

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case No. _____

Niagara Mohawk Power Corporation d/b/a National Grid

ELECTRIC and GAS ENERGY EFFICIENCY PROGRAM
PROPOSALS

September 22, 2008

national**grid**

Niagara Mohawk Power Corporation d/b/a National Grid
Electric and Gas Energy Efficiency Program Proposals
September 22, 2008

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I. Introduction

Niagara Mohawk Power Corporation d/b/a National Grid (“National Grid” or the “Company”) proposes to implement a suite of energy efficiency programs that are designed to provide integrated services to its electric and natural gas customers. The suite of proposed programs is intended to respond effectively to customer needs for electric and gas energy efficiency, renewable energy, demand response, other distributed resources, power factor correction, and power quality needs in the period from January 1, 2009 through December 31, 2011. The proposed energy efficiency programs are intended to contribute to New York’s goal to reduce electric use projected in 2015 by 15%, with a comparable target for natural gas. The 15 x 15 goal is the cornerstone of the ongoing Energy Efficiency Portfolio Standard (“EEPS”) proceeding.¹

The proposed programs incorporate market transformation strategies, services that are targeted directly to end-users and to key trade allies, and strategies that help to minimize lost opportunities. The proposed programs produce long-term electric energy and demand savings and natural gas savings, as well as other resource benefits. In addition, proposed program efforts are intended to both complement and coordinate with NYSERDA’s ongoing energy efficiency efforts.

Providing energy efficiency services to our customers is a core element of the National Grid vision.² It is key to assisting our customers in managing their energy costs and to addressing climate change.

¹ Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Instituting Proceeding (issued and effective May 16, 2007).

² National Grid’s vision statement was adopted about a year ago and reads: “We, at National Grid, will be the foremost international electricity and gas company, delivering unparalleled efficiency, reliability and

For the last 20 years, National Grid has been an ardent supporter of energy efficiency programs. The Company has implemented numerous award-winning programs and, as a result, is a nationally-recognized leader in this area. National Grid's innovative energy efficiency programs are an integral part of the Company's continuing commitment to providing superior customer service and environmental stewardship.

The Company's dedicated staff and strong infrastructure of vendors and service providers deliver these programs by closely working with commercial and industrial customers, as well as small businesses, and aggressively marketing its programs to residential customers. This unique customer relationship has put National Grid in an excellent position to directly help customers cope with rising energy costs and address policymaker's desire to have energy efficiency be part of the solution to the increases in energy prices and climate change.

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 experience to New York.

Since 1987, National Grid has advocated in federal and state legislative arenas and other forums for energy efficiency policies and programs to benefit customers, communities and the environment. In 2007, the Company achieved a major milestone, marking the 20th anniversary of its nationally recognized, award-winning energy efficiency programs and an investment of over \$1 billion in energy efficiency programs. During the last 20 years, more than 4.7 million National Grid customer projects have been completed in New England saving more than \$3.6 billion in energy costs and 26 billion kilowatt hours of

safety, vital to the well-being of our customers and communities. We are committed to being an innovative leader in energy management and to safeguarding our global environment for future generations.”

electricity, enough to power 3 million homes for one year as well as saving 650 million therms of natural gas, enough to heat 500,000 homes for one year. The programs have reduced greenhouse gas emissions in New England by 18.3 million tons, the equivalent of removing 2.3 million cars from the road. The Company's efforts and commitment to this endeavor have yielded a 60% participation rate in the programs among National Grid's 1.7 million New England customers, saving them more than \$250 million on an annual basis.

National Grid has earned numerous awards for its programs as part of its advocacy campaigns including the following:

- 2007 AESP Award for its "Outstanding Achievement in Program Implementation" for its 20 years of energy efficiency programs
- US EPA and DOE Excellence in ENERGY STAR® Outreach Award and the ENERGY STAR Sustained Excellence Award for leadership and outstanding contributions (9th consecutive award)
- US EPA and DOE Awards for ENERGY STAR® Homes in 2007 and Small Business Services in 2003
- 12 Exemplary Program Awards from ACEEE (Large and Small Commercial and Industrial Programs and Residential and Low Income programs)

A full list of awards is available upon request.

II. Collaboration

New York has set an ambitious goal for energy efficiency. Achieving it will require the concerted efforts of utilities, the New York State Energy Research and Development Authority (“NYSERDA”), vendors, contractors and other energy efficiency providers. The Company has and will continue to collaborate with the other New York State electric and natural gas utilities, NYSERDA, Department of Public Service Staff (“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 recent collaborative activities.

Upstate New York
Collaborative Activities, March – September 2008

Dates	Attendees	Topics of Discussion
March 18, 2008 (NYSERDA's Albany Office)	National Grid representatives and NYSERDA program staff	Discussed opportunities for program coordination and collaboration in context of EEPS proceeding. The parties identified gaps in their combined programs and ways to address such gaps, as well as potential program barriers for customers. The parties agreed to identify the consistencies in their offerings and combine common attributes of program design, including incentives, eligibility criteria, technical assistance and measurement and verification.
July 14, 2008 (teleconference; multiple follow-up calls)	National Grid and NYSERDA representatives	Reviewed residential program description drafts and discussed program options.
July 14, 2008 (teleconference)	Working Group VIII participants	Pre-organizational call for Working Group VIII. Discussed Working Group IV report, timing, scheduling, meeting locations, potential conveners, and general scope of work.
July 17 and 18, 2008 (National Grid's Syracuse Office)	National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives	Discussed common elements of program designs as well as program implementation and program evaluation issues facing upstate NY utilities.
July 23, 2008 (National Grid's Brooklyn Office)	National Grid and NYSERDA representatives	Discussed options for multifamily efficiency program development for upstate New York.
July 23, 2008 (NY Dormitory Authority, 1 Penn Plaza, New York City, and teleconference)	Working Group VIII participants	Co-conveners of WGVIII introduced themselves and overall WG scope was defined. Existing NYSERDA and NYISO demand response activities were discussed, as well as the role of CHP and AMI tie-in to Demand Response.

Dates	Attendees	Topics of Discussion
July 25, 2008 (teleconference)	Working Group VI (On-Bill Financing) participants	Defined WG's scope of activities by beginning to develop an issues list.
July 28, 2008 (webinar / teleconference) and August 1, 2008 (teleconference)	National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, Orange & Rockland, and NYSERDA representatives	Respective parties held discussions to identify areas of uniformity and where planned residential and C&I programs complement each other. Parties also discussed how program design, delivery and marketing might be complemented with NYSERDA's existing portfolio of energy efficiency programs. The overall objective of subsequent meetings with NYSERDA and utilities is to work at the program detail level, address individual company issues and maximize savings while reducing the risks of confusing customers or double counting savings.
July 31, 2008 (teleconference)	National Grid representatives, DPS Staff and Signatory Parties to the Joint Proposal, including NYSERDA representatives	Reviewed Niagara Mohawk's Interim Joint Proposal to provide interim gas energy efficiency programs for upcoming heating season (proposed eight-month program plan).
August 1, 2008 (teleconference)	National Grid representatives, DPS Staff and Signatory Parties to the Joint Proposal, including NYSERDA representatives	Second round of revisions to Niagara Mohawk's Interim Joint Proposal to provide interim gas energy efficiency programs. The Joint Proposal was finalized incorporating all signatory parties' input and filed with the Public Service Commission on this same date.

Dates	Attendees	Topics of Discussion
August 5, 2008 (NYISO Headquarters, Troy NY, and teleconference)	Working Group VIII participants	The group reviewed Demand Response and Peak Reduction programs and measures not presently available through existing NYISO, SBC, and utility programs. Also discussed opportunities related to hourly pricing, integrating DR with EE, lost DR, renewable and CHP opportunities, AMI, and environmental issues pertaining to both peaking units and demand response sources.
August 6, 2008 (teleconference)	National Grid , Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives	Discussed evaluation planning and possible coordination.
August 8, 2008 (in person and teleconference)	Working Group VII (Workforce Development) participants	Co-Conveners laid out the charge for the working group and timeline for the process, which will address workforce needs for programs already approved, as well as the need to ramp up to fill longer-term needs after other programs are approved under the EEPS.
August 12, 2008 (teleconference)	National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives	Reviewed Independent Program Administrator proposals.
August 13, 2008 (teleconference)	Working Group VI (On-Bill Financing) participants	Further defined WG's scope of activities by completing the issues list.
August 13, 2008 (NY DEC offices, Albany)	Working Group VIII participants	Discussed environmental justice issues; demand response, CHP, and AMI proposals; and drafted a scoping memo.
August 15, 2008 (teleconference)	National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives	Discussed evaluation planning and possible coordination.

Dates	Attendees	Topics of Discussion
August 18, 2008 (teleconference)	Working Group V (Natural Gas) participants	Discussed methodology for compiling data on existing programs.
August 20, 2008 (teleconference)	Working Group VI (On-Bill Financing) participants	Began to develop recommendations related to issues list.
August 26, 2008 (NY Dormitory Authority, 1 Penn Plaza, New York City)	Working Group VIII participants	The group conducted a Q & A session with Judge Stein, discussed coordination between WG VIII and utilities, and assigned sub-groups to address specific topics.
August 27, 2008 (teleconference)	Working Group VII (Workforce Development) participants	Group members discussed how to come up with recommendations and a budget for workforce development.
August 28, 2008 (teleconference)	Working Group VI (On-Bill Financing) participants	Further developed recommendations related to issues list.
August 29, 2008 (teleconference)	Working Group V (Natural Gas) participants	Reviewed gas load forecasts and program data compilation.
September 4, 2008 (teleconference)	Working Group VI (On-Bill Financing) participants	Further developed recommendations related to issues list.
September 5, 2008 (Con Ed / NYC)	Working Group V (Natural Gas) participants	Reviewed approaches, methodologies, assumptions and results of consultants' studies.
September 8, 2008 (teleconference)	National Grid, ConEd, Comverge, EnerNOC (WG VIII sub-group)	Discussed how to integrate demand response into SBC funded energy efficiency programs.
September 9-12, 2008 (teleconference and e-mails)	National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives.	Discussed residential 90-day filings and answered questions.
September 10, 2008 (teleconference)	Working Group VII (Workforce Development) participants	Group continued to work on recommendations and budgeting.
September 12, 2008 (teleconference)	National Grid and NYSERDA representatives	Discussed areas for collaboration on statewide 90-day filings.

III. Budget and Goals

Budgets³ for each proposed electric and gas energy efficiency program are provided below by year and for the period 2009 through 2011⁴.

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

⁴ The Commission's Order Concerning Utility Financial Incentives issued August 22, 2008 in the EEPS Proceeding stated that "incentives for gas utility programs, if any, will continue to be set on a case-by-case basis for the near future." The Company reserves the right to incorporate a performance-based incentive for its proposed gas energy efficiency programs should such a performance incentive be subsequently determined by the Commission as applicable for utility-administered gas energy efficiency programs.

Projected Electric Energy Efficiency Program Costs in 2009

Electric Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
Enhanced Home Sealing Incentives	\$50,000	\$100,000	\$480,000	\$75,000	\$35,250	\$26,266	\$766,516
Residential ENERGY STAR® Products and Recycling Program	\$200,000	\$700,000	\$350,000	\$1,000,000	\$112,500	\$184,818	\$2,547,318
Residential Internet Audit Program and E-Commerce Sales	\$100,000	\$200,000	\$200,000	\$200,000	\$35,000	\$116,591	\$851,591
Residential Building Practices and Demonstration Program	\$64,000	\$60,000	\$425,000	\$22,300	\$28,565	\$314,685	\$914,550
EnergyWise Program	\$100,000	\$100,000	\$1,500,000	\$300,000	\$100,000	\$92,395	\$2,192,395
Residential Pricing Pilot with Load Control	\$100,000	\$50,000	\$250,000	\$0	\$20,000	\$0	\$420,000
Energy Initiative	\$2,225,800	\$281,610	\$12,462,590	\$520,000	\$744,500	\$3,018,303	\$19,282,803
Total	\$2,839,800	\$1,491,610	\$15,667,590	\$2,117,300	\$1,105,815	\$3,753,058	\$26,975,173

Projected Electric Energy Efficiency Program Costs in 2010

Electric Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
Enhanced Home Sealing Incentives	\$50,000	\$100,000	\$900,000	\$150,000	\$60,000	\$48,154	\$1,308,154
Residential ENERGY STAR® Products and Recycling Program	\$200,000	\$700,000	\$700,000	\$1,800,000	\$170,000	\$370,585	\$3,940,585
Residential Internet Audit Program and E-Commerce Sales	\$100,000	\$200,000	\$200,000	\$200,000	\$35,000	\$116,591	\$851,591
Residential Building Practices and Demonstration Program	\$64,000	\$60,000	\$425,000	\$22,300	\$28,565	\$314,685	\$914,550
EnergyWise Program	\$100,000	\$100,000	\$4,000,000	\$400,000	\$230,000	\$190,070	\$5,020,070
Residential Pricing Pilot with Load Control	\$50,000	\$75,000	\$1,500,000	\$150,000	\$88,750	\$0	\$1,863,750
Energy Initiative	\$2,782,250	\$352,013	\$15,578,238	\$650,000	\$968,125	\$3,772,879	\$24,103,504
Total	\$3,346,250	\$1,587,013	\$23,303,238	\$3,372,300	\$1,580,440	\$4,812,963	\$38,002,203

Projected Electric Energy Efficiency Program Costs in 2011

Electric Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
Enhanced Home Sealing Incentives	\$50,000	\$100,000	\$900,000	\$150,000	\$60,000	\$48,154	\$1,308,154
Residential ENERGY STAR® Products and Recycling Program	\$200,000	\$700,000	\$700,000	\$1,800,000	\$170,000	\$370,585	\$3,940,585
Residential Internet Audit Program and E-Commerce Sales	\$100,000	\$200,000	\$200,000	\$200,000	\$35,000	\$116,591	\$851,591
Residential Building Practices and Demonstration Program	\$64,000	\$60,000	\$425,000	\$22,300	\$28,565	\$314,685	\$914,550
EnergyWise Program	\$100,000	\$100,000	\$4,000,000	\$400,000	\$230,000	\$190,070	\$5,020,070
Residential Pricing Pilot with Load Control	\$25,000	\$0	\$50,000	\$50,000	\$6,250	\$0	\$131,250
Energy Initiative	\$3,477,813	\$440,016	\$19,472,797	\$812,500	\$1,210,156	\$4,716,098	\$30,129,379
Total	\$4,016,813	\$1,600,016	\$25,747,797	\$3,434,800	\$1,739,971	\$5,756,182	\$42,295,578

