



May 28, 2009

**VIA ELECTRONIC MAIL AND OVERNIGHT DELIVERY**

Honorable Jaclyn A. Brillling, Secretary  
New York State Public Service Commission  
Three Empire State Plaza  
Albany, New York 12223-1350

**Re: Case 09-G-0363 – Petition of Niagara Mohawk Power Corporation d/b/a  
National Grid for Approval of Energy Efficiency Portfolio Standard (EEPS) Gas  
Energy Efficiency Programs**

Dear Secretary Brillling:

Enclosed please find for filing an original and five (5) copies of an update to the original 90-day filing made on September 22, 2008 in the subject proceeding by Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”). This update is relative only to the gas energy efficiency services component of the Company’s proposed *EnergyWise* Program and Energy Initiative Program<sup>1</sup> in response to the request made to the Company by the Department of Public Service Staff (“Staff”). Staff has determined that the *EnergyWise* Program would focus on multifamily dwellings between five and fifty units and the Energy Initiative Program would initially serve only commercial and industrial customers provided such customers have an electric load of 2 MW or greater. National Grid filed an update relative to the electric energy efficiency services component of the Company’s proposed *EnergyWise* and Energy Initiative Programs on May 11, 2009.

In addition to expeditiously approving these two gas energy efficiency programs as updated along with the companion electric energy efficiency programs by the same names, National Grid respectfully requests that the Commission move expeditiously to expand the review and approval of these programs to broader participant eligibility so that energy efficiency benefits are not limited to only a subset of the Company’s customer base.

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<sup>1</sup> Previously identified as the Commercial and Industrial Energy Efficiency Program in the Company’s 90-day filing of proposed gas energy efficiency programs.

Kindly acknowledge receipt of this filing by date-stamping as received the enclosed duplicate copy of this letter and returning it in the enclosed, self-addressed envelope provided for your convenience. Thank you for your attention to this matter.

Respectfully submitted,

*Catherine L. Nesser* <sup>(M)</sup>

Catherine L. Nesser

Enc.

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**Niagara Mohawk Power Corporation d/b/a National Grid**

**Case 09-G-0363**

**Updated Gas Energy Efficiency Proposals  
for  
EnergyWise and Energy Initiative Programs**

**May 28, 2009**

**nationalgrid**

**Niagara Mohawk Power Corporation d/b/a National Grid**

**Case 09-G-0363**

**Updated Gas Energy Efficiency Proposals**

**for**

**EnergyWise and Energy Initiative Programs**

**May 28, 2009**

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**Niagara Mohawk Power Corporation d/b/a National Grid**

**Case 09-G-0363**

**Updated Gas Energy Efficiency Proposals**

**for**

**EnergyWise and Energy Initiative Programs**

**May 28, 2009**

**I. Introduction**

Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”) is updating two of the energy efficiency program descriptions that were included in the Company’s 90-day Filing dated September 22, 2008 in response to a request from the Department of Public Service Staff (“DPS Staff”). DPS Staff requested the Company to update its Energy Initiative Program<sup>1</sup> description to focus initially on providing gas energy efficiency program services only to those industrial customers with an electric load of 2 MW or greater. DPS Staff also requested the Company update its proposed EnergyWise Program description to focus on gas energy efficiency services in multifamily facilities with between five and fifty units. Although the budgets and savings provided herein address the gas components of these programs only, both programs are designed to provide solutions to electric and gas customers. Proposed EnergyWise and Energy Initiative electric efficiency program budgets and savings were included with the Updated Electric Energy Efficiency Proposal filed with the Secretary on May 11, 2009.

While National Grid is complying with this request from DPS Staff, the Company notes that the Energy Initiative Program as originally proposed had been designed to meet both

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<sup>1</sup> In the Company’s 90-day Filing dated September 22, 2008, National Grid proposed to provide services and financial incentives to the Company’s commercial and industrial natural gas customers through a program to be called the Commercial and Industrial Energy Efficiency Program, whereas services and financial incentives to the Company’s commercial and industrial electric customers would be provided through a program to be called the Energy Initiative Program. Upon further consideration and to avoid customer confusion, National Grid now proposes to offer both gas and electric energy efficiency services to the Company’s large commercial and industrial customers through one program, the Energy Initiative Program.

the gas and electric needs of all non-residential customers so qualifying on the basis of electric loads greater than 100 kW. The Company recognizes that these customers, like the large industrial customers which are the initial focus of DPS Staff's review, will be funding energy efficiency program efforts and will benefit from proposed program services. The Company is hoping that the Commission will extend its review to this broader customer base expeditiously so that Energy Initiative Program services can be offered to all of the customers who might derive benefit.

The Company also notes that its *EnergyWise* Program as originally proposed had been designed to address energy efficiency needs in multifamily facilities with five or more units. While the Company is willing and able to limit services in this program to multifamily facilities with between five and fifty units, it is also willing and able to expand this program to meet the energy efficiency needs of larger multifamily facilities in its service territory.

Both the *EnergyWise* and Energy Initiative programs are intended to respond effectively to customer needs for both gas and electric energy efficiency. However, the updated program descriptions provided herein are focused solely on gas energy efficiency services. The proposed gas programs are intended to contribute to New York's goal to reduce estimated natural gas use by 14.7% by 2020, independent of any usage fluctuations caused by fuel switching or other economic factors,<sup>2</sup>

The Company's dedicated staff and strong infrastructure of vendors and service providers deliver these programs by closely working with industrial customers and owners of multifamily properties. This unique customer and property owner's relationship has positioned National Grid to directly help customers cope with rising energy costs and address policy makers' desires to have energy efficiency be a part of the solution to energy price volatility and climate change.

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<sup>2</sup> Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Establishing Targets and Standards for Natural Gas Efficiency Programs (issued and effective May 19, 2009).

The Company strongly believes that it has a responsibility to customers, communities, and the areas where it operates to actively support energy efficiency programs that provide long-term economic and environmental benefits while mitigating climate change, ultimately helping to improve the quality of life for the region as a whole. National Grid looks forward to bringing these services and its affiliates' experiences to New York.

For the purpose of this updated proposal, National Grid assumes that the proposed *EnergyWise* Program and Energy Initiative Program as modified will begin on July 1, 2009. National Grid notes that it is hopeful that the Commission will approve all of the proposed programs in the Company's 90-day Filing as soon as possible to increase the likelihood that the state's aggressive energy savings goals can be accomplished. The Company cannot presume to predict when the Commission will complete its review of the proposed programs. However, National Grid is able to initiate program implementation efforts within 30-days of receipt of an order from the Commission authorizing the Company to proceed.

Additionally for the purpose of this updated proposal, National Grid assumes that the period of July 1, 2009 through December 31, 2010 will be combined when reporting achievement of savings targets, spending and other metrics.

## **II. Collaboration**

The Company has and will continue to collaborate with the other New York State natural gas and electric utilities, the New York State Energy Research and Development Authority (“NYSERDA”), DPS Staff, and other interested stakeholders about planned energy efficiency efforts, including, but not limited to, discussions about the proposed program designs, evaluation planning, and coordination of program services. These collaborative efforts to date have taken the form of numerous teleconferences and in-person meetings, as well as a webinar with interested stakeholders. The table below provides further details on these collaborative activities since the September 22, 2008 filing.

