

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

At a session of the Public Service  
Commission held in the City of  
Albany on December 16, 2009

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman  
Patricia L. Acampora  
Maureen F. Harris  
Robert E. Curry, Jr.  
James L. Larocca

- CASE 08-E-1127 - Petition of Consolidated Edison Company of New York, Inc. for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.
- CASE 08-E-1128 - Petition of Orange and Rockland Utilities, Inc. for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.
- CASE 08-E-1129 - Petition of New York State Electric and Gas Corporation for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.
- CASE 08-E-1130 - Petition of Rochester Gas and Electric Corporation for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.
- CASE 08-E-1132 - Petition of New York State Energy Research and Development Authority (NYSERDA) for Approval of an Energy Efficiency Portfolio Standard (EEPS) NYSERDA-Administered Electric Energy Efficiency Program.
- CASE 08-E-1133 - Petition of Niagara Mohawk Power Corporation for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.

CASE 08-E-1127, et al.

CASE 08-E-1135 - Petition of Central Hudson Gas & Electric Corporation for Approval of an Energy Efficiency Portfolio Standard (EEPS) Utility-Administered Electric Energy Efficiency Program.

CASE 09-G-0363 - Petitions for Approval of Energy Efficiency Portfolio Standard (EEPS) Gas Energy Efficiency Programs.

CASE 07-M-0548 - Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard.

ORDER APPROVING CERTAIN COMMERCIAL AND INDUSTRIAL;  
RESIDENTIAL; AND LOW-INCOME RESIDENTIAL CUSTOMER  
ENERGY EFFICIENCY PROGRAMS WITH MODIFICATIONS

(Issued and Effective January 4, 2010)

BY THE COMMISSION:

INTRODUCTION

In this order, the Commission approves, with modifications, selected Energy Efficiency Portfolio Standard (EEPS) electric and natural gas energy efficiency programs designed to serve the commercial and industrial customer market segment and the residential and low-income residential customer market segments.

The approved commercial and industrial programs are: Block Bidding (electric) to be administered by New York State Electric and Gas Corporation and Rochester Gas and Electric Corporation (NYSEG/RG&E), and the Benchmarking and Operations Efficiency (electric) and High Performance New Construction (gas) to be administered by the New York State Energy Research and Development Authority (NYSERDA).

Commercial and industrial programs that are rejected are: Building Practices and Demonstration (gas) proposed by The

Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid (KEDNY/KEDLI) and Niagara Mohawk Power Corporation d/b/a National Grid (Niagara Mohawk); and Bidding Program within Industrial and Process Efficiency (electric and gas), Commercial Loan Fund & Finance (electric and gas), Institutional Block Bidding (electric and gas), and the New York Energy Smart Business Partners (electric) proposed by NYSERDA.

Two commercial and industrial programs are being deferred for future consideration to allow more time to review information recently filed by the proponents. These programs are: Small and Mid-size Commercial Gas Efficiency (gas) proposed by Central Hudson Gas & Electric Corporation (Central Hudson) and Targeted Demand Side Management (electric) proposed by Consolidated Edison Company of New York, Inc. (Con Edison).

The approved residential and low-income residential programs are: Expanded Residential HVAC (electric) and Residential Appliance Recycling (electric) to be administered by Central Hudson; Appliance Bounty (electric), Residential Direct Installation (electric), and Residential Room Air Conditioning (electric) to be administered by Con Edison; Enhanced Home Sealing Incentives (gas) and Residential ENERGY STAR® Products (gas) to be administered by KEDNY/KEDLI; Enhanced Home Sealing Incentives (electric and gas), Residential ENERGY STAR® Products and Recycling (electric and gas), and Residential Building Practices and Demonstration (electric and gas) to be administered by Niagara Mohawk; and Assisted Home Performance with ENERGY STAR® (gas), EmPower NY (gas), NY ENERGY STAR® Homes (gas), and Home Performance with ENERGY STAR® (gas) to be administered by NYSERDA. In conjunction with these programs, the Commission is also approving a technical manual to put in

place interim approaches for estimating energy savings from residential programs until they can be validated or updated through the Evaluation Advisory Group, using results from evaluation studies conducted in accordance with approved protocols or with results from other credible data sources.

The rejected residential and low-income residential programs are Residential Lower Income Assistance (electric and gas) and Residential Lighting - Community Group CFL Sales (electric) proposed by Central Hudson; ENERGY STAR® Homes New Construction Program (gas), Residential Internet Audit Program and E-Commerce Sales (gas), and Residential Low Income (gas) proposed by KEDLI/KEDNY; Residential Internet Audit Program and E-Commerce Sales (electric), Residential Low Income (gas), and Residential Pricing Pilot with Load Control (electric) proposed by Niagara Mohawk; Residential Efficient Products (electric) proposed by Orange and Rockland Utilities, Inc. (O&R); Residential ENERGY STAR® HVAC Electric (electric), Residential Lighting (electric), Residential Limited Income (electric), and Residential Recommissioning/Early Replacement (electric) proposed by NYSEG/RG&E; and Power Management Pilot (electric), ReModel with ENERGY STAR® (electric), and Residential Green Building Program (electric and gas) proposed by NYSERDA.

Central Hudson also submitted a proposal for a residential behavioral modification marketing program to promote reduced energy use and energy efficiency that will be considered at a future date to allow time for parties to provide comments.

#### BACKGROUND

On June 23, 2008, the Commission created an Energy Efficiency Portfolio Standard (EEPS) program for New York State to develop and encourage cost-effective energy efficiency

programs.<sup>1</sup> The Commission invited NYSERDA and the six large investor-owned electric utilities to submit electric energy efficiency program proposals. Subsequently, the Commission invited NYSERDA and natural gas utilities with 14,000 or more customers to submit natural gas energy efficiency program proposals. Numerous proposals were submitted in response to the Commission's invitation, some of which are combined electric and gas programs. To provide for an orderly review of the proposals, they are being considered in phases, by customer market segment. This order focuses on program proposals designed for the commercial and industrial customer market segment and the residential and low-income residential customer market segments.

NOTICE OF PROPOSED RULEMAKING

Notices of Proposed Rulemaking concerning the energy efficiency program proposals under consideration were published in the State Register on October 7, 2009 [SAPA 08-E-1127SP8 and SAPA 08-E-1127SP9] and on October 14, 2009 [SAPA 08-E-1127SP10]. The minimum periods for the receipt of public comments pursuant to the State Administrative Procedure Act (SAPA) regarding those notices expired on November 23, 2009 [SAPA 08-E-1127SP8 and SAPA 08-E-1127SP9] and November 30, 2009 [SAPA 08-E-1127SP10]. The manner in which the comments received are addressed is described below.

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<sup>1</sup> Case 07-M-0548, Energy Efficiency Portfolio Standard (EEPS), Order Establishing Energy Efficiency Portfolio Standard and Approving Programs (issued June 23, 2008).

SUMMARY OF COMMERCIAL AND INDUSTRIAL PROGRAM PROPOSALS

Brief summaries of the proposed programs considered in this order are presented below. More detailed descriptions of the programs are provided in Appendix 1.

KEDLI/KEDNY and Niagara Mohawk -  
Building Practices and Demonstration (Gas)

On September 22, 2009, KEDNY, KEDLI, and Niagara Mohawk proposed a Building Practices and Demonstration program. As proposed, the program would be administered by the respective companies' engineering staffs with assistance from outside consultants and professional engineering firms. Outside contractors would be selected through a competitive bid process.

KEDLI/KEDNY and Niagara Mohawk would offer incentives of up to 50% of the project cost, capped at \$100,000, for the implementation of projects that showcase significant energy savings potential. Customers would be allowed to apply directly to the KEDLI, KEDNY, or Niagara Mohawk or through trade ally channels. Participants would be required to permit the utility to meter the installation and monitor performance.

KEDLI/KEDNY/Niagara Mohawk propose to coordinate with NYSERDA and leverage existing energy efficiency partners for product selection, feasibility, installation and monitoring.

KEDLI proposes a total budget of \$421,354 for 2010 and 2011. The program is projected to save 15,672 MMBtu and serve 30 customers. KEDNY proposes a total budget of \$881,494 for 2010 and 2011. The program is projected to save 13,646 MMBtu and serve 12 customers. Niagara Mohawk proposes a total budget of \$776,276 for 2010 and 2011. The program is projected to save 38,092 MMBtu and serve 30 customers.

NYSEG/RG&E - Block Bidding (Electric)

NYSEG and RG&E propose to offer block bidding programs to all of their customers that purchase electric delivery service from NYSEG or RG&E and pay the electric System Benefits Charge. NYSEG/RG&E originally filed the program proposal on September 22, 2008 and filed updates on April 22 and 24, 2009 and on September 18, 2009. The original proposal would have covered both electric and gas efficiency, but later updates limited the program to electric efficiency initiatives.

The programs are directed toward commercial or industrial facilities (or multiple residential buildings) in either or both of the companies' service territories. Potential participants include Energy Service Companies (ESCOs), performance contractors, management companies, and customers that could submit proposals for projects that achieve energy reductions resulting in a minimum of 1,000 MWh/year savings.

NYSEG has proposed a cumulative program budget of \$3,181,000, covering program years 2010 thru 2012. The cumulative budget includes one-time startup costs of \$75,000 in 2010. The proposal seeks to achieve annual savings of 1,695 MWh in 2010, 4,135 MWh in 2011, and 2440 MWh in 2012 for total cumulative electric savings of 8,270 MWh. NYSEG stated in its September 22, 2008 filing that due to the unique nature of this program, it was unable to project meaningful participation levels and has been silent on this matter in subsequent filings.

RG&E has proposed a cumulative program budget of \$3,280,000, covering program years 2010 thru 2012. The cumulative budget includes one-time startup costs of \$75,000 in 2010. The proposal seeks to achieve annual savings of 1,695 MWh in 2010, 4,135 MWh in 2011, and 2,440 MWh in 2012 for total cumulative electric savings of 8,270 MWh. RG&E stated in its

September 22, 2008 filing that due to the unique nature of this program, it was unable to project meaningful participation levels and has been silent on this matter in subsequent filings.

NYSERDA - Benchmarking and Operations Efficiency (Electric)

NYSERDA proposes a Benchmarking and Operations Efficiency program to encourage customers to benchmark their facilities' energy performance, implement low- and no-cost operational improvements, and participate in NYSERDA's incentive programs for capital-intensive energy efficiency measures. The program would also support New York City's building benchmarking effort and provide general marketing and outreach to improve customer participation in NYSERDA and utility incentive programs. The proposed program would focus on developing benchmarking tools for the commercial/industrial sector and providing direct customer benchmarking services. Tools to be offered would include a web-based portal to national benchmarking systems as well as a database of energy use information from peer buildings. Direct customer assistance would be available for building owners to collect and analyze their own data and energy management "SWAT" teams would provide individualized assistance to customers.

NYSERDA proposes an electric energy savings goal of 37,240 MWh savings through 2011<sup>2</sup> and states that it would achieve unspecified gas savings. NYSERDA is requesting electric funding of \$11.1 million through 2011 and estimates that 500 electric customers would participate in the program. The proposed program would offer no direct customer incentives, but rather would offer benchmarking services as described.

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<sup>2</sup> NYSERDA projects total cumulative savings through 2013 of 56,000 MWh.



NYSERDA - Bidding Program within  
Industrial and Process Efficiency Program (Electric and Gas)

NYSERDA proposes to include a bidding component within the existing Industrial and Process Efficiency Program that would offer gas and electric savings to commercial and industrial customers. The proposed program is directed at large industrial customers

NYSERDA proposes a cumulative electric program budget of \$20,000,000 for the program years 2010 and 2011 and states that the program would achieve 187,000 MWh of savings. For the gas component of the bidding program, NYSERDA proposes \$8,000,000 of natural gas funding to achieve a minimum of 730,000 MMBtu of savings. The program proposal did not include an estimate of the expected number of program participants. The funding for the program would come from previously approved funding for the EEPS "fast track" Industrial and Process Efficiency Program. No additional program details have been provided at this time.

NYSERDA - Commercial Loan Fund  
And Finance Program (Electric and Gas)

NYSERDA proposes an expansion of the existing Loan Fund and Finance Program for electric and gas measures. Currently, the program encourages the installation of energy-efficiency equipment and process improvements in commercial buildings by increasing the availability of low-interest capital. The program uses a network of participating lenders and leasing companies to provide reduced-interest rate financing. Current interest-rate reductions are 6.5% in Con Edison's service territory and 4.0% in other utility service territories. The subsidy is paid to a participating lender upon evidence that the customer has received the reduced rate on the

issued loan or lease. Loans or leases up to \$1,000,000 are eligible for the program.

NYSERDA's proposed expansion plans include identifying new lenders and targeting commercial customers in underserved markets and sectors. To date, the program has allowed customers to receive an interest rate reduction for projects also receiving direct incentives from other NYSERDA programs. NYSERDA proposes to eliminate this overlap by requiring customers to choose between the direct incentive offered by other programs or the low-interest capital available through the loan fund. NYSERDA also proposed to explore partnering with other entities on "green bonds" and loan guarantees.

NYSERDA's proposed Commercial Loan Fund and Finance program's electric budget for 2010 through 2013 is \$8,216,963 and is expected to produce 19,826 MWh in savings. The number of participants has not been provided. NYSERDA's proposed gas budget for the program for 2010 through 2013 is \$1,088,781 and is expected to produce 22,734 MMBtu of savings. The number of participants has not been provided. NYSERDA proposes that the entire budget would be encumbered by the end of 2011 but that expenditures would continue through 2013.

NYSERDA - High Performance New Construction (Gas)

NYSERDA's High Performance New Construction program is intended to serve local governments, businesses, not-for-profit and private institutions, public & private schools, multifamily buildings (seeking green buildings services), and health care facilities that pay the System Benefits Charge. The program provides customers with technical assistance services and financial incentives for energy efficiency improvements in new construction and substantially renovated buildings. Incentives

are available for pre-qualified and custom gas measures. NYSERDA proposes a funding stream through 2014 totaling \$8,625,262, including \$375,199 for outreach and marketing, with a total savings goal through 2015 of 580,205 MMBtu. NYSERDA estimates that 111 customers would participate in the proposed program.

The proposed program would provide financial incentives up to a maximum of \$850,000 in service territories other than Con Edison and \$1,650,000 in the Con Edison area to help offset the cost of energy efficient natural gas improvements.

NYSERDA - Institutional Block Bidding (Electric and Gas)

NYSERDA proposes a bidding program that would offer gas and electric savings to commercial and industrial customers. It originally filed the proposed program on September 22, 2008 and filed revisions on June 5, 2009. Currently, the program does not have any detailed program design description other than that it would have two year budget of \$9,000,000 (according to the June 5, 2009 revision).

NYSERDA - New York Energy Smart Business Partners (Electric)

As part of its September 22, 2008 filing, NYSERDA proposed an expansion of its existing electric SBC-funded Business Partners Program. NYSERDA describes the program as a mid-stream market development program that encourages program partners to use strategies that coincide with their own business models to "influence markets toward efficiency." NYSERDA's proposed expansion would include efforts to recruit new participants and target technologies and practices that have the highest energy savings potential.

The heating, ventilation, and air conditioning (HVAC) portion of the proposed expansion would promote the efficient operation of existing unitary air conditioning units and facilitate the specification, purchase, and installation of high efficiency commercial HVAC equipment. NYSERDA also proposed expanding the delivery network of qualified HVAC service providers. Participating "Business Partners" (contractors) would be eligible for incentives for diagnosing the energy efficiency of small commercial unitary HVAC units and, where appropriate, completing HVAC testing and tuning services, economizer repairs, and enhanced control strategies for existing units. NYSERDA also proposed an outreach component that would target new construction.

The commercial lighting portion of the proposed New York Energy Smart Business Partners program would focus on market development and incentive structures to support teaching lighting practitioners about the benefits and attributes of effective, energy-efficient lighting. Business partners would also be trained on advanced and "comparative" lighting technologies. Recruitment of lighting business partners would include energy service companies and interior designers. NYSERDA proposed increasing the number of account managers in the New York City and western New York areas. The proposal also included an expansion of end-user marketing efforts aimed at educating end-users on the benefits of energy-efficient lighting and leading them to business partners trained under the program.

NYSERDA also proposed an expansion of the energy-efficient motors and drives portion of the New York Energy Smart Business Partners program. This segment of the program would focus on procuring kWh savings through incentives and other strategies, including educating vendors and purchasers and

customer site visits. Midstream incentives would be provided to business partners for the sale of qualified motors and variable speed drives. NYSERDA indicated that the incentives are designed to prime the motor market by encouraging vendors and distributors to stock motors that will meet regulatory requirements that are to take effect in late 2011.