Projected Electric Energy Efficiency Program Costs in 2009 - 2011

Electric Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Performance Incentive	Total Utility Cost
Enhanced Home Sealing Incentives	\$150,000	\$300,000	\$2,280,000	\$375,000	\$155,250	\$122,573	\$3,382,823
Residential ENERGY STAR® Products and Recycling Program	\$600,000	\$2,100,000	\$1,750,000	\$4,600,000	\$452,500	\$925,988	\$10,428,488
Residential Internet Audit Program and E-Commerce Sales	\$300,000	\$600,000	\$600,000	\$600,000	\$105,000	\$349,772	\$2,554,772
Residential Building Practices and Demonstration Program	\$192,000	\$180,000	\$1,275,000	\$66,900	\$85,695	\$944,055	\$2,743,650
EnergyWise Program	\$300,000	\$300,000	\$9,500,000	\$1,100,000	\$560,000	\$472,534	\$12,232,534
Residential Pricing Pilot with Load Control	\$175,000	\$125,000	\$1,800,000	\$200,000	\$115,000	\$0	\$2,415,000
Energy Initiative	\$8,485,863	\$1,073,638	\$47,513,624	\$1,982,500	\$2,952,781	\$11,507,279	\$73,515,686
Total	\$10,202,863	\$4,678,638	\$64,718,624	\$8,924,400	\$4,426,226	\$14,322,202	\$107,272,954

Projected Gas Energy Efficiency Program Costs in 2009

Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Total Utility Cost
Enhanced Home Sealing Incentives	\$111,000	\$81,509	\$300,000	\$30,000	\$26,125	\$548,635
Residential ENERGY STAR® Products Program	\$5,000	\$14,514	\$30,000	\$5,000	\$2,726	\$57,240
Residential Low Income Program	\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
Residential Building Practices and Demonstration Program	\$69,169	\$82,406	\$479,000	\$30,750	\$33,057	\$694,203
EnergyWise Program	\$48,030	\$36,175	\$500,000	\$23,000	\$30,360	\$637,565
Commercial and Industrial Energy Efficiency Program	\$150,000	\$261,000	\$1,298,700	\$550,000	\$112,985	\$2,372,685
Commercial High-Efficiency Heating and Water Heating Program	\$26,000	\$97,000	\$130,000	\$10,000	\$29,000	\$292,000
Building Practices and Demonstration Program	\$26,000	\$20,000	\$291,665	\$22,000	\$30,000	\$389,665
Total	\$435,199	\$592,604	\$8,029,365	\$670,570	\$264,254	\$9,991,992

Projected Gas Energy Efficiency Program Costs in 2010

Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Total Utility Cost
Enhanced Home Sealing Incentives	\$52,000	\$81,769	\$300,000	\$111,000	\$27,238	\$572,008
Residential ENERGY STAR® Products Program	\$5,000	\$15,515	\$50,000	\$5,000	\$3,776	\$79,291
Residential Low Income Program	\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
Residential Building Practices and Demonstration Program	\$64,000	\$71,849	\$425,000	\$22,300	\$29,157	\$612,307
EnergyWise Program	\$48,030	\$35,340	\$500,000	\$23,000	\$30,319	\$636,689
Commercial and Industrial Energy Efficiency Program	\$150,000	\$300,000	\$1,461,037	\$550,000	\$123,052	\$2,584,089
Commercial High-Efficiency Heating and Water Heating Program	\$50,500	\$122,000	\$390,000	\$12,500	\$28,750	\$603,750
Building Practices and Demonstration Program	\$26,000	\$30,000	\$291,655	\$22,000	\$18,483	\$388,138
Total	\$395,530	\$656,474	\$8,417,692	\$745,800	\$260,775	\$10,476,270

Projected Gas Energy Efficiency Program Costs in 2011

Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Total Utility Cost
Enhanced Home Sealing Incentives	\$111,000	\$77,342	\$300,000	\$31,651	\$26,000	\$545,992
Residential ENERGY STAR® Products Program	\$5,000	\$15,529	\$50,000	\$5,000	\$3,776	\$79,305
Residential Low Income Program	\$0	\$0	\$5,000,000	\$0	\$0	\$5,000,000
Residential Building Practices and Demonstration Program	\$64,000	\$71,975	\$425,000	\$22,400	\$29,169	\$612,544
EnergyWise Program	\$48,030	\$35,471	\$500,000	\$23,000	\$30,325	\$636,826
Commercial and Industrial Energy Efficiency Program	\$150,000	\$300,000	\$1,623,375	\$550,000	\$131,169	\$2,754,544
Commercial High-Efficiency Heating and Water Heating Program	\$50,500	\$100,800	\$455,000	\$84,500	\$34,540	\$725,340
Building Practices and Demonstration Program	\$26,000	\$30,000	\$291,655	\$22,000	\$18,483	\$388,138
Total	\$454,530	\$631,116	\$8,645,030	\$738,551	\$273,461	\$10,742,689

Projected Gas Energy Efficiency Program Costs in 2009 - 2011

Gas Programs	Program Planning and Administration	Program Marketing & Trade Ally	Customer Incentives or Services	Program Implementation	Evaluation & Market Research	Total Utility Cost
Enhanced Home Sealing Incentives	\$274,000	\$240,620	\$900,000	\$172,651	\$79,364	\$1,666,635
Residential ENERGY STAR® Products Program	\$15,000	\$45,558	\$130,000	\$15,000	\$10,278	\$215,836
Residential Low Income Program	\$0	\$0	\$15,000,000	\$0	\$0	\$15,000,000
Residential Building Practices and Demonstration Program	\$197,169	\$226,230	\$1,329,000	\$75,270	\$91,383	\$1,919,053
EnergyWise Program	\$144,090	\$106,986	\$1,500,000	\$69,000	\$91,004	\$1,911,080
Commercial and Industrial Energy Efficiency Program	\$450,000	\$861,000	\$4,383,112	\$1,650,000	\$367,206	\$7,711,318
Commercial High-Efficiency Heating and Water Heating Program	\$127,000	\$319,800	\$975,000	\$107,000	\$92,290	\$1,621,090
Building Practices and Demonstration Program	\$78,000	\$80,000	\$874,975	\$66,000	\$66,966	\$1,165,941
Total	\$1,285,259	\$1,880,194	\$25,092,087	\$2,154,921	\$798,490	\$31,210,951

Projected participation and savings in the proposed electric and gas energy efficiency programs are provided in the following tables:⁵

⁵ The participation and savings goals proposed in this filing are incremental to the participation and savings goals identified in National Grid's August 22, 2008 filing regarding expedited electric and gas energy efficiency programs and the electric savings shown in this filing and the August 22, 2008 savings need to be summed when making any comparison to the minimum thresholds for utility-administered electric programs for the period 2009-2011 set forth in the Commission's June 23, 2008 Order Establishing Energy Efficiency Portfolio Standard and Approving Programs.

Participation and Savings Goals - Electric Programs

Electric Programs	2009				2010				2011				2009 - 2011					
	Participants	Annualized MWh Savings	Lifetime MWh Savings	Participants	Annualized MWh Savings	Lifetime MWh Savings	Participants	Annualized MWh Savings	Lifetime MWh Savings	Participants	Annualized MWh Savings	Lifetime MWh Savings	Participants	Annualized MWh Savings	Lifetime MWh Savings	Participants	Annualized MWh Savings	Lifetime MWh Savings
Enhanced Home Sealing Incentives	360	676	13,522	660	1,239	24,790	660	1,239	24,790	660	1,239	24,790	1,680	3,155	63			
Residential ENERGY STAR® Products and Recycling Program	18,100	4,757	37,880	36,300	9,539	76,003	36,300	9,539	76,003	36,300	9,539	76,003	90,700	23,835	189			
Residential Internet Audit Program and E-Commerce Sales	50,000	3,001	18,006	50,000	3,001	18,006	50,000	3,001	18,006	50,000	3,001	18,006	150,000	9,003	54			
Residential Building Practices and Demonstration Program	50,000	8,100	8,100	50,000	8,100	8,100	50,000	8,100	8,100	50,000	8,100	8,100	150,000	24,300	24			
EnergyWise Program	1,750	2,378	39,146	3,600	4,892	80,529	3,600	4,892	80,529	3,600	4,892	80,529	8,950	12,163	200			
Residential Pricing Pilot with Load Control	139	0	0	833	0	0	833	0	0	833	0	0	1,000	0				
Energy Initiative	611	77,691	947,469	764	97,114	1,184,336	764	97,114	1,184,336	764	97,114	1,184,336	2,330	296,198	3,612			

Participants for the Residential Internet Audit Program and E-Commerce Sales represents products. Actual participation may be lower.

Participation and Savings Goals - Gas Programs

Gas Programs	2009				2010				2011				2009 - 2011					
	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings	Participants	Annualized MMBTtu Savings	Lifetime MMBTtu Savings
Enhanced Home Sealing Incentives	125	4,140	82,800	188	6,227	124,531	188	6,227	124,531	188	6,227	124,531	501	16,593	331			
Residential ENERGY STAR® Products Program	300	606	15,140	500	1,009	25,234	500	1,009	25,234	500	1,009	25,234	1,300	2,624	65			
Residential Low Income Program	1,340	0	0	1,340	0	0	1,340	0	0	1,340	0	0	4,020	0				
Residential Building Practices and Demonstration Program	51,080	73,152	76,554	50,000	69,750	69,750	50,000	69,750	69,750	50,000	69,750	69,750	151,080	212,652	216			
EnergyWise Program	1,800	9,396	131,544	1,800	9,396	131,544	1,800	9,396	131,544	1,800	9,396	131,544	5,400	28,188	394			
Commercial and Industrial Energy Efficiency Program	400	57,683	709,498	450	69,911	859,907	450	69,911	859,907	450	69,911	859,907	1,350	203,999	2,509			
Commercial High-Efficiency Heating and Water Heating Program	100	7,164	143,280	300	21,492	429,840	300	21,492	429,840	300	21,492	429,840	750	53,730	1,074			
Building Practices and Demonstration Program	15	19,047	259,038	15	19,046	259,029	15	19,046	259,029	15	19,046	259,029	44	57,139	777			

IV. Program Cost-Effectiveness

1. Plan Results

The Company has projected the expected benefits and costs associated with both the electric and natural gas energy efficiency programs and services that it proposes to administer in 2009 - 2011 using a Total Resource Cost (“TRC”) Test. The TRC Test is the primary test used by the New York Public Service Commission (the “Commission”).⁶ The following tables summarize the expected benefits, costs, and the benefit/cost ratios for the programs that the Company proposes to 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.

⁶ See Case 04-E-0572 – *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service*, Order On Demand Management Action Plan (issued and effective March 16, 2006).

Summary of Benefit, 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)
Electric Programs												
Enhanced Home Sealing Incentives	1.00	\$811	\$ 815	1.17	\$1,543	\$ 1,324	1.29	\$1,614	\$ 1,255	1.17	\$3,969	\$3,394
Residential ENERGY STAR® Products and Recycling Program	1.34	\$3,417	\$ 2,548	1.90	\$7,108	\$ 3,738	2.11	\$7,460	\$ 3,543	1.83	\$17,985	\$9,829
Residential Internet Audit Program and E-Commerce Sales	1.76	\$1,562	\$ 887	1.91	\$1,604	\$ 840	2.11	\$1,681	\$ 797	1.92	\$4,846	\$2,524
Residential Building Practices and Demonstration Program	1.05	\$911	\$ 865	1.07	\$880	\$ 819	1.16	\$897	\$ 777	1.09	\$2,688	\$2,461
Energy/Wise Program	1.01	\$2,839	\$ 2,812	1.02	\$6,068	\$ 5,966	1.12	\$6,352	\$ 5,655	1.06	\$13,259	\$14,432
Residential Pricing Pilot with Load Control	n/a	n/a	\$ 420	n/a	n/a	\$ 1,767	n/a	n/a	\$ 118	n/a	n/a	\$2,305
Energy Initiative	2.97	\$94,261	\$ 31,745	3.25	\$122,239	\$ 37,613	3.59	\$159,898	\$ 44,565	3.30	\$376,397	\$113,923
Grand Total	2.59	\$103,802	\$40,091	2.68	\$139,441	\$52,067	3.14	\$177,901	\$56,709	2.83	\$421,144	\$148,867

Total NPV cost is the net present value of utility and participant costs
Residential Pricing Pilot with Load Control includes costs for the program but does not include expected benefits.

Summary of Benefit, 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)
Gas Programs												
Enhanced Home Sealing Incentives	0.89	\$541	\$ 609	1.33	\$833	\$ 628	1.50	\$857	\$ 572	1.23	\$2,231	\$1,808
Residential ENERGY STAR® Products Program	1.32	\$107	\$ 81	1.62	\$184	\$ 113	1.77	\$189	\$ 107	1.59	\$480	\$302
Residential Low Income Program	n/a	n/a	\$ 5,000	n/a	n/a	\$ 4,739	n/a	n/a	\$ 4,492	n/a	n/a	\$ 14,232
Residential Building Practices and Demonstration Program	1.20	\$884	\$ 736	1.47	\$783	\$ 533	1.52	\$771	\$ 505	1.37	\$2,438	\$1,774
Energy/Wise Program	0.94	\$976	\$ 1,038	1.01	\$991	\$ 983	1.09	\$1,015	\$ 932	1.01	\$2,982	\$2,952
Commercial and Industrial Energy Efficiency Program	1.40	\$5,495	\$ 3,926	1.57	\$6,741	\$ 4,280	1.72	\$7,518	\$ 4,361	1.57	\$19,754	\$12,567
Commercial High-Efficiency Heating and Water Heating Program	2.17	\$937	\$ 432	2.96	\$2,874	\$ 970	3.16	\$3,450	\$ 1,092	2.91	\$7,260	\$2,494
Building Practices and Demonstration Program	3.11	\$1,940	\$ 623	3.34	\$1,969	\$ 589	3.61	\$2,015	\$ 558	3.35	\$5,924	\$1,770
Grand Total	0.87	\$10,881	\$12,445	1.12	\$14,374	\$12,835	1.25	\$15,814	\$12,619	1.08	\$41,069	\$37,899

Total NPV cost is the net present value of utility and participant costs
Residential Building Practices and Demonstration Program includes expected benefits and costs for the Gas Heating Equipment Tune Up.
Residential Low Income Program includes costs for the program but does not include expected benefits.