Upstate New York

Collaborative Activities, October 2008 – May 2009

<b>Dates</b>	<b>Attendees</b>	<b>Topics of Discussion</b>
February 11, 2009 In-person meeting in Brooklyn, NY @ National Grid Offices	All NY State Utilities	<p>JU in-person meeting (discussed various operations and regulatory-related topics)</p> <ul style="list-style-type: none"> <li>◆ Established a NY Joint Utilities Committee; National Grid’s Bruce Johnson – Chair, NYSEG / RGE’s Joni Fish-Gertz - Vice-Chair.</li> </ul> <p>Decided on weekly teleconferences and monthly in-person meetings.</p>
NY State Utilities Weekly Teleconferences (Facilitated by National Grid)	All NY State Utilities	<p>Weekly 30-minute calls include topics of most importance to utilities at the time of the call; those have mostly been focused on the regulatory clarifications / discussions and operations.</p>
March 12, 2009 In-person meeting in Syracuse, NY @ National Grid Offices	All NY State Utilities	<p>JU in-person meeting (discussed various operations and regulatory-related topics)</p> <ul style="list-style-type: none"> <li>◆ Evaluation</li> <li>◆ Reporting</li> <li>◆ Interface with NYSERDA</li> <li>◆ Vendor selection, etc.</li> </ul>

<b>Dates</b>	<b>Attendees</b>	<b>Topics of Discussion</b>
<p>April 9, 2009 In-person meeting in Albany, NY @ NYSERDA's office</p>	<p>NYSERDA/NYS Utility EEPS Collaboration</p>	<p>A collaborative meeting with NYSERDA and NYS Utilities to establish working groups / communities to start addressing various issues. The outcome was as follows:</p> <ul style="list-style-type: none"> <li>• By 5/1: Nominate leaders for communities &amp; working groups; Identify participants in communities &amp; working groups; and Identify individuals to receive notes &amp; materials from communities &amp; working groups</li> <li>• By 5/8: Provide input into 5/14 agenda; Current agenda topics: 1 - Governance structure; and 2 - Participation of other program administrators (NYPA, LIPA)</li> </ul>
<p>April 23rd, 2009 In-person meeting in Buffalo, NY @ National Fuel HQ Offices</p>	<p>All NY State Utilities</p>	<p>JU in-person meeting (discussed various operations and regulatory-related topics)</p> <ul style="list-style-type: none"> <li>◆ 90-day electric programs</li> <li>◆ Revised 60-day gas programs</li> <li>◆ Program coordination among overlapping territories</li> <li>◆ Update on 60-day electric program launch</li> </ul>
<p>May 14, 2009 In-person meeting in Albany @ National Grid &amp; NYSERDA</p>	<p>All NY State Utilities – morning NYSERDA/NYS Utility EEPS Collaboration - afternoon</p>	<p>Focus on the JU meeting was on preparation for the NYSERDA meeting and NYSERDA's meeting focus was on establishing clear governance structure and finalizing the leads, participants of working groups / communities and lay out of the implementation plans.</p>

### III. Budget and Goals

Updated budgets<sup>3</sup> for the EnergyWise and Energy Initiative Programs, including the gas energy efficiency initiative, reflect program services for the more limited market defined by DPS Staff and are provided below by year and for the period 2009 through 2011.

#### Projected Gas Energy Efficiency Program Costs in 2009

Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
2009	EnergyWise Program	\$24,015	\$18,087	\$427,000	\$23,000	\$24,605	\$23,453	\$540,161
	Energy Initiative	\$127,780	\$12,090	\$50,625	\$20,000	\$12,056	\$12,308	\$234,858
2009	Total	\$151,795	\$30,177	\$477,625	\$43,000	\$36,661	\$35,761	\$775,019

#### Projected Gas Energy Efficiency Program Costs in 2010

Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
2010	EnergyWise Program	\$48,030	\$35,340	\$878,400	\$23,000	\$49,239	\$48,247	\$1,082,256
	Energy Initiative	\$278,619	\$48,358	\$405,000	\$80,000	\$36,599	\$49,232	\$897,808
2010	Total	\$326,649	\$83,699	\$1,283,400	\$103,000	\$85,837	\$97,479	\$1,980,064

#### Projected Gas Energy Efficiency Program Costs in 2011

Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
2011	EnergyWise Program	\$48,030	\$35,471	\$878,400	\$23,000	\$49,245	\$48,247	\$1,082,393
	Energy Initiative	\$354,179	\$72,537	\$607,500	\$100,000	\$51,711	\$73,848	\$1,259,775
2011	Total	\$402,209	\$108,008	\$1,485,900	\$123,000	\$100,956	\$122,095	\$2,342,168

#### Projected Gas Energy Efficiency Program Costs in 2009 - 2011

Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
2009-2011	EnergyWise Program	\$120,075	\$88,899	\$2,183,800	\$69,000	\$123,089	\$119,948	\$2,704,810
	Energy Initiative	\$760,578	\$132,985	\$1,063,125	\$200,000	\$100,366	\$135,387	\$2,392,442
2009 - 2011	Total	\$880,653	\$221,884	\$3,246,925	\$269,000	\$223,454	\$255,335	\$5,097,252

<sup>3</sup> Descriptions of the costs included in the budget categories shown below are provided in attached Appendix A.

Projected participation and savings in the proposed *EnergyWise* and Energy Initiative Program including the gas energy efficiency initiatives as modified are provided in the following tables:

	2009			2010		
	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings
<b>Gas Programs</b>						
<i>EnergyWise</i> Program	875	7,718	108,045	1,800	15,876	222,264
Energy Initiative	2	4,050	60,750	8	16,200	243,000

	2011			2009 - 2011		
	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings	Participants	Annualized MMBtu Savings	Annualized MMBtu Savings
<b>Gas Programs</b>						
<i>EnergyWise</i> Program	1,800	15,876	222,264	4,475	39,470	552,573
Energy Initiative	12	24,300	364,500	22	44,550	668,250

Although this updated proposal is focused only on a segment of the *EnergyWise* and Energy Initiative Programs, the Company is still prepared to support all of the proposed programs in its 90-day Filing.

#### IV. Program Cost-Effectiveness

##### 1. Plan Results

The following tables summarize the expected benefits, costs, and the benefit/cost ratios for the *EnergyWise* and Energy Initiative Programs as modified that the Company would implement in 2009 - 2011. For more detailed information about the benefits and costs associated with the individual programs, including expected annual and lifetime savings, see Appendix B attached hereto. The input assumptions used in this analysis can be found in attached Appendix C.

**Summary of Benefits, Costs (2009 \$s)**  
**Total Resource Cost Test**

	2009			2010			2011			2009 - 2011		
	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)
<b>Gas Programs</b>												
EnergyWise Program	1.02	\$639	\$ 626	1.13	\$1,346	\$ 1,192	1.22	\$1,382	\$ 1,130	1.14	\$3,366	\$2,948
Energy Initiative	1.11	\$351	\$ 316	1.24	\$1,438	\$ 1,158	1.41	\$2,215	\$ 1,568	1.32	\$4,003	\$3,042
<b>Total</b>	<b>1.05</b>	<b>\$990</b>	<b>\$941</b>	<b>1.18</b>	<b>\$2,784</b>	<b>\$2,350</b>	<b>1.33</b>	<b>\$3,596</b>	<b>\$2,699</b>	<b>1.23</b>	<b>\$7,370</b>	<b>\$5,991</b>

## B. Avoided Costs and Description of Program Benefits

The TRC Test compares the present value of future electric system, natural gas, and other customer savings to the total of the expenditures and customer costs necessary to implement the programs. The benefit of a measure is the net present value of the avoided costs (i.e., value of the savings) associated with the net savings of a measure over the life of that measure. The measure life is based on the technical life of the measure modified to reflect expected measure persistence.

