +/- 10% at 90% confidence as specified by Staff's Evaluation Guidelines.

When evaluated net savings for this program become available, National Grid plans to use those results to support planned efforts that focus on this market and technologies. This will include assessing program cost-effectiveness using these evaluated results in place of planning assumptions.

Steps to Identify and Mitigate Threats to Data Reliability

The Company will review the evaluation plan submitted by the selected evaluation contractors for consistency with the EAG guidelines, the requirement to maintain a 90% confidence interval with +/- 10 % precision, and the overall need to identify and mitigate threats to reliability of the results. Evaluation contractors will be required to insure data reliability to the greatest practical extent, including methods for minimizing systematic and random error and techniques for reducing uncertainty introduced by necessary assumptions and adjustments to the data. The selected evaluation contractors will be asked to include a discussion about threats to data reliability in their reports.

14. Logic Model

As part of its 2009 process evaluation, National Grid's evaluation consultant(s) will be required to develop a logic model for the Residential High Efficiency Central Air Conditioning Program, focusing on the logic model that will support the 2010-2011 program anticipated to replace the program as implemented in 2009.

C. Small Business Services Energy Efficiency Program

Introduction

The purpose of this program is to provide direct retrofit installation of energy-efficient lighting, refrigeration and other unique custom electric energy saving measures for small commercial and industrial (“C&I”) customers of National Grid with an average monthly demand of less than 100 kW.⁴

This program will be administered by National Grid and will be implemented by several vendors selected through a competitive bidding process. The vendors will market the program, perform audits at customer’s facilities, complete audit forms, and provide project proposals to customers including the project cost, estimated annual savings, customer’s contribution, and payback. These same vendors will also be responsible for the purchase of materials from a supplier selected through a competitive bid process conducted by the Company as well as installation of measures and inputting data into National Grid’s program tracking database. A separate vendor will handle services for recycling ballasts and lamps to ensure proper disposal.

Based on the Order and the experience of National Grid affiliates in delivering energy efficiency services to small business customers in other states, a number of implementation challenges have been identified and are presented below. The Company’s implementation strategy has been refined to accommodate program requirements included in the Order so that savings objectives can be achieved.

Implementation Cost

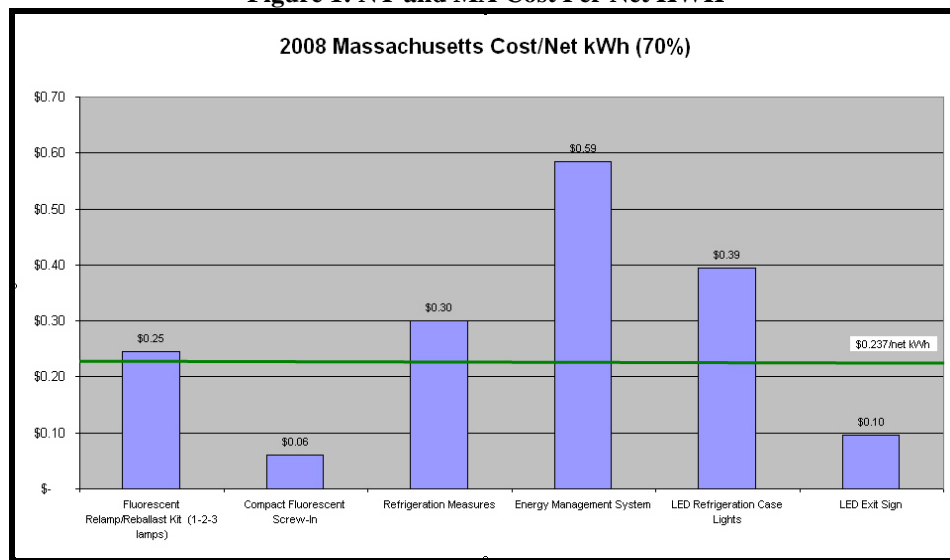
The experiences of National Grid affiliates in implementing a similar Small Business Energy Efficiency Program in Massachusetts shows that the implementation cost is approximately 28 cents/annual kWh saved. To meet the budget and annual kWh savings stipulated in the Order requires the Company to deliver the Small Business Energy

⁴ 100 kW corresponds to National Grid’s threshold for SC2 and SC2D customers.

Efficiency Program in the Niagara Mohawk service territory using an implementation cost of 23.7 cents/annual kWh saved. In response to this cost constraint, participating customers will be asked to pay the portion of the cost greater than 23.7 cents/annual kWh saved for more expensive measures such as light-emitting diodes (“LEDs”) in refrigerator cases, energy management systems, and custom measures which exceed the Order’s implementation cost (i.e., higher cost measures that would result in the customer incentives being greater than 30%).