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 net savings reflect findings from evaluation studies that National Grid has conducted in New England. 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 expedited electric energy efficiency programs were developed in the Report on “Niagara Mohawk Avoided Electricity and Natural Gas Costs” dated March 31, 2008 as prepared by Synapse Energy Economics, Inc. (the “Avoided Cost Report”). This study is provided in Appendix D attached hereto. The avoided costs used to determine program cost-effectiveness for the expedited natural gas energy efficiency programs were developed by DPS Staff, inflated by 20% to account for increased fuel prices since DPS Staff conducted their analysis.

Avoided electric energy and capacity values used for this three-year plan are from Table 7 of the Avoided Cost Report. Table 7 presents avoided electric energy and capacity values for the Company’s service area in New York in 2007 dollars. The avoided costs in Table 7 incorporate a reserve margin, pool transmission losses incurred from the generator to the point of delivery to the distribution companies, and a retail adder as recommended by Synapse. The New York Independent System Operator (“NYISO”) reserve margins are incorporated into the capacity values, since energy efficiency avoids the back-up reserves for that generation as well as the generation itself. The avoided energy costs include the expected cost of complying with regional and federal carbon control requirements. The avoided costs do not include non-pool transmission losses or distribution losses. They also do not include company specific avoided transmission and distribution capacity values.

Table 7 also provides CO₂ values that are termed “CO₂ Related Costs NOT REFLECTED IN WHOLESALE POWER PRICES.” These additional values reflect the difference between what is considered to be the cost of controlling carbon to a sustainable level and the costs of carbon mitigation, based on anticipated Regional Greenhouse Gas Initiative (“RGGI”) and federal requirements, internalized into the avoided energy costs.

Avoided natural gas cost values used for the three-year plan were developed by DPS Staff and have been increased by 20% to account for fuel price increases that occurred after these avoided costs were developed.

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

Avoided transmission and distribution capacity values used in the analysis are determined from a spreadsheet tool that was developed in 2005 by ICF International, Inc., the consultant that performed the biennial avoided cost study for New England’s energy efficiency program administrators. The tool calculates an annualized value of avoided transmission and distribution capacity values from company specific inputs of historic and forecast capital expenditures and loads, as well as a carrying charge calculated from applicable tax rates and Federal Energy Regulatory Commission (“FERC”) Form 1 accounting data. National Grid used this tool to develop its values of \$18.07/kW for avoided transmission capacity and \$63.87/kW for avoided distribution capacity in New York. These are in 2006 dollars and have been escalated to 2009 dollars for the benefit/cost analyses. These values are assumed to be constant in real dollars throughout the analysis period.

Demand and energy loss factors are applied to the avoided costs to account for local transmission and distribution losses from the point of delivery to the distribution company’s system to the ultimate customer’s facility.

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 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.

Separate calculations of benefits and cost-effectiveness are provided for the electric energy efficiency programs and natural gas energy efficiency programs. The expedited natural gas energy efficiency program is expected to produce electricity savings in addition to natural gas savings. All of the resource benefits produced by a program are shown with that program.

Avoided Benefits Calculations:

Avoided Electric Energy Benefits. The Avoided Cost Report identified four electric energy costing periods consistent with NYISO definitions. Energy prices are divided into the following four time periods:

- Winter Peak: October – May, 6:00 a.m. – 10:00 p.m., weekdays excluding holidays.
- Winter Off-Peak: October – May; 10:00 p.m. – 6:00 a.m., weekdays. Also including all weekends and NYISO-defined holidays.
- Summer Peak: June – September, 6:00 a.m. – 10:00 p.m., weekdays excluding holidays.
- Summer Off-Peak: June – September; 10:00 p.m. – 6:00 a.m., weekdays. Also including all weekends and NYISO-defined holidays.

Net energy savings for a program (or measures aggregated within a program) are allocated to each one of these time periods and multiplied by the appropriate avoided energy value. The dollar benefits are then grossed up using the appropriate loss factors.

- Summer Peak Energy Benefit (\$) = kWhNet * Energy%_{SumPk} * SumPk\$/kWh_(@Life) * (1 + %Losses_{SumPk-kWh})
- Summer OffPeak Energy Benefit (\$) = kWhNet * Energy%_{SumOffPk} * SumOffPk\$/kWh_(@Life) * (1 + %Losses_{SumOffPk-kWh})
- Winter Peak Energy Benefit (\$) = kWhNet * Energy%_{WinPk} * WinPk\$/kWh_(@Life) * (1 + %Losses_{WinPk-kWh})
- Winter OffPeak Energy Benefit (\$) = kWhNet * Energy%_{WinOffPk} * WinOffPk\$/kWh_(@Life) * (1 + %Losses_{WinOffPk-kWh})

Avoided Generation Capacity Benefits. Capacity benefits from energy efficiency accrue because demand reduction reduces the NYISO's Unforced Capacity ("UCAP") requirement. The UCAP requirement is based on load's contribution to the system peak, which, for the NYISO, is the summer peak. Therefore, capacity benefits accrue only from summer peak demand reduction and are determined by multiplying net peak summer demand savings by avoided generating capacity values from the Avoided Cost Report and capacity loss factor representing losses downstream of the NYISO delivery point. There is no winter generation capacity benefit.

- Generation Capacity Benefit(\$) = kWSum * AnnualMarketCapValue\$/kW_(@Life) * (1 + %Losses_{SumkW})

Avoided Transmission and Distribution Capacity Benefits. These values are calculated similarly to the avoided generation capacity values, using the Company's specific avoided transmission and distribution ("T&D") capacity values. In theory, the benefit could be allocated to summer and winter periods, depending on the relation between summer and winter peaks on the local system. However, in recent years, the Company's system in New York has been summer peaking. Therefore, the T&D benefits will be exclusively associated with summer demand reduction.

- Transmission Benefit (\$) = (kWSum * Trans\$/kW_(@Life)) * [1 + (Losses_{SumkWTrans})]
- Distribution Benefit (\$) = (kWSum * Dist\$/kW_(@Life)) * [1 + (Losses_{SumkWDist})]

Natural Gas Benefits. National Grid has used the natural gas avoided costs developed by DPS Staff to value the savings anticipated from its expedited natural gas energy efficiency program. The dollar value of natural gas benefits is calculated as

- Natural Gas Benefits (\$) = MMBTU_NetGas * Gas\$/MMBTU

Projected Carbon Reductions From Proposed Programs. The avoided energy costs include the expected cost of complying with regional and federal carbon control requirements. Table 7 of attached Appendix D also provides CO₂ values that are termed “CO₂ Related Costs NOT REFLECTED IN WHOLESALE POWER PRICES.” These additional values reflect the difference between what is considered to be the cost of controlling carbon to a sustainable level and the costs of carbon mitigation, based on anticipated Regional Greenhouse Gas Initiative (“RGGI”) and federal requirements, internalized into the avoided energy costs.

Table 6 of attached Appendix F presents an Alternate Total Resource Cost Test which includes the benefit of carbon reduction. Since the avoided energy costs internalize the expected cost of carbon in the above manner, assuming an additional carbon value of \$15 per ton would overstate the benefits. The following table compares the expected cost of carbon per ton internalized in the avoided energy costs with the carbon value of \$15 per ton and presents the value that was used to calculate carbon benefit for electric efficiency programs in Table 6 of Appendix F.

	NY Carbon Benefit per ton	Synapse AESC	NY Carbon Benefit per ton net AESC
2008	15.00	0.00	15.00
2009	15.00	2.21	12.79
2010	15.00	2.37	12.63
2011	15.00	2.53	12.47
2012	15.00	9.46	5.54
2013	15.00	11.56	3.44
2014	15.00	13.66	1.34
2015	15.00	15.76	0.00
2016	15.00	17.86	0.00
2017	15.00	19.96	0.00
2018	15.00	22.06	0.00
2019	15.00	24.16	0.00
2020	15.00	26.27	0.00
2021	15.00	27.32	0.00
2022	15.00	28.37	0.00
2023	15.00	29.42	0.00
2024	15.00	30.47	0.00
2025	15.00	31.52	0.00
2026	15.00	32.57	0.00
2027	15.00	33.62	0.00
2028	15.00	34.67	0.00
2029	15.00	35.72	0.00
2030	15.00	36.77	0.00
2031	15.00	36.77	0.00
2032	15.00	36.77	0.00
2033	15.00	36.77	0.00
2034	15.00	36.77	0.00
2035	15.00	36.77	0.00
2036	15.00	36.77	0.00
2037	15.00	36.77	0.00
2038	15.00	36.77	0.00
2039	15.00	36.77	0.00
2040	15.00	36.77	0.00

The value of carbon is calculated by assuming 0.5 tons of carbon for each annual MWh saved in each electric efficiency program. The value of carbon for each gas program is calculated by assuming 58.5 tons of carbon per billion BTUs saved. Since the natural gas avoided energy costs did not internalize the expected cost of carbon, each ton of carbon saved through the gas energy efficiency programs is valued using \$15 per ton as

recommended in the Commission's June 23, 2008 Order in Case 07-M-0548 (the "June 23, 2008 Order").⁷ This value is provided in Table 7 of attached Appendix F.

Other Screening Metrics. Appendix 3 in the Commission's June 23, 2008 Order identified screening metrics for each program and for the suite of proposed programs to be included in energy efficiency program proposals submitted by the utilities. In addition to benefit cost ratios with and without a carbon externality added, these metrics include the following for each proposed electric and gas energy efficiency program:

- Electric rate impact
- Electric rate impact per MWh saved
- Electric rate impact per MW saved
- MWh saved in 2015
- MW of coincident NYISO peak saved in 2015
- Peak coincidence factor of MWh saved in 2015
- Number of participants as a percentage of the number of customers in the class as of 2015
- Gas rate impact
- Gas rate impact per MBTU saved, levelized over the years through 2015.

Metrics required for the suite of proposed energy efficiency programs as a whole include the following:

- Electric rate impact as of year 2015
- Gas rate impact as of the year 2015.

These other screening metrics for the electric and gas energy efficiency programs proposed herein are provided in attached Appendix F.

⁷ Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Establishing Energy Efficiency Portfolio Standard and Approving Programs (issued and effective June 23, 2008) (the "June 23, 2008 Order").

V. Program Descriptions

On August 22, 2008, National Grid filed proposed “expedited” electric and gas programs with the Commission. In addition to those programs, National Grid proposes to provide its customers with a broad suite of electric and gas energy efficiency programs beginning January 1, 2009. Descriptions of these programs follow.

a. Electric Programs

1. Residential Programs

National Grid proposes to offer the following electric residential energy efficiency programs to its customers beginning in January 2009:

- Enhanced Home Sealing Incentives Program
- Residential ENERGY STAR® Products and Recycling Program
- Residential Internet Audit and E-Commerce Sales
- Residential Building Practices and Demonstration Programs
- EnergyWise Program
- Residential Pricing Pilot with Load Control

Each of these programs is described below.

Enhanced Home Sealing Incentives Program

Purpose

The purpose of the program is to encourage customers and contractors who are unable or unwilling to participate in Home Performance with ENERGY STAR® to complete critical insulation, air sealing, ventilation, and health and safety measures

Coordination

This program will be coordinated with NYSERDA to ensure there is no double counting of savings and as little customer confusion as possible. National Grid will encourage residential customers and contractors who are not currently participating in NYSERDA's Home Performance with ENERGY STAR[®] program to do so, and if they are not able to do so, to ensure that safe insulation and air sealing work is alternatively completed through this program. National Grid will also coordinate with its own natural gas energy efficiency programs. National Grid will refer low income customers to NYSERDA's EmPower New YorkSM or Assisted Home Performance with ENERGY STAR[®] program as appropriate, to ensure they receive the lowest cost and most comprehensive service for which the customer is qualified.

Co-Benefits

Adding insulation and air sealing to existing homes increases the value and durability of housing stock. It also may improve health through the control of existing moisture problems and the identification of the potential for carbon monoxide poisoning or other unhealthy existing conditions. Insulation and air sealing reduces the heating and air conditioning bills of residents, resulting in more money that can be spent on other household needs and potentially improving the local economy.

Program Administration and Delivery

This program will be administered by vendors selected through a competitive solicitation by National Grid. National Grid will inspect 10% of the participant projects completed in this program through another third party vendor. Electric and gas measures will be addressed during the same home visit, allowing for a single customer contact.

Target Market and Marketing Approach

The target market for this program will be residential customers and contractors who are not currently participating in NYSERDA's Home Performance with ENERGY STAR® program to encourage them to participate, and if they are not able to do so, to ensure that safe insulation and air sealing work is completed. Target customers will be those with electric heat and/or central air conditioning. National Grid estimates that about 8% of its customers have electric heat and about 26% of its customers have central air conditioning. Outreach will include direct mail, bill inserts, and media advertising.

Target End Uses, Recommended Technologies, and Financial Incentives

Work must be performed by BPI-certified contractors in order to be eligible for an incentive. National Grid will initially offer a 75% incentive up to \$5,000 for insulation, blower-door assisted air sealing, mechanical ventilation, and related health and safety items in electrically heated and/or centrally air conditioned homes. This level of incentive was supported by the NY DPS staff in the Company's Interim Energy Efficiency Joint Proposal filed with the Commission on August 1, 2008. In the second and third years, National Grid will lower the incentive to 50% up to \$3,000. This level of incentive was recommended by NYSERDA to improve coordination of all programs.

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. 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 by year-end 2009 or early 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.
- 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 the Enhanced Home Sealing Incentives Program in 2010 through 2011 using industry-accepted methods of analysis.

The Company will explore conducting this evaluation with other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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 mid-year 2011.
- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.

- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,⁸ the Company's goal for estimating gross savings at the program level is at the 90% confidence interval, within +/- 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 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 insure data reliability to the greatest practical extent, including methods for minimizing systematic and random error and techniques for reducing

⁸ See Working Group III Final Report, dated December 5, 2007, at p. 37.