The avoided costs used to determine program cost-effectiveness for the gas energy efficiency programs are from Appendix 2, Table 2 of the April 9, 2009 order approving Energy Efficiency Portfolio Standard (“EEPS”) “Fast Track” utility-administered gas energy efficiency programs with modifications (the “Order”).<sup>4</sup> The Order directed the utilities to use the estimates of Long Run Avoided Costs (“LRACs”) provided in the Order to evaluate all energy efficiency proposals currently pending before the Commission.

To escalate the avoided costs into 2009 constant dollars, an inflation rate of 2.98% was applied.

The dollar value of the program’s benefits is calculated by multiplying the expected savings by the appropriate avoided value component. The avoided value component for each benefit (e.g., electric energy, capacity, natural gas) is the cumulative net present value (2009 dollars) of lifetime avoided costs for each year of the planning horizon from the base year. For example, the avoided value component in Year 10 for any given benefit is the sum of the net present value of the annual avoided costs for the resource for Year 1, Year 2, Year 3, etc., through Year 10, in 2009 dollars. This value is applied to the annual savings for a measure with a 10-year life to generate the lifetime avoided benefit for that measure. Since all of the future year values are in constant 2009 dollars, lifetime benefits

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<sup>4</sup> Case 08-G-1015, *et al.*, *Niagara Mohawk Power Corporation, et al.*, Order Approving “Fast Track” Utility-Administered Gas Energy Efficiency Programs with Modifications (issued and effective April 9, 2009).

thus calculated are discounted back to 2009 using a real discount rate equal to  $[(1 + \text{Nominal Discount Rate}) / (1 + \text{Inflation})] - 1$ . The nominal discount rate used for this three-year plan is 8.6% which results in a real discount rate of 5.5%; this is the discount rate recommended for use by DPS Staff.

## **V. Program Descriptions**

In response to a request from DPS Staff, National Grid has updated the descriptions of its proposed *EnergyWise* and Energy Initiative Programs. These updated program descriptions follow.

### **EnergyWise Program**

#### Purpose

This program provides a free, comprehensive assessment of a multifamily property's energy use and recommends various ways customers can improve their property's energy efficiency. Customers will be given a detailed report containing the recommendations of the audit including information about improving the efficiency of their property which may lead to participation in other energy efficiency programs. Incentives will be provided to encourage participation and overcome the split incentive that often exists between landlords owning properties but not paying utility bills and tenants paying utility bills but not owning the properties and therefore not having an incentive to invest in energy efficiency.

#### Coordination

As requested by DPS Staff, National Grid proposes to provide program services to customers with fifty units or less. Larger properties will be referred to NYSERDA for services. There may also be a few cases in which a customer might be better served by

NYSERDA's Multifamily Performance Program, and National Grid will refer those customers to that NYSERDA program. For example, if a property owner has previously participated in the NYSERDA program, the customer may prefer to continue to participate in that program with all owned properties.

### Co-Benefits

Tenants, a typically underserved market, will benefit from improvements made by their utility and landlord in their properties. The improvements could improve their comfort and health and safety. Improving lighting can decrease eye strain and improve security and personal safety.

### Program Administration and Delivery

National Grid will administer the *EnergyWise* Program. Eligible customers and/or property managers or associations will receive a comprehensive energy audit, energy education, and the installation of low-cost efficiency measures at no direct cost. The implementation contractor will put major measures out to competitive bid in facilities that have greater than twenty (20) units. The program will be delivered as a joint gas and electric program in areas where National Grid provides both gas and electric services. In areas where National Grid is the electric utility, but not the gas utility, the program will provide services that reduce electric usage only, such as the replacement of inefficient lighting and refrigerators with efficient products.

### Target Market and Marketing Approach

The Company plans to promote the *EnergyWise* program through advertising, including bill inserts, direct mail, and the National Grid website. Customers interested in learning more about the program will be able to call a toll-free number where they will also be able to learn about all of the Company's residential energy efficiency programs. National Grid will also meet with property associations, and large property managers to promote this

program. The program will be coordinated with NYSERDA's multifamily property programs.

#### Target End Uses, Recommended Technologies, and Financial Incentives

Major measures will include attic insulation, wall insulation, basement/crawl space insulation, rim joint insulation, duct insulation, heating system pipe insulation, attic ventilation (in conjunction with attic insulation), ductwork leakage testing, ductwork leakage sealing, air infiltration testing, and air infiltration sealing for electric heated property where National Grid is the electric utility, and for gas heated property where National Grid is the gas utility. Electric customers will also receive lighting fixture and refrigerator upgrades. Other measures may be added to the program menu, upon demonstration of cost-effectiveness and subject to available funding.

The customer or association will pay \$20 per new lighting fixture in common areas and 75% of the cost of major measures outside of lighting in common areas. The Program will pay \$300 towards the cost of each new refrigerator.

Customers will apply for incentives for residential-sized heating equipment through the Residential Gas HVAC Program.<sup>5</sup> Facilities with central heating plants and domestic hot water systems that are interested in natural gas savings measures will be served through the interim Commercial High-Efficiency Heating Program and the proposed Energy Initiative Program.

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<sup>5</sup> Case 08-G-1014, *Niagara Mohawk Power Corporation, et al.*, Order Approving "Fast Track" Utility-Administered Gas Energy Efficiency Programs with Modifications (issued and effective April 9, 2009).

## Evaluation Plan

### **Year One Evaluation**

In 2009, evaluation efforts 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 program implementation efforts. The Company plans to initiate a process evaluation in support of these efforts. The plan is to hire an independent evaluation expert through a competitive solicitation to complete this work. This RFP will be issued shortly after the Commission authorizes the Company to implement this program with the objective of hiring the evaluation contractor during the program start-up phase of operations.<sup>6</sup> The Company will request interim reports from the selected contractor 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. A final report summarizing results from the process evaluation will likely be completed in 2010.

### ***Process Evaluation***

The first year process evaluation will document program processes during start-up and will gather the following information:

- Level of customer satisfaction.
- Effectiveness of the program delivery mechanism from the position of the program delivery contractors, program customers, trade allies and other key stakeholders. Did the delivery mechanism differ from the program plan? If yes, how and why?
- Effectiveness of program promotion.
- Remaining barriers to program participation including an assessment of why some customers choose to not participate in the program.

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<sup>6</sup> As an alternative, the Company may request that the independent evaluation consultant selected to provide process evaluation services focused on already approved programs modify their work scope to also include this program.

- 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 is being collected.

As part of the process evaluation plan, the Company will survey participating and non-participating customers as well as trade allies who have and have not promoted the program.

## **Year Two - Three Evaluation**

### ***Impact Evaluation***

The Impact Evaluation will quantify the savings attributable to program efforts based on how the equipment installed through this program is actually operating. The Company anticipates completing an impact evaluation of this program in 2010 through 2011 using industry-accepted methods of analysis and building on evaluation techniques that National Grid affiliates have successfully employed when evaluating the *EnergyWise* Program in New England.

- **Impact Evaluation Methodology.** An independent evaluation consultant will be hired through a competitive solicitation. Firms proposing to complete the work will be required to recommend an impact evaluation approach appropriate for this type of program that will produce results that meet the precision requirements set forth in the guidelines issued through the Evaluation Advisory Group. The Company currently anticipates conducting a billing data analysis to determine program produced savings as that approach has been used successfully in its other jurisdictions. However, the Company is receptive to alternative approaches that the selected evaluation consultant may recommend. This analysis may include surveys with program participants and with trade allies in an effort to arrive at net savings attributable to program efforts. The results of the impact evaluation will be used to

refine expectations about future program savings, and may be used to modify future programs. Results from this study are anticipated by year-end 2011 or early in 2012.