NYSERDA's proposed budget for 2010 and 2011 is \$7,239,369 with total savings of 46,150 MWh. NYSERDA projects that the program would serve 3,860 customers.

#### DISPOSITION OF COMMERCIAL AND INDUSTRIAL PROGRAM PROPOSALS

Comments on NYSEG/RG&E's Block Bidding proposal have been received from EnSave, which has experience providing energy efficiency programs to agricultural customers in New York State. In a letter dated November 21, 2009, EnSave supports the NYSEG/RG&E update of the program proposal, filed on September 18, 2009. EnSave states that the program "allows the Companies to achieve energy savings while also creating business opportunities and marketplace innovation." It further says that the program will allow firms with a niche focus to use specialized expertise to capture energy savings that might not otherwise be realized.

#### Discussion

##### 1. Funding Principles

As a continuing general principle for all EEPS programs, monies collected from electric ratepayers should be used to fund only electric energy efficiency measures and monies collected from gas ratepayers should be used to fund only gas efficiency measures. EEPS resources should not fund heating efficiency measures in buildings heated by a fuel source other than natural gas or electricity. Measures that are not cost effective on a stand-alone basis, and measures that do not

contribute directly to achieving the Commission's electricity or gas usage reduction targets, should also not be funded by EEPS resources. Each type of measure to be installed must be cost effective on a stand-alone basis such that the type of measure has a total resource cost (TRC) value of at least 1.0 prior to inclusion of program administrative and evaluation, measurement, and verification costs. Further, program administrators should determine that each project as a whole will be cost effective after inclusion of all program administrative and evaluation, measurement, and verification costs.<sup>3</sup> The determination of total resource benefits must be based on avoided costs, carbon reduction per unit values, and all other inputs and assumptions in effect at the time benefit/cost analyses are performed.

## 2. Benefit/Cost Analysis

All of the benefit cost estimates for gas measure categories reported below are based either on numerous specific installations aggregated by Staff or on generic estimates, researched by Staff and/or provided by companies. They are intended to indicate whether measure types are more or less likely to be cost-effective. However, the cost-effectiveness of a measure type in the commercial and industrial sectors is often highly site, and actual measure detail, specific. It may also depend on whether the context requires coverage of full costs or only of partial costs. For prescriptive measures, it will be necessary to either generically pre-screen the measures for cost-effectiveness based on typical costs and savings<sup>4</sup> or to pre-screen them on a project-specific basis. For custom and bidding

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<sup>3</sup> Utility program administrators must also include estimated shareholder performance incentive amounts when evaluating the cost-effectiveness of a project.

<sup>4</sup> For prescriptive programs, the incentives would generally be based on typical costs. Higher costs would be at the participant's expense.

measures, it will be necessary to pre-screen individual measures on a project-specific basis. The measures must achieve a total resources benefit/cost ratio of at least one (1.0). The program's implementation protocol should include a TRC pre-screening analysis both at the specific measure and project level before project funding commitments are made. We believe such a requirement will ensure cost-effective investments on behalf of ratepayers and will not be overly burdensome for large custom projects requiring engineering studies.

a. Gas Measure Level Benefit/Cost Analysis

Table 1 below displays measure-category average TRC ratios for gas commercial and industrial measures that would be typical of the programs covered by this order. The estimates are based on Staff aggregation of project details related to measures funded under National Grid's Energy Initiative program in Massachusetts. The TRC results indicate that many gas measures can be cost-effective as part of a commercial and industrial energy efficiency program.<sup>5</sup>

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<sup>5</sup> Table 1 in the EEPS order issued on November 13, 2009, lists additional gas C&I measures that are apparently cost-effective. Those TRC ratios are not shown here because they were modeled as retrofit, not new, construction.

**Table 1**  
**TRCs for Gas Energy Efficiency Measures**

GAS MEASURES	TRC Measure Ratios With CO <sub>2</sub>	
	Downstate	Upstate
<b>Modeled as New Construction -- Estimated Incremental Cost: 40% of Total Measure Costs</b>		
Condensing Boilers All Sizes	3.1	2.5
Cooking Equipment, Commercial/Institutional	5.6	4.4
Furnace 92% + AFUE	2.1	1.6
Furnace with ECM	2.0	1.6
Hydronic Boilers all Sizes	3.4	2.7
Infrared Space Heating	5.1	4.1
Water Heater – Indirect	2.4	1.9
Water Heater - On-Demand	1.4	1.1

b. Program Level Benefit/Cost Analysis

The NYSERDA program TRC ratios reported below are calculated by NYSERDA consistent with Commission orders and Staff guidelines on system inputs. The NYSEG/RG&E Block Bidding program ratios are necessarily more speculative. Each ratio is highly dependent on the program administrator's estimates of measure costs and savings and assumptions about the mix of cost-effective measures that participants will select. Staff has not reviewed those estimates fully. Still, the measure-type ratios above confirm that NYSERDA, NYSEG and RG&E, with reasonable administrative costs, should be able to conduct a cost-effective program using the measures proposed.



**Table 2**  
**TRC Ratios for the Programs as a Whole<sup>6</sup>**

Utility	Program Name	Electric/Gas	TRC with CO <sub>2</sub>
NYSEG	Block Bidding	Electric	1.62
RG&E	Block Bidding	Electric	1.67
NYSERDA	Benchmarking and Operations Efficiency	Electric	1.60
NYSERDA	High Performance New Construction	Gas	1.90

3. Customer Outreach and Education/Marketing

Consistent with prior orders, and as part of the utility program implementation plans and NYSERDA operating plan for commercial and small industrial customer energy efficiency programs, each of the program administrators will submit program-specific marketing plans for certification by the Director of the Office of Consumer Services.

4. Approved Programs

The programs under consideration here are designed to provide technical and financial assistance to commercial and industrial electric and gas customers to encourage them to make cost-effective energy efficiency improvements. Success of programs for this market sector is essential to meeting our EEPS energy savings goals.

NYSEG/RG&E - Block Bidding (Electric)

NYSEG and RG&E proposed to use a sealed-bid/pay-as-bid auction approach for this program. This is the same approach that has been used for all Renewable Portfolio Standard main tier solicitations to-date.

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<sup>6</sup> Unlike the measure level tables, these ratios include administrative and evaluation costs and shareholder performance incentives for the utilities, as well as appropriate free rider treatment. As with the measure ratios, the CO<sub>2</sub> adders are included.

Further, NYSEG and RG&E stated in their filings that to be considered in the bidding process:

[A] proposal must have a Total Resource Cost ("TRC") test benefit: cost [sic] ratio greater than 1.0. Where required by the Commission or by the nature of the bidder's proposal, individual projects and measures within the program may be required to pass a TRC test prior to payment by the Companies.

Clearly, any permitted bidder will have to demonstrate that it satisfies the general cost effectiveness criteria we have previously established and which are repeated in this order.

NYSEG and RG&E's proposal would not require a winning bidder to provide security to ensure that the bidder satisfies its contractual obligations nor does the proposal provide details of the criteria that would be used to determine payment schedules. NYSEG/RG&E will be required to include criteria and protocols within their implementation plan that address the need to offer a reasonable expectation that the winning projects can provide their forecasted cost-effective savings.

The proposal does not explain how competing bids will ultimately be ranked against each other. Department Staff has informed us that it has discussed this omission informally with NYSEG and RG&E. They have agreed that bidders will be required to place a bid for the amount of incremental ratepayer funding being sought to implement the proposal and to convert the proposed funding into a percentage of the project's projected measure life discounted resource benefits based on the Commission's long run avoided cost estimates. Projects requiring the lowest percentage of resource benefits would be selected up to the point where the cumulative funding would equal the total program dollars offered in the auction. The competitive ranking, therefore, would not be influenced by

bidders' estimates of costs or be subject to error and gaming of those costs. This method would permit projects offering only electric savings, or predominantly electric savings with ancillary gas savings, to be considered in one ranking, without artificial weighting of therms, kWh, or peak KW to be saved. This method, as opposed to bidding by dollars/kWh or therm, would automatically value electric system peak impacts and time-of-use variations in avoided costs. NYSEG/RG&E will be required to include a description of the auction design, consistent with the previous discussion, within its implementation plan. We will require that all submitted bids identify the specific measures to be installed at each location with sufficient supporting documentation to determine the project's feasibility before an award is granted.

NYSEG and RG&E also propose that potential participants submit proposals for projects that achieve energy reductions resulting in a minimum of 1,000 MWh/year savings. However, we consider this target too large and believe that the minimum threshold for the bid size should be reduced to 100 MWh/year savings in order to expand the potential pool of participants eligible to apply for this program, thereby increasing its viability. Aggregation of sites would be allowed to meet the minimum threshold requirement. Aggregation proposals must include measure specific efficiency information at the identified locations so that the feasibility of the project can be evaluated before an award is granted.

NYSERDA - Benchmarking  
and Operations Efficiency (Electric)

NYSERDA's Benchmarking and Operations Efficiency program provides information and resources (such as benchmarking, limited technical assistance, energy "SWAT" team visits, and general marketing and outreach) to improve customer participation in NYSERDA and utility efficiency programs (e.g., NYSERDA's commissioning activities). NYSERDA notes that a large portion of the projects served through this program are expected to benefit from implementation funding or follow-up technical assistance provided through other programs (because many of these projects will also participate in other NYSERDA programs such as Existing Facilities or FlexTech). NYSERDA further explains that this program requires additional work to finalize the software necessary to support the benchmarking component (i.e., to be able to provide custom reports for benchmarking activities).

Although we recognize the potential benefits and energy savings that NYSERDA's proposed program could provide, most notably the commissioning activities that provide low-cost energy savings through operations and maintenance improvements (often independent of incentive programs), we remain concerned about program overlap issues resulting from the numerous energy efficiency programs that NYSERDA administers. These issues include potential overlap of outreach and marketing activities; overlap with research and development-type activities; layering of administrative costs and/or program benefits or incentives; and concerns related to the proper attribution of program costs and energy savings. Consequently, we direct NYSERDA to incorporate the Benchmarking and Operations program into its existing FlexTech program in an effort to streamline the program and reduce overall administrative costs to ratepayers. NYSERDA

should also fully address the attribution of program costs and energy savings in its operating plan submittal.

This program is approved for funding at the adjusted annual program budget and energy savings levels, subject to the generic modifications to all programs described in this order. In addition, we reiterate the principle that for all EEPS programs electric funds should pay for electric measures and gas funds should pay for gas measures. NYSERDA can fund measures that target other fuels, especially measures to conserve heating oil, from other (non-EEPS) funding sources.

NYSERDA - High Performance New Construction (Gas)

We approve NYSERDA's proposal to administer a gas commercial and industrial new construction program to complement the existing electric New Commercial Buildings Program that we approved for EEPS funding earlier in 2009<sup>7</sup>. In addition, we reiterate the principle that for all EEPS program, electric funds should pay for electric efficiency measures or studies to save electricity, and gas funds should pay for gas efficiency measures or studies to save gas. NYSERDA can fund measures that target other fuels, especially measures to conserve heating oil, from other (non-EEPS) funding sources. The resources being approved for this program are solely for gas energy efficiency measures that are directly related to EEPS energy savings. NYSERDA should track and report the gas High Performance New Construction program budgets and goals separately from its other energy efficiency programs. Tracking should include program

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<sup>7</sup> Electric funding for the New Commercial Buildings Program was provided pursuant to NYSERDA's System Benefits Charge Supplemental Revision for the New York Energy Smart Programs (2008-2011) [as amended on August 22, 1008 and revised on March 12, 2009] certified by the Department of Public Service on March 13, 2009.

costs, participants served, measures installed, and energy efficiency-related savings.

NYSERDA is directed to require project level screening to ensure that each project is cost-effective, with a TRC greater than 1.0, before any project is accepted into this program. Moreover, if NYSERDA is offering bonus incentives for certain technologies or Leadership in Energy and Environmental Design (LEED) certification, NYSERDA is directed to require measure level screening to verify that all measures are cost-effective, with a TRC greater than 1.0, prior to any project being accepted into this program.

This program is approved for funding at the adjusted annual program budget and energy savings levels, and subject to generic modifications to all programs as described in this order. The EEPS funding for this program is to be used for new projects whose applications are received subsequent to this order.

5. Rejected Programs

KEDNY/KEDLI, Niagara Mohawk - Building Practices and Demonstration Program (Gas)

We are not approving incremental funding for the Building Practices and Demonstration Program (gas) proposed by KEDNY/KEDLI and Niagara Mohawk. We find the program, as presented, to be exploratory in nature and directed toward case studies, as evidenced by statements in its proposal. We prefer to dedicate EEPS funds to programs that are able to contribute directly in the near-term to achieving the energy savings goals and targets we have established. We are not confident that the program as proposed would make appropriate use of EEPS funds at this time.

In addition, since the similar Building Practices and Demonstration program is currently operating within the KEDNY and KEDLI interim programs, in the future we may reconsider whether these programs should continue operating.

NYSERDA - Bidding Program within  
Industrial and Process Efficiency Program (Electric and Gas)

We are not approving funding for the bidding component of the Industrial and Process Efficiency (gas & electric) program proposed by NYSERDA at this time. Although there may be potential energy savings opportunities with a properly designed bidding program component within the Industrial and Process Efficiency Program, we find the program as presented by NYSERDA is insufficiently developed and lacks essential program details. NYSERDA states in its proposal that final program design would be partially based on input from Staff. We therefore encourage NYSERDA to continue to gain knowledge and collect information about the potential for a bidding program within the context of its existing Industrial and Process Efficiency Program. However, we are unable to conclude at this time that the bidding program would make appropriate use of EEPS funds and are, therefore, unable to authorize funding for the program as filed.

NYSERDA - Commercial Loan Fund &  
Finance Program (Electric and Gas)

We are not approving funding of NYSERDA's Loan Fund Program using EEPS funds. Although NYSERDA states that the Loan Fund would enable customers to implement recommendations from technical assistance audits and serve those customers whose projects cannot qualify for other commercial incentive programs, we remain concerned about program overlap issues resulting from NYSERDA's administration of numerous energy efficiency programs (e.g., layering of administrative and marketing and outreach

costs, and proper attribution of programs costs and energy savings). In addition, NYSERDA proposes to explore other financing opportunities, such as partnering with other entities on "green bonds" and loan guarantees. Furthermore, there are several initiatives underway to examine if and how efficiency program financing may be conducted in the future. For example, the state legislature issued a directive to NYSERDA to solicit proposals for innovative financing mechanisms for energy efficiency measures. This and other initiatives may obviate the need for additional funding for the loan fund. Consequently, this program is not approved for EEPS funding.

NYSERDA -Institutional Block Bidding (Electric and Gas)

We are not approving funding for the Institutional Block Bidding program proposed by NYSERDA. Although there may be potential energy savings opportunities with a properly designed bidding program, we find the program as presented by NYSERDA to be insufficiently developed and lacking essential details.

NYSERDA notes in its proposal that detailed design of a commercial and institutional bidding program would benefit greatly from information gathering through discussion with Staff and other parties. Consequently, we are unable to conclude at this time that the Institutional Block Bidding program would make appropriate use of EEPS funds and are unable to authorize funding for the program as filed. However, we encourage NYSERDA to continue to gain knowledge and collect information about the potential for bidding programs in New York State.

NYSERDA - New York Energy \$mart Business Partners (Electric)

We are not approving incremental funds for NYSERDA's Energy \$mart Business Partners program. As described by



NYSERDA, the program is a market transformation program that pays upstream incentives to manufacturers and other partners and/or trade allies. We are concerned about how these efforts would be coordinated statewide. Furthermore, it is unclear what impact these activities would have on utility energy efficiency programs. Moreover, we are concerned about how the energy savings would be attributed because of potential overlap with utility and NYSERDA programs and the potential disadvantage to utility programs that such a program might create. Consequently, we prefer to dedicate EEPS funds to programs that can contribute more directly to achieving the energy savings goals and targets we have established. We are not convinced that the program, as proposed, would make appropriate use of EEPS funds.

6. Deferred Programs

Central Hudson - Small Commercial Gas Efficiency (Gas)

Central Hudson filed an update to this program on November 25, 2009, that reflected substantial changes in the program's design, including an expansion in the number of customers targeted and an increase in the cost per unit of energy saved. The revision arrived too late to allow for adequate staff review. Therefore, we are unable to act on this program at this time. Staff should work with Central Hudson to obtain the information that Staff needs to make an informed recommendation to us at a later date about the revised program.