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:⁹
 - 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
 - Project completion date
 - Evaluation inspection/commissioning date
 - Date of evaluation of measure or program
 - Types of evaluation conducted
 - Result of evaluation

⁹ Please note that not all the measure-specific data listed here are going to be captured for this program.

- **Schedule and Deliverable Dates.** The Company anticipates initiating a process evaluation early in 2009 and an impact evaluation in the fall of 2010. Final results of the process evaluation are anticipated by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by mid-year 2011.
- **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Residential ENERGY STAR[®] Products and Recycling Program

Purpose

The purpose of this program is to encourage customers to choose ENERGY STAR[®] products, which will decrease their electric energy use, system peak demand, and also support ENERGY STAR[®] market transformation efforts. The program will also help customers recycle inefficient or used equipment which may contain toxic components such as PCBs and mercury.

National Grid will provide incentives and encouragement to its customers to replace inefficient second refrigerators and freezers, windows and thermostats for electrically heated and/or air conditioned homes, room air conditioners, dehumidifiers, halogen torchieres, and incandescent lighting. ENERGY STAR[®] lighting promotions will include the recycling of fluorescent lamps to avoid adding mercury to the water stream. Other cost-effective products may be added to this program as they are identified and if sufficient funding is available. Programs that include an in-home appliance pick-up component will include recycling of inefficient products and the delivery of two ENERGY STAR[®] compact fluorescent light bulbs per household. National Grid will also work with retailers to promote ENERGY STAR[®] windows, thermostats, and ENERGY STAR[®] lighting where recycling efforts are included.

Coordination

This program relies on the in-home pick-up of inefficient equipment and delivery of ENERGY STAR® light bulbs and recycling of toxic products. Efforts will be coordinated with NYSERDA's retailer programs to encourage customers to find efficient products at local retailers. National Grid will coordinate with its own gas energy efficiency programs and other utility programs.

Co-Benefits

Many toxic products exist in the home that customers are unable to easily dispose of. Older second refrigerators may contain banned refrigerant and other hazardous materials. By allowing customers to also recycle burnt-out compact fluorescent lamps ("CFLs") as part of the refrigerator pick-up and through local retailers, these programs will help reduce toxic chemicals going into the household waste stream. This can help lower costs for towns and also reduce environmental pollution and human exposure to toxic chemicals.

Program Administration and Delivery

This program will be administered by the Company using vendors selected through a competitive solicitation. National Grid may target specific areas of its service territory for these services in order to ensure cost-effective services.

Target Market and Marketing Approach

The Company will promote ENERGY STAR® products using various methods including the Company website, electronic newsletters, bill inserts, and cooperative promotions with retailers. National Grid will also use advertising to publicize the benefits of ENERGY STAR® and individual program components.

Target End Uses, Recommended Technologies, and Financial Incentives

National Grid will provide incentives and encouragement to its customers to replace inefficient second refrigerators and freezers, windows and thermostats for electrically heated and/or air conditioned homes, room air conditioners, dehumidifiers, halogen torchieres, and incandescent lighting. Programs that include an in-home appliance pick-up component will include recycling of inefficient products.

The ENERGY STAR[®] Replacement Window Program will provide a \$10 mail-in incentive for each high-efficiency window installed in existing residential customers' homes. Eligible participants must be residential heating customers who have installed ENERGY STAR[®] labeled replacement windows with a U-factor of .35 or less¹⁰ during the program year as specified on the incentive form. Windows installed in new construction or home additions will not qualify for the per window incentive. Each customer will be subject to a \$500 maximum incentive per account. National Grid will work with contractors for multi-family or other large residential renovation projects on a case-by-case basis, and may provide different incentive levels for cost-effective projects.

When applying for this incentive, residential customers will be required to submit proof-of-purchase, as well as proof of the windows' U-factor. Efficiency ratings can be confirmed by the customer using either a copy of the National Fenestration Rating Council ("NFRC") label from the window, or by providing detailed specifications from the window manufacturer confirming the window's U-factor. The Company plans to conduct inspections of the first two installations per new participating installation contractor. In addition, random inspections of self-installations may be administered to verify that the proper windows were installed.

¹⁰ The U-Factor is a measurement of thermal conductivity. A lower U-factor indicates a higher level of window insulation.

Customers will be able to receive \$25 for up to two (2) ENERGY STAR® labeled programmable thermostats, where the rebate does not exceed the price of the thermostat(s). Most sales will be through retail outlets, but program information will also be included in marketing for the high efficiency heating and controls programs. Savings for thermostats will be counted in this program.

The incentives to be offered for the remaining products will be determined by market conditions and delivery mechanisms following a competitive bidding process which will inform the incremental cost for those measures.

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. 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 by year-end 2009 or early 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.
- 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 completing an impact evaluation of the Residential ENERGY STAR® Products and Recycling Program in 2010 through 2011 using industry-accepted methods of analysis. The Impact Evaluation will quantify the savings attributable to program efforts based on relevant market indicators¹¹ for the ENERGY STAR® products promoted through the program, information about rebated products, and observed or reported operation of promoted equipment in homes. The impact evaluation will also include an assessment of savings from second refrigerators and freezers that are removed from customer homes.

¹¹ Relevant market indicators may include sales data about qualifying products from participating retailers compared to sales data in states that do not have active ENERGY STAR® programs and survey-derived ENERGY STAR® awareness statistics.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible evaluation approaches may include engineering analysis, synthesis of secondary information available about savings, metering, or some other approach. This analysis may include market analyses, surveys with program participants and with trade allies such as retailers and distributors, and other appropriate methods 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 mid to late 2011.
- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.

- **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,¹² the Company's goal for estimating gross savings at the program level is at the 90% confidence interval, within +/- 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 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 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 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

¹² See Working Group III Final Report, dated December 5, 2007, at p. 37.

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:¹³

- 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
 - 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 by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by year-end 2011 or early in 2012.

¹³ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Residential Low Income Program¹⁴

Purpose

National Grid recognizes that low-income customers are severely impacted by high energy bills and often struggle to keep their families warm and safe. The Company views the funding of low-income services as a high priority for energy efficiency. National Grid seeks to ensure that low income customers heating with electricity receive services through the Assisted Home Performance with ENERGY STAR[®] and EmPower New YorkSM programs, (each individually and collectively the “Program” and collectively, the “Programs”), administered by NYSERDA, as well as other services to be developed collaboratively. The Company currently markets these program services to its customers and intends to continue these marketing efforts.

NYSERDA has indicated that it has sufficient funding to provide needed services to National Grid’s upstate New York customers. Therefore, no additional funding for these efforts is proposed here. National Grid does not propose to claim savings from this effort.

Residential Internet Audit Program and E-Commerce Sales

Purpose

The purpose of this program is to provide customers with easy access to information about energy usage in their homes, and encourage them to participate in the National Grid and

¹⁴ In discussions with a NYSERDA representative on 9/12/08, National Grid was advised that there was very little electric heat unserved in the Niagara Mohawk service territory, and was advised not to include Low Income as an electric energy efficiency program in this filing.

NYSERDA energy efficiency programs. This program also provides easy access to on-line purchases of CFLs, weatherization materials, and other do-it-yourself products.

Coordination

National Grid will provide links to the NYSERDA website and National Grid's websites where energy efficiency information and program offerings are explained.

Co-Benefits

Customers who implement energy efficiency practices will contribute to the improvement of the area's housing stock. Reduced residents' heating and air conditioning bills result in more money that can be spent on other household needs and potentially improving the local economy.

Program Administration and Delivery

This program will be administered by the Company using an internet and software vendor selected through a competitive solicitation. National Grid intends to provide customers with access to its existing services available to downstate New York and New England customers, and may modify the software and delivery vendor through a competitive bid process.

Target Market and Marketing Approach

The website address will be included on all of the Company's residential energy efficiency program literature. A Spanish-language version may also be made available for on-line use. Several thousand customers have participated in this program in National Grid's downstate New York territory, and tens of thousands have participated in New England. Customers are interested in easy access to information about energy efficiency.

Target End Uses, Recommended Technologies, and Financial Incentives

This self-service audit tool will allow customers to complete an electronic survey about their home, including age, size, appliances and average use patterns. The process starts with twelve basic questions to produce a report that compares the participant's home with similar homes and to generate their "Top Ways to Save," including estimated annual cost savings if recommended measures are taken.

Subsequent steps will require more detailed information from the customer, resulting in more personalized tips to improve the home's efficiency. The analyzer will be fuel-blind and will list opportunities to save in heating/cooling, lighting, water use, etc. The customer will also receive information about any relevant energy efficiency opportunities such as those offered through National Grid and NYSERDA energy efficiency programs.

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. 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 by year-end 2009 or early 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.

As part of the process evaluation plan, the Company will survey participating and non-participating customers.

Year Two - Three Evaluation

Impact Evaluation

The Company anticipates completing an impact evaluation of the Residential Internet Audit Program and E-Commerce Sales in 2010 through 2011 using industry-accepted methods of analysis. The Impact Evaluation will quantify the savings attributable to program efforts based on surveys with customers that will be used to identify recommended actions from the audit that participating customers acted on and the savings realized from following those recommendations. The impact evaluation will also include an assessment of the savings related to products sold through the e-commerce service in the program.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. A survey based approach possibly supplemented by site visits is anticipated. 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.
- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,¹⁵ 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 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 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 contractor will be asked to include a discussion about threats to data reliability in their reports.

- **Data Collection and Management Process.** The Company will track "hits" on the internet audit site, e-commerce sales resulting from customer participation in the program, and data that will be collected from site visits and surveys of participants and non-participants. Measure-specific data as appropriate will also be captured. Examples of measure-specific data that will be collected can include:¹⁶
 - Date of contract/agreement to install measure(s)
 - Date of beginning of installation process

¹⁵ See Working Group III Final Report, dated December 5, 2007, at p. 37.

¹⁶ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- 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
 - 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 or early in 2011. Final results of the process evaluation are anticipated by year-end 2009 or early 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. Reporting is discussed below in Chapter VI. Evaluation and Reporting.

Residential Building Practices and Demonstration Program

Purpose

The purpose of this program is to provide incentives to customers and support to contractors to introduce new, highly efficient products and services to National Grid customers. This will include installation pilot programs and other demonstration projects.

National Grid will also offer a pilot program to test the Positive Energy Home Energy Reports and complementary services. Positive Energy provides a home energy efficiency paper report and website that benchmarks individual customer use compared to use by others in the surrounding neighborhood and uses this energy profile to customize customer target offers, coupons, and rebates.

Coordination and Co-Benefits

National Grid will share results from the demonstration projects with the DPS Staff, other utilities, and NYSERDA. This will allow for discussion and refinement of these offerings and may result in new programs that can be offered to all New York customers.

Program Administration and Delivery

This program will be administered by the Company using vendors as needed. The program will demonstrate new and/or under-utilized energy efficiency practices and equipment that can enhance a home's overall energy savings potential. Eligible participants in this program will include homeowners, landlords and new home builders. Each participant may be asked to allow monitoring of the installation and publication of the results in case study format.

Target Market and Marketing Approach

Marketing of the program will rely on networking with those in the industry who are developing or offering new or under-utilized electric energy efficiency technologies, as well as other interested organizations, such as the Northeast Sustainable Energy Association (“NESEA”), Affordable Comfort, Inc (“ACI”), and the U.S. Green Building Councils’ Leadership in Energy and Environmental Design (“LEED”).

For the Positive Energy pilot, National Grid will select 50,000 combined electric and gas customers for services. The pilot will use direct mail and website components to encourage customers to participate in all the National Grid energy efficiency programs.

Target End Uses, Recommended Technologies, and Financial Incentives

The focus of this program is new technology that is not yet proven or that may be subsequently identified during the approved program delivery period. For example, National Grid may offer Blue Line Innovations’ Power Cost Monitors to residential customers and potentially other technology that provides customers with information on their current electricity consumption and helps reduce system peak demand through this program. National Grid will also explore the installation and testing of additional products such as ductless mini-split heat pumps, solar water heating, heat pump water heating, light emitting diode lighting products, and other technologies as they emerge.

The Positive Energy pilot will use several components designed to work together to drive energy efficiency gains and customers understanding. These will include an energy comparison report, progress tracker, targeted behavioral tips, and targeted energy efficiency programs and coupons.

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. 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 by year-end 2009 or early 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.

- 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 impact evaluation efforts will be an on-going and regular focus of this R&D focused program.

- **Impact Evaluation Methodology.** An independent evaluation consultant will be hired through a competitive solicitation. The Company anticipates that the selected evaluation firm will participate in project planning efforts so that key findings and savings from efforts are well-documented. Impact evaluation approaches appropriate for the unique measures installed through this type of program are anticipated to produce results that meet the precision requirements set forth in the guidelines issued through the Evaluation Advisory Group. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,¹⁷ 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 consistency with the Evaluation Advisory Group guidelines, the requirement to maintain a 90% confidence interval with +/- 10% precision and the overall need to

¹⁷ See Working Group III Final Report, dated December 5, 2007, at p. 37.

identify and mitigate threats to reliability of the Results. The evaluation contractor 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 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:¹⁸
 - 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
 - Project completion date
 - Evaluation inspection/commissioning date

¹⁸ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- 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 early in 2009 and an impact evaluation in the fall of 2010. Final results of the process evaluation are anticipated by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

EnergyWise Program

Purpose

This program provides a free, comprehensive assessment of a multifamily building's energy use and recommends various ways customers can improve their building's energy efficiency. Customers will be given a detailed report containing the recommendations of the audit including information about improving the efficiency of their building 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 buildings 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

National Grid will coordinate with NYSERDA to determine the most appropriate service for specific multifamily customers. Some customers might be better served by

NYSERDA's Multifamily Performance Program, and National Grid will refer those customers to that NYSEERDA program.

Co-Benefits

Tenants, a typically underserved market, will benefit from improvements made by their utility and landlord in their buildings. 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 building 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 electric and gas program, serving buildings that use both electric and gas.

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. The program will be coordinated with NYSEERDA's multifamily building 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. On the electric side, this will be coordinated with 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 equipment through the Residential High Efficiency Heating and Water Heating and Controls Program. Facilities with central heating plants and domestic hot water systems that are interested in natural gas savings measures will be served through the Commercial High-Efficiency Heating and Commercial Energy Efficiency Programs.