- **Net-to-Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. Many measures in the proposed Program are not addressed in the technical manual. Savings estimation approaches, calculations and assumptions at the measure level for estimating energy savings for the measures that are not addressed in the technical manual are provided in Appendix C. These assumptions will be updated in the future based on evaluation findings, including updated information about free-ridership and spillover, or net-to-gross ratios as discussed above.
- **Budget.** Consistent with the June 23, 2008 Order, the Company has budgeted approximately 5% of program implementation costs to fund evaluation efforts. Actual evaluation expenses for this program may be higher or lower than this amount.
- **Sampling Strategies and Design and Data Reliability Standards.** Consistent with the Evaluation Plan Guideline for EEPS Program Administrators and as recommended by Working Group III,<sup>7</sup> the Company's goal for estimating gross savings at the program level is at the 90% confidence interval, with +/- 10% precision. The Company will develop sampling protocols for all of its evaluations based on this standard. However, actual evaluation results may deviate from this standard.
- **Steps to Identify and Mitigate Threats to Data Reliability.** The Company will review the evaluation plan submitted by the selected evaluation contractor for

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<sup>7</sup> See Working Group III Final Report, dated December 5, 2007, at p. 37.

consistency with the Evaluation Advisory Group 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. The evaluation contractor will be required to ensure 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 contractor will be asked to include a discussion about threats to data reliability in their reports.

- **Data Collection and Management Process.** Program data will be collected from customer application forms, site visits and surveys of participants and non-participants. National Grid's tracking system supplemented by data that the Company requires its implementation vendors to track supports program evaluation through the collection of all relevant data pertaining to customer rebates and installed equipment. Customer name, account, premise level and other non-program specific data is captured in the system. Measure-specific data as appropriate will also be captured. Examples of measure-specific data that will be collected can include:<sup>8</sup>
  - Date of contract/agreement to install measure(s)
  - Date of beginning of installation process
  - Installation completion date
  - Installation contractor
  - Installation location
  - Project or work order number
  - Type of measure
  - Annualized energy savings
  - Measure life
  - Total measure installed cost
  - Incremental measure cost
  - Incentive payment amount

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<sup>8</sup> Please note that not of all the measure-specific data listed here are going to be captured for this program.

- Project completion date
  - Evaluation inspection/commissioning date
  - Date of evaluation of measure or program
  - Types of evaluation conducted
  - Result of evaluation
- 
- **Schedule and Deliverable Dates.** The Company anticipates initiating a process evaluation in 2009 and an impact evaluation in the fall of 2010. Final results of the process evaluation are anticipated in 2010. Final results for the impact evaluation are anticipated by year-end 2011 or early in 2012.
  
  - **Data Collection.** Data to be collected about this program is discussed above.

## **Energy Initiative Program**

### Purpose

As modified at the request of DPS Staff, this retrofit program will initially focus on energy efficiency opportunities associated with existing mechanical, electrical and natural gas applications in industrial facilities with an electric load of at least 2 MW. However, the program is designed to serve both the gas and electric energy efficiency needs of existing non-residential customers with an electric load greater than 100 kW and can be readily expanded to serve this broader market.

The Energy Initiative Program offers financial incentives and technical assistance to help customers analyze their operations in order to assess outdated and/or energy-inefficient systems and recommend opportunities for replacement equipment and systems. The Energy Initiative Program will address both gas and electric energy efficiency opportunities with prescriptive and custom measure offerings. This will include stand-alone equipment (e.g., lighting, motors, heating systems, controls, VFD's, compressors, etc.), associated with industrial processes or custom applications.

## Program Administration and Delivery

This program will be delivered and administered by the Company through its in-house technical and account management staff, supplemented by outside contractors, and will provide participants with financial incentives, technical assistance, training, and commissioning. National Grid is uniquely poised to effectively deliver these services since the Company's Account Executives have established strong business relationships with customers at decision-making levels within their respective organizations. It is this connection with these customers that makes it possible to leverage the financial and technical solutions provided by the Company to aid customers in energy cost reduction and mitigation strategies. Moreover, the Company's Account Executives have achieved high customer satisfaction and it is this attribute that makes it possible to add energy efficiency services to their duties and responsibilities and gain the trust of customers. Most importantly, the time is opportune to be proactive with these customers rather than to rely on reactive activities that have dominated the delivery of energy efficiency services to date. The combination of these services and close association with customers will increase the level of participation in energy efficiency. The primary services to be offered include:

- **Financial Incentives:** Reduce the cost barrier to investing in energy efficiency. Analyzing the opportunities in this target market, incentives will be offered for a diverse group of applications. The Energy Initiative Program is designed to capture both natural gas and electric savings addressing traditional technologies found in facilities of this size along with emerging technologies focused on combustion-related applications, nano-manufacturing, intelligent control technologies, automation technologies, and other cross-cutting technologies. In addition, the Company will address applications where there is a strong potential for energy savings based on significant heating and cooling loads within the processes, and/or long hours of operation. Also, in addition to energy savings, we expect several of the projects to enhance product/process quality, and increase profitability for the customer.

- Technical Assistance: Provides information and education to participants in the use of energy efficiency engineering practices to advance better design and construction practices in buildings. Technical assistance also provides the customer with criteria related to energy efficiency options that can be used when the customer specifies new equipment or is evaluating an application focused on an emerging technology.

The Company's account management staff provides marketing, sales, and project administration functions for the Energy Initiative Program. Their regular contact with customers and familiarity with customers' operations position them to assist customers with pro-actively identifying energy efficiency opportunities. For electric customers, account management staff also seeks assistance in identifying energy efficiency opportunities from business partners such as Project Expeditors.<sup>9</sup> Additionally, the Account Executives have the authority to commit incentive dollars to cost-effective projects and therefore, customers are assured of the Company's contribution to the energy efficiency projects and that the incentive dollars are available when the project is installed and operating.

The Company will hire outside contractors in addition to their own in-house engineering staff for technical review and assistance of comprehensive projects, post-installation inspections, and commissioning services. It is expected with the large industrial customers that technical services, particularly for process related systems, will be critical to identifying cost-effective energy savings. In addition, outside contractors are also selected through a competitive bid process, insuring that the Company is obtaining these services at a competitive rate. Ultimately, it is the Company's belief that this approach will help to build an energy efficiency industry in New York State.

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<sup>9</sup> Project Expeditors are utilized by National Grid affiliates in Massachusetts, Rhode Island and New Hampshire to help identify energy efficiency opportunities, quantify the project benefits, and manage projects for customers. These vendors are selected through a competitive bid process and work closely with in-house staff to identify and pilot emerging technologies that can be implemented in customers' facilities.

### Coordination:

The Company proposes working with NYSERDA to ensure that effective coordination can take place with the existing services offered to industrial customers through both the FlexTech Program and Industrial and Process Efficiency Program, to be administered by NYSERDA. The sharing of the technical delivery knowledge and information, especially as it relates to efficiency potential in the industrial sector, will contribute to rapid adoption of these better practices within industrial systems and operations. The Company is also proposing further coordination with NYSERDA and other program administrators as described below in the Section titled “Coordination with NYSERDA and Other Program Administrators.”