Con Edison - Targeted Demand Side Management (Electric)

On November 17, 2009, Con Edison submitted significant updates to this program. The update reflected substantial program changes that required additional Staff analysis.

Furthermore, Con Edison's responses to Staff information requests were received too late to allow for adequate Staff review. Therefore, we are unable to act on this program at this time. Staff should work with Con Edison to obtain information needed to make an informed recommendation to us at a later date.

7. Program Funding

The electric energy efficiency proposals for this market segment totaled more than \$190 million in annual spending. The gas efficiency proposals totaled more than \$27 million in annual spending, which is more than twice the amount of funding we are allocating to this market segment.

The annual program budgets, evaluation budgets, and energy savings goals for the approved commercial and industrial programs shall be as set forth in Appendix 3 of this order. For the commercial and industrial programs considered here, the total amount of funding we shall approve at this time reflects in part our calculation of the proportional share of the expected cost of EEPS electric and gas programs divided pro rata by customer market sector. The funding of gas programs further reflects the fact that some of the gas programs will replace existing interim energy efficiency programs.

8. Policy Guidelines Regarding Incentives

Commercial and industrial customers often require customized energy efficiency programs to best meet their individual needs. As a result, programs offered by NYSERDA and the utilities include customized incentive payments that may be a portion of the overall cost of a particular project. To ensure the appropriate expenditure of ratepayer dollars, we will require that NYSERDA or the utilities obtain proper documentation (i.e., itemized invoices depicting the installation costs of the energy efficiency measures) before any

energy efficiency incentives are paid that are based on a total overall cost of a project. Program administrators should ensure that EEPS program funding is used only for costs associated with end-use energy savings equipment.

Many of the proposed commercial and industrial programs discussed here do not include caps on the total amount of incentives that the program administrator would pay toward an individual project and/or customer. To encourage broad participation, we will limit the extent to which a disproportionate amount of ratepayer funds are used to support relatively few projects and/or customers. For new project applications for programs approved by this order, with the exception of High Performance New Construction Program, we will require that for the programs with annual budgets of \$10,000,000 or more, the utilities and NYSERDA shall cap per-year individual customers and/or project incentive payments at 10% of the total annual program budget. The utilities and NYSERDA may petition the Commission to exceed such cap on a project-specific basis if unusual circumstances warrant.

The policy guidelines for per-participant incentive caps for commercial and industrial customers, as described above, apply solely to the EEPS funded program initiatives approved in this order.

9. Program Evaluation

a. NYSEG/RG&E - Block Bidding Program (Electric)

NYSEG/RG&E filed with their program proposals a generic evaluation plan designed to cover the 12 programs it originally proposed in response to our June 2008 EEPS Order.

In its generic evaluation plan, which includes the Block Bidding program, NYSEG/RG&E states a commitment to quality evaluation and the evaluation guidelines that were developed by Staff and the Evaluation Advisory Group, but offer few details on

how the commitment will be satisfied. They promise to provide these essential details upon hiring an independent evaluation contractor. NYSEG/RG&E state that "[r]etaining an independent evaluation expert will permit NYSEG and RG&E to begin work at once in developing the detailed and rigorous evaluation plans necessary for the Companies' EEPS programs, in consultation with Staff and the Evaluation Advisory Group." Staff, however, can not review an evaluation plan without additional program specific detail on key evaluation components including process and impact evaluations, budget, sampling strategy, and steps to improve data reliability. The plan must also address how Staff and the Evaluation Advisory Group will be engaged to execute their oversight responsibilities.

- b. NYSERDA - Benchmarking and Operations Efficiency Program (Electric) and NYSERDA - High Performance New Construction (Gas)

NYSERDA submitted evaluation plans with its Benchmarking and Operations Efficiency and High Performance New Construction programs that cover key evaluation elements, including process, impact, and market evaluations; budgets; sampling strategies; and net impact analysis. The impact evaluation for the Benchmarking and Operations Efficiency program will track the number of participants that enter into NYSERDA and utility incentive programs. The process evaluation will focus on the participation and decision making process in each of the program elements. As part of the market evaluation, NYSERDA will develop program theory and logic models to guide its program-specific evaluation activities. The primary goal of the evaluation effort for High Performance New Construction is to measure and verify the savings attributable to the program.

NYSERDA prepared an overall approach that will give it and its contractors the flexibility to adapt the evaluations to the programs once they have a better understanding of the final evaluation protocols and funding. NYSERDA expects the evaluation budgets for these programs to be approximately 5% of the program funding level, minus any set-aside for statewide studies

conducted in collaboration with other program administrators. NYSERDA has provided the percentages of the total that it expects would be allocated among impact, process, and market evaluations.

While the evaluation approach described generally comports with the guidelines developed by Staff and the Evaluation Advisory Group pursuant to our June 2008 EEPS Order, NYSERDA cautions that its evaluation plans were designed without knowing certain critical factors such as the final disposition of the program design and funding by the Commission. As a result, it described the evaluation plans as "scalable and flexible." NYSERDA states its intention to work with Staff and the Evaluation Advisory Group on developing full evaluation plans.

In August 2009, Staff approved NYSERDA's evaluation plan for the SBC-funded electric component of its New Construction Program. We will expect that NYSERDA will submit a revised plan that integrates both the gas and electric program components of its New Construction Programs.

c. Reporting

The reporting protocols outlined by NYSEG/RG&E and NYSERDA are not always consistent with the requirements outlined in our January 2009 EEPS Order. Except for NYSERDA, there is no mention of plans to submit the required monthly "scorecard report." There are inconsistencies among the companies in the deadlines for completing the quarterly and annual reports. We require the annual report no later than 60 days after the conclusion of the calendar year and the quarterly report no later than 45 days after the conclusion of the quarter.

SUMMARY OF RESIDENTIAL AND  
LOW-INCOME RESIDENTIAL PROGRAM PROPOSALS

Brief summaries of the proposed programs considered in this order are presented below. More detailed descriptions of the programs are provided in Appendix 2.

Central Hudson - Expanded  
Residential HVAC (Electric)

This program would promote energy efficiency by offering rebates to residential customers who install ground-source heat pumps. Rebates would be provided for electronically commutated (ECM) fans that are installed at the same time as a ground-source heat pump and for programmable thermostats as a stand-alone measure.

Central Hudson's proposed total program budget for Expanded Residential HVAC is \$483,500 through 2011. The projected participation level through 2011 is 650 to 800 customers with a proposed electric savings goal of 1,488 MWh through 2011.

Central Hudson - Residential  
Appliance Recycling (Electric)

This program would achieve energy savings by removing and recycling old refrigerators, freezers, and room air conditioners. A \$50 per unit "bounty" would be paid to a customer that turns in up to two working refrigerators and/or freezers. Customers that turn in an older model energy-inefficient room air conditioning unit would be eligible for a rebate for a new ENERGY STAR® air conditioning unit. The appliances would be collected and recycled to ensure that they will not be donated, given as gifts, or resold.

Central Hudson's proposed total program budget for Residential Appliance Recycling is \$1,779,000 through 2011. The projected participation is 6,000-8,000 customers, and the proposed annual electric savings goal is 3,898 MWh, achieved through 2011.

Central Hudson - Residential Lighting  
Community Group CFL Sales (Electric)

Central Hudson proposes to promote efficient residential lighting by distributing compact fluorescent light (CFL) bulbs to electricity customers via fund raising campaigns conducted by community groups. Central Hudson would provide bulbs and training to the community groups and these groups would retain the proceeds from bulb sales. It proposes to offer screw-in CFLs of three different wattages in choices of soft white and natural light.

Central Hudson's proposed total program budget for Residential Lighting - Community Group CFL Sales is \$260,000 through 2011. The projected participation level through 2011 is 10,000 to 20,000 customers with a proposed electric savings goal of 1,167 MWh.

Central Hudson - Residential  
Lower Income Assistance (Electric and Gas)

This program would address energy efficiency for lower-income residential customers using a whole house approach. The program would provide free assessments to a building owner or homeowner that would show how a combination of improvements (including weatherization measures, improved HVAC equipment, and upgraded lighting and appliances) could lower energy consumption and create a more comfortable home. Targeted customers would be those in existing residential dwelling units whose total annual household income level is at or below 60% of the state median, consistent with HEAP guidelines

Proposed efficiency measures include installing weatherization; improving heating, ventilation, and air conditioning (HVAC), primarily through re-commissioning;<sup>8</sup> and upgrading existing lighting and appliances. Central Hudson

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<sup>8</sup> Re-commissioning refers to restoring a building's systems to original manufacturers' operational specifications.

proposes a maximum incentive of \$3,000 for homeowners and up to \$6,000 for 2-4 unit building owners. These caps are based on average cost assumptions for energy efficiency upgrades after the on-site assessment has been conducted. A qualified owner occupying a dwelling in a 2 to 4 unit building could receive a subsidy of up to \$3,000 for the whole building without an income verification required of the tenants. A higher subsidy of up to \$6,000 for the building is available if one or more tenants are also income-eligible.

Central Hudson's proposed overall program budget for Residential Lower Income Assistance is \$1,879,000 through 2011. The projected participation level is 250 customers, with proposed total energy savings through 2011 of 602 MWh of electricity and 53,775 therms of gas. The proposed general program cost apportionment is 75% for electric low-income residential efficiency and 25% for gas low-income residential efficiency.

Con Edison - Appliance Bounty (Electric)

Con Edison designed the Appliance Bounty program to encourage customers to dispose of older, working, inefficient room air conditioners and second refrigerators in an environmentally sound manner. Energy and capacity savings would be achieved by removing the appliances from the electric system and ensuring that they would not be used again. The proposed program would target all residential customers in 1-4 family housing.

To encourage participation, Con Edison proposes to offer customers free appliance disposal and recycling, and incentive bounties of up to \$100 per appliance. Con Edison plans to limit customer incentive payments to two incentives for each type of appliance per customer address. Con Edison proposes



to serve 29,700 participants through 2011 with a budget of \$6,217,000. The proposed energy savings goal is 16,940 MWh savings through 2011.

Con Edison - Residential Direct Installation (Electric)

Con Edison designed its proposed Residential Direct Install program as an entry point for residential customers to evaluate their home's energy performance and identify energy savings opportunities. Con Edison proposes to use a low-cost energy audit to encourage customer participation, recommend energy efficiency upgrades, and document existing equipment. Con Edison proposes to charge customers approximately \$35 for the energy audit. At the time of the audit, Con Edison would install free low-cost efficiency measures that would include: six compact fluorescent bulbs, a smart strip,<sup>9</sup> hot water pipe insulation, low-flow showerheads, a water heater setback, weather stripping and door sweeps, window air conditioner timers, and faucet aerators.

Con Edison proposes to audit 6,500 participants with a budget of \$4,242,000 through 2011. The proposed program energy savings goal is 6,880 MWh savings with 1.7 MW coincident peak demand savings in 2011.

Con Edison - Residential Room Air Conditioning (Electric)

Con Edison's proposed Residential Room Air Conditioning program would promote the purchase and installation of new high-efficiency room air conditioners. It would add high-efficiency room air conditioners to Con Edison's existing Fast

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<sup>9</sup> A smart strip is a power strip with a control device outlet and switched outlets that automatically shut down when the controlled device is shut down. This type of device is commonly used with computers and entertainment systems.

Track Residential HVAC program to make efficient air conditioner rebates more widely available. Con Edison proposes to offer the incentives to all residential electric customers with Con Edison accounts to encourage them to upgrade to higher-efficiency room air conditioners.

Con Edison proposes that the program serve 35,750 participants through 2011, with a total budget of \$2,010,000. The proposed program energy savings goal is 2,310 MWh through 2011 with 4.9 MW coincident peak demand savings.

KEDLI/KEDNY - Enhanced Home Sealing Incentives (Gas)

KEDLI/KEDNY propose to offer residential gas customers a free home energy audit and financial incentives to install insulation, mechanical ventilation, and other health and safety measures to improve the energy efficiency of the customer's home. KEDLI and KEDNY propose to modify the program description in the September 22, 2008 filing for Enhanced Home Sealing Incentive by combining the objectives of both the Energy Audit program and Enhanced Home Sealing Incentives program into a single program. KEDLI and KEDNY state that by combining the two programs they anticipate that there will be an increase in energy savings due to the synergies between these two programs.

At the time of the energy audit, a Building Performance Institute (BPI) certified contractor would install some low-cost air-sealing measures at no charge and give the customer an estimate for other cost-effective air-sealing and weatherization measures. KEDLI and KEDNY propose to offer an incentive of 75% of the installed costs, with a maximum of \$5,000 for customers who undertake further measures.

KEDNY proposes a total budget of \$3,706,704 through 2011, with cumulative energy savings of 35,694 MMBtu. It projects that 1,200 customers will participate in the program.

KEDLI proposes a total budget of \$3,168,011 through 2011, with cumulative energy savings of 34,534 MMBtu. It projects a level of 1,161 participants.

KEDLI/KEDNY - Internet Audit Program and E-Commerce Sales (Gas)

This program would offer an Internet audit to allow customers to complete an electronic survey of their home that would analyze information about the home's age, size, appliances, and average energy use patterns. The program would produce a report that compares the energy consumed in a customer's home with that of similar homes and would generate a "top ways to save" report with estimated annual cost savings if the recommended measures are taken. In addition, KEDLI/KEDNY would provide its customers on-line access to the purchase of energy efficiency equipment, such as compact fluorescent lights (CFLs), weatherization material, and other do-it-yourself products.

KEDLI and KEDNY propose no separate budget for this program; they propose to fund and promote the program as part of their other residential programs. The total cost of the programs, through 2011, is \$50,584 for KEDNY and \$43,406 for KEDLI. They propose to recover the costs of the program through the marketing costs of other approved gas energy efficiency residential programs.

KEDLI/KEDNY - Residential Building Practices and Demonstration (Gas)

KEDNY and KEDLI propose to provide incentives to customers and contractor support to introduce new, highly efficient products and services to its customers. The program would provide the opportunity to demonstrate new and/or under-

used energy efficiency practices and equipment that could enhance a home's overall energy savings potential.

KEDNY proposes a total budget of \$77,549 with no cumulative energy savings goal and 20 participants. KEDLI proposes a total budget of \$87,922 with no cumulative energy savings goal and 42 participants. In later updates, KEDNY/KEDLI withdrew the program.

KEDLI/KEDNY and Niagara Mohawk -  
Residential ENERGY STAR® Products (Gas)

This program is designed to promote installation of replacement windows and programmable thermostats in houses that heat with natural gas. KEDLI/KEDNY propose to offer customers a \$10 mail-in rebate for each high-efficiency window installed with a U-factor<sup>10</sup> of 0.35 or lower in existing homes, with a maximum incentive of \$500 per account. In addition, customers would be able to receive a \$25 rebate for each ENERGY STAR® labeled programmable thermostat, up to a maximum of two thermostats per account.

KEDNY proposes a total budget of \$138,250 through 2011 with a cumulative energy savings goal of 4,186 MMBtu. It projects that 900 window rebates and 400 thermostat rebates will be offered through 2011.

KEDLI proposes a total budget of \$138,250 through 2011 with cumulative energy savings goal of 4,186 MMBtu. It projects that 900 window rebates and 400 thermostat rebates will be offered through 2011.

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<sup>10</sup> U-factor is a measurement of the effectiveness of a window's insulation; the lower a U-Factor is, the less heat is transferred from the interior to the exterior of a dwelling during the heating season.

KEDLI/KEDNY - Residential Low Income (Gas)

KEDNY and KEDLI propose to offer the Residential Low Income program to their customers with annual incomes of up to 60% of the median New York State household income that are homeowners or tenants in single family homes or multifamily buildings where natural gas is the heating fuel. KEDLI and KEDNY currently offer an interim gas efficiency program for low-income residential customers, which is administered by the Association for Energy Affordability (AEA) of Bronx, New York and delivered by AEA and a coalition of community-based organizations.

Energy efficiency measures would include attic, crawl space, and wall insulation; blower-door assisted air sealing; inert-gas-filled windows; heating pipe insulation; heating system repairs; upgrades or replacement of heating controls; energy management systems; and related health and safety measures. According to National Grid, these are some of the same measures that are available to customers through the Weatherization Assistance Program (WAP) administered by the New York State Division of Housing and Community Renewal.