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. 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 by year-end 2009 or early 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.
- 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 the

Company has 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. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.

- **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,¹⁹ 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 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 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 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

¹⁹ See Working Group III Final Report, dated December 5, 2007, at p. 37.

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:²⁰

- 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
 - 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 by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

²⁰ Please note that not of all the measure-specific data listed here are going to be captured for this program.

Residential Pricing Pilot with Load Control

In order to test consumer behavior and their response to hourly or other types of time of day pricing and automated load controls, the Company proposes to provide up to 1,000 residential customers who currently have broadband connectivity with tools to show their electric energy use in real time, load control devices to assist them in voluntarily controlling site loads (i.e. window AC units, central HVAC, pool pumps, and other appliances), and an optional tariff, yet to be identified, that would provide an incentive to manage their loads. This tariff may be a critical peak pricing, a time of use, or an hourly pricing tariff. This tariff would be shadow billed such that participating customers would be protected from paying more than they would under standard tariffs by being able to earn a credit if they do better with hourly pricing, but not paying more than the standard tariff. Based on other studies done by home display unit manufacturers (e.g., Blue Line Innovations), simply providing a customer with their real time usage information will provide a 6% energy savings.²¹ With specific load management tools and an optional pricing tariff, this could be as high as 15%.²² The average residential customer in New York uses 667 kWh per month. If the studies are correct, energy savings of 40 to 100 kWh per month could be realized per pilot participant. With the proposed 1,000 customer pilot, energy savings of 40,000 to 100,000 kWh could be realized. Taking a conservative approach and assuming 80 kWh per participant, the pilot would achieve 960,000 kWh per year in savings. There are additional benefits beyond energy use reductions that may result from these systems, such as emergency demand response capabilities.

²¹ Hydro One Study, " The Impact of Real-Time Feedback on Residential Energy Consumption: The Hydro One Pilot," March 2006. The study is available online at

<http://www.energetics.com/madri/pdfs/ChartwellHydroOneMonitoringProgram.pdf>.

²²Observed Temperature Effects on Hourly Residential Electric Load Reduction in Response to an Experimental Critical Peak Pricing Tariff" By Karen Herter (Energy and Resources Group, University of California at Berkeley, 310 Barrows Hall, Berkeley, CA 94720, Lawrence Berkeley National Laboratory, MS3111, One Cyclotron Road, Berkeley, CA 94720), Patrick McAuliffe and Arthur Rosenfeld (California Energy Commission, MS-35, Sacramento, CA 95814); LBNL-58956, Date: November 2005
The study is available online at <http://drcc.lbl.gov/pubs/58956.pdf>.

The tools considered in this pilot may include a combination of advanced meters or systems able to track usage by hour. The devices could be plug-in or hard wired ZigBee-enabled load control devices and appliances, home display units, smart thermostats, or other tools that are evolving in the marketplace. In addition, with the use of a web portal, participating customers could monitor their usage and control the devices in their home either from their home personal computer, or remotely by accessing the password protected web portal. Control of devices could be programmed to react to price signals, as well as other control strategies. Working with participating customers, the Company will try various techniques to maximize energy savings while maintaining comfort in the home. The estimated cost of products and services provided to pilot participants is expected to range between \$1,500 to 2,000 per home, with a total of approximately \$1,800,000 budgeted for the pilot.

Evaluation Plan

Year One to Year Two Evaluation

Process Evaluation

The Company plans to initiate an evaluation in support of the pilot, but since it is likely that work at customer sites and with customers will primarily occur near the end of year one and in year two, the Company anticipates the process evaluation will be completed over the first two years.

In 2009, evaluation efforts will focus on the creation of a detailed process evaluation plan for the pilot and identifying how the pilot is operating during the start-up phase, with the objective of identifying improvements that can be made to pilot efforts as well as potential larger scale implementation efforts that may result from a successful pilot. The Company anticipates that year one pilot activities will consist mainly of completing a technology evaluation, determining the most beneficial and appropriate pilot location and scope, related RFP development and implementation, development of a marketing plan, and

initiating the necessary back office integration that will be needed to provide the hourly (shadow) billing infrastructure.

The Company's plan for evaluating these activities is to hire an independent evaluation expert through a competitive solicitation to complete this work as part of an overall process evaluation as detailed below. An RFP will be issued shortly after the Commission authorizes the Company to implement this pilot. 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. A final report summarizing results from the process evaluation will likely be completed by year-end 2010.

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

- Appropriateness and completeness of pilot technical requirements
- Back office (billing and IT integration efforts), level of success, and lessons learned
- Methodology and effectiveness of pilot RFP creation and evaluation of responses
- Initial level of customer satisfaction

Year Two - Three Evaluation

The Process evaluation will continue in year two and will include:

- 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.
- 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,

Impact Evaluation

The Company anticipates evaluating savings from the pilot, potentially in conjunction with its New England residential hourly billing and load control efforts. The Company anticipates focusing impact evaluation efforts on pilot energy savings as well as the ancillary benefits of direct load control and hourly pricing. Those ancillary benefits may include reduced bills resulting from load shifting due to hourly price signals, increased load factors resulting in reduced need for peaking generation and any financial or reliability benefits that may result from the utilization of pilot infrastructure for demand response.

The evaluation technique to be used will be tailored to the unique attributes of the pilot, including energy reduction, price response, and potentially demand response. In this case, National Grid will also evaluate kW reductions from customer- and utility-triggered load curtailment events under a variety of hourly prices, weather conditions, and times of day. In addition, any customer over-riding of load curtailment events will be tracked.

- **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. In addition, the Company anticipates that the hardware and software that will be deployed as part of the pilot will allow for automated and custom evaluation reporting that will assist the consultant. 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. In addition, National Grid will attempt to determine free-ridership and spillover related to pilot efforts through the use of customer surveys or some other technique appropriate to this effort.

The results of the impact evaluation will be used to refine expectations about future program savings, and will be used to help determine if the pilot should be expanded to a large scale deployment and if so, how it should be modified. Results from the impact studies are anticipated by late 2011 or early 2012.

- **Net to Gross Analysis.** Due to its nature as a pilot, the Company has not included savings estimates in its filing. Proposed approaches for assessing achieved net savings from pilot efforts are described above.
- **Benefit Cost Analysis.** The Company will conduct an assessment of benefits and costs as part of the pilot evaluation effort informed by its impact evaluation findings. The Company has not attempted to assess benefits and costs at this time given the uncertainty of customer response to the proposed effort.
- **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,²³ 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 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 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 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 enrollment forms, pilot reporting capabilities, 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:²⁴
 - Date of contract/agreement to install measure(s)
 - Date of beginning of installation process
 - Installation completion date

²³ See Working Group III Final Report, dated December 5, 2007, at p. 37.

²⁴ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- 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
 - Project completion date
 - Evaluation inspection/commissioning date
 - Date of evaluation of measure or program
 - Types of evaluation conducted
 - Result of evaluation
 - Additional data pertaining to the active load control nature of the pilot, such as demand response performance and savings due to hourly pricing
- **Schedule and Deliverable Dates.** The Company anticipates initiating a process evaluation in 2009 – 2010 and an impact evaluation in 2010 - 2011. Final results of the process evaluation are anticipated by year-end 2010 or early in 2011. 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

2. Commercial and Industrial Programs

In addition to the Small Business Services Program which the Company filed as an expedited program, National Grid proposes to implement the Energy Initiative Program, a retrofit program for its large commercial and industrial customers. This program is described below.

Energy Initiative

Purpose

This retrofit program focuses on energy efficiency opportunities associated with existing mechanical and electrical systems in commercial, industrial, agriculture, governmental, and institutional buildings. Energy Initiative 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.

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 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 offered include:

- Financial Incentives: Reduce the cost barrier to investing in energy efficiency.

- **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.
- **Commissioning:** Ensures that the design and systems specified for efficient buildings operate as intended by the design professionals.

The Company's account management staff provides marketing, sales, and project administration functions for Energy Initiative. Their regular contact with customers and familiarity with customers' operations position them to assist customers with pro-actively identifying energy efficiency opportunities. Account management staff also seeks assistance in identifying energy efficiency opportunities from business partners such as Project Expeditors.²⁵ 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. 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.

²⁵ Project Expeditors are utilized by National Grid 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 commercial 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:

In addition, where applicable, the Company will ensure that other natural gas space and water heating systems and equipment improvements will be evaluated for efficiency opportunities and customers will be provided with both technical assistance and financial incentives to integrate better natural gas space and water heating practices in their facilities.

Target Market and Marketing Approach

The Energy Initiative Program will be available to all non-residential customers. 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 vendors and 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.

The Company also intends to market the program to cities and towns, a target market known to have barriers to participation such as access to capital and continual pressures to reduce operating budgets. Please see the next section for more information on the Company's on-bill financing service that complements the installation of energy-efficient equipment through the Energy Initiative Program.

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. 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. There are also Whole Building Assessment services that offer customers a means to identify the performance of their buildings with the tools of Benchmarking and Energy Profiler Online, two instruments to assess the energy and carbon footprint of existing buildings. It is the combined effect from this analysis that demonstrates the overall energy use of buildings and the opportunity to intervene with various energy efficiency strategies to reduce this usage leading to both energy cost reduction, better environmental sensitivity and other non-electric benefits such as operation and maintenance savings or higher productivity.

Target End Uses, Recommended Technologies, and Financial Incentives

Targeted end uses will include, but are not limited to advanced lighting systems, lighting controls, 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 a one-year payback, whichever is less to the Company. Customers select from a prescriptive or custom track depending on the complexity of their building and the unique opportunity to gain significant energy savings through more customized examination of their facility. In an attempt to encourage larger scale participation by cities and towns in the Company's service territory, it is expected that municipal financing will be offered to these customer to allow the participating municipality to pay their customer contribution over a period of up to twenty-four (24) months on their electric bill. The Company believes that this program attribute will assist cities and towns to achieve higher efficiency opportunities in their municipal buildings by offering more attractive financing solutions where capital and operating budgets prohibit up-front investments.

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 insure 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 < \$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 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 are 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, of 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 facility.

Target Market and Marketing Approach

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

- Large 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.

The Company anticipates providing up to fifty (50) demand response audits at \$4,500 each per year, as well as \$100,000 to fund automated demand response measures for a minimum of ten (10) customers per year. The Company is requesting funding of \$325,000 per year for these efforts.

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;
 - CO₂ 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, 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.

The Company proposes to provide power factor and/or power quality analyses to 20 customers per year at a cost of \$3,500 each per year, for an annual cost of \$70,000 per year.

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. 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 by year-end 2009 or early 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.
- 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 its New England evaluation efforts 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 typically conducts a billing data analysis to determine achieved savings from prescriptive lighting measures. National Grid typically conducts a detailed engineering review which may include some metering of use when assessing results from custom projects completed through this program. Executive summaries from recently completed impact evaluations of the Energy Initiative Program are provided in Appendix E attached hereto.

- **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.

National Grid typically assesses both free-ridership and spillover related to its commercial and industrial program efforts through surveys with participants and relevant trade allies. These studies are conducted every two years. The Executive Summary from National Grid's recently completed Commercial & Industrial Free-Ridership and Spillover Study is provided in Appendix E attached hereto. The

results of free-ridership and spillover studies will be used to derive net savings from the Energy Initiative Program.

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. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. Assumptions about free-ridership and spillover will be updated based on a survey-based analysis as described above.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,²⁶ the Company's goal for estimating gross savings at the program level is at the 90% confidence interval, with +/- 10%

²⁶ See Working Group III Final Report, dated December 5, 2007, at p. 37.

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 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 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 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:²⁷
 - 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

²⁷ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- Type of measure
 - Annualized energy savings
 - Measure life
 - Total measure installed cost
 - 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 by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Coordination with NYSERDA and Other Program Administrators

The Company proposes three additional opportunities for collaboration with other program administrators (“PAs”). While the majority of discussions to date have been with NYSERDA, the Company has had collaboration with other joint utilities and is eager to work with these 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. The Company's existing 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 early which will permit offering these services through NYSERDA's High Performance New Construction Program.

Advanced Buildings

Also, there is the opportunity for both NYSERDA and National Grid to promote improved energy performance and holistic design through Advanced Buildings, a strategy and program model developed by the New Buildings Institute in cooperation with the U.S. Environmental Protection Agency ("EPA"), American Society of Heating, Refrigeration and Air-Conditioning Engineers ("ASHRAE"), U.S. Green Buildings Council, and National Building Operators and Managers Association. A key element of Advanced Buildings is an all-inclusive set of criteria for building efficiency and sustainable green design for mid-market commercial buildings. NYSERDA and the Company will share the responsibility of promoting sustainable design seminars for architects, engineers, trade allies and other building practitioners and aid in delivering technical services that will help customers' design teams integrate better building practices in new construction that will lead to carbon reductions. In addition, both electric and gas efficiency opportunities will be integrated into Advanced Buildings design and specification practices.

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. Also, the Company anticipates that performance standards for new commercial buildings, based on NYSERDA's New Construction Program, will be raised by up to 10% beyond the current code to build upon what is achievable through Advanced Building's Core Performance.

b. Gas Programs

1. Residential Programs

National Grid proposes to offer the following gas residential energy efficiency programs to its customers beginning in January 2009:

- Enhanced Home Sealing Incentives Program
- Residential ENERGY STAR® Products Program
- Residential Low Income Program
- Residential Internet Audit and E-Commerce Sales
- Residential Building Practices and Demonstrations Program
- Energy*Wise* Program

Each of these programs is described below.

Enhanced Home Sealing Incentives Program

Purpose

The purpose of this program is to encourage customers and contractors who are unable or unwilling to participate in NYSERDA's Home Performance with ENERGY STAR® Program to complete critical insulation, air sealing, ventilation, and health and safety measures.

Coordination

This program will be coordinated with NYSERDA to ensure there is no double counting of savings and as little customer confusion as possible. National Grid will encourage residential customers and contractors who are not currently participating in NYSERDA's Home Performance with ENERGY STAR[®] program to do so, and if they are not able to do so, to ensure that safe insulation and air sealing work is alternatively completed through this program. National Grid will also coordinate with its own natural gas energy efficiency programs. National Grid will refer low income customers to NYSERDA's EmPower New YorkSM or Assisted Home Performance with ENERGY STAR[®] program as appropriate, to ensure they receive the lowest cost and most comprehensive service for which the customer is qualified.