Figure 1 below provides examples of the average cost of annual energy savings for certain efficiency measures based on the experience of National Grid affiliates in Massachusetts compared to the 23.7 cents/annual kWh saved in the Order.

Figure 1: NY and MA Cost Per Net KWH



In order to be able to respond to the variances that are expected in program measures based on the above experiences in Massachusetts, the Company’s program vendors in the Niagara Mohawk service territory will be required to attach documentation to the specific project application defining both material and labor costs. National Grid will monitor

these costs and may propose to make appropriate changes, if needed, in early 2010, based on the experience gained in 2009.⁵

The Small Business Services Energy Efficiency Program is designed so that National Grid pays 70% of the project cost and the customer pays 30%, except when the cost of savings associated with higher cost measures exceeds the cost of savings in the Order as described above. Customers have the option of financing their portion of the customer cost on their bill over 12 or 24 months, interest free. See Figure 2 below for an example of a National Grid electric bill with the customer's monthly payment of its portion of the energy efficiency project cost. In lieu of financing, customers also have the option to make a one-time payment on their electric bill, in which case they are eligible for a 15% discount. Based on the payment option the customer chooses, National Grid's contribution can range from 70% to 74.5% of the total project cost. The experience in Massachusetts suggests that this payment option is very popular since approximately 65% of the customers opt for this one-time payment when the customer contribution is less than \$1,000. The Company intends to report back to Staff at the end of the 2009 program year on the number of customers opting for the one-time payment versus multiple installments as well as the Company vendors' experience with the benefits of offering the one-time "quick pay" option.

⁵ Any proposed program changes will conform to the Order at 51 where "the Utilities shall be allowed to make minor refinements to the approved energy efficiency measures and customer rebates/financial inducements on notice to Staff for review and comment at least 90 days before the proposed implementation date of any such proposed changes."

Figure 2: National Grid Bill with On-Bill Financing

www.nationalgrid.com

Supply Services

SUPPLIER [REDACTED]

PHONE [REDACTED]

Electricity Supply	[REDACTED]	5,042.34
Total Supply Services		\$ 5,042.34

Other Charges/Adjustments

Conservation Contribution	[REDACTED]	148.30
Total Other Charges/Adjustments		\$ 148.30

Program Ramp Up

The Small Business Services Energy Efficiency Program will naturally ramp up as vendors are trained and gain experience with the program, processes are established, and marketing efforts build awareness. National Grid does not believe that it can spend the entire budget currently allocated for this program in 2009 for the Small Business Services Energy Efficiency Program in the Order.⁶ The Company anticipates spending unused funds from the 2009 budget in the 2010 program year.⁷

Vendor Selection Timeline

A number of different vendors are needed to implement the Small Business Services Energy Efficiency Program. See Figure 3 below for an identification of vendors, roles and target dates for selection through a competitive bid process.

⁶ See Order at Appendix 1, Table 3, where the total program cost for Niagara Mohawk's Small Business Program in 2009 is \$18,458,016.

⁷ See Case 07-M-0548 - *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order on Rehearing Denying in Part and Granting in Part Petition for Reconsideration (issued and effective February 13, 2009) at 8 where "for efficiency programs initiated in Calendar Year 2009, incentive determinations for 2009 and 2010 will be made based on an accounting of measures installed or performed cumulatively in Calendar Years 2009 and 2010 applied against a cumulative program target through Calendar Year 2010."

Figure 3: Program Vendors

Type of Vendor	Role	Estimated Number of Vendors Needed to Provide Services in Upstate NY	Target Date
Lighting Labor Vendor	Primary program vendor responsible for marketing, energy efficiency audits, data entry, and hiring local electricians for installations.	4	June 2009
Lighting Material Vendor	Provides all lighting materials to Lighting Labor Vendor. Also provides replacement equipment and labor for equipment covered under warranty.	1	June 2009
Refrigeration Vendor	Provides labor and materials for walk-in and reach-in cooler measures. Responsible for marketing, energy efficiency audits, hiring electricians for installations, data entry.	1	July 2009
Farm Vendor	Provides labor and materials for farm customers with responsibility for marketing, energy efficiency audits, hiring electricians for installations, and data entry.	1	January 2010
Recycling Vendor	Responsible for the pick-up and disposal of ballasts and fluorescent lamps.	1	Existing vendor ⁸

Use of a Bridge Vendor

Program staff will be using “bridge vendors”⁹ during the first few months of the rollout of the Small Business Services Energy Efficiency Program. RISE Engineering and National Resource Management will provide services as the bridge vendors. While focused primarily in the Albany, New York area, these vendors will be conducting audits and

⁸ National Grid has an existing contract with a recycling vendor utilized throughout its various service territories through 2011.