### Fuel Integration:

Due to the high penetration of process equipment in facilities of this size, the Company will ensure that both natural gas and electric applications are equally addressed by the Account Management staff or other technical assistance partners involved with this class of customers. Customers will be provided with both technical assistance and financial incentives to better integrate natural gas and electric technologies in their facilities.

### Target Market and Marketing Approach

The Energy Initiative Program will be available to both gas and electric industrial customers that qualify for program participation on the basis of an electric load of 2 MW or greater. The Company will market the program to customers and trade allies through a number of different channels as follows:

- Customers: The Company will market the program to customers through extensive personal communication by the Company’s Account Executives and energy efficiency staff. This includes, but is not limited to, on-site customer meetings, seminars, training sessions, and direct marketing approaches.

- Trade Allies: The Company will reach out to trade allies such as equipment engineers, architects, vendors and mechanical contractors to educate and encourage adoption of new high performance design features and equipment selection in order to promote efficient energy usage in commercial, government, institutional, agriculture, and industrial buildings.

Through the Energy Initiative Program, the Company will also actively support regional and national market transformation initiatives. One such initiative is the Compressed Air Challenge that supports better practices with compressed air systems and equipment. With the high use of compressed air in industrial facilities this targeted effort is expected to generate significant savings for this sector. Another initiative is Building Operator Certification that trains and certifies facility personnel in energy and resource efficient operation of building systems at two levels: (1) Level 1 - Building Systems and Maintenance; and (2) Level II - Equipment Troubleshooting and Maintenance.

#### Target End Uses, Recommended Technologies, and Financial Incentives

Targeted end uses for the overall Program will include, but are not limited to, advanced lighting systems, lighting controls, and premium efficient motors and drive systems, high performance ventilation, cooling, heating, compressed air, industrial process, energy management systems and any other high performance mechanical and electrical systems.

In general, incentives are designed to cover approximately 50% of the total installed costs, including labor and equipment, or to buy the cost of the equipment down to the equivalent of approximately one-year payback, whichever is less to the Company. Gas customers will receive \$2.25 per therm saved. Customers select from a prescriptive or custom track depending on the complexity of their facility and the unique opportunity to gain significant energy savings through more customized examination of their energy usage.

## Quality Control:

The Company recognizes that quality control is a critical component of effective program implementation. The program design incorporates a number of quality control measures including:

- **Evaluation:** Please see the Evaluation Section for detailed information.
- **Pre- and Post-Inspections:** Projects are inspected prior to project initiation and post-installation to assure that operating assumptions and existing and installed measures are accurately counted and operating. Pre- and post-inspections are conducted by account management staff or independent vendors selected through a competitive bid process.
- **Minimum Requirements Document:** Custom projects are by nature more complex than prescriptive incentive projects. Therefore, every custom project requires a Minimum Requirements Document (“MRD”) consisting of equipment specifications, sequence of operations, and post-inspection requirements. This helps ensure that the proposed equipment and operating assumptions are installed and operating as documented in the original Technical Assistance Analysis.
- **Customer Sign Off:** The customer is required to document their satisfaction with the installation.

Balancing program implementation costs with quality control requires recognizing that some projects, oftentimes due to size of investment or complexity, require varying levels of quality control. For example:

- Projects with incentives less than \$10,000 are randomly selected for post-inspection by the Company’s work flow system InDemand.
- All custom projects, regardless of dollar amount, require a post-inspection.
- All applications where an invoice is not available require a post-inspection.

## **Complementary Energy Initiative Services**

The Company proposes to offer participants in the Energy Initiative Program complementary services focusing on demand response, power quality, power factor correction, combined heat and power opportunities, and renewable energy. These services are described below.

### Demand Response Deployment and Services

The objective of these services is to help electric customers efficiently deploy existing and emerging energy efficiency technologies and strategies to reduce electrical load during peak hours (typically summer) throughout the Company's service territory. The centerpiece of the Company's Demand Response Services is demand response or load shed audits, which are aimed at identifying various demand response measures that may be undertaken by customers depending on the level of need. The need will be defined by one or more of the following factors: 1) the customer is enrolled in the NYISO's day-ahead price program and the audit will identify the amount of economic load shed available at their bid price; and/or, 2) the customer is on either mandatory hourly pricing ("MHP") from National Grid, or on an indexed hourly price from their energy supplier and wants to understand how much load can be economically shed at differing hourly prices. This will typically require at least two levels of load shedding – the first level (2-5% of their peak load) would be called when a certain price point is reached, the second (5-15% or more of peak load) would be called at some other higher price point that would economically support this higher amount of load shedding. Either level could also be used during an emergency demand response event either called by the NYSIO or National Grid when a system emergency occurs (i.e., loss of generation, transmission, or local distribution facilities). The audits also identify peak load management strategies that should help customers reduce demand charges as well as potential energy efficiency strategies, once the customer better understands what comprises their peak load in their facilities.

## Target Market and Marketing Approach

Market segments that will be targeted with Demand Response services include:

- Large electric customers on highly loaded distribution system components;
- Customers where anticipated load growth has the potential to outpace infrastructure improvements;
- Customers receiving their energy supply via dynamic pricing supply from a competitive supplier, taking the hourly default service from National Grid, or enrolled with a third party curtailment service provider in a NYISO demand response program.

In addition, the Company will work with customers in different rate classes to provide automation tools for HVAC and other end uses to reduce peaks at high-priced hours and/or system emergencies. This automation capability may also include the installation of advanced metering to monitor and control the selected end use loads.

## Target End Uses

The list of measures recommended for consideration by a customer may include some or all of the following:

- Temporary load shedding and shifting measures:
  - building management system control changes, including temperature setbacks for HVAC systems;
  - lighting controls, either manually or through a building energy management system;
  - operation of emergency generation under a reliability emergency;
  - scheduling of industrial processes;
  - lighting retrofits that include the functionality of dimming electronic ballasts;
  - cooling system upgrades;

- CO<sub>2</sub> sensors to regulate air distribution; and
- compressed air system modification.
  
- Automated load shedding techniques:
  - making changes to a customer's energy management system to manage load automatically based on pricing or emergency conditions.

### Power Factor and Power Quality Studies

In many cases, electric customers who are interested in making their facilities more energy-efficient also are interested in pursuing other energy-related opportunities. These other opportunities include power factor correction, as well as improving the power quality for their systems.

Power factor correction through the use of capacitors within a customer facility can release electrical capacity on the customer's main switch, sub-panels, and motor control centers allowing additional equipment to be installed without increasing the size of the customer's main switch. In addition, proper capacitor installation can provide voltage support within a customer's facility, as well as reduce internal losses, thereby saving electric energy. Capacitor installations need to take into account the harmonic content of the customer's loads. Non-linear loads (e.g., VSDs, electronic ballasts, programmable logic controllers) need non-60 Hz power to work properly. This need can distort the voltage waveform and cause operational problems if not addressed properly. In some cases, harmonic-filtered capacitors are required for proper power factor correction. It is important to install these systems as efficiently as possible in order to secure energy savings.

Power quality issues, such as wiring and grounding problems, harmonic distortion, and momentary interruptions can cause downtime for customer processes. In addition, improperly installed equipment including power factor correction equipment can cause similar disruptions. Services such as harmonics and load studies can provide valuable information for customers wanting to install additional or newer micro-processor based

equipment that has higher energy efficiency attributes than the equipment it is replacing while providing customers with information needed to withstand momentary interruptions (energy storage needs, etc.). As customers decide on the type of equipment they may wish to purchase to resolve power quality issues, it is important they select and install these systems as efficiently as possible to provide as much energy savings as possible.