Co-Benefits

Adding insulation and air sealing to existing homes increases the value and durability of housing stock. It also may improve health through the control of existing moisture problems and the identification of the potential for carbon monoxide poisoning or other unhealthy existing conditions. Insulation and air sealing reduces the heating and air conditioning bills of residents, resulting in more money that can be spent on other household needs and potentially improving the local economy.

Program Administration and Delivery

This program will be administered by vendors selected by National Grid through a competitive solicitation. National Grid will inspect 10% of the participants in this program through another third party vendor. Gas and electric measures will be addressed during the same home visit, allowing for a single customer contact.

Target Market and Marketing Approach

The target market for this program will be residential customers and contractors who are not currently participating in NYSERDA's Home Performance with ENERGY STAR[®] program to encourage them to participate, and if they are not able to do so, to ensure that safe insulation and air sealing work is completed. The target market is customers who heat with natural gas. Outreach will include bill inserts, direct mail, media advertising, and trade ally training of contractors.

Target End Uses, Recommended Technologies, and Financial Incentives

Work must be performed by BPI-certified contractors in order to be eligible for an incentive. National Grid will initially offer a 75% incentive up to \$5,000 for insulation, blower-door assisted air sealing, mechanical ventilation, and related health and safety items. This level of incentive was supported by the DPS Staff in the Interim Energy Efficiency Joint Proposal filed with the Commission on August 1, 2008. In the second and third years, National Grid will lower the incentive to 50% up to \$3,000. This level of incentive was recommended by NYSERDA to improve the coordination of all programs.

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. 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 by year-end 2009 or early 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.
- 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 the Enhanced Home Sealing Incentives Program in 2010 through 2011 using industry-accepted methods of analysis.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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 mid-year 2011.
- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this

program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.

- **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,²⁸ 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 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 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 contractor will be asked to include a discussion about threats to data reliability in their reports.

²⁸ See Working Group III Final Report, dated December 5, 2007, at p. 37.

- **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:²⁹
 - 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
 - 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 early in 2009 and an impact evaluation in the fall of 2010. Final results

²⁹ Please note that not of all the measure-specific data listed here are going to be captured for the Enhanced Home Sealing Incentives Program.

of the process evaluation are anticipated by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by mid-year 2011.

- **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Residential ENERGY STAR® Products Program

Purpose

The purpose of this program is to encourage customers to choose ENERGY STAR® products and other high efficiency products, which will decrease their gas energy use and also support ENERGY STAR® market transformation efforts. The first products to be incented will be ENERGY STAR® windows and thermostats. Other cost-effective products may be added subject to available funding.

Program Administration and Delivery

This program will be administered by the Company using vendors selected through a competitive solicitation. The program will be delivered in tandem with National Grid's electric ENERGY STAR® Products efforts.

Target Market and Marketing Approach

The Company will promote ENERGY STAR® replacement windows and thermostats using various methods, including the Company website, electronic newsletters, bill inserts, and cooperative promotions with retailers.

Target End Uses, Recommended Technologies, and Financial Incentives

The ENERGY STAR[®] Replacement Window Program will provide a \$10 mail-in incentive for each high-efficiency window installed in existing residential customers' homes. Eligible participants must be residential heating customers who have installed ENERGY STAR[®] labeled replacement windows with a U-factor of .35 or less³⁰ during the program year as specified on the incentive form. Windows installed in new construction or home additions will not qualify for the per window incentive. Each customer will be subject to a \$500 maximum incentive per account. National Grid will work with contractors for multi-family or other large residential renovation projects on a case-by-case basis, and may provide different incentive levels for cost-effective projects.

When applying for this incentive, residential customers will be required to submit proof-of-purchase, as well as proof of the windows' U-factor. Efficiency ratings can be confirmed by the customer using either a copy of the National Fenestration Rating Council ("NFRC") label from the window, or by providing detailed specifications from the window manufacturer confirming the window's U-factor. The Company plans to conduct inspections of the first two installations per new participating installation contractor. In addition, random inspections of self-installations may be administered to verify that the proper windows were installed.

Customers will be able to receive \$25 for up to two (2) ENERGY STAR[®] labeled programmable thermostats, where the rebate does not exceed the price of the thermostat(s). Most sales will be through retail outlets, but program information will also be included in marketing for the high efficiency heating and controls programs. Savings for thermostats will be counted in this program.

³⁰ The U-Factor is a measurement of thermal conductivity. A lower U-factor indicates a higher level of window insulation.

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. 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 by year-end 2009 or early 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.
- 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 completing an impact evaluation of the Residential ENERGY STAR[®] Products Program in 2010 through 2011 using industry-accepted methods of analysis. The Impact Evaluation will quantify the savings attributable to program efforts based on relevant market indicators³¹ for the ENERGY STAR[®] products promoted through the program, information about rebated products, and observed or reported operation of promoted equipment in homes. The impact evaluation will also include an assessment of savings from second refrigerators and freezers that are removed from customer homes.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible

³¹ Relevant market indicators may include sales data about qualifying products from participating retailers compared to sales data in states that do not have active ENERGY STAR[®] programs and survey-derived ENERGY STAR[®] awareness statistics.

evaluation approaches may include engineering analysis, synthesis of secondary information available about savings, metering, or some other approach. This analysis may include market analyses, surveys with program participants and with trade allies such as retailers and distributors, and other appropriate methods 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 mid to late 2011.

- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,³² the Company's goal for estimating gross

³² See Working Group III Final Report, dated December 5, 2007, at p. 37.

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 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 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 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:³³
 - Date of contract/agreement to install measure(s)
 - Date of beginning of installation process
 - Installation completion date

³³ Please note that not of all the measure-specific data listed here are going to be captured for the Residential ENERGY STAR® Products and Recycling Program.

- 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
 - 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 by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Residential Low Income Program

Purpose

National Grid recognizes that low-income customers are severely impacted by high energy bills and often struggle to keep their families warm and safe. The Company views the funding of low-income services as a high priority for energy efficiency. National Grid

seeks to continue and expand the level of participation of its natural gas heating customers in both the Assisted Home Performance with ENERGY STAR[®] and EmPower New YorkSM programs, (each individually the “Program” and collectively the “Programs”), administered by NYSERDA.

Coordination

National Grid will fund NYSERDA to deliver their existing programs to additional National Grid customers than could otherwise be served.

Co-Benefits

Adding insulation and air sealing to existing homes increases the value and durability of housing stock. It may also improve health through the control of existing moisture problems and identification of the potential for carbon monoxide poisoning and other unhealthy existing conditions. Insulation and air sealing reduces the heating and air conditioning bills of residents, resulting in more money that can be spent on other households needs, and potentially improving the local economy.

Program Administration and Delivery

National Grid and NYSERDA have implemented the Low Income Gas Customer Energy Efficiency Program (“Gas Efficiency Program”) using funding from the Contingency Reserve Account.³⁴ The Gas Efficiency Program was initially approved by the Commission at a \$5 million funding level on September 12, 2005 and was subsequently extended on September 18, 2007 in Case 07-G-0733 with an additional funding authorization of \$5 million. National Grid and NYSERDA will collaborate to serve additional customers with energy efficiency dollars. National Grid customers who heat

³⁴ The Contingency Reserve Account is: a deferral account National Grid was directed to establish in 1996 mostly for the purpose of accumulating interstate gas pipeline refunds due to the Company’s customers that were ordered by the Federal Energy Regulatory Commission.

with natural gas and meet program guidelines will be eligible to participate in this program.

Target Market and Marketing Approach

National Grid will promote this program directly to customers who are low income and have trouble paying their bills. The Company will develop, design, and print specialized educational materials in English and Spanish for limited income and payment-troubled customers.

Customers with household income levels below 60% of the State Area Median Income are eligible for EmPower New YorkSM services. Tenants are eligible to receive services if the customer is the bill payer and if the landlord agrees not to raise the rent based on the energy efficiency improvements made by the program. Services are free to program participants.

The Assisted Home Performance with ENERGY STAR[®] program targets households with income levels between 60% and 80% of the State Median Income. Services are similar to the EmPower New YorkSM program, and the customer does pay a percentage of the program costs.

Target End Uses, Recommended Technologies, and Financial Incentives

The Assisted Home Performance with ENERGY STAR[®] program targets households with income levels between 60% and 80% of the State Median Income, with incentives for up to 75% of the project cost with low-cost financing for the balance of the cost. There is a maximum subsidy of \$6,000 per applicant for single family homes or up to \$12,000 per building for 2-4 family dwellings.

Measures for the EmPower New YorkSM and Assisted Home Performance with ENERGY STAR[®] programs will include attic and wall insulation, blower-door assisted air sealing,

and related health and safety measures. The Assisted Home Performance Program includes heating system replacement. The EmPower New YorkSM program includes water heating system repair or replacement, and water heater and clothes dryer conversions from electric to natural gas. These are the same measures available to low-income customers through the state administered Weatherization Assistance Program (“WAP”).

Evaluation Plan

National Grid does not plan to claim savings from this program. As a result, no evaluation plan has been developed related to the efforts described above.

Residential Internet Audit Program and E-Commerce Sales

Purpose

The purpose of this program is to provide customers with easy access to information about energy usage in their homes, and encourage them to participate in the National Grid and NYSERDA energy efficiency programs. This program also provides easy access to on-line purchases of compact fluorescent lighting, weatherization materials, and other do-it-yourself products.

Coordination

National Grid will provide links to the NYSERDA website and National Grid websites where energy efficiency information and program offerings are explained.

Co-Benefits

Customers who implement energy efficiency practices will contribute to the improvement of the area’s housing stock. Reduced residents’ heating and air conditioning bills results in

more money that can be spent on other household needs and potentially improving the local economy.

Program Administration and Delivery

This program will be administered by the Company using an internet and software vendor selected through a competitive solicitation. National Grid intends to provide customers with access to its existing services available to downstate New York and New England customers, and may modify the software and delivery vendor through a competitive bid process.

Target Market and Marketing Approach

The website address will be included on all of the Company's residential energy efficiency program literature. A Spanish-language version may also be made available for on-line use. Several thousand customers have participated in this program in National Grid's downstate New York territory, and tens of thousands have participated in New England. Customers are interested in easy access to information about energy efficiency.

Target End Uses, Recommended Technologies, and Financial Incentives

This self-service audit tool will allow customers to complete an electronic survey about their home, including age, size, appliances and average use patterns. The process starts with twelve basic questions to produce a report that compares the participant's home with similar homes and to generate their "Top Ways to Save," including estimated annual cost savings if recommended measures are taken.

Subsequent steps will require more detailed information from the customer, resulting in more personalized tips to improve the home's efficiency. The analyzer will be fuel-blind and will list opportunities to save in heating/cooling, lighting, water use, etc. The

customer will also receive information about any relevant energy efficiency opportunities such as those offered through National Grid and NYSERDA energy efficiency programs.

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. 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 by year-end 2009 or early 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.

As part of the process evaluation plan, the Company will survey participating and non-participating customers.

Year Two - Three Evaluation

Impact Evaluation

The Company anticipates completing an impact evaluation of the Residential Internet Audit Program and E-Commerce Sales in 2010 through 2011 using industry-accepted methods of analysis. The Impact Evaluation will quantify the savings attributable to program efforts based on surveys with customers that will be used to identify recommended actions from the audit that participating customers acted on and the savings realized from following those recommendations. The impact evaluation will also include an assessment of the savings related to products sold through the e-commerce service in the program.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. A survey based approach possibly supplemented by site visits is anticipated. 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.

- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,³⁵ 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.

³⁵ 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 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 contractor will be asked to include a discussion about threats to data reliability in their reports.

- **Data Collection and Management Process.** The Company will track “hits” on the internet audit site, e-commerce sales resulting from customer participation in the program, and data that will be collected from site visits and surveys of participants and non-participants. Measure-specific data as appropriate will also be captured. Examples of measure-specific data that will be collected can include:³⁶

 - 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
 - Project completion date
 - Evaluation inspection/commissioning date

³⁶ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- 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 or early in 2011. Final results of the process evaluation are anticipated by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Residential Building Practices and Demonstration Program

Purpose

The purpose of this program is to provide incentives to customers and contractor support to introduce new, highly efficient products and services to National Grid customers. This will include installation pilot programs and other demonstration projects.

National Grid will also offer a pilot program to test the Positive Energy Home Energy Reports and complementary services. Positive Energy provides a home energy efficiency paper report and website that benchmarks individual customer use compared to use by others in the surrounding neighborhood and uses this energy profile to individually target offers, coupons, and rebates more relevant to the customer.

National Grid will also offer a gas heating Tune-Up pilot recommended by DPS Staff and other signatories to the Company's Interim Energy Efficiency Joint Proposal filed on August 1, 2008 in Case 08-G-0609. Although the Commission did not approve the Tune-

Up Pilot Program in the Commission's September 18, 2008 Order Adopting an Interim Energy Efficiency Program and Modifying the Joint Proposal, National Grid believes that the program warrants reconsideration. The Tune-Up Pilot Program has the potential to quickly and effectively improve the efficiency of existing heating systems. In this period of high and volatile energy prices, this low cost measure may provide significant benefit to customers who are unable to replace an older inefficient heating system. The Pilot is designed to determine, at relatively low cost, whether such a program is cost-effective for the long term.

Coordination and Co-Benefits

National Grid will share results from the demonstration projects with DPS Staff, other utilities, and NYSERDA. This will allow for discussion and refinement of these offerings and may result in new programs that can be offered to all New York customers.

Program Administration and Delivery

This program will be administered by the Company using vendors as needed. The program will demonstrate new and/or under-utilized energy efficiency practices and equipment that can enhance a home's overall energy savings potential. Eligible participants in this program will include homeowners, landlords and new home builders. Each participant may be asked to allow monitoring of the installation and publication of the results in case study format.

Target Market and Marketing Approach

Marketing of the program will rely on networking with those in the industry who are developing or offering new or under-utilized gas energy efficiency technologies, as well as other interested organizations, such as local Heating, Ventilation and Air Conditioning contractors, the Small Customer Marketer Coalition, the Northeast Sustainable Energy

Association (“NESEA”), Affordable Comfort, Inc (“ACI”), and the U.S. Green Building Councils’ Leadership in Energy and Environmental Design (“LEED”).