⁹ A vendor currently under contract with National Grid’s affiliates to deliver a similar Small Business Services Energy Efficiency Program in New England will be utilized to provide the Small Business Services Energy Efficiency Program auditing and installation services in the near-term (e.g., approximately three months in duration) in the Niagara Mohawk service territory. This will enable the Company to have a vendor on-board and be able to respond to customers’ requests and provide energy efficiency installation services to customers.

installing energy-efficient equipment for eligible small business customers while the Company seeks vendors through a competitive solicitation. Ultimately, vendors will be selected through the competitive bid process for specific geographic areas of the Niagara Mohawk service territory at which time the bridge vendors will cease operations. Bridge vendors will have the opportunity to submit proposals through the competitive solicitation.

Lighting Labor Vendor Performance Incentives

At the beginning of the program year, lighting labor vendors are provided spending and energy (net kWh) savings goals. If the vendors meet these program goals, they are provided a performance bonus as described below:

- Meet spending/savings goals: 1% of total project cost
- Meet spending and exceed savings goals by 10%: 2% of project cost

InDemand Enhancement Releases

The Small Business Services Energy Efficiency Program relies on a browser-based work flow management system (“InDemand”). For example, lighting labor vendors enter all customer audit information in InDemand, attach scanned versions of documents such as signed customer contracts to applications in InDemand, and invoice National Grid for projects. National Grid releases the customer co-pays to the billing system through InDemand. Currently, there are two scheduled InDemand enhancement releases per year. Enhancements, debugging and other software modifications are prioritized and scheduled for the next enhancement release based on the prioritization. For example, the next enhancement release is scheduled for mid-April 2009 and will include only the changes necessary to implement the energy efficiency programs in the Niagara Mohawk service territory. Another InDemand enhancement release is scheduled for November 2009.

1. Goals

Annual and cumulative customer participation and savings goals for the Small Business Services Energy Efficiency Program follow.

Projected Annual Customer Participation and Savings Goals 2009 - 2011

	2009		2010		2011	
	Annual Customer Participation	Annualized MWh Savings	Annual Customer Participation	Annualized MWh Savings	Annual Customer Participation	Annualized MWh Savings
Electric Programs						
Small Business Services Energy Efficiency Program	3,891	69,206	5,188	92,275	5,188	92,274
Total	3,891	69,206	5,188	92,275	5,188	92,274

For 2009 – 2011 the Small Business Services Energy Efficiency Program has proposed savings slightly higher than the savings goals set forth in Appendix 1, Table 3 of the Order.

Projected Cumulative Customer Participation and Savings Goals 2009 - 2011

	2009		2010		2011	
	Cumulative Customer Participation	Cumulative MWh Savings	Cumulative Customer Participation	Cumulative MWh Savings	Cumulative Customer Participation	Cumulative MWh Savings
Electric Programs						
Small Business Services Energy Efficiency Program	3,891	69,206	9,079	161,481	14,267	253,755
Total	3,891	69,206	9,079	161,481	14,267	253,755

For 2009 – 2011 the Small Business Services Energy Efficiency Program has proposed savings slightly higher than the savings goals set forth in Appendix 1, Table 3 of the Order.

2. Budget

The budget for the Small Business Services Energy Efficiency Program follows.

Projected Small Business Services Energy Efficiency Budget 2009 - 2011

Cost Category	2009	2010	2011	2009 - 2011
General Administration	\$150,000	\$210,000	\$210,000	\$570,000
Program Planning	\$25,000	\$25,000	\$25,000	\$75,000
Program Marketing	\$150,000	\$200,000	\$200,000	\$550,000
Trade Ally Training	\$50,000	\$50,000	\$50,000	\$150,000
Incentives and Services	\$17,130,115	\$22,845,153	\$22,845,153	\$62,820,421
Direct Program Implementation	\$30,000	\$50,000	\$50,000	\$130,000
Program Evaluation	\$922,901	\$1,230,534	\$1,230,534	\$3,383,969
Shareholder Incentive	\$2,688,648	\$3,584,890	\$3,584,851	\$9,858,389
Total Utility Cost	\$21,146,664	\$28,195,577	\$28,195,538	\$77,537,779
Participant Cost	\$9,561,078	\$12,748,197	\$12,748,058	\$35,057,333
Total Cost	\$30,707,742	\$40,943,774	\$40,943,596	\$112,595,115

Budget shows activity in program year dollars, not present valued to 2009 dollars.

The budgeted shareholder incentive is equal to \$38.85 per projected annual MWh savings for the program.

For 2009 – 2011 the Small Business Services Energy Efficiency Program has proposed savings of slightly higher than the savings goals set forth in Appendix 1, Table 3 of the Order. Since the shareholder incentive is equal to \$38.85 per projected annual MWh savings, the higher savings causes the projected shareholder incentive for 2009 – 2011 to be \$43,285 greater than the projected shareholder incentive in the Order. This causes the 2009 - 2011 Annual Utility Cost to be \$43,285 greater than the 2009 – 2011 total cost for the Small Business Services Energy Efficiency Program in the Order.