The KEDLI program has proposed annual budgets of \$2,949,463 in 2010 and \$2,949,396 in 2011, for a total two-year program cost of \$5,898,859. Total program participation is projected to be 878 in 2010 and 2011, with expected savings of 23,173 Dth in each year, for a total participation level of 1,756 and cumulative energy savings of 47,346 Dth.

The KEDNY program has proposed annual budgets of \$5,887,804 in 2010 and \$5,888,015 in 2011, for a total program cost of \$11,775,819. Total program participation is expected to be 1,754 in 2010 and 2011 with an expected savings of 46,253 Dth in each year, for a total two-year participation level of 3,508 and cumulative energy savings of 92,506 Dth.

KEDLI/KEDNY - Residential New Construction Program (Gas)

KEDLI included a new construction program, entitled ENERGY STAR® Homes Program on Long Island, in its September 22, 2008 EEPS filing. In later updates National Grid included a new construction program in the KEDNY service territory as well, and renamed the offering "New Construction Program."

The program would support professional training for building partners to increase their awareness of and skills in applying energy efficiency technologies when building new homes. Program funding would provide financial incentives for participating building partners to offset the increased costs of installing high efficiency products that surpass the current building codes in new single family home construction.

KEDNY proposes a total budget through 2011 of \$77,101 with cumulative energy savings of 986 MMBtu. It projects that 40 customers would participate through 2011.

KEDLI proposes a total budget of \$712,337 through 2011, with cumulative energy savings of 9,864 MMBtu. It projects that 400 customers would participate through 2011.

Niagara Mohawk - Enhanced  
Home Sealing Incentives (Electric and Gas)

Niagara Mohawk proposes to offer its residential gas and electric customers a free home energy audit and financial incentives to install insulation, mechanical ventilation, and health and safety measures to improve the energy efficiency of a customer's home. At the time of the energy audit, a Building Performance Institute (BPI) certified contractor would install selected low-cost air-sealing measures at no charge and provide estimates to the customer of the costs for installing cost-effective air sealing, insulation, and weatherization measures. Niagara Mohawk proposes to offer an incentive of 75% of the installed costs, with a maximum payment of \$5,000, for customers who undertake further cost-effective measures.

Niagara Mohawk proposes a total electric program budget of \$4,437,000 through 2011, with a cumulative energy savings goal of 7,458 MWh and a projected participation level of 3,030 customers.

Niagara Mohawk proposes a total gas program budget for the program of \$1,745,385 through 2011, and a cumulative energy savings goal of 27,939 MMBtu. It projects that the program would have 501 participants.

Niagara Mohawk - Residential  
Building Practices and Demonstration (Electric and Gas)

Niagara Mohawk proposes a pilot program to test the effectiveness of behavioral marketing via customized home energy reports. The program would provide mail and website reports showing individual customers' electricity and gas use compared to usage of other customers in the surrounding neighborhood. The reports would provide the customer with recommendations for reducing energy usage, coupons, and rebates to assist with

energy efficiency improvements. This behavioral modification approach to reducing energy use has been employed successfully in other utility service territories.

In addition, Niagara Mohawk proposes a Tune-Up Pilot Program for its gas heating customers. The company would offer customers a \$50 incentive to have their gas heating system tuned and cleaned by a qualified contractor.

Niagara Mohawk proposes a total electric program budget of \$1,330,845 through 2011, with cumulative savings of 24,300 MWh. It projects that 150,000 customers would participate in the program.

Niagara Mohawk proposes a total gas program budget of \$1,437,553 with cumulative savings of 201,690. It projects that 152,400 customers would participate.

Niagara Mohawk - Residential  
ENERGY STAR® Products and Recycling (Electric and Gas)

This program is designed to promote installation of energy-efficient replacement windows and programmable thermostats. Niagara Mohawk proposes to offer customers a \$10 mail-in rebate for each high-efficiency window, with a U-factor of .35 or less, installed in existing homes, with a maximum incentive of \$500 per account. In addition, customers would be eligible to receive a \$25 rebate for ENERGY STAR® labeled programmable thermostats, up to a maximum of two thermostats per account.

Niagara Mohawk also proposes an electric-only recycling program component to encourage customers to replace their inefficient second refrigerators and freezers. Niagara Mohawk would provide customers with a \$30 rebate and in-home appliance pick up to remove the second refrigerator or freezer for environmentally responsible recycling.



Niagara Mohawk proposes a total electric program budget of \$9,502,500 through 2011 and a cumulative energy savings goal of 22,767 MWh. It projects a participation level of 90,700 customers.

Niagara Mohawk proposes a total gas budget of \$215,836 through 2011 and a cumulative energy savings goal of 8,259 MMBtu. It projects that 1,750 customers would participate.

Niagara Mohawk - Residential Internet Audit Program and E-Commerce Sales (Electric and Gas)

Niagara Mohawk proposes an Internet Audit program that would allow customers to complete an electronic survey of their home that considers its age, size, appliances, and average energy use patterns. The program would produce a report that compares the energy consumed in the customer's home with that of similar homes. In addition, Niagara Mohawk would provide its customers on-line access to the purchase of energy efficiency equipment, such as CFLs, weatherization material, and other do-it-yourself products.

Niagara Mohawk proposes no separate budget for this program; it would fund and market the program as part of its other residential programs.

The total cost of the program through 2011 amounts to \$496,688 and Niagara Mohawk proposes to recover \$91,668 of the costs through the marketing costs of gas energy efficiency residential programs and \$405,000 through the marketing costs of its electric residential energy efficiency programs.

Niagara Mohawk - Residential Low Income (Gas)

Niagara Mohawk proposes to provide additional funding for NYSERDA's EmPower NY and Assisted Home Performance with

ENERGY STAR® programs to expand the participation of its eligible low-income residential gas heating customers in NYSERDA programs. Customers with incomes of up to 60% of the median annual New York State median household income would be eligible for the EmPower NY program. Those with incomes in the range of 60-80% of the New York State median household income would be eligible for Assisted Home Performance with ENERGY STAR®. Customers in single family residences and tenants of 2-4 unit buildings would be able to participate if the tenant is the bill paying customer and the landlord agrees not to raise rents based on improvements made through the program.

Gas energy efficiency measures would include attic, crawl space, and wall insulation; blower-door assisted air sealing; inert gas-filled windows; heating pipe insulation; heating system repairs, upgrades, or replacement; heating controls; and related health and safety measures.

Niagara Mohawk proposes total funding of \$15,000,000 in 2010 and 2011, and expects that 1,876 gas customers would participate in the program in 2010 and 2,144 would participate in 2011. It does not provide an energy savings goal and states that it does not plan to claim savings from the program. It proposes that any savings that are achieved should be attributable to the programs administered by NYSERDA.

Niagara Mohawk - Residential  
Pricing Pilot with Load Control (Electric)

Niagara Mohawk proposes to provide tools to show electric usage in real time to up to 1,000 residential electric customers who currently have broadband connectivity. Customers would receive load control devices to assist them in voluntarily controlling the loads of equipment, such as window air conditioning units, central HVAC, and pool pumps. Niagara Mohawk would provide these customers with an optional time-of-

use tariff and would provide shadow bills so that participating customers would be protected from paying more than they would pay under their normal rate during the pilot program.

Niagara Mohawk proposes a total electric budget of \$2,415,000 through 2011, with no projected energy savings. It projects that 1,000 customers would participate.

NYSEG/RG&E - Residential  
ENERGY STAR® HVAC Program (Electric)

The NYSEG and RG&E Residential ENERGY STAR® HVAC Program would encourage installation of energy efficiency measures for single family residences. The program would offer rebates for replacing central air conditioning equipment; sealing ducts; and installing heat pumps, electronically commutated (ECM) furnace fans, electric heat pump water heaters, and programmable thermostats. These incentives would be offered to influence customers to purchase higher efficiency electric equipment and to motivate equipment vendors and contractors to stock and promote the installation of energy efficient ENERGY STAR® HVAC equipment in residential homes.

An additional incentive of \$200 is proposed to be given to contractors who are Building Performance Institute certified and have documentation stating that an Air Conditioning Contractors of America (ACCA) Manual J calculation has been performed to determine that the proper size central air conditioning equipment has been installed.

NYSEG's proposed total budget is \$1,461,000 for 2010 and 2011, with a goal of achieving energy savings of 500 MWh during the same period. NYSEG estimates that 1,400 customers would participate in the electric program component through 2011.

RG&E's proposed total budget is \$679,000 for 2010 and 2011, with an energy savings goal of 222 MWh during the same period. RG&E anticipates that a total of 600 electric customers would participate through 2011.

NYSEG/RG&E - Residential Lighting (Electric)

NYSEG and RG&E propose to increase energy efficient compact fluorescent light (CFL) bulb usage by encouraging community agencies and not-for-profit organizations to sell CFLs as part of their fund-raising activities.

NYSEG proposes a total budget of \$1,301,000 for 2010 and 2011 and an energy savings goal of 15,032 MWh during the same period. NYSEG has estimated that 75,000 customers will participate in the program through 2011.

RG&E proposes a total budget of \$603,000 for 2010 and 2011 and has an energy savings goal of 6,264 MWh during the same period. RG&E anticipates that a total of 32,000 electric customers would participate through 2011.

NYSEG/RG&E - Residential Limited Income (Electric)

NYSEG and RG&E propose this program for residential customers whose annual household income is 80%, or less, of the New York State median household income. The program would replace older, inefficient refrigerators with new high efficiency ENERGY STAR® refrigerators at no charge to the participants. NYSEG and RG&E also propose to install six CFL lights in homes where the refrigerators are being replaced.

NYSEG proposes a budget of \$1,971,000 for 2010 and 2011 and has an energy savings goal 2,158 MWh during the same period. NYSEG has estimated that 2,000 customers would participate in the electric program component through 2011.

RG&E proposes a budget of \$1,017,000 for 2010 and 2011 and has an energy savings goal of 1,078 MWh during the same period. RG&E anticipates that a total of 1,000 electric customers would participate through 2011.

NYSEG/RG&E - Residential  
Recommissioning/Early Replacement (Electric)

NYSEG and RG&E propose to offer rebates to residential customers to encourage them to recondition their existing central air conditioning systems to bring them back to original energy use specifications. If the existing central air conditioning system can not be brought back to original specifications, the customer would be offered a rebate to replace the system.

NYSEG proposes a budget of \$4,937,000 for 2010 and 2011 and an energy savings goal of 2,760 MWh during the same period. NYSEG estimates that 4,400 customers would participate through 2011.

RG&E proposes a budget of \$3,093,000 for 2010 and 2011 and has an energy savings goal of 1,764 MWh during the same period. RG&E anticipates that a total of 2,800 electric customers would participate through 2011.

Orange and Rockland - Residential  
Efficient Products (Electric)

Orange and Rockland's (O&R) Residential Efficient Products program is designed to increase the penetration of efficient electric equipment in the residential sector by enhancing the stocking and promotion of efficient lighting, appliances, and other customer products at the retail level and by giving customers incentives to purchase this equipment. The program would work with manufacturers and retailers to promote efficient products to residential customers and would allow any

customer in its service territory to receive incentives, including C&I customers. O&R proposes to encourage participation using mail-in or online rebates.

O&R projects that it will achieve 9,428 MWh in energy savings with a cumulative budget of \$1,408,164 through 2011. O&R expects that 9,200 participants would participate through 2011.

NYSERDA - Assisted  
Home Performance with ENERGY STAR® (Gas)

The Assisted Gas Home Performance with ENERGY STAR® program is the income-eligible component of NYSERDA's existing Home Performance with ENERGY STAR® program, designed for 1-4 family households. The Assisted Home Performance with ENERGY STAR® program is designed to reduce the energy burden on households with incomes that are between 60%-80% of New York State's median household income and that are not eligible for the low-income Weatherization Assistance Program or EmPower NY.

Eligibility for the Assisted Home Performance with ENERGY STAR® program varies by county and is determined by comparing 80% of State Median Income (SMI) with 80% of the county's Area Median Income (AMI) and choosing whichever is higher as the threshold income level. Qualified single family households are eligible for a subsidy of 50% of the project cost, with a maximum subsidy of \$5,000. For 2-4 family buildings, the maximum subsidy is 50% of project costs, with a maximum of \$10,000 per building. NYSERDA proposes to continue to offer reduced interest rates on financing for the balance of work through its New York Energy Smart Loan Fund program.

As with NYSERDA's Home Performance with ENERGY STAR® program, a whole building, all fuels approach is used to target efficiency savings through partnerships with Building

Performance Institute (BPI) certified contractors. Contractors perform home assessments and make recommendations and prepare cost estimates for a variety of energy efficiency measures including HVAC, lighting, appliances, and building shell improvements (insulation, sealing, windows, etc.). NYSERDA's proposed list of eligible measures can be found below in the Home Performance with ENERGY STAR® program description.

NYSERDA proposes a cumulative budget of \$34.17 million through 2011 with a projected participation level of 7,414 customers. The projected energy savings are 219,454 MMBtu through 2011.

NYSERDA - EmPower NY (Gas)

NYSERDA proposes to provide cost-effective gas efficiency measures to gas customers who are currently eligible to receive electric efficiency measures under the EmPower NY program, which is an SBC-funded program that received additional funding for electric energy efficiency measures during the "fast track" phase of the EEPS proceeding. Households with total annual income below 60% of the New York State median income level would be eligible to participate at no cost to the customer. Rental units would receive energy-efficiency measures directly benefiting the eligible tenant without requiring a landlord contribution to the cost of the installed measure.

The EmPower NY program relies heavily on referral of customers by utilities or community service organizations (e.g., social service departments, offices for the aging, and weatherization agencies). The majority of referrals from utilities are of customers in utility payment assistance programs. NYSERDA does not market the EmPower NY program directly to customers.

NYSERDA proposes a cumulative gas budget for the state-wide administration and implementation of the EmPower NY program of \$21,036,842 through 2011 (\$10,518,241 per year in 2010 and 2011) with a total estimated gas energy savings of 182,880 Dth (91,440 Dth per year). NYSERDA proposes to combine EEPS gas funding with resources available through SBC and EEPS Fast Track money provided for electric energy efficiency measures.

NYSERDA describes a potential customer base for the EmPower NY program of 4,095,085 dwelling units. Of these, the anticipated number of program participants through 2011 would be 4,572 natural gas customer households.

NYSERDA - Home Performance with ENERGY STAR® (Gas)

Home Performance with ENERGY STAR® is an existing electric System Benefits Charge (SBC) program that uses Building Performance Institute accredited contracting firms to install comprehensive energy efficiency improvements and technologies in one-to-four family homes and low-rise multifamily residential buildings. According to NYSERDA, the program has increased the expertise of more than 160 home improvement contracting firms through various training measures and has offered targeted financial incentives to customers to help defray the costs of the installed measures. The existing program is funded by electric SBC funds, but it uses a whole-house approach and promotes savings of all types of fuels. This program proposal seeks natural gas efficiency funding for the implementation of gas measures, freeing up SBC funds to be applied to cost-effective renewable technologies and electricity saving measures.

NYSERDA proposes a cumulative budget of \$25 million through 2011 with a projected participation level of 13,782



customers. The projected energy savings are 407,948 MMBtu through 2011.

NYSERDA - New York ENERGY STAR® Homes (Gas)

New York ENERGY STAR® Homes is an existing electric SBC-funded program that provides technical assistance and financial assistance to one-to-four family home builders. The program encourages the adoption of energy-efficient construction techniques and requires the installation of high efficiency HVAC equipment for the payment of incentives. The proposal is designed to provide gas funding to increase the market penetration of NYSERDA's existing SBC program and to encourage builders to install high efficiency gas equipment in greater numbers than would be installed under the SBC program alone.

The proposed program would have a cumulative budget of \$18.48 million to achieve a cumulative energy savings goal of 435,310 MMBtu through 2011.

NYSERDA - Power Management Pilot (Electric)

This program would be implemented as part of the existing SBC New York Energy Smart Products program. The program would develop and demonstrate advanced power management devices such as "smart" power strips (i.e., a power strip that can automatically shut down products plugged in but not in use without any action by the consumer). Other products, such as programmable thermostats, whole-house switches, and home automation systems, would also be tested and evaluated. The program would include work with mid- and upstream market partners; offer cooperative advertising and product buy-down incentives; and develop point-of-purchase, educational, and promotional materials. NYSERDA anticipates that utilities would provide consumers with the power management devices, teach them

how to use them, explain the benefits of effective power management, and collect participant data. NYSERDA proposes that it and the utilities would analyze the results to update the program design.