For the Positive Energy pilot, National Grid will select 50,000 combined electric and gas customers for services. The pilot will use direct mail and website components to encourage customers to participate in all the National Grid energy efficiency programs.

Target End Uses, Recommended Technologies, and Financial Incentives

The focus of this program is new technology that is not yet proven or that may be subsequently identified during the approved program delivery period. National Grid will explore the installation and testing of additional products such as solar water heating, heating system tune-ups, and other technologies as they emerge.

The Positive Energy pilot will use several components designed to work together to drive energy efficiency gains and customers understanding. These will include an energy comparison report, progress tracker, targeted behavioral tips, and targeted energy efficiency programs and coupons.

The Tune-Up pilot will offer a \$50 incentive to customers to have their gas heating system tuned and cleaned by a qualified contractor. This will be a limited time offer to a geographically distinct area or areas in the service territory, offered as a way to gather information about customer and contractor interest, and to gather information about potential energy savings.

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. 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 by year-end 2009 or early 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.
- 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 impact evaluation efforts will be an on-going and regular focus of this R&D focused program.

- **Impact Evaluation Methodology.** An independent evaluation consultant will be hired through a competitive solicitation. The Company anticipates that the selected evaluation firm will participate in project planning efforts so that key findings and savings from efforts are well documented. Impact evaluation approaches appropriate for the unique measures installed through this type of program are anticipated to produce results that meet the precision requirements set forth in the guidelines issued through the Evaluation Advisory Group. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.

- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,³⁷ 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 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 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 contractor will be asked to include a discussion about threats to data reliability in their reports.

³⁷ See Working Group III Final Report, dated December 5, 2007, at p. 37.

- **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:³⁸
 - 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
 - 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 early in 2009 and an impact evaluation in the fall of 2010. Final results

³⁸ Please note that not of all the measure-specific data listed here are going to be captured for this program.

of the process evaluation are anticipated by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

EnergyWise Program

Purpose

This program provides a free, comprehensive assessment of a multifamily building's energy use and recommends various ways customers can improve their building's energy efficiency. Customers will be given a detailed report containing the recommendations of the audit including information about improving the efficiency of their building 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 buildings 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

National Grid will coordinate with NYSERDA to determine the most appropriate service for specific multifamily customers. Some customers might be better served by NYSERDA's Multifamily Performance Program, and National Grid will refer those customers to that NYSERDA program.

Co-Benefits

Tenants, a typically underserved market, will benefit from improvements made by their utility and landlord in their buildings. 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 building 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 electric and gas program, serving buildings that use both electricity and gas.

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

Target End Uses, Recommended Technologies, and Financial Incentives

Major measures will include attic insulation, wall insulation, basement/crawl space insulation, rim joist 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. On the electric side, this will be coordinated with 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 equipment through the Residential High Efficiency Heating and Water Heating and Controls Program. Facilities with central heating plants and domestic hot water systems that are interested in natural gas savings measures will be served through the Commercial High-Efficiency Heating and Commercial Energy Efficiency Programs.

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. 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 by year-end 2009 or early 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.
- 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 the Company has 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. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from future program evaluation efforts.
- **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,³⁹ 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 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 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 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-

³⁹ See Working Group III Final Report, dated December 5, 2007, at p. 37.

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:⁴⁰

- 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
 - 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 by year-end 2009 or early 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. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

⁴⁰ Please note that not of all the measure-specific data listed here are going to be captured for this program.

2. Commercial and Industrial Programs

National Grid proposes to implement three commercial and industrial gas energy efficiency programs beginning January 2009:

- The Commercial and Industrial Energy Efficiency Program
- The Commercial High-Efficiency Heating and Water Heating Program
- The Building Practices and Demonstrations Program

Each of these programs is described below.

Commercial and Industrial Energy Efficiency Program

Purpose

The Commercial Energy Efficiency Program (“CEEP”) provides support services and financial incentives to encourage the Company’s commercial and industrial customers to install energy-efficient natural gas equipment and gas saving measures. Through CEEP, energy-efficient technologies and system designs that exceed local energy code minimum requirements may be eligible to receive rebates. Both prescriptive and custom rebates are available. In addition, energy audits and engineering services will be cost-shared by the Company.

Program Administration and Delivery

The program will be delivered and administered by the Company and will provide participants with financial assistance to help defray the cost of an energy audit by providing co-funding for engineering studies as well as financial incentives to help fund qualifying energy saving measures. Technical assistance funding will provide information and education to participants in the use of energy efficiency engineering practices to advance better design in buildings. Technical assistance will also provide the customer with criteria related to energy efficiency options that can be used when the customer specifies new equipment. Projects are inspected prior to project initiation as well as post-

installation to assure that operating assumptions and existing and installed measures are accurately counted and operating. Pre- and post-inspections are conducted by in-house staff or independent vendors selected through a competitive bid process.

Customers can apply for program services or rebates through a number of trade ally channels including: Company representatives, plumbing and heating contractors, engineering firms, energy service companies, and equipment vendors.

The Company will hire outside contractors to assist with technical review of comprehensive projects and administer the program. Outside contractors will be 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 helps to build an energy efficiency industry in New York State. Final incentive approval will be provided by a Company representative or an outside vendor acting as administrator. The outside contractor will also manage and maintain project information, issue rebate checks, and confirm project completion.

Coordination

It is anticipated that this program will be coordinated with NYSERDA services and offers and with the Company's proposed electric program. This will ensure fuel integration with all gas and electric energy efficiency services and offers to customers and supplement NYSERDA's FlexTech and Industrial and Process Efficiency Programs.

Coordination with the proposed Company electric programs will leverage Company representatives and outside vendors to address comprehensive building operations from both electric and natural gas usage and efficiency. This coordination will also encourage whole building design and fuel efficiency through the Company's proposed small and medium business program. The competitive bidding process will ensure that outside vendors have the appropriate experience with natural gas systems and price their services

to address comprehensive building practices. Quality assurance and control will be performed by Company representatives as well as outside vendors hired by the Company.

Target End Uses, Recommended Technologies, and Financial Incentives

Energy-efficient technologies or system designs that exceed the minimum requirements of the local energy code and are not covered by another Company program offering may be eligible for a rebate under this program. Energy auditing and engineering services will be cost shared with customers who require technical assistance to evaluate technologies associated with mechanical and or process equipment. The Company will provide co-funding to customers of up to 50% of the cost of an energy audit or engineering study, up to a maximum of \$10,000. These types of technologies may include boiler or chiller plant redesigns, heat recovery systems, digital energy management systems or process efficiency improvement projects. This may include the cost sharing of a technical study with the proposed electric programs. In addition, the Company will coordinate with the Company's electric energy efficiency efforts and will also collaborate with NYSERDA to promote electric savings opportunities as well as natural gas savings opportunities in energy efficiency projects.

Prescriptive rebates will be available for common energy efficiency measures including programmable thermostats, boiler reset controls, steam trap replacements, pipe and/or duct insulation, building shell (wall, roof, floor, crawlspace) insulation, and high efficiency windows. Other prescriptive measures will incorporate high efficiency kitchen equipment such as high efficiency fryers, steamers, convection ovens and combination ovens.

Custom incentives will be available for projects that demonstrate the use of natural gas more efficiently than typical industry practices or more efficiently than minimum building code requirements. Incentives will be limited to not more than 50% of the eligible installed costs, and the Company's contribution will be subject to a cap per site and/or project. Under this program, customers will be eligible to receive up to \$2.25 per first year therms saved, capped at 50% of the installation costs, and up to \$250,000 per project for

natural gas energy saving measures implemented. Incentives of up to \$6 per first year therms saved, capped at 50% of installation costs, and up to \$250,000 per project will be available for projects that involve innovative building design, community and economic impacts and creation of affordable housing.

The program is open to all firm natural gas sales customers on a commercial tariff. Financial incentives (i.e., rebates) provided through the program must be pre-approved by the Company and/or the vendor working on behalf of the Company prior to delivery or installation of product(s) or service(s).

Fuel Integration

Customers will be encouraged to choose a firm to complete this work that is registered as a partner with the Company's proposed electric programs or NYSERDA to ensure that work completed will be both comprehensive in terms of all fuels as well as eligible for all possible incentives for electric measures implemented.

Target Market and Marketing Approach

Primary marketing materials will include: program brochures, rebate applications, direct mail promotions, bill inserts, Company and other appropriate websites (e.g., NYSERDA) and efficiency news. Outreach will include direct contact with plumbing and heating contractors, engineering firms, energy service companies and equipment vendors, trade ally events and trade ally network relations, association sponsorships and participation in trade and business groups and environmental organizations well as internal communications and training for Company personnel who have contact with commercial customers.

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. 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 by year-end 2009 or early 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.
- 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 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 late in 2010 or early in 2011 using industry-accepted methods of analysis.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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 late in 2010 or early in 2011.

- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from program evaluation efforts.
- **Budget.** Consistent with the June 23, 2008 Order, the Company has budgeted 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,⁴¹ 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.

⁴¹ 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 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 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:⁴²
 - 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

⁴² 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 by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by year-end 2010 or early 2011.
 - **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Commercial High-Efficiency Heating and Water Heating Program

Purpose

The Commercial High-Efficiency Heating and Water Heating Program offers rebates to customers on a firm commercial service classification tariff that install high-efficiency heating equipment. The rebates are provided to reduce the incremental cost between standard and high-efficiency equipment.

Program Administration and Delivery

This is a rebate/incentive program. The Company will administer this program through a third-party vendor that will handle customer inquiries via web and phone, as well as process and distribute rebate checks.

Target End Uses, Recommended Technologies, and Financial Incentives

Eligible products include furnaces, boilers, infrared heaters, and water heating equipment. Rebate amounts will vary according to the size and type of the heating equipment installed with a cap of \$15,000. Efficiency ratings for smaller heating equipment (up to 300,000 btuh input) are measured using Annual Fuel Utilization Efficiency (“AFUE”) ratings. Efficiency ratings for larger heating equipment, which exceeds the size ranges for AFUE, will be measured using a thermal efficiency or steady state rating. The Company reserves the right to negotiate a lower rebate amount per-unit for multiple installations at a single site. This practice ensures that rebate dollars are helping participants reduce the true incremental costs of installing high-efficiency heating equipment.

Target Market and Marketing Approach

The program will be open to all firm natural gas sales customers on a commercial service classification tariff. It will be marketed to customers through the Company’s account management staff, supply houses, HVAC contractors, architects, and engineers, as well as through direct marketing to customers.

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. 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 by year-end 2009 or early 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.
- 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 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 late in 2010 or early in 2011 using industry-accepted methods of analysis.

The Company will explore conducting this evaluation with the other utilities implementing a similar program so that consistent approaches are used to arrive at evaluated program savings. However, at this point in time, while awaiting guidance from the Evaluation Advisory Group, the Company proposes the following for consideration as part of its program evaluation plan.

- **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. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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 late in 2010 or early in 2011.
- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this

program using available information. Future assessments of cost-effectiveness will take into account findings from program evaluation efforts.

- **Budget.** Consistent with the June 23, 2008 Order, the Company has budgeted 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,⁴³ 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 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 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 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-

⁴³ See Working Group III Final Report, dated December 5, 2007, at p. 37.

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:⁴⁴

- 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
 - 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 by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by year-end 2010 or early 2011.

⁴⁴ Please note that not of all the measure-specific data listed here are going to be captured for this program.

- **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

Building Practices and Demonstrations Program

Purpose

The Building Practices and Demonstrations Program is designed to promote the installation of new, emerging or under-utilized natural gas-related energy efficiency technologies and operating practices. New technologies are critical to the advancement of energy efficiency and mitigation of greenhouse gas emissions in the commercial and industrial markets. These projects become case study examples for incorporating new technologies or improving practices in the energy efficiency program portfolio.

Program Administration and Delivery

The program will be administered directly by the Company's engineering staff with assistance from outside consultants and professional engineering firms. The Company may utilize outside contractors to assist with technical review of comprehensive projects. Outside contractors will be selected through a competitive bid process, ensuring that the Company is attaining these services at a competitive rate. To showcase the significant energy savings potential, the Company will offer financial incentives towards the cost of installation. Interested customers will submit applications for financial assistance directly to the Company. Applications must include a scope of work and an estimate of the savings and benefits to be realized. Participants are required to allow the Company to meter the installation and monitor its performance. Customers can apply for program services or rebates through a number of trade ally channels including: Company representatives, plumbing and heating contractors, engineering firms, energy service companies, and equipment vendors.

Coordination

This program will be coordinated with NYSERDA as well as with other partners such as the Consortium for Energy Efficiency, the Gas Technology Institute and the Energy Solutions Center. The Company has existing partnerships with these organizations that will be utilized and leveraged for product selection, feasibility, installation and monitoring.

Target End Uses, Recommended Technologies, and Financial Incentives

This program will provide the Company with the flexibility to evaluate all end uses that could potentially provide cost-effective energy saving solutions to customers. Past examples of end uses evaluated by the program include energy recovery devices, combustion controls, advanced solar thermal technologies, desiccant units, commercial cooking equipment, and building control strategies, among others. The Company will offer an incentive of up to 50% of the project cost capped at \$100,000 for technologies evaluated through this program.

Target Market and Marketing Approach

In an effort to identify potential new technologies for demonstration, the Company seeks out program partners such as the Gas Technology Institute and trade associations and will coordinate with NYSERDA. In addition, the Company may work with manufacturers of new technologies. To market the program, Company representatives will identify and recruit appropriate customer sites and applications. Coordination will occur with the Company's proposed electric energy efficiency program and program partners and outside vendors. Primary marketing materials include program brochures, direct mail campaigns, case studies and demonstrations, as well as direct outreach by Company representatives to architects and engineers, contractors, and commercial and industrial trade associations.

Fuel Integration

The Company will assess technologies that may save on electric usage as well as gas. Technology options will be reviewed by Company engineering staff as well as outside vendors to evaluate maximum energy savings potential through feasibility studies.

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. 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 by year-end 2009 or early 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.
- 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 Evaluation

Impact Evaluation

The Impact Evaluation will quantify the savings attributable to the technology based on how the equipment installed through this program is actually operating. The Company anticipates completing an impact evaluation of this program late in 2010 or early in 2011 using industry-accepted methods of analysis.