An explanation of budget categories is provided in attached Appendix C, “Budget Categories for Energy Efficiency Programs,” as provided to the Company in a February 20, 2009 letter from Staff’s Floyd Barwig to National Grid’s Bruce Johnson.

3. Eligible measures

Below is a list of the most common measures installed in small business energy efficiency projects undertaken in Massachusetts by National Grid affiliates in a similar Small Business Energy Efficiency Services Program. The Company expects that these are indicative of the projects that will be completed in the Niagara Mohawk service territory. A total of 815 projects were completed in Massachusetts in 2008 consisting primarily of relamp/reballast and fluorescent fixture installations (3 lamps to 2 lamps).

Fluorescent Relamp/Reballast Kit (1-2-3 lamps)
Fluorescent Fixture Installation Kit
Fluorescent Eight Foot Fixture Kit
Compact Fluorescent Screw In Relamp/Reballast Kit
Fluorescent Relamp/Reballast Kit (4 lamps)
Fluorescent Eight Foot Relamp/Reballast Kit
HID Interior Kit
Compact Fluorescent New Fixture Hardwired Interior Kit
Fluorescent Relamp/Reballast Tandem Wired Kit (4 lamps)
HID Exterior Retrofit Kit
Compact Fluorescent New Fixture Hardwired Exterior Kit
LED Exit Sign Retrofit/Compact Fluorescent Retrofit Kit
HID Exterior Kit
Fluorescent Relamp/Reballast Tandem Wired Kit (1-2-3 lamps)
HID Interior Retrofit Kit
Fluorescent Eight Foot Relamp/Reballast Tandem Wired Kit

In most cases, customer incentives will cover 70% of total project cost. For installations where the identified cost-effective measures exceed 23.7 cents/kWh, the cost of savings limitation implicit in the Order, the customer incentive will be less than 70% of total project cost since customers will be asked to pay costs in excess of 23.7 cents/kWh.

4. Target customer market and detailed marketing plan

The target market for the Small Business Services Energy Efficiency Program is C&I customers with an average monthly demand of less than 100 kW. These customers tend to have electric loads that are dominated by lighting (as a percentage of total electric load) and a historical reluctance or inability to fund efficiency improvements. While their small size tends to exclude them as potential beneficiaries of services from other energy service providers, their lighting dominance makes them excellent candidates for the direct install approach.

The Small Business Services Energy Efficiency Program will be marketed primarily by vendors under contract with National Grid in their assigned areas of the Niagara Mohawk service territory. Vendors will use a variety of customer outreach channels including:

- Mailer with return card requesting an audit
- “Cold calling” (e.g., strip mall visits) where the Company’s vendor is conducting an audit at one place of business and visits other businesses in the same geographic area
- Web Site
- Incoming Phone Calls
- Meetings/Gatherings such as a small business economic development expo or seminar

An integrated marketing plan is utilized for outreach and education. Individual vehicles include direct mail, collateral, www.thinksmarthinkgreen.com website, search engine marketing, email newsletters, print advertisements, business events, and meetings. Efforts are directed to small business owners so that they can reduce operating expenses by lowering their energy consumption. The budget for planned outreach and education activities follows:

Small Business Services Energy Efficiency Program Outreach & Education Budget Summary		
Method	Frequency / Description	Estimated cost
<i>O&E to Customers</i>		
Direct mail	Ongoing	\$55,000
Collateral	10,000 rebate forms	\$20,000
Online efforts: Website and email newsletter	New pages for these programs, Incremental cost of E-action newsletter	\$15,000
Print advertisements	3 publications	\$40,000
Business Events/outreach	12 events	\$20,000
	Total	\$150,000

The following table provides the expected marketing timeline for outreach and education activities planned for this program:

Marketing Timeline

Small Business Services Energy Efficiency Program	Q2 2009		Q3 2009		Q4 2009	
	Direct Mail	X	X	X	X	X
Collateral	Ongoing beginning in April 2009					
Website	Ongoing beginning in April 2009					
Email Newsletters	X	X	X	X	X	X
Print Advertisements	Ongoing beginning in May 2009					
Events/Outreach	X	X	X	X	X	X

5. Roles and Responsibilities

National Grid Program Management

National Grid's program implementation personnel oversee the planning, coordination, resource management, project execution, and project performance and progress of the programs. National Grid's program managers responsible for program implementation work closely with vendors to ensure that all reasonable efforts are being undertaken to achieve desired program goals and work through any issues that vendors encounter in the field.