NYSERDA proposes a cumulative budget of \$2.85 million through 2011, and a cumulative energy savings goal of 15,292 MWh to be achieved through the distribution and use of 133,000 power management devices.

NYSERDA - ReModel with ENERGY STAR® (Electric)

This program is designed to target a sector of the residential market that is, according to NYSERDA, as yet untapped. The exclusive focus of this program would be on the remodeling market instead of the whole house approach typical of the other NYSERDA ENERGY STAR® programs. NYSERDA recognizes that some utilities may offer rebates on specific products that may be included in a remodeling effort. The intent of this program is to offer a comprehensive approach to remodeling projects with a high priority on efficiency, and not to compete with utility rebate programs. To that end, NYSERDA would coordinate this program with offerings by the utilities.

NYSERDA proposes a cumulative budget of \$11.36 million through 2011 with an estimated 9,750 participants and a cumulative projected energy savings goal of 13.311 MWh.

NYSERDA - Residential Green Building Program (Electric and Gas)

The Residential Green Building Program is designed to provide financial incentives to homeowners and builders who meet green building standards during home construction or renovation projects. This proposed program would also incorporate the standards of NYSERDA's New York ENERGY STAR® Homes program as a minimum standard for energy efficiency in one-to-four family

buildings. The program would serve residential buildings with fewer than 12 dwelling units and provide incentives to the building owner once the home receives a Certificate of Occupancy and third-party certification that it meets the green standards established for the program.

NYSERDA proposes a cumulative gas program budget of \$6.74 million through 2011 with a participation level of 944 customers, yielding a total projected savings of 53,264 MMBtu. NYSERDA proposes a cumulative electric budget of \$1.1 million with a participation level of 944 customers, yielding an energy savings goal of 2,502 MWh through 2011.

#### DISPOSITION OF PROGRAM PROPOSALS

On November 2, 2009, the Secretary issued "New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs 90 Day Program Single Family Residential Measures" with a comment period that ended on November 23, 2009. Interested parties were asked to comment on the document, which is a draft technical manual covering procedures for calculating energy savings attributable to a variety of single-family residential energy measures. Twenty seven parties filed comments, which generally express support for residential energy efficiency programs.

Comments on the technical manual, summarized below, were received from Advanced Energy Systems of NY, LLC; Altren Consulting and Contracting; Blue Ox Energy Products & Services; BP Consulting; Building Performance Contractor's Association of New York State; Comfort Home Improvement Co.; Community Environmental Center; Conservation Services Group; Consolidated Edison Company of New York, Inc. and Orange & Rockland Utilities, Inc.; Earth Kind Energy; Essex Homes of Western New York; George H Stephens IV; Green Audit USA; Green Homes America; Huber Energy & Remodeling; Integral Building & Design, Inc.; Ivy Lea

Construction Inc.; Jag Construction, Inc.; McClure Construction, Inc.; New Buffalo Impact, Inc.; New York State Builders Association, Inc.; New York State Electric and Gas Inc. and Rochester Gas and Electric, Inc.; Niagara Mohawk Power Corporation; Northeast Energy Efficiency Council; NYSERDA; Sunny Brook Builders of Enfield, Inc.; and TAG Mechanical Systems, Inc.

In most cases, comments either resulted in changes to the technical manual or were referred to the Evaluation Advisory Group Technical Manual subcommittee for further consideration (designated "EAG" in Appendix 4). No further action is planned for comments that either did not request a change or for which no change to the technical manual was necessary (designated "None" in Appendix 4).

The comments mainly included recommendations for changes to formulas, additional data, editorial changes, modifications to parameters, and information on additional measures. Appropriate corrections and modifications to the draft technical manual have been made as part of the review process. Comments requesting additional measures, alternative approaches, or changes to algorithms will be referred to the Evaluation Advisory Group review subcommittee for further study. Among comments received, some requested clarification on proper application of manual formulas to meet program reporting requirements; clarifications will be issued in an upcoming memo from Staff.

Several comments focused on broad policy issues not directly related to specific elements of the technical manual. For NYSERDA's Home Performance with ENERGY STAR® program, 13 of the commenting parties described above voiced concern that converting cost-effective comprehensive projects to cost-

effective individual measures would result in program participation and approval delays, similar to those experienced by NYSERDA's Multifamily Performance Program.

Many of the commenter's stressed that the residential programs' "stand alone" cost effectiveness criteria would eliminate measures, including health and safety measures, currently eligible as part of a comprehensive package.

Thirteen of the parties' comments objected to use of a fuel-restricted approach, saying that many of New York State's residential customers use oil or propane heating and would not be able to participate in the residential programs. Twenty-one of those providing comments support use of a whole building approach. Eight parties mentioned concerns that changes to the program would affect the Home Performance with ENERGY STAR® program; eight other parties explicitly mentioned support for NYSERDA's residential programs because they create job opportunities.

Comments were also received in response to SAPA 08-E-1127 SP8 that generally supported residential energy efficiency programs. These comments, summarized below came from Adam Snyder; Building Performance Contractors Association; Conservation Services Group; Highland Builders Corp.; Integral Building & Design, Inc.; Jeff Reese; Jon Davignon; Joseph W. Miller; McClure Construction, Inc.; Michael Froward; Performance Systems Development; Rich Rustici; Richard Streating Jr.; Rob Granger; Standard Insulating Co.; William M. Backell; and William Olick.

Sixteen of the parties submitted comments in support of providing additional funding for NYSERDA's residential energy efficiency programs and continuing to provide employment within the energy industrial through NYSERDA-administered residential programs. Thirteen of the parties' comments supported NYSERDA's residential programs for the economic impact they have on New

York State through the creation of job opportunities. Building Performance Contractors Association, Conservation Service Group, and Performance Systems Development spoke against using a fuel-restricted approach for residential programs and voiced concerns about converting cost-effective comprehensive projects to cost-effective individual measures. Performance Systems Development supports using a whole building approach and deemed savings rather than the total resource cost test.

Discussion

1. Funding Principles

As a continuing general principle for all EEPS programs, monies collected from electric ratepayers should be used to fund only electric energy efficiency measures and monies collected from gas ratepayers should be used to fund only gas efficiency measures. EEPS resources should not fund heating efficiency measures in buildings heated by a fuel source other than natural gas or electricity. In this and prior EEPS program approval orders we have approved energy efficiency programs for each customer market segment to reflect a balance between each customer segment's energy use and allocated program cost responsibility. Allowing customers from other market segments to participate in programs approved for a different customer segment would distort the balance we have established among customer segments and reduce the amount of program funds available for the intended customer segment. Therefore, the utilities and NYSERDA should take steps to ensure that only the intended types of customers participate in each approved program. Measures that are not cost effective on a stand-alone basis and measures that do not contribute directly to achieving the Commission's electricity or gas usage reduction targets, should also not be funded by EEPS resources. Each type of measure to be installed must be cost-effective on a stand-alone

basis such that the type of measure has a total resource cost (TRC) value of at least one (1.0) prior to inclusion of program administrative and evaluation, measurement, and verification costs. Further, program administrators should determine that the project as a whole will be cost effective after all program administrative and evaluation, measurement, and verification costs are included.<sup>11</sup> The determination of total resource benefits must be based on avoided costs, carbon reduction per unit values, and all other inputs and assumptions in effect at the time benefit/cost analyses are performed.

## 2. Benefit/Cost Analysis

The measure TRC ratios reported below are intended to suggest whether measure types are more or less likely to be cost-effective. It will be necessary to generically pre-screen the measures for cost-effectiveness based on typical costs and savings in a service territory. The measures must achieve a resources benefit/cost ratio of at least one (1.0). The program's implementation protocols should include a TRC pre-screening analysis both at the specific measure and project level, adding a percentage for pro rata cost program costs. We believe such a requirement will ensure cost-effective investments on behalf of ratepayers.

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<sup>11</sup> Utility program administrators must also include estimated shareholder performance incentive amounts when evaluating the cost-effectiveness of projects.

a. Measure Level Benefit/Cost Analysis

Table 1 below displays measure-category average TRC ratios for gas residential measures which would be typical of the programs covered by this order. The estimates are based on Staff research with utility and public sources. The TRC results indicate that many gas measures can be cost-effective as part of a residential energy efficiency program.<sup>12</sup>

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<sup>12</sup> While measures not shown on the table may be considered as well, programs should not pay rebates for conventional hot water stand-alone tanks with burners. The April 9, 2009 EEPS gas Fast Track order prohibited rebates for Water Heating Storage Tanks (with 0.62 and 0.64 Efficiency Factors) (Appendix 1, Table 2)



**Table 1**  
**TRC Ratios for Gas Measures**

Measure Name	TRC with CO <sub>2</sub>
Air sealing downstate	3.3
Air sealing upstate	2.5
Boilers (HW) downstate-85% AFUE	1.9
Boilers (HW) upstate-85% AFUE	<u>2.8</u>
Boilers (Steam) downstate-82% AFUE	3.2
Boilers (Steam)upstate-82% AFUE	4.6
Furnaces downstate – 90% AFUE	2.6
Furnaces upstate – 90% AFUE	4.4
Furnaces downstate – 92% AFUE w/ECM	1.6
Furnaces upstate – 92% AFUE w/ECM	2.3
Hot water storage tank indirect statewide .80 EF	1.5
Insulated exterior door downstate	1.0
Insulated exterior door upstate	0.8
Insulation shell – roof and wall downstate	0.8
Insulation shell – roof and wall upstate	1.1
Pipe insulation (1 <sup>st</sup> 12') downstate	7.9
Pipe insulation (1 <sup>st</sup> 12') upstate	6.0
Seal and insulation ductwork downstate	1.5
Seal and insulation ductwork upstate	1.8
Tankless water heater statewide .82 EF	0.9
Windows <u>ENERGY STAR®</u> downstate	0.4
Windows <u>ENERGY STAR®</u> upstate	0.3

Note: The ENERGY STAR® windows, double pane with argon gas and low emissivity coating, are modeled against standard double pane windows.

Table 2 below displays measure-category average TRC ratios for electric residential measures that would be typical of the programs covered by this order. The estimates are based on Staff research with utility and public sources. The TRC results indicate that many electric measures can be cost-effective as part of a residential energy efficiency program.

**Table 2**  
**TRC Ratios of Energy Star/High Efficiency Residential Electric Measures\***

<b>Measure Name</b>	<b>TRC</b>
CFL bulb (downstate)	12.6
CFL bulb (upstate)	9.4
Clothes washer (downstate)	0.5
Clothes washer (upstate)	0.4
Dehumidifier (downstate)	1.5
Dehumidifier (upstate)	1.1
ECM fan for ground source heat pump (upstate)	1.3
Ground source heat pump (downstate)**	1.3
Ground source heat pump (upstate)**	1.3
Through-wall air conditioner (downstate)	5.0
Through-wall air conditioner (upstate)	2.7
Window air conditioner (downstate)	12.3
Window air conditioner (upstate)	6.7

\* Central air conditioning is shown on Table 3

\*\* This result reflects average costs; ground loop system costs vary considerably. These results are compared with electric resistance heat and SEER 10 central air conditioning.

**Table 3**  
**Central Air Conditioning TRCs with CO<sub>2</sub>**

<b>SEER Level</b>	<b>NYC</b>	<b>Upstate</b>	<b>Lower Hudson Valley</b>
SEER 15	1.3	0.6	0.7
SEER 15 w/QI	1.8	0.8	0.9
SEER 16	1.1	0.5	N/A

"SEER" (in the table above) refers to the seasonal efficiency of the equipment. "QI", quality installation, refers to the "right"-sizing of the equipment for each home, often reducing the tonnage from the equipment being replaced. Under the January 16, 2009 EEPS Order, this entails a \$200 extra incentive to the contractor for the Manual J work. In each case, the comparison is with an oversized SEER 13 air conditioner, which is the minimum level currently allowed on the market. These ratio reflect only measure costs, without administrative, evaluation, or shareholder performance incentives.

b. Program Level Benefit/Cost Analysis

Table 4 reports the TRC ratios reported by the prospective program administrators. Each ratio, relative to the others, is highly dependent on the program administrator's estimates of measure costs and savings, and assumptions about the mix of highly and minimally cost-effective measures that participants will select. Staff has not reviewed those estimates and assumptions fully. Still, the measure-type ratios above confirm that the program administrators, with reasonable administrative costs, should be able to conduct a cost-effective program using the measures proposed.

A source error emerged in Central Hudson's calculation of the cost-effectiveness of the Expanded Residential HVAC Program - the measure TRC ratio of the primary measure, ground source heat pumps, is 1.6 in this service territory. Therefore, the filed ratio of 1.18 is probably too low.

**Table 4**  
**TRC Ratios for the Programs as a Whole**<sup>13</sup>

<b>Utility</b>	<b>Program Name</b>	<b>Electric/Gas</b>	<b>TRC</b>
Central Hudson	Expanded Residential HVAC Program	Electric	1.18
Central Hudson	Residential Appliance Recycling	Electric	1.35
Con Edison	Appliance Bounty	Electric	3.25
Con Edison	Residential Direct Installation	Electric	1.55
Con Edison	Residential Room Air Conditioning	Electric	3.66
KEDLI	Enhanced Home Sealing Incentives	Gas	1.39
KEDLI	Residential ENERGY STAR® Products	Gas	2.86
KEDNY	Enhanced Home Sealing Incentives	Gas	1.43
KEDNY	Residential ENERGY STAR® Products	Gas	2.86
Niagara Mohawk	Enhanced Home Sealing Incentives	Electric	1.99
Niagara Mohawk	Enhanced Home Sealing Incentives	Gas	2.06
Niagara Mohawk	Residential Building Practices and Demonstration (Behavioral modification marketing component)	Electric	1.38
Niagara Mohawk	Residential Building Practices and Demonstration (Behavioral modification marketing component)	Gas	1.33
Niagara Mohawk	Residential ENERGY STAR® Products and Recycling	Electric	1.40
Niagara Mohawk	Residential ENERGY STAR® Products and Recycling	Gas	3.06
NYSERDA	Assisted Home Performance with ENERGY STAR®	Gas	0.91
NYSERDA	EmPower NY	Gas	1.10
NYSERDA	Home Performance with ENERGY STAR®	Gas	1.07
NYSERDA	New York ENERGY STAR® Homes	Gas	1.20

### 3. Customer Outreach and Education/Marketing

Consistent with prior orders, and as part of the utility program implementation plans and NYSERDA operating plan for residential and low-income residential customer energy efficiency programs, each of the program administrators will submit program-specific marketing plans for certification by the Director of the Office of Consumer Services.

### 4. Discussion of Comments Received

The Commission understands that by requiring each residential efficiency measure to be cost beneficial on its own under the Total Resource Cost test, the number of efficiency

<sup>13</sup> Unlike the measure level tables, these ratios include administrative and evaluation costs and shareholder performance incentives for the utilities, as well as appropriate free rider treatment. As with the measure ratios, the CO<sub>2</sub> adders are included.

measures that are eligible to be included in the program will change. We believe that it is important to do so for several reasons. We must be mindful of the economic burdens on ratepayers and strive to achieve our energy usage reduction goals in the most efficient manner possible. In addition, we want to offer program participation to as many end users as possible within the approved budget authorizations. Focusing our efforts on measures that pass the Total Resource Cost Test will result in the greatest net benefits to all ratepayers, including non-program participants. For similar reasons we have required in the EEPS process that only electric and gas efficiency measures be funded so that each efficiency investment funded is contributing to specific Commission goals for energy usage reduction.

To avoid any potential program delay for existing programs while NYSERDA is implementing measure-level specific screening, we will allow a six month phase-in of the measure-level screening processes for affected programs. However, to avoid a "run on the bank" situation under the existing rules during the phase in period, we will limit the amount of additional commitments under the existing rules to 25 percent of the remaining or newly authorized program budgets.

To evaluate the performance of EEPS programs in ways that are consistent, fair, and transparent across all program administrators, we have established a process for the measurement of energy savings concurrent with program approvals. A key element of this effort is the technical manuals, which provide a standardized approach for measuring energy savings. The technical manual we are approving here will put in place interim approaches for estimating energy savings until they can be validated or updated through the Evaluation Advisory Group,

using results from evaluation studies conducted in accordance with approved protocols or with results from other credible data sources. An Evaluation Advisory Group subcommittee is engaged in a detailed review of previous editions of the technical manual and has made notable progress. It is our expectation that recommendations for future adjustments to approved technical manuals will come to us periodically from the Evaluation Advisory Group through the Director of the Office of Energy Efficiency and the Environment.