#### Target Market and Marketing Approach

Market segments targeted for Power Factor and Power Quality services include:

- Customers with highly loaded internal distribution systems; and
- Customers with wiring and grounding issues or where momentary interruptions affect their production.

The output of these studies will assist customers in evaluating the changes and equipment needed for power factor correction or power quality issues.

#### Renewable Energy (“RE”) and Combined Heat and Power (CHP) Studies

The Company will offer RE/CHP audits to interested customers to determine if their facility could host a RE or CHP system. The Company will work with NYSERDA to assist the customer with possible funding requests for studies and incentives if the customers choose to move forward.

#### Target Market and Marketing Approach

Market segments that are targeted for RE and CHP studies include:

- Customers with good wind or solar resources; and
- Customers with base thermal loads coincident with electric usage to take advantage of a highly efficient CHP system.

The output of these studies will assist participating customers in developing and filing proposals for additional funding through NYSERDA and other entities.

## Evaluation Plan

### **Year One Evaluation**

In 2009, evaluation efforts 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 program implementation efforts. The Company plans to initiate a process evaluation in support of these efforts. The plan is to hire an independent evaluation expert through a competitive solicitation to complete this work. This RFP will be issued shortly after the Commission authorizes the Company to implement this program.<sup>10</sup> The Company will request interim reports from the selected contractor 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. A final report summarizing results from the process evaluation will likely be completed in 2010.

### ***Process Evaluation***

The first year process evaluation will document program processes during start-up and will gather the following information:

- Level of customer satisfaction.
- Effectiveness of the program delivery mechanism from the position of the program delivery contractors, program customers, trade allies and other key stakeholders. Did the delivery mechanism differ from the program plan? If yes, how and why?
- Effectiveness of program promotion.
- Remaining barriers to program participation including an assessment of why some customers choose to not participate in the program.
- Identification of lessons learned and specific actionable recommendations for program improvement.

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<sup>10</sup> As an alternative, the Company may expand the scope of work of the independent consultant selected to provide process evaluation services in support of already approved program efforts.

- A review of program tracking databases to ensure that data that will likely be required to support future program evaluation efforts is being collected.

As part of the process evaluation plan, the Company will survey participating and non-participating customers as well as trade allies who have and have not promoted the program.

## **Year Two - Three Evaluation**

### ***Impact Evaluation***

The Company anticipates evaluating savings from the Energy Initiative Program in conjunction with New England evaluation efforts by National Grid affiliates that focus on this same program. The Company anticipates focusing initial impact evaluation efforts on the end-uses that appear to be delivering significant savings in the program. The evaluation technique to be used will be tailored to the unique attributes of the end-use of interest. For example, National Grid affiliates typically conduct a billing data analysis to determine achieved savings from prescriptive lighting measures. National Grid affiliates typically conduct a detailed engineering review which may include some metering of use when assessing results from custom projects completed through this program.

- **Impact Evaluation Methodology.** An independent evaluation consultant will be hired through a competitive solicitation to complete the defined studies using an impact evaluation approach appropriate for the selected end-use. The selected consultant will employ methods that will produce results that meet the precision requirements set forth in the guidelines issued through the Evaluation Advisory Group. Possible evaluation approaches may include engineering analysis, synthesis of secondary information available about savings, metering, billing data analysis, or some other approach.

The results of the impact evaluation will be used to refine expectations about future program savings, and may be used to modify future programs. Results from studies of key end-uses are anticipated by late 2011. Additional results will be available for other end-uses in 2012.

- **Net-to-Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. Many measures in the proposed Program are not addressed in the technical manual. Savings estimation approaches, calculations and assumptions at the measure level for estimating energy savings for the measures that are not addressed in the technical manual are provided in Appendix C. These assumptions will be updated in the future based on evaluation findings, including updated information about free-ridership and spillover, or net-to-gross ratios as discussed above.
- **Budget.** Consistent with the June 23, 2008 Order, the Company has budgeted approximately 5% of program implementation costs to fund evaluation efforts. Actual evaluation expenses for this program may be higher or lower than this amount.
- **Sampling Strategies and Design and Data Reliability Standards.** Consistent with the Evaluation Plan Guideline for EEPS Program Administrators and as recommended by Working Group III,<sup>11</sup> the Company's goal for estimating gross savings at the program level is at the 90% confidence interval, with +/- 10% precision. The Company will develop sampling protocols for all of its evaluations based on this standard. However, actual evaluation results may deviate from this standard.

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<sup>11</sup> See Working Group III Final Report, dated December 5, 2007, at p. 37.

- **Steps to Identify and Mitigate Threats to Data Reliability.** The Company will review the evaluation plan submitted by the selected evaluation contractor for consistency with the Evaluation Advisory Group 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. The evaluation contractor will be required to ensure 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 contractor will be asked to include a discussion about threats to data reliability in their reports.
  
- **Data Collection and Management Process.** Program data will be collected from customer rebate forms, site visits and surveys of participants and non-participants. National Grid's tracking system, supplemented by data that the Company requires its implementation vendors to track, supports program evaluation through the collection of all relevant data pertaining to customer rebates and installed or removed equipment. Customer name, account, premise level and other non-program specific data is captured in the system. Measure-specific data as appropriate will also be captured. Examples of measure-specific data that will be collected can include:<sup>12</sup>
  - Date of contract/agreement to install measure(s)
  - Date of beginning of installation process
  - Installation completion date
  - Installation contractor
  - Installation location
  - Project or work order number
  - Type of measure
  - Annualized energy savings
  - Measure life
  - Total measure installed cost

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<sup>12</sup> Please note that not of all the measure-specific data listed here are going to be captured for this program.

- Incremental measure cost
  - Incentive payment amount
  - Project completion date
  - Evaluation inspection/commissioning date
  - Date of evaluation of measure or program
  - Types of evaluation conducted
  - Result of evaluation
- **Schedule and Deliverable Dates.** The Company anticipates initiating a process evaluation in 2009 and an impact evaluation in the fall of 2010. Final results of the process evaluation are anticipated in 2010. Final results for the impact evaluation are anticipated by year-end 2011 or early in 2012.

### **Coordination with NYSERDA and Other Program Administrators**

The Company proposes to continue to collaborate with the program administrators (“PAs”) in New York. Such efforts to date have included both NYSERDA, and the other New York utilities, who have been sharing program design and implementation strategies. In addition, the Company continues to support the efforts of the Evaluation Advisory Group and the statewide evaluation studies contemplated therein. The Company is eager to continue its work with other PAs to promote energy efficiency throughout New York State.

## **New Construction**

The Company proposes working in close collaboration with NYSERDA's High Performance New Construction Program to promote better building and design practices in new construction and major renovation markets. National Grid affiliates' new construction program attributes map closely with those of NYSERDA with respect to program design, incentives, technical support capacity, recommended technologies, and implementation strategies. The Company, through its close personal account management relationships, will identify new construction opportunities in the industrial sector early on which will permit offering these services through NYSERDA's High Performance New Construction Program.

## Better Building Codes

The Company and NYSERDA recognize the important role that better building codes and standards play in elevating the energy performance of commercial buildings. To ensure that the code improvement process continues to move forward with higher standards being enacted beyond the current New York State Energy Code ASHRAE 90.1 2004, the Company will be actively engaged in the code improvement process so that progress can be made toward utilizing ASHRAE 90.1 2007. The latter version of the ASHRAE code has improved mechanical, lighting and envelope standards.