- **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. Possible evaluation approaches may include a billing data analysis, an engineering simulation model, metering, or some other approach. 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 late in 2010 or early in 2011.

- **Net to Gross Analysis.** The assumptions used to develop goals for this program are provided in Appendix C attached hereto. These assumptions reflect the Company's experience in delivering a similar program in New England, including relevant program evaluation findings. 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.
- **Benefit Cost Analysis.** Benefit cost analysis is performed at the measure and program level. The Company has conducted a benefit cost analysis for this program using available information. Future assessments of cost-effectiveness will take into account findings from program evaluation efforts.
- **Budget.** Consistent with the June 23, 2008 Order, the Company has budgeted 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,⁴⁵ 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

⁴⁵ 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 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 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:⁴⁶
 - 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

⁴⁶ 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 by year-end 2009 or early in 2010. Final results for the impact evaluation are anticipated by year-end 2010 or early 2011.

 - **Data Collection.** Data to be collected about this program is discussed above. Reporting is discussed below in Chapter VII. Evaluation and Reporting.

VI. Independent Program Administrator Proposals

National Grid received four (4) proposals from parties seeking to be Independent Program Administrators (IPAs). The proposals were from EnerNOC, Inc., EarthKind Energy, Inc. Positive Energy, and ConsumerPowerline, Inc. The June 23, 2008 Order states:

“Independent program administrators may submit proposals for programs, to be implemented within the 2009-2011 time period, to utilities and/or to NYSERDA within 45 days of the issuance of this Order. Such proponents should use best efforts to include the information required in Appendix 3. Any such proposal received by a utility or NYSERDA must be considered for inclusion in that entity’s proposal to the Commission, and its inclusion or omission from the proposal to the Commission must be explained. If a utility and/or NYSERDA receives an independent proposal that is incomplete but warrants further examination, the utility and/or NYSERDA may petition the Secretary for additional time to submit its proposal.”

On August 12, 2008, National Grid, Central Hudson, St. Lawrence Gas, National Fuel Gas, New York State Electric & Gas / Rochester Gas & Electric, and Orange & Rockland representatives reviewed and discussed submitted proposals. National Grid has undertaken internal reviews of these proposals and has discussed responses internally and with the proposed IPAs. A brief description of the proposals and the Company’s response is described below.

EnerNOC, Inc. Proposal

National Grid received a proposal for a Monitoring-Based Commissioning Energy Efficiency Program from EnerNOC, Inc. (“EnerNOC”) dated August 7, 2008.⁴⁷ The proposal describes a program that “assists commercial customers to better understand their energy usage, participate in a comprehensive audit, implement cost-effective energy efficiency measures and engage in an ongoing, monitoring-based commissioning process that will generate substantial energy efficiency savings.” The proposed program budget is \$5,668,500 through 2015 and is projected to serve 20 customers, conserve an estimated 125,020 MWh and 4.2 million therms, and reduce peak demand by 1.8 MW.

National Grid is encouraged by the proactive role that EnerNOC has presented. The Company plans further discussions with EnerNOC regarding our comments below and how Monitoring Based Commissioning Services might be structured to work with our related proposed offerings such as retro-commissioning services. For the reasons stated below, however, the Company believes it would be premature to accept the EnerNOC proposal as it currently exists.

1. EnerNOC’s proposal targets four (4) customers in year one, eight (8) customers in year two and eight (8) customers in year three for a total of twenty (20) customers over three years. The proposed EnerNOC budget for these twenty (20) customers is \$5,668,500. This program targets only a very small number of customers, mostly large customers, for a limited, finite period of time. This approach will concentrate resources on a limited number of customers and reduce the market transformation effect of a broader based retro-commissioning program. National Grid prefers that a retro-commissioning effort be marketed to and implemented by many customers, including medium and small customers. Working with large commercial and industrial customers offers great savings opportunities; however, it limits market participation and market transformation.

⁴⁷ EnerNOC, Inc. “Monitoring-Based Commissioning Energy Efficiency Program Proposal”, August 7, 2008.

2. EnerNOC's proposal may understate the true cost of the program. In section 1.7 of EnerNOC's proposal, EnerNOC indicates that National Grid resources will be utilized to help with the marketing and the sale of the Monitoring-Based Commissioning services without describing in detail what is expected of National Grid. In order for National Grid to assess the budget, a more detailed description of National Grid's role and its cost is needed. National Grid's costs would then need to be included in the \$5,668,500 EnerNOC proposal. Moreover, an additional budget to conduct independent measurement and verification of the proposed savings and cost calculations should be included. When these costs are included in the EnerNOC proposal, the Company estimates the cost of the energy saved will be higher than equivalent savings from more traditional energy efficiency programs. Because of this, the cost-effectiveness of this proposal will reduce the overall portfolio cost-effectiveness. One driver for this increase is the cost of monitoring service for years two and three. Another potential and unknown cost of this proposal is the cost to customers of extending EnerNOC's tracking and notification services beyond year five.
3. The cost associated with the installation of metering by EnerNOC may not be necessary at some customer facilities. EnerNOC's proposal contemplates taking the same auditing/metering/reporting approach with each customer. The Company's experience is that different approaches work best for different customers. Some customers will already have sophisticated energy management systems and/or highly skilled energy managers in place. EnerNOC's proposal would overlay additional metering and/or management on top of these capabilities. Most building energy management systems have the capabilities to monitor the energy consumption of the building, create trend logs, and control the operation of the building systems. When utilized properly, the building energy management system can eliminate the need of having a separate monitoring system in the building.
4. Acceptance of EnerNOC's proposal as it presently exists for independent retro-commissioning services will concentrate funding on a small number of customers. National Grid plans on soliciting proposals from qualified vendors to deliver retro-

commissioning services and other energy efficiency services in New York. Such a RFP will give all interested parties the opportunity to bid on these services. This will allow National Grid to compare proposals to ensure quality, uniformity and cost-effectiveness. National Grid encourages EnerNOC to participate in that process and continue to work with National Grid to further develop retro-commissioning services.

EarthKind Energy Proposal

National Grid received a proposal from EarthKind Energy, Inc. (“EarthKind Energy”) on August 7, 2008⁴⁸ proposing a program to provide solar thermal technology to National Grid electric hot water customers. EarthKind Energy proposes to work with National Grid to establish a program that will benefit customers, meet the objectives of the EEPS proceeding, and improve customer satisfaction as well as create a new source of positive cash flow.

EarthKind Energy believes that while there can be significant results in the initial time frame, a longer term program will be required to achieve complete market penetration of a statewide Solar Thermal program. EarthKind Energy has proposed a similar plan to other utilities and NYSERDA.

EarthKind Energy proposes to administer the program and work with the Company to customize program elements to meet company specific requirements and improve the cost-effectiveness of implementing the program in National Grid’s service territory.

The proposal addressed all the criteria required by the Commission’s Order; however, some quantitative information was required to complete the response. Additional information about customers, loads and costs was requested.

⁴⁸ EarthKind Energy “NYS Energy Efficiency Portfolio Standard Proposal to NATIONAL GRID EarthKind Energy Inc. Independent Administrator Solar Hot Water Heating for Electric Customers”, August 7, 2008.

Based on the discussions with EarthKind Energy, National Grid's response to EarthKind Energy Proposal is as follows:

National Grid is interested in working with EarthKind Energy on a solar hot water offer to electric water heating customers. It is not known how EarthKind Energy plans to build a trained labor force to sell and install the hot water systems in the volumes that is proposed. In National Grid's experience, EarthKind Energy's estimate for a solar hot water system is high and it is not clear why there are the added program administration costs. Incentives for solar hot water systems were not addressed in the proposal.

Many details need to be calculated through a more thorough rate impact analysis and there are no details of the proposed system's quality control and assurance. While a solar hot water program could bring energy savings to customers in New York, there are many more cost-effective measures for residential customers to consider before installing an expensive system. National Grid is interested in working with EarthKind Energy on developing a solar hot water option for residential customers who have also installed other energy savings measures, such as insulation, air sealing and high efficiency lighting and appliances.

In addition to working with EarthKind Energy, National Grid is also interested in working with other distributors and installers of solar hot water systems.

Positive Energy Proposal

National Grid received a proposal on August 22, 2008 for deployment of the Positive Home Energy Reporting System ("HERS") from Positive Energy. Based on the original proposal, Positive Energy has been working with National Grid as well as other utilities, and the Company has had multiple discussions with Positive Energy. National Grid requested Positive Energy to make certain adjustments to its original proposal. Positive

Energy submitted to National Grid on September 5, 2008⁴⁹ an amendment which proposed a HERS Program based on following two options: (1) Base Option 1: Dual-Fuel, 50,000 homes in 2009, expanding to 100,000 homes in 2011 (The “50K/75K/100K” Plan); and (2) Option 2: Dual-Fuel, 75,000 homes in 2009, expanding to 150,000 homes in 2011 (The “75K/100K/150K” Plan).

National Grid has agreed to include the Positive Energy HERS program as part of the Company’s Residential Building Practices and Demonstration Program. This effort is expected to provide services to 25,000 electric customers and 25,000 gas customers in upstate New York over a 3 year period. The Residential Building Practices and Demonstration Program parameters are described in detail above.

ConsumerPowerline Inc. Proposal

ConsumerPowerline Inc. (“CPLN”) submitted a proposal to all active parties in the EEPS proceeding via the EEPS listserv on August 8, 2008.⁵⁰ National Grid was served with a paper copy of the same proposal via mail on August 11, 2008. The CPLN proposal advocates the creation of an energy efficiency cap-and-trade program which would be administered by NYSERDA. The CPLN proposal represents a radical departure from the current approach set forth in the June 23 Order and is one that would require Commission action and approval. Essentially, CPLN put forth a whitepaper detailing an entirely different approach to administering energy efficiency in New York State. CPLN was seeking comments on their proposal within 45 days (i.e., on or about September 22, 2008) from any and all interested parties. CPLN stated that they were particularly seeking input from NRDC, Pace Law Institute and DASNY. Although the requested date for comments coincides with the 90-filing requirement of the June 23, 2008 Order for utility-administered programs, CPLN’s proposal is not one that National Grid or any single utility could begin to implement.

⁴⁹ Positive Energy “NYS EEPS Proposal Amendment – delivered to National Grid”, September 5, 2008.

⁵⁰ ConsumerPowerline Proposal “Opportunity in Time”, August 8, 2008.

For the above reasons, the Company does not consider this to be an independent program administrator proposal as contemplated in the June 23, 2008 Order and the Company is not including it in its 90-day program plans.

VII. 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 some cases, some early impact studies may be undertaken where participants from the Niagara Mohawk service territory can be included with participants from New England to arrive at net savings that are relevant over the combined New York and New England service territories. This approach will result in lower evaluation expenses both in New York and in New England.

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 avoided cost studies. The Advisory Group is expected to create evaluation protocols that all program administrators in the state would agree to adopt. National Grid is committed to working with the parties to develop these protocols.

National Grid's Evaluation Team

National Grid USA Service Company includes centralized energy efficiency staff that oversees evaluation projects completed in support of the Company's energy efficiency efforts in both New England and New York. Carol White directs the Energy Efficiency Evaluation and Regulatory Affairs Group. She reports to the Vice President of Energy Efficiency and Distributed Resources.

Reporting

National Grid is proposing to provide the Commission with quarterly reports on the progress of program implementation. These reports will include information on actual expenses, customer participation, and savings realized compared to annual budgets and goals. These reports will also include information about ongoing program evaluation efforts. Each quarterly report will be submitted to the Commission approximately 45 days following the end of the calendar quarter.

In addition to quarterly reporting, the Company proposes to submit an annual report to the Commission for the purpose of updating its proposed budgets and goals for the coming year informed by evaluation findings, customer response to program services, and other relevant market intelligence. The proposed budget to be included in this annual update will reflect any under or over-spending from the prior year. Each annual report will be

submitted to the Commission approximately 180 days following the end of the calendar year.

The Company is proposing to use the reporting format it currently uses in its reports to the Commission regarding downstate New York energy efficiency efforts. (*See* attached sample Status Report in Appendix G.) The specific categories of information included in the report include:

- Program Planning & Administrative Expenditures, year-to-date
- Program Marketing Expenditures, year-to-date
- Customer Incentive Expenditures, year-to-date
- Program Implementation Expenditures, year-to-date
- Evaluation & Market Research Experience, year-to-date
- Total Expenditures, year-to-date
- Program Year Budget, year-to-date
- Annual Budget
- Number of Rebates (or Participants), year-to-date
- Participation Goal, year-to-date
- Annual Participant Goal for the Program Year
- Total Savings (kWh, kW, Therms), year-to-date
- Savings Goal, year-to-date
- Annual Savings Goals for the Program Year

VIII. Lost Revenues

National Grid is proposing to recover lost revenues related to its energy efficiency program efforts. Appendix I attached hereto provides a description of how lost revenues due to electric energy efficiency program efforts will be determined. Appendix J attached hereto provides a description of how lost revenues due to gas energy efficiency program efforts will be determined.

IX. Performance-Based Shareholder Incentives

The Commission has recognized the importance of providing utilities with a financial incentive to achieve savings in its electric energy efficiency programs.⁵¹ The incentive mechanism applicable to electric energy efficiency efforts includes both rewards for acceptable performance and penalties applicable to efforts that are deemed to be deficient.

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 \$38.85 per MWh saved. The incentive will not exceed the approved annual energy savings goal for the year multiplied by \$38.85.

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 equal to or 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 \$38.85 per MWh. The maximum penalty will not exceed the amount calculated for achieving only 50% of the annual goal.

Appendix K attached hereto outlines the potential incentives and penalties related to proposed electric energy efficiency efforts by year for the period 2009 through 2011.

The Commission's Order Concerning Utility Financial Incentives issued August 22, 2008 in the EEPS proceeding stated that "incentives for gas utility programs, if any, will continue to be set on a case-by-case basis for the near future." The Company reserves the

⁵¹ See 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).

right to incorporate a performance-based incentive for its proposed gas energy efficiency programs should such a performance incentive be subsequently determined by the Commission as applicable for utility-administered gas energy efficiency programs.

APPENDIX A

Explanation of Budget Categories

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).