We direct that the technical manual entitled "New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Single Family Residential Measures" dated December 16, 2009 shall be used to standardize energy savings estimation approaches, calculations, and assumptions at the measure level for estimating energy savings from the programs approved in this order and for other residential energy efficiency programs going forward. A copy of the manual is available for download on the Internet at the following link: [http://www.dps.state.ny.us/Phase2\\_Case\\_07-M-0548.htm](http://www.dps.state.ny.us/Phase2_Case_07-M-0548.htm).

5. Disposition of Individual Programs

The programs under consideration here are designed to provide assistance to residential and low-income residential electric and gas customers to influence them to make cost-effective energy efficiency improvements.

The approved budgets and energy savings goals for programs approved in this order are provided in Appendix 3.

Some of the proposed programs are approved without modifications other than adjustments to program budgets and energy savings goals and other general requirements that are described elsewhere in this order. Programs of this type that are approved programs are the KEDNY, KEDLI, and Niagara Mohawk

Residential ENERGY STAR® Products programs (gas), the NYSERDA New York ENERGY STAR® Homes program (gas), the NYSERDA Home Performance with ENERGY STAR® program (gas), and the NYSERDA EmPower NY program (gas).

Several of the proposed programs would include home energy audits to identify cost-effective energy savings opportunities. These are the Con Edison Residential Direct Installation program (electric), the Niagara Mohawk Enhanced Home Sealing Incentives program (electric), and the KEDNY, KEDLI, and Niagara Mohawk Enhanced Home Sealing Incentives programs (gas). Experience in New York and elsewhere has shown that if residential audit services are provided at no charge, customers are, in general, less likely to follow through on audit recommendations to install energy efficiency measures than when they have paid for at least a portion of the audit services cost. On the other hand, an audit fee that is too high will deter customer participation. We prefer that the residential audit fees be the same amount for all the utility programs to minimize confusion across service territories. Accordingly, these programs are approved with a condition that an audit fee of \$50 is established for each of these utility-administered programs.

Niagara Mohawk proposes that its electric heating, electric air cooling, and gas heating customers would be eligible for its Enhanced Home Sealing Incentives program (electric and gas). This program proposal needs to be modified to conform to our policy that electric EEPS funds will be used only for electric energy efficiency measures and gas EEPS funds will be used only for gas efficiency measures. Only electric heating and/or electric cooling customers should receive incentives under the electric program and only gas heating

customers should receive incentives under the gas program. Furthermore, Niagara Mohawk customers who are dual fuel customers of the utility may receive only one rebate for each measure installed. We establish an additional eligibility requirement for the KEDNY and KEDLI Enhanced Home Sealing Incentive programs: only customers that use natural gas as their primary heating fuel will be eligible for those programs.

Central Hudson's Expanded Residential HVAC program, that would offer incentives for ground-source heat pumps, is approved. However, the economics of heat pump installations are dependent on site-specific characteristics. The program is approved with these modifications: 1) Central Hudson should conduct an assessment of each proposed project to determine whether it is cost-effective and provide incentive payments to only those projects with a TRC ratio of 1.0 or greater and 2) only customers that heat primarily with electricity and have electric central cooling are eligible for incentives under this program.

The NYSERDA Assisted Home Performance with ENERGY STAR® gas program for low-income customers is not cost-effective as proposed, having an as-filed TRC ratio of 0.91. This program would complement the existing electric SBC-funded Assisted Home Performance with ENERGY STAR® Program<sup>14</sup> by providing funding from gas ratepayers for gas energy efficiency measures and allowing more comprehensive energy efficiency services for customers. The targeted customer market segment, residential customers with 60% to 80% of the State household median income, often lack the financial resources to undertake energy efficiency measures on their own or to afford the customer share of measure costs under

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<sup>14</sup> This is a program designed for low income customers just above the threshold for participation in EmPower NY.



programs for all residential customers, and they are not eligible for other programs for low-income customers such as EmPower NY and the Weatherization Assistance Program (WAP). As a general principle, all customers should have reasonable opportunities to participate in and benefit from EEPS programs. It is also important that supplemental funding be provided to address gas efficiency measures in this program. Therefore, despite its low TRC ratio, we approve the program. NYSERDA should deliver the program as cost-effectively as possible and make all reasonable efforts to screen out energy efficiency measures that are not cost-effective and achieve an overall program level cost effectiveness ratio of 1.0 or greater.

The Niagara Mohawk Residential Building Practices and Demonstration program proposal includes two distinct components: an electric and gas pilot customer behavioral modification marketing program, and a pilot program to provide incentive payments to gas heating customers to have their heating systems tuned up. The Commission has previously rejected a Niagara Mohawk tune-up program proposal in its Order Adopting an Interim Energy Efficiency Program.<sup>15</sup> Niagara Mohawk has not addressed issues identified in the Order in its current program proposal. Niagara Mohawk's proposal is to offer the program on a pilot basis to gather information about customer and contractor interest and about potential energy savings. We choose not to fund a proposal with such uncertainty about program cost-effectiveness and energy savings that will be achieved. The Tune-Up pilot component of the program is not approved. Behavioral modification marketing programs similar to that proposed by Niagara Mohawk have achieved energy savings in other

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<sup>15</sup> Case 08-G-0609, Niagara Mohawk power Corporation, Order Adopting An Interim Energy Efficiency Program and Modifying the Joint Proposal, (issued September 18, 2008), at p. 17.

jurisdictions, including National Grid's New England operations, but have not yet been implemented in New York. If it is effective, the approach promises to be a fairly low cost means of acquiring energy usage reductions. We are, therefore, interested in evaluating the concept's effectiveness in influencing customers to reduce energy use and approve that component of the program.

Con Edison proposes to offer its Residential Room Air Conditioning program to all residential electric customers, including residential customers in multifamily buildings. However, we have previously approved Con Edison's Refrigerator Plus program that includes incentives to building owners for installations of ENERGY STAR® room air conditioners in dwelling units of multifamily buildings. To avoid conflict and duplication between the programs, we approve the Residential Room Air Conditioner program with the requirement that program eligibility is clarified to include only residential customers in 1-4 dwelling unit buildings or those that reside in multifamily buildings and purchase their own the air conditioners and are direct customers of Con Edison.

Several electric utilities proposed programs to provide rebates for the purchase of efficient appliances and/or bounties for turning in old appliances, including existing second working refrigerators in a household. They are the Central Hudson Residential Appliance Recycling program, the Con Edison Appliance Bounty program, the O&R Efficient Products program, and the Niagara Mohawk ENERGY STAR® Products and Recycling program. We approve these programs with modifications, with the exception of O&R's Efficient Products Program which is discussed in detail later in this section. First, Staff has found that rebates for individual purchases of

refrigerators in single family buildings are not cost-effective. Accordingly, rebates for individual refrigerator purchases are not approved and should be removed from the programs. Second, the market for efficient appliances and recycling of older appliances in New York will be substantially changed by a new federally-funded program to be implemented by NYSERDA. NYSERDA will receive \$18.7 million in funding under the American Recovery and Reinvestment Act (ARRA) to provide cash rebates for the purchase of efficient appliances in New York under its program named the Great Appliance Swap Out. The program will provide rebates to New York consumers for purchasing eligible refrigerators, clothes washers, freezers, and dishwashers, with larger rebates to consumers who also recycle their discarded appliances. The program is expected to run and expend all of its funding during the late winter and spring of 2010. We prefer that the available federal money be used first to promote consumer demand for efficient appliances and recycling of old appliances before ratepayer resources are spent for those purposes. Further, the concurrent availability of the NYSERDA and utility programs could cause confusion in the marketplace due to differences in the offerings, which could reduce the effectiveness of all the programs. Therefore, the utility programs should delay offerings of rebates and bounties for the same appliance types that will be promoted by the NYSERDA ARRA program until the NYSERDA program is completed, which is now expected to occur in the spring of 2010, but utility programs can be under any circumstances by July 1, 2010. The utilities, NYSERDA, and Staff should meet to review the results of the ARRA program and to consider appliance rebate and bounty levels and program delivery approaches in view of those results, and to attempt to develop consistency among programs. At the

conclusion of these collaborative discussions, utilities should submit any appropriate proposals to modify the approved appliance programs.

Several utilities propose to promote the sales of compact fluorescent light (CFL) bulbs to residential customers. O&R proposed, as part of its Efficient Products program, to provide customer rebates of \$2 per bulb purchased. Central Hudson's Residential Lighting Community Group CFL Sales program (electric) and NYSEG and RG&E's Residential Lighting programs (electric) would promote CFLs through sales to residential customers by community groups. These proposed programs could conflict with NYSERDA's existing CFL Expansion program. If the utility proposals were implemented it would be difficult and more costly to evaluate the programs to attribute energy savings to the utility and NYSERDA programs. We prefer to continue with the statewide approach to promoting increased penetration of CFLs in New York that we adopted in our June 23, 2008 EEPS Order with the approval of a total budget of more than \$17 million for NYSERDA's CFL Expansion electric fast track program. That program is designed to increase the supply of, and demand for, CFLs by working with bulb manufacturers and retailers to increase the availability of energy efficient light bulbs at reduced prices and to promote them to consumers. We do not support having utility efforts to promote CFL sales<sup>16</sup> running concurrently with the statewide EEPS fast track CFL Expansion program. Since O&R has provided Staff with information indicating that over 90% of the program's energy savings were expected to be achieved through CFL promotion, we reject the O&R

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<sup>16</sup> We are approving in this order the direct installation of CFLs, an approach that does not conflict with the CFL Expansion program.

Efficient Products program. We also do not approve the Central Hudson, NYSEG, and RG&E programs.

Several utilities propose programs for low-income residential customers. They are the Central Hudson Residential Lower Income Assistance program (electric and gas), Niagara Mohawk, KEDNY, and KEDLI Residential Low Income programs, and NYSEG and RG&E's Residential Limited Income programs (electric). We prefer a statewide program approach to providing bill-reducing energy efficiency services for low-income residential customers in New York in a consistent and administratively efficient manner, and the utility programs are not approved. We are approving in this order gas funding to supplement previously-approved SBC and EEPS electric funding for the EmPower NY program and gas funding to supplement existing electric SBC funding the Assisted Home Performance with ENERGY STAR® program. Both are statewide programs for low-income residential customers administered by NYSERDA. The EmPower NY program, which serves customer with annual household income up to 60% of the state median, coordinates its services to participants with the Weatherization Assistance Program to provide energy efficiency and weatherization services that reduce the energy bills of participants. In our June 2008 EEPS Order, in which we provided additional electric Fast Track funding for the EmPower NY program, we recognized the importance of the program for making energy services more affordable for eligible low-income customers, especially those that have had difficulty paying their utility bills and are at risk of losing utility service for nonpayment. In that order we specifically noted the important role that utilities play in the success of the program by serving as the primary sources of referrals of eligible low-income residential customers to NYSERDA for EmPower

NY program services. Now that the program will be expanded to all the major utilities and supported by both electric and gas EEPS funds, we are further supporting the electric and gas utilities' role and will allow each utility to claim 15% of the energy saved from measures installed under the EmPower NY Program toward the utility's EEPS energy savings goal. To qualify, the energy savings must be from the specific measures installed under the EmPower NY Program for the customers that are referred to NYSERDA by the utility.

KEDNY and KEDLI's ENERGY STAR® New Construction programs (gas) for residential customers are not approved. We approve gas funding for NYSERDA's New York ENERGY STAR® Homes program in this order to supplement existing SBC electric funding. We prefer a statewide program to promote energy efficiency in residential new construction. NYSERDA already has a new construction program in place that works closely with the home construction industry. Utility new construction programs are likely to duplicate these efforts and create customer and builder confusion. Instead, we encourage the utilities to work with NYSERDA to provide information on potential program participants. It is important to reach as many new construction programs as possible with energy efficiency services, because construction presents a unique, one-time opportunity to design and install measures in a building in an integrated, cost-effective manner.

Several of the proposed programs are rejected because they do not focus primarily on directly achieving cost-effective energy efficiency savings. The proposed NYSERDA Residential Green Building Program (electric and gas) would provide incentives to builders and homeowners to meet green building standards that in many cases are not energy-related and do not

provide incremental energy savings above the requirements for receiving incentives under NYSERDA's New York ENERGY STAR® Homes program for which we are providing incremental gas funding in this order. The NYSERDA Power Management Pilot program (electric), as proposed, would educate consumers and evaluate their acceptance and usage of new devices that may eventually be shown to provide cost-effective savings. We are not approving EEPS funding for evaluation or research and development of potentially cost-effective energy savings technologies. Niagara Mohawk does not project any energy savings for its Power Management Pilot program (electric) that would evaluate the effects of energy use displays and load control devices on consumers' abilities to voluntarily control their electric loads and usage under time-of use pricing. All three of these programs might provide system benefits or useful research findings, but they are beyond the scope of our goals for the EEPS program.

NYSEG and RG&E's proposed Residential ENERGY STAR® HVAC Electric program (electric) programs are not approved. Other utilities filed this type of central air conditioning energy efficiency program as part of the "fast track" process. NYSEG and RG&E chose not to do that and instead filed the programs as part of their September 22, 2009 filing. Two primary measures in this program are the installation of SEER<sup>17</sup> 15 and SEER 16 central air conditioners (CAC), both as end-of-life replacements and as early replacements. The current minimum standard for residential CAC is SEER 13.

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<sup>17</sup> SEER is an acronym for Seasonal Energy Efficiency Ratio. The SEER rating is the Btu level of cooling output during a typical cooling season divided by the total electric energy input in watt-hours during the same period.

In its benefit/cost spreadsheet for end-of-life measures, NYSEG and RG&E calculated TRC ratios well above 1.0 for these two measures. The analyses supporting the claimed ratios, however, are internally inconsistent largely because the measure costs do not reflect the use of installation techniques that are needed to achieve the projected level of savings.

NYSEG and RG&E estimated the installed costs of the measures based on information contained in the January 16, 2009 EEPS electric fast track order. The order contains a table of required rebates. Regarding that table we said that, "Staff states that its recommended levels are generally based on paying 70% of the expected average measures cost."<sup>18</sup> NYSEG and RG&E divided the prescribed rebate included in that order by 0.7 to generate installed cost estimates. The measure costs implied in that order reflected the installation of CAC equipment with average installation quality. For a SEER 15 installation this resulted in an incremental cost of \$571 over the installation costs for a SEER 13 unit.

However, NYSEG and RG&E claimed savings, in kWh and KW, approximately three times higher than Staff calculated with the technical manual for the SEER 15 installation with average installation quality.<sup>19</sup> NYSEG and RG&E's justification is that they also included the savings from two types of (high) Quality Installation (QI).

The first QI consideration is correct sizing; NYSEG and RG&E assumed that the existing unit being replaced was a 3 ton unit and that with correct sizing a 2.5 ton SEER 15 unit

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<sup>18</sup> See Table 2 in Appendix 1 of the January order, page 10.

<sup>19</sup> This occurs even following NYSEG and RG&E's use of the technical manual's cooling load hours estimate for Buffalo, which is over 150 hours higher than the estimate for NYSEG's center in Binghamton (417 versus 249 hours).



would be installed rather than a 3 ton unit. Installation of the correctly sized unit results in energy and capacity savings. However, Staff has determined that NYSEG and RG&E's analysis incorrectly estimates those savings and significantly overstates them. Further, NYSEG and RG&E did not reflect the cost of this QI service in its measure cost; it is unreasonable to assume that correct sizing will always occur at no additional charge. Finally, NYSEG and RG&E assumed that installation outside of its program would always be over-sized and that installation within its program would always be properly sized.

In the January 2009 EEPS order we recognized that correct sizing required additional work and additional expense. We stated that, "[I]n installation by a BPI-certified contractor and documentation that the ACCA Manual J calculation has been completed to determine the proper size of the installed central air conditioning equipment makes the contractor eligible for an incremental financing inducement of \$200." This \$200 reflects a resource cost, additional skilled labor, which as previously mentioned, NYSEG and RG&E did not include in their measure cost.

In addition to assuming 100% correct sizing versus 100% over-sizing, the company assumed that the refrigerant charge for all units installed under its program would be checked and adjusted for optimal performance while all units would have otherwise been installed would not be optimally adjusted. The technical manual provides for refrigerant charge correction, a 10% reduction in the efficiency of the base case, thereby enlarging the incremental savings of the high efficiency case. Once again, NYSEG and RG&E did not reflect a cost for this additional QI service.