## **VI. Evaluation and Reporting**

### **Evaluation**

Consistent with the June 23, 2008 Order, the Company has budgeted 5% of program implementation costs to support program evaluation efforts. Detailed evaluation plans for each proposed program have been provided along with the description of each proposed program. In general, in the first year, the Company anticipates focusing on process evaluation efforts that will assist the Company in making timely adjustments to program implementation efforts to improve overall effectiveness. In later years, the Company anticipates focusing on impact evaluation efforts so that actual savings from program efforts can be estimated more accurately.

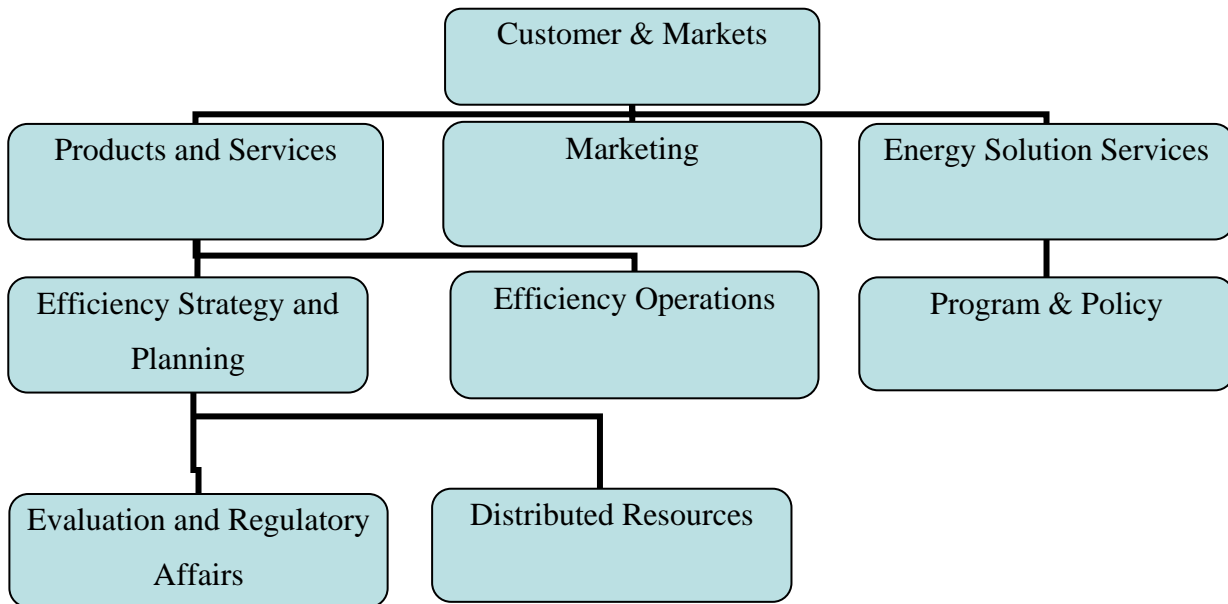
In planning evaluation activities, the Company considers several factors including the length of time since a program or end-use was evaluated, the maturity of the program (particularly for process evaluation issues), the significance of expected savings for the end use or project in the recently completed program year, the stability of prior evaluation results for the program aspect under consideration, and expected opportunities to participate in joint studies, including market assessments, in the coming year. National Grid plans to oversee the efforts of independent evaluation consultants who will be selected through a competitive bidding process to complete the Company's evaluation studies.

The Company has representation on the Evaluation Advisory Group ("Advisory Group") convened by the Director of the Office of Energy Efficiency and Environment, Department of Public Services. A portion of the Company's evaluation budget is anticipated to be directed to the Advisory Group's efforts to fund the efforts of an evaluation expert who will advise DPS Staff and the Advisory Group as well as to fund evaluation studies that will be conducted across New York State. These studies are anticipated to include, but not

be limited to, baseline practices studies and efforts to identify common approaches for assessing free-ridership and spillover.

### **National Grid's Evaluation Team**

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 area 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.



## VII. Performance-Based Shareholder Incentives

The Commission had previously recognized the importance of providing utilities with a financial incentive to achieve savings in its electric energy efficiency programs.<sup>13</sup> The Commission has recently authorized an incentive mechanism applicable to gas energy efficiency efforts that similarly includes both rewards for acceptable performance and penalties applicable to efforts that are deemed to be deficient.<sup>14</sup>

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<sup>13</sup> Case 07-M-0548 - *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Concerning Utility Financial Incentives (issued and effective August 22, 2008).

<sup>14</sup> Case 07-M-0548 - *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Establishing Targets and Standards for Natural Gas Efficiency Programs (issued and effective May 19, 2009).

The Company will be able to earn an incentive on achieved annual energy savings if it achieves greater than 80% of the approved annual energy savings goal for the program year. The incentive will be equal to the achieved annual energy savings multiplied by \$3.00 per MCF saved. The incentive will not exceed the approved annual energy savings goal for the year multiplied by \$3.00.

If results are greater than 70% but at or below 80% of the annual goal, no incentive will be earned and no penalty will apply.

If annual energy savings achieved through program efforts are less than 70% of the approved goal for annual energy savings in the year, the Company will be subject to a penalty equal to the shortfall multiplied by \$3.00 per Mcf. The penalty will not exceed the amount calculated for achieving only 50% of the annual goal.

Additionally for the purpose of this updated proposal, National Grid assumes that for gas efficiency programs initiated in calendar year 2009, shareholder incentive determinations will be made based on an accounting of measures installed or performed cumulatively in calendar years 2009 and 2010 applied against a cumulative target through 2010 consistent with Ordering Clause No. 1 in the Commission's February 13, 2009 order in the EEPS proceeding.<sup>15</sup>

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<sup>15</sup> 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.

# Appendix A

# **Appendix A**

## **Explanation of Budget Categories**

### **Program Planning and Administration**

Costs to administer energy efficiency programs that include but are not limited to; staff salaries (management personnel, program managers, accounting personnel, evaluation staff, regulatory staff, and administrative support staff), and company overhead (i.e., office space, supplies, computer and communication equipment, staff training, industry related sponsorships and memberships).

### **Program Marketing and Trade Ally**

Promotion of energy efficiency programs which includes but is not limited to; production of all energy efficiency program literature, advertising, promotion, displays, events, promotional items, bill inserts, internal and external communications. Advertising encompasses all forms of media such as direct mail, print, radio, television, and internet.

Trade Ally includes all activity associated with energy efficiency training/education of the trade ally community which includes but is not limited to; heating contractors, weatherization contractors, efficiency equipment/products installers, residential and C&I auditors, residential and C&I builders and developers.

### **Customer Incentives or Services**

Costs associated with rebates paid to customers for implementing energy efficiency. Additionally, this includes services provided to customers such as energy audits, technical assessments, engineering studies, plans reviews, blower door tests and infrared scans.

### **Program Implementation**

Costs associated with vendors and contractors administering programs on the Company's behalf. Tasks associated with this budget category include but are not limited to; lead intake, customer service, rebate application processing, rebate application problem resolution, equipment installation inspections, rebate processing and individual program reporting.

### **Evaluation and Market Research**

All activities associated with the evaluation of current and potential energy efficiency programs. These activities include but are not be limited to; benefit cost ratio analysis, program logic models, cost per therm analysis, efficiency product saturation analysis, customer research and all ad hoc analyses that are necessary for program evaluation. In addition any activities that pertain to regulatory compliance or reporting conducted by energy efficiency group personnel or contractors would fall under this category. Expenses associated with evaluation include all internal and external costs (i.e., consultant contracts).

# **Appendix B**

Niagara Mohawk Power Corporation d/b/a National Grid  
ENERGY EFFICIENCY PROGRAMS  
2009 - 2011 TRC BENEFIT COST TEST

Participation and Savings Goals - Gas Programs

Gas Programs	2009			2010			2011			2009 - 2011		
	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings	Participants	Annualized MMBtu Savings	Lifetime MMBtu Savings
EnergyWise Program	875	7,718	108,045	1,800	15,876	222,264	1,800	15,876	222,264	4,475	39,470	552,573
Energy Initiative	2	4,050	60,750	8	16,200	243,000	12	24,300	364,500	22	44,550	668,250

Niagara Mohawk Power Corporation d/b/a National Grid  
ENERGY EFFICIENCY PROGRAMS  
2009 - 2011 TRC BENEFIT COST TEST

Summary of Benefits, Costs (2009 \$s)  
Total Resource Cost Test

	2009			2010			2011			2009 - 2011		
	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)	TRC Benefit/ Cost	Total NPV Benefits (\$000)	Total NPV Costs (\$000)
<b>Gas Programs</b>												
EnergyWise Program	1.02	\$639	\$ 626	1.13	\$1,346	\$ 1,192	1.22	\$1,382	\$ 1,130	1.14	\$3,366	\$2,948
Energy Initiative	1.11	\$351	\$ 316	1.24	\$1,438	\$ 1,158	1.41	\$2,215	\$ 1,568	1.32	\$4,003	\$3,042
<b>Total</b>	<b>1.05</b>	<b>\$990</b>	<b>\$941</b>	<b>1.18</b>	<b>\$2,784</b>	<b>\$2,350</b>	<b>1.33</b>	<b>\$3,596</b>	<b>\$2,699</b>	<b>1.23</b>	<b>\$7,370</b>	<b>\$5,991</b>

**Niagara Mohawk Power Corporation d/b/a National Grid**  
**ENERGY EFFICIENCY PROGRAMS**  
**2009 - 2011 TRC BENEFIT COST TEST**

Year	Gas Programs	Total Benefits		MMBTU Saved	
		Total Benefits	Natural Gas	Annual	Lifetime
2009	EnergyWise Program	\$638,770	\$638,770	7,718	108,045
	Energy Initiative	\$350,911	\$350,911	4,050	60,750
<b>Grand Total - 2009</b>		<b>\$989,681</b>	<b>\$989,681</b>	<b>11,768</b>	<b>168,795</b>
2010	EnergyWise Program	\$1,345,755	\$1,345,755	15,876	222,264
	Energy Initiative	\$1,437,875	\$1,437,875	16,200	243,000
<b>Grand Total - 2010</b>		<b>\$10,900,335</b>	<b>\$2,783,630</b>	<b>32,076</b>	<b>465,264</b>
2011	EnergyWise Program	\$1,381,687	\$1,381,687	15,876	222,264
	Energy Initiative	\$2,214,700	\$2,214,700	24,300	364,500
<b>Grand Total - 2011</b>		<b>\$11,957,712</b>	<b>\$3,596,387</b>	<b>40,176</b>	<b>586,764</b>
2009 - 2011	EnergyWise Program	\$3,366,212	\$3,366,212	39,470	552,573
	Energy Initiative	\$4,003,486	\$4,003,486	44,550	668,250
<b>Grand Total - 2009 - 2011</b>		<b>\$23,847,729</b>	<b>\$7,369,698</b>	<b>84,020</b>	<b>1,220,823</b>

Niagara Mohawk Power Corporation d/b/a National Grid  
ENERGY EFFICIENCY PROGRAMS  
2009 - 2011 TRC BENEFIT COST TEST

Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost	Participant Cost	Total Cost
2009	EnergyWise Program	\$24,015	\$18,087	\$427,000	\$23,000	\$24,605	\$23,453	\$540,161	\$85,400	\$625,561
	Energy Initiative	\$127,780	\$12,090	\$50,625	\$20,000	\$12,056	\$12,308	\$234,858	\$81,000	\$315,858
2009	Total	\$151,795	\$30,177	\$477,625	\$43,000	\$36,661	\$35,761	\$775,019	\$166,400	\$941,419
Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost	Participant Cost	Total Cost
2010	EnergyWise Program	\$48,030	\$35,340	\$878,400	\$23,000	\$49,239	\$48,247	\$1,082,256	\$175,680	\$1,257,936
	Energy Initiative	\$278,619	\$48,358	\$405,000	\$80,000	\$36,599	\$49,232	\$897,808	\$324,000	\$1,221,808
2010	Total	\$326,649	\$83,699	\$1,283,400	\$103,000	\$85,837	\$97,479	\$1,980,064	\$499,680	\$2,479,744
Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost	Participant Cost	Total Cost
2011	EnergyWise Program	\$48,030	\$35,471	\$878,400	\$23,000	\$49,245	\$48,247	\$1,082,393	\$175,680	\$1,258,073
	Energy Initiative	\$354,179	\$72,537	\$607,500	\$100,000	\$51,711	\$73,848	\$1,259,775	\$486,000	\$1,745,775
2011	Total	\$402,209	\$108,008	\$1,485,900	\$123,000	\$100,956	\$122,095	\$2,342,168	\$661,680	\$3,003,848
Year	Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost	Participant Cost	Total Cost
2009-2011	EnergyWise Program	\$120,075	\$88,899	\$2,183,800	\$69,000	\$123,089	\$119,948	\$2,704,810	\$436,760	\$3,141,570
	Energy Initiative	\$760,578	\$132,985	\$1,063,125	\$200,000	\$100,366	\$135,387	\$2,392,442	\$891,000	\$3,283,442
2009 - 2011	Total	\$880,653	\$221,884	\$3,246,925	\$269,000	\$223,454	\$255,335	\$5,097,252	\$1,327,760	\$6,425,012

# **Appendix C**

MASTER WORKSHEET WITH ALL PROGRAM INPUT ASSUMPTIONS  
Input Assumptions Energy Efficiency Programs - Niagara Mohawk Power Corporation d/b/a National Grid  
May 28, 2009

Gas Programs	Measure Name	Measure Life	Source of Measure Life	Incremental Cost	Source of Incremental Cost	Annual Savings Per Participant or Per Unit of Installation	Source of Annual Savings	Net to Gross Impact Factors	Source of Net to Gross
EnergyWise Program	Insulation and Air Sealing	14	Measure life of projects completed in RI service territory.	\$651	This figure represents the average cost of weatherization/insulation jobs for this program. The average rebate will be approximately \$488, and this represents 75% of the total cost of each weatherization job. Thus the average cost of each weatherization is \$651.	10	Average savings of representative project completed in RI service territory.	10% Net Free Ridership Rate	Net free ridership is a DPS staff estimate.
Energy Initiative	Commercial Energy Efficiency Projects	12	Data from KeySpan's updated "Performance Report" report for Massachusetts programs" for Program Year 3 (this is for the period May 1, 2004 to April 30, 2005)	\$101,250	The average rebate will be approximately \$50,625 which is based on \$2.25 per therm saved. This will represent 50% of the total cost of each project. Thus the average cost of each project is \$101,250.	2,250	Estimate savings at 2% of annual consumption for large industrial customers.	10% Net Free Ridership Rate	Net free ridership is a DPS staff estimate.