The concerns expressed above regarding the ENERGY STAR® HVAC Electric Program also apply to the analyses done for

NYSEG and RG&E's proposed Recommissioning/Early Replacement program. A further problem exists with the manner in which the early replacement costs have been modeled. The analysis assumes that an existing unit is replaced after ten years with a SEER 15 unit but that in the absence of the early replacement the unit would have remained in service for an additional five years, at which point it would have been replaced with a SEER 13 unit. The analysis nets the cost of the SEER 13 unit against the cost of the SEER 15 unit, resulting in a net early replacement cost of approximately \$600. Under the technical manual's standard approach for early replacement, the full cost of the SEER 15 unit would be used to determine the measure cost. Using the standard approach, and considering the other modeling problems discussed earlier, the early replacement program does not pass a TRC test.

Staff has also found errors within the TRC analysis of the retro-commissioning component of this program which, when corrected, reduce the TRC substantially, to below 1.0. The proposed Recommissioning/Early Replacement program is, therefore, rejected. Similarly, the NYSERDA Remodel with ENERGY STAR® program (electric) is not approved because it is not likely to be cost-effective. It had a filed TRC of only 0.6.

6. Program Funding

The electric energy efficiency proposals filed for the residential market segment totaled more than \$33 million in annual spending, including \$2.2 million of low-income residential programs. The gas efficiency proposals filed totaled more than \$75 million in annual spending, including \$44.2 million for low-income residential programs.

The annual program budgets, evaluation budgets, and energy savings goals for the approved commercial and industrial

programs shall be as set forth in Appendix 3 of this order. For the residential and low-income residential programs considered here, the total amount of funding we shall approve at this time reflects in part our calculation of the proportional share of the expected cost of EEPS electric and gas programs divided pro rata by customer market sector. Further, in addressing funding of low-income gas programs for the incremental residential funds available, Staff relied on the directive in the Commission's Order Establishing Targets and Standards for Natural Gas Efficiency Programs,<sup>20</sup> limiting low-income program funding to 20% of the total residential funding allocation. The funding of gas programs further reflects the fact that some of the gas programs will replace existing interim energy efficiency programs.

7. Policy Guidelines Regarding Incentives

We must ensure the appropriate expenditure of ratepayer dollars. Therefore, we will require that NYSERDA and the utilities obtain proper documentation (i.e., itemized invoices depicting the installation costs of the energy efficiency measures) before any energy efficiency incentives are paid that are based on a total overall cost of a project. Program administrators should ensure that EEPS program funding is used only for costs associated with end-use energy savings equipment.

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<sup>20</sup> Case 07-M-0548, Energy Efficiency Portfolio Standard (EEPS), Order Establishing Target and Standards for Natural Gas Efficiency Program (issued May 21, 2009), at 14.

8. Program Evaluation

- a. Central Hudson - Expanded Residential HVAC Program (Electric) and Residential Appliance Recycling Program (Electric)

Central Hudson's program proposals include outlines of evaluation plans that address process and impact evaluation, sampling strategies, and steps to mitigate threats to data reliability. For the Residential Appliance Recycling program there is no mention of the evaluation budget and for the Expanded Residential HVAC Program the budget will be approximately 5% of the program budget. There is no information explaining how the evaluation budgets will be divided among key evaluation tasks, such as process and impact evaluation.

For the Expanded Residential HVAC impact evaluation, Central Hudson proposes to conduct an analysis of billed energy consumption data from both program participants and a control group. For the Residential Appliance Recycling program, Central Hudson plans to conduct an impact analysis by analyzing data in the program tracking database and customer surveys to determine "free ridership."

All the programs will be subject to process evaluation that will focus on program performance with the objective of identifying improvements in program design and reducing barriers to participation.

Generally the plans comport with the spirit of the evaluation guidelines developed by Staff and the Evaluation Advisory Group pursuant to our June 2008 EEPS Order. While the proposed evaluation plans are adequate as a first step for these programs, more detailed evaluation plans are necessary to explain more fully the evaluation approach, standards, and budgets. Moreover, there is a lack of specific information

about the sampling design, how a representative control group will be selected, and how threats to data reliability will be mitigated. Central Hudson is depending on an outside contractor to develop these details, but without them we cannot fully judge the adequacy of the plans. Also, the plans fail to address how Staff and the Evaluation Advisory Group will be engaged in order to execute their oversight responsibilities. The evaluation plan should offer the opportunity for Staff to review the critical elements of the evaluation process, including customer surveys, statistical approaches, modeling techniques, and draft reports.

- b. Con Edison - Appliance Bounty  
(Electric), Residential  
Direct Installation  
(Electric), and Residential  
Room Air Conditioning (Electric)

For each of the programs under consideration here Con Edison has included evaluation plans that employ similar strategies. The plans describe key evaluation elements, including process and impact evaluations, budgets, sample design, net impact analysis, and steps to mitigate threats to data reliability. Con Edison will use an outside consultant to conduct evaluations under the management of its recently created independent measurement, verification, and evaluation section.

The process evaluations will include document reviews and surveys of select participants and non-participants to achieve objectives, such as improving program performance and overcoming barriers to participation.

The impact evaluations will include pre- and post-installation inspections and pre- and post-longitudinal analysis. The details of the impact methodologies will be more fully defined after the company selects an evaluation contractor.

For the Appliance Bounty program, the process evaluation will include an annual survey of ten percent of program participants for each appliance type. The impact evaluation will provide estimates of energy and peak demand savings. A key objective will be to estimate the energy consumption of the recycled appliances. The estimates will be based on appliance profiles provided by the appliance recycling contractor and usage data reported by the Association of Home Appliance Manufacturers. For recycled appliances replaced with new units the savings will be calculated using the new unit's energy guide. For recycled but not replaced units, gross savings will be based on the consumption of the recycled unit. Surveys of participating customers will collect data on customer characteristics, program satisfaction, free-ridership, and unit replacement.

Con Edison proposes that the evaluation of the Residential Room Air Conditioning program use the same evaluation procedures and methods proposed for the Residential HVAC program, which we approved in January 2009.

Overall, the evaluation plans are adequate as a first step, but more detailed evaluation plans are necessary to explain more fully the evaluation approach, standards, and budget. The plans also fail to address how Staff and the Evaluation Advisory Group will be engaged to execute their oversight responsibilities. The evaluation plans should offer the opportunity for Staff to review the critical elements of the evaluation process, including customer surveys, statistical approaches, modeling techniques, and draft reports.

- c. KEDLI/KEDNY - Enhanced Home Sealing Incentives (Gas), KEDLI/KEDNY - Residential ENERGY STAR® Products (Gas), Niagara Mohawk - Enhanced Home Sealing Incentives (Electric and Gas), Niagara Mohawk - Residential Building Practices and Demonstration (Electric and Gas), and Niagara Mohawk - Residential ENERGY STAR® Products and Recycling (Electric and Gas)

KEDNY, KEDLI, and Niagara Mohawk provided evaluation plans for Enhanced Home Sealing Incentives, Residential ENERGY STAR® Products, Residential Building and Demonstration, and Residential ENERGY STAR® Products and Recycling. These plans cover key evaluation elements, including process and impact evaluation, budgets, sampling strategies, steps to mitigate threats to data reliability, and the data collection process. The evaluation plans generally comport with the evaluation guidelines developed by Staff and the Evaluation Advisory Group pursuant to our June 2008 EEPS Order.

While the proposed evaluation plans are adequate as a first step, more detailed evaluation plans are necessary to explain more fully the evaluation approach, standards, and budget. Niagara Mohawk, KEDNY, and KEDLI have established an evaluation budget of 5% of the program funding, but note that the actual budget could be higher or lower. They provided no breakdown of the approximate cost of the key elements of the evaluation effort, such as process and impact evaluation. As for sampling strategies, Niagara Mohawk, KEDNY, and KEDLI agree to statistical reliability goals consistent with Staff's evaluation guidelines but do not provide information about the sampling protocols and caution that "actual evaluation results may deviate from this standard." The scope and timing of

evaluation efforts are not sufficiently defined and the impact evaluation methodology is left open-ended.

In general we find that the plans as presented lack needed specificity. Also, the discussion of how Staff and the Evaluation Advisory Group will execute their oversight and coordination responsibilities is inadequate. The evaluation plan should also provide an opportunity for Staff to review the critical elements of the evaluation process, including customer surveys, statistical approaches, modeling techniques, and draft reports.

- d. NYSERDA - Assisted Home Performance with ENERGY STAR® (Gas) and NYSERDA - Home Performance with ENERGY STAR® (Gas)

NYSERDA's Home Performance with ENERGY STAR® program and Assisted Home Performance with ENERGY STAR® program are continuous with existing SBC funded programs but will be expanded to include natural gas components. NYSERDA expects to coordinate its evaluations of these program elements. The primary evaluation goals are to verify savings, confirm the success of program improvements, and conduct a comprehensive statewide baseline study for existing one-to-four unit residential buildings.

NYSERDA prepared an overall approach that will give it and its contractors the flexibility to adapt the evaluation approaches to the programs once they have a better understanding of the final evaluation protocols and funding. The evaluation plans cover key elements, including process and impact evaluations, market evaluation, budgets, sampling strategies, and steps to mitigate threats to data reliability. NYSERDA expects the evaluation budgets for these programs to be approximately 5% of the program funding level, minus any set-



aside for statewide studies conducted in collaboration with other program administrators. NYSERDA has provided the percentages of the total that it expects would be allocated among impact, process, and market evaluations.

While the evaluation approach described generally comports with the guidelines developed by Staff and the Evaluation Advisory Group pursuant to our June 2008 EEPS Order, NYSERDA cautions that its evaluation plan was designed without knowing certain critical factors such as the final disposition of the program design and funding by the Commission. As a result, it described the evaluation plan as "scalable and flexible." NYSERDA states its intention to work with Staff and the Evaluation Advisory Group on developing full evaluation plans.

In August 2009, Staff approved NYSERDA's evaluation plan for the SBC-funded component of these programs. We expect that NYSERDA will submit a revised plan that integrates both the gas and electric program components of these programs.

e. NYSERDA - EmPower NY (Gas)

NYSERDA included a detailed evaluation plan with its proposed EmPower NY program that covers key evaluation elements, including process and impact evaluations, theory and logic models, year-by-year budgets, sampling strategies, market assessment, net impact analysis, and the data collection process. NYSERDA's internal evaluation staff will rely extensively on independent contractors to conduct the evaluation work.

The evaluation plan generally comports with the guidelines developed by Staff and the Evaluation Advisory Group pursuant to our June 2008 EEPS Order. NYSERDA will work with an independent outside contractor. While the program is funded by

both SBC and EEPS, NYSERDA will not distinguish between funding sources when conducting its evaluation. NYSERDA has also made a commitment to involve Staff in all phases of the evaluation. Staff has already reviewed the evaluation plan with NYSERDA and finds it acceptable.

f. NYSERDA - New York ENERGY STAR® Homes (Gas)

The New York ENERGY STAR® Homes program is intended to increase the market penetration of NYSERDA's existing program, now funded with SBC funds, by adding a natural gas component. NYSERDA's primary evaluation goal is to verify energy savings; secondary goals include reassessing issues raised in previous process evaluations and conducting a baseline study of new residential construction practices.

Since this program is an extension of an existing SBC program, NYSERDA proposes to conduct its evaluation at the same time that it evaluates the SBC portion of the program. This approach will help maximize the cost-effective use of evaluation funds. NYSERDA prepared an overall approach that will give it and its contractors the flexibility to adapt the evaluation approaches to the programs once they have a better understanding of the final evaluation protocols and funding. The evaluation plans cover key evaluation elements, including process and impact evaluations, market evaluation, budgets, and sampling strategies. NYSERDA expects the evaluation budgets for these programs to be approximately 5% of the program funding level, minus any set-aside for statewide studies conducted in collaboration with other program administrators. NYSERDA has provided the percentages of the total that it expects would be allocated among impact, process, and market evaluations.

While the evaluation approach described generally comports with the guidelines developed by Staff and the

Evaluation Advisory Group pursuant to our June 2008 EEPS Order, NYSERDA cautions that its evaluation plan was designed without knowing certain critical factors such as the final disposition by the Commission of the program design and funding. As a result, it described the evaluation plan as "scalable and flexible." NYSERDA states its intention to work with Staff and the Evaluation Advisory Group on developing full evaluation plans.

In August 2009, Staff approved NYSERDA's evaluation plan for the SBC funded component of this program. We expect that NYSERDA will submit a revised plan that integrates both the gas and electric program components.

g. Reporting

The reporting protocols outlined by Con Edison, KEDLI, KEDNY, Niagara Mohawk, Central Hudson, and NYSERDA are not always consistent with the requirements outlined in our January 2009 EEPS Order. Except for NYSERDA, there is no mention of plans to submit the required monthly "scorecard report." There are also inconsistencies among the companies in the deadlines for completing the quarterly and annual reports. We require the annual report no later than 60 days after the conclusion of the calendar year and the quarterly report no later than 45 days after the conclusion of the quarter.

COLLECTIONS

The schedule of collections we are approving today will commence on April 1, 2010. This will allow us to coordinate these increases with others resulting from the consideration of other EEPS programs and funding levels. To the degree that EEPS programs are replacing rate plan and/or "interim" energy efficiency programs, it is our intention that

the costs for such programs should be collected in an SBC charge and not through some other revenue mechanism.

#### SEQRA FINDINGS

Pursuant to our responsibilities under the State Environmental Quality Review Act (SEQRA), in conjunction with this order we find that programs approved here are within the overall action previously examined by us in Case 07-M-0548 and will not result in any different environmental impact than that previously examined. In addition, the SEQRA findings of the June 23, 2008 Order in Case 07-M-0548 are incorporated herein by reference and we certify that: (1) the requirements of SEQRA, as implemented by 6 NYCRR part 617, have been met; and (2) consistent with social, economic, and other essential considerations from among the reasonable alternatives available, the action being undertaken is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable.

#### CONCLUSION

For the reasons discussed above, the Commission approves, with modifications discussed in this order, electric and gas energy efficiency programs designed to serve the commercial and industrial customer market sector to be administered by NYSEG, NYSERDA, and RG&E; electric and gas energy efficiency programs designed to serve the residential and low-income residential customer market sectors to be administered by Central Hudson, Con Edison, KEDNY/KEDLI, Niagara Mohawk, NYSEG, and NYSERDA; and a technical manual for the evaluation of residential programs. In addition, the Commission approves adjustments to the rate of SBC collections from

ratepayers to ensure the correct level of funding for all EEPS programs approved to date.

The Commission orders:

1. System Benefits Charge (SBC) funding for Energy Efficiency Portfolio Standard (EEPS) programs to be administered by Central Hudson Gas & Electric Corporation (Central Hudson); Consolidated Edison Company of New York, Inc. (Con Edison); New York State Electric and Gas Corporation (NYSEG); Niagara Mohawk Power Corporation (Niagara Mohawk); Rochester Gas and Electric Corporation (RG&E); The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid (KEDNY/KEDLI); and New York State Energy Research and Development Authority (NYSERDA) is approved by program as set forth in Tables 1a, 1b, 2, 3, 4a and 4b of Appendix 3 of this order. The annual program budgets, evaluation budgets, and energy savings goals for the programs shall be as set forth in Tables 1a, 1b, 2, 3, 4a and 4b of Appendix 3 of this order. Funding may not be reallocated among programs without further approval by the Commission. For NYSERDA, this treatment is dissimilar to that afforded existing non-EEPS SBC programs where NYSERDA may reallocate funding between programs within program categories.

2. NYSERDA shall within 60 days of the issuance of this order, submit a supplemental revision to the SBC Operating Plan incorporating its approved EEPS programs that reflects this order and Staff Guidelines for preparing the supplemental revision of the SBC Operating Plan that are to be provided by the Director of the Office of Energy Efficiency and the Environment within 15 days of the issuance of this order. The programs, including measures, quality assurance, marketing,

7administration, and evaluation plans, should be described and implemented in a manner that is consistent with the discussion in this order. In addition to other requirements, the evaluation plans shall address achieving the statistical standards for reporting key results at both the Statewide and regional levels (upstate and downstate regions) and a more defined role for Staff oversight and participation in technical refinements. The types of measures and the level of particular financial inducements/incentives/rebates shall not be changed by NYSERDA except in consultation with Staff; any disagreements shall be brought to the Commission for resolution.

3. Central Hudson, Con Edison, NYSEG/RG&E, Niagara Mohawk, and KEDNY/KEDLI shall, within 60 days of the issuance of this order, submit Implementation Plans for their approved EEPS programs that reflect this order and Staff Guidelines for preparing the implementation plans that are to be provided by the Director of the Office of Energy Efficiency and the Environment within 15 days of the issuance of this order. The programs, including measures, quality assurance, marketing, administration, and evaluation plans, should be described and implemented in a manner that is consistent with the discussion in this order. The types of measures and the level of particular financial inducements/incentives/rebates shall not be changed except in consultation with Staff; any disagreements shall be brought to the Commission for resolution.

4. Central Hudson, Con Edison, NYSEG/RG&E, Niagara Mohawk, KEDNY/KEDLI, and NYSERDA shall each incorporate reports on the programs approved in this order into the periodic quarterly program and evaluation reports, annual program reports and evaluations, and monthly scorecard reports already required for the other EEPS programs they administer. Central Hudson,

Con Edison, NYSEG/RG&E, Niagara Mohawk, KEDNY/KEDLI and NYSERDA shall track their expenditures on evaluation-related market research in such a manner that they may be reported and scrutinized in the future. Within sixty days of the issuance of this order, the Director of the Office of Energy Efficiency and Environment will provide to these entities guidance on any specific periodic reporting requirements applicable to the programs.

5. In the supplemental revisions to the SBC Operating Plan, and in the Implementation Plans, Central Hudson, Con Edison, NYSEG/RG&E, Niagara Mohawk, KEDNY/KEDLI and NYSERDA are directed to also include the following information related to their outreach and education (O&E)/marketing programs and, if necessary, to submit new budgets:

- (a) specific budget amounts for each individual element of the O&E/marketing budget for each year of the program;
- (b) a list and description of the O&E/marketing vehicles to be used;
- (c) an explanation of the target audiences for each program component;
- (d) a timeline for the development, implementation, and evaluation of the O&E/marketing efforts;
- (e) how the O&E/Marketing programs relate to the entity's general and other O&E/Marketing programs; and
- (f) the efforts that will be undertaken to minimize any overlap and/or customer confusion that may result from O&E/marketing activities in the same or adjacent market areas.

6. Annual reports of each calendar year's O&E/marketing program achievements, as available to date, and updated plans for the upcoming calendar year, shall be submitted

each year with the third quarter status report so that they can be reviewed prior to the end of each program year.

7. All O&E/marketing plan components of the compliance filings will be subject to review and certification by the Director of the Office of Consumer Services that they conform to the requirements of this order before they shall be implemented.

8. Central Hudson, Con Edison, Niagara Mohawk, NYSEG, RG&E, and Orange and Rockland Utilities, Inc. (O&R) shall establish by contract with NYSERDA, a schedule of payments, no less frequently than quarterly commencing April 1, 2010, to transfer electric SBC funds to NYSERDA for NYSERDA-administered programs as set forth in Table 5 of Appendix 3 of this order.

9. Central Hudson, Con Edison, KEDNY, KEDLI, Niagara Mohawk, NYSEG, RG&E, O&R, Corning Natural Gas Corporation (Corning), National Fuel Gas Distribution Corporation (NFG), and St. Lawrence Gas Company, Inc. (St. Lawrence) shall establish by contract with NYSERDA, a schedule of payments, no less frequently than quarterly commencing April 1, 2010, to transfer gas SBC funds to NYSERDA for NYSERDA-administered programs as set forth in Table 6 of Appendix 3 of this order.

10. The electric System Benefits Charge (SBC) is augmented such that beginning on April 1, 2010, the annual level of overall SBC electric revenue collections is increased by \$14,084,101, and such that beginning on January 1, 2011, the annual level of overall SBC electric revenue collections is increased by an additional \$11,322,007, to be collected in the manner shown in Table 7 of Appendix 3. [Note: As shown in Table 7 of Appendix 3, for O&R the Commission is actually decreasing a previous authorization.] In addition, additional SBC electric revenue collections of \$1,792,223 for year 2012, and \$488,234



for year 2013 are authorized, also to be collected in the manner shown in Table 7 of Appendix 3.

11. The gas SBC is augmented such that beginning on April 1, 2010, the annual level of overall SBC gas revenue collections is increased by \$40,022,476, and such that beginning on January 1, 2011, the annual level of overall SBC gas revenue collections is increased by an additional \$8,685,961, to be collected in the manner shown in Table 8 of Appendix 3. In addition, additional SBC gas revenue collections of \$1,096,942 for year 2012, \$1,249,248 for year 2013, and \$557,511 for year 2014 are authorized, also to be collected in the manner shown in Table 8 of Appendix 3.

12. Each utility affected by this order shall file tariff amendments and/or statements on not less than 30 days' notice to become effective April 1, 2010, incorporating the revisions described herein. The requirements of Section 66(12)(b) of the Public Service Law as to newspaper publication of the changes proposed by these filings is waived.

13. To the degree that EEPS programs are replacing rate plan and/or "interim" energy efficiency programs, it is our intention that the costs for such programs should be collected in an SBC charge and not through some other revenue mechanism, and our action today will result in concurrent decreases in collections for some rate plan and/or interim energy efficiency programs.

14. Shareholder incentives and net lost revenues are not addressed by this order. If Central Hudson, Con Edison, NYSEG, RG&E, Niagara Mohawk, KEDNY, or KEDLI have a rate plan that provides for either, it shall consult with Staff and then propose whatever adjustments are necessary in such provisions, if any, due to changes in circumstances arising from this order.

15. The budgets approved in this order are to be funded by an SBC; they do not represent traditional rate allowances in the sense that any under-spending shall result in the utility drawing down less money from the SBC collections. Efficiencies in that regard are for the benefit of ratepayers, not shareholders. Central Hudson, Con Edison, NYSEG, RG&E, Niagara Mohawk, KEDNY, KEDLI, and NYSERDA shall manage the EEPS and SBC funds prudently and within the budgets authorized by the Commission.

16. The technical manual entitled "New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs - Single Family Residential Measures" dated December 16, 2009 shall be use to standardize energy savings estimation approaches, calculations, and assumptions at the measure level for estimating energy savings from the programs approved in this order and for other residential energy efficiency programs going forward. A copy of the manual is available for download on the Internet at the following link:  
[http://www.dps.state.ny.us/Phase2\\_Case\\_07-M-0548.htm](http://www.dps.state.ny.us/Phase2_Case_07-M-0548.htm).

17. The Secretary at her sole discretion may extend the deadlines set forth herein.

18. These proceedings are continued.

By the Commission,

(SIGNED)

JACLYN A. BRILLING  
Secretary

DESCRIPTIONS OF PROPOSED PROGRAMS

Commercial and Industrial Programs

Central Hudson – Small and Mid-size Commercial Gas Efficiency (Gas)

On September 22, 2008, Central Hudson filed a portfolio of proposed energy efficiency programs, including a program entitled the Small Commercial Gas Efficiency program. It submitted updates for the program on June 5, 2009 and November 25, 2009 and changed the name of the proposed program to Small and Mid-size Commercial Gas Efficiency Program.

The proposed program targets non-residential gas customers with annual usage under approximately 10,000 Ccf for natural gas space and water heating equipment. Central Hudson plans to integrate the proposed program with its Small Commercial Electric Efficiency program previously approved in Case 08-E-1019 and its Mid-size Commercial Business Program previously approved in Case 08-E-1135.

Central Hudson proposes a total program budget of \$313,800 for the Small and Mid-size Commercial Gas Efficiency program through 2011. Central Hudson projects that 160 customers would participate in the program, with gas savings of 4,398 Dth through 2011. Central Hudson's proposal provides budget detail, participation, and savings for the years 2010 and 2011 as follows.

**Central Hudson Small and Mid-Size Commercial Gas Efficiency Program  
Proposed 2010-2011 Program Costs**

Year	Administration	Marketing	Contractors	Incentives	Evaluation	Total
2010	15,000	15,000	50,000	68,900	8,000	156,900
2011	<u>15,000</u>	<u>15,000</u>	<u>50,000</u>	<u>68,900</u>	<u>8,000</u>	<u>156,900</u>
<b>Total</b>	<b>30,000</b>	<b>30,000</b>	<b>100,000</b>	<b>137,800</b>	<b>16,000</b>	<b>313,800</b>

**Central Hudson Small and Mid-size Commercial Gas Efficiency Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total
Participants	80	80	160
Dth Savings	2,199	2,199	4,398

The Small and Mid-size Commercial Gas Efficiency program is designed to assist customers by providing financial incentives to reduce their energy usage. The program would provide energy audits, implementation assistance, and prescriptive incentives in the form of rebates to encourage installation of energy efficiency measures. The program would also provide recommendations for customer activities that will saving energy. Energy audits are not required to participate in the program. The prescriptive customer rebates would apply to natural gas space heating and indirect water heating equipment based on the efficiency performance of the equipment being installed. Rebates would also be offered for boiler reset controls and thermostats.

Central Hudson proposes the following rebate amounts by the general equipment type and the associated efficiency performance level:

**Central Hudson - Small and Mid-size Commercial Program  
Financial Incentives to Participating Customers**

<b>Equipment Type</b>	<b>Minimum Performance Rebate</b>	<b>Rebate</b>
Natural Gas Furnace	Tier 1: AFUE = 90	\$500
	Tier 2: AFUE = 92	\$500
	Tier 3: AFUE = 92 / ECM driving fan	\$700
	Tier 4: AFUE = 94 / ECM driving fan	\$900
	Tier 5: AFUE = 95 / ECM driving fan	\$900
Natural Gas Water Boiler	Tier 1: AFUE = 85	\$800
	Tier 2: AFUE = 90	\$1,200
Natural Gas Steam Boiler	AFUE = 82	\$800
Boiler Reset Control	N/A	\$100
Indirect Water Heater	N/A	\$300
Programmable Thermostat	N/A	\$25

Central Hudson proposes to deliver the program using representatives of Central Hudson and trade allies and employing a targeted marketing campaign. As projects are completed, Central Hudson proposes to prepare case study reports documenting savings in a variety of different facility types and to use the results in its marketing efforts. Central Hudson also proposes to work closely with NYSERDA to ensure coordination with NYSERDA's commercial programs.

Central Hudson states that the program's quality assurance plan will include an inspection process to ensure that the equipment for which rebates are sought is actually installed and operational. The plan would be similar to that proposed for Central Hudson's Fast Track programs.

KEDLI/KEDNY and Niagara Mohawk  
Building Practices and Demonstration Program (Gas)

On September 22, 2009, KEDNY, KEDLI, and Niagara Mohawk proposed a Building Practices and Demonstration Program. As proposed, the program would be administered by the respective companies' engineering staffs with assistance from outside consultants and professional engineering firms. Outside contractors would be selected through a competitive bid process.

The companies would offer incentives of up to 50% of the project cost, capped at \$100,000, for the implementation of projects that showcase significant energy savings potential. Customers would be allowed to apply directly to the KEDLI, KEDNY, or Niagara Mohawk or through trade ally channels in order to participate. Participants would be required to permit the utility to meter the installation and monitor performance. KEDLI/KEDNY/Niagara Mohawk propose to coordinate with NYSERDA and leverage existing energy efficiency partners for product selection, feasibility assessment, installation, and monitoring.

The proposed evaluation program would consist of process evaluation in the first year of the program. Impact evaluation would be on-going following the programs' start-up period. KEDLI/KEDNY/Niagara Mohawk propose the use of an independent evaluation consultant chosen through a competitive solicitation.

KEDLI/KEDNY/Niagara Mohawk provided a breakdown of their respective program budget and goals as shown in the tables below. The KEDNY and KEDNY information was updated on July 28, 2009 while the data for Niagara Mohawk is derived from its September 22, 2008 proposal.

**KEDNY's Building Practices and Demonstration Program**  
**Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$30,685	\$30,685	\$61,370
Program Marketing & Trade Ally	\$15,000	\$15,000	\$30,000
Customer Incentives or Services	\$303,253	\$303,253	\$606,506
Program Implementation	\$61,369	\$61,369	\$122,738
Evaluation and Market Research	\$30,440	\$30,440	\$60,880
<b>Total Cost</b>	<b>\$440,747</b>	<b>\$440,747</b>	<b>\$881,494</b>

**KEDNY's Building Practices and Demonstration Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	6	6	12
MMBtu Savings	6,823	6,823	13,646

**KEDLI's Building Practices and Demonstration Program  
Proposed 2010-2011 Program Costs**

	2010	2011	Total
Program Planning and Administration	\$15,773	\$15,773	\$31,546
Program Marketing & Trade Ally	\$33,326	\$33,326	\$66,652
Customer Incentives or Services	\$120,000	\$120,000	\$240,000
Program Implementation	\$31,546	\$31,546	\$63,092
Evaluation and Market Research	\$10,032	\$10,032	\$20,064
<b>Total Cost</b>	<b>\$210,677</b>	<b>\$210,677</b>	<b>\$421,354</b>

**KEDLI's Building Practices and Demonstration Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	6	6	30
MMBtu Savings	7,836	7,836	15,672

**Niagara Mohawk's Building Practices and Demonstration Program – Gas  
Proposed 2010-2011 Program Costs for 2010- 2011**

	2010	2011	Total
Program Planning and Administration	\$ 26,000	\$26,000	\$52,000
Program Marketing & Trade Ally	\$30,000	\$30,000	\$60,000
Customer Incentives or Services	\$291,655	\$291,655	\$583,310
Program Implementation	\$22,000	\$22,000	\$44,000
Evaluation and Market Research	\$18,483	\$18,483	\$36,966
<b>Total Cost</b>	<b>\$388,138</b>	<b>\$388,138</b>	<b>\$776,276</b>

**Niagara Mohawk's Building Practices and Demonstration Program - Gas  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	15	15	30
MMBtu Savings	19,046	19,046	38,092

NYSEG/RG&E - Block Bidding Program (Electric)

NYSEG and RG&E propose to offer block bidding programs for all customers that purchase electric delivery service from them and pay the electric System Benefit Charge. NYSEG/RG&E originally filed the program proposal on September 22, 2008 and filed updates on April 22 and 24, 2009 and on September 18, 2009. The original proposal would have covered both electric and gas efficiency, but later updates limited this proposed program to electric efficiency initiatives.

The program is directed toward commercial or industrial facilities (or multiple residential buildings) in NYSEG and RG&E's service territories. Potential participants include Energy Service Companies (ESCOs), performance contractors, management companies, and customers that could submit proposals for projects that achieve energy reductions resulting in a minimum of 1,000 MWh/year savings.

NYSEG proposes a cumulative program budget of \$3,181,000 covering program years 2010 through 2012. The cumulative budget includes one-time startup costs of \$75,000 in 2010. The proposed program seeks to achieve annual savings of 1,695 MWh in 2010, 4,135 MWh in 2011, and 2,440 MWh in 2012, for total cumulative electric savings of 8,270 MWh. NYSEG has stated that due to the unique nature of this program, it is unable to project meaningful participation levels.

RG&E proposes a cumulative program budget of \$3,280,000, covering program years 2010 through 2012. The cumulative budget includes one-time startup costs of \$75,000 in 2010. The proposed program seeks to achieve annual savings of 1,695 MWh in 2010, 4,135 MWh in 2011, and 2,440 MWh in 2012, for total cumulative electric savings of 8,270 MWh. RG&E has stated that due to the unique nature of this program, it is unable to project meaningful participation levels.

NYSEG and RG&E provided a breakdown of cost information related to the proposed Block Bidding Program costs for the year 2010-2012:

**NYSEG Block Bidding Program Proposed Program  
Proposed 2011-2012 Program Costs**

<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
Start Up	\$75,000	\$0	\$0	\$75,000
Non-Evaluation	\$547,000	\$1,330,000	\$749,000	\$2,626,000
Evaluation	\$32,000	\$64,000	\$32,000	\$128,000
Allocated Portfolio	\$132,000	\$132,000	\$88,000	\$352,000
<b>Total</b>	<b>\$786,000</b>	<b>\$1,526,000</b>	<b>\$869,000</b>	<b>\$3,181,000</b>

**NYSEG Block Bidding Program  
Proposed 2011-2012 Participants and Energy Savings**

	2010	2011	2012	Total
Participants	N/A	N/A	N/A	N/A
MWh Savings	1,695	4,135	2,440	8270

**RG&E Block Bidding Program  
Proposed 2010-2012 Program Costs**

<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>Total</b>
Start Up	\$75,000	\$0	\$0	\$75,000
Non-Evaluation	\$749,000	\$1,270,000	\$749,000	\$2,768,000
Evaluation	\$32,000	\$62,000	\$31,000	\$125,000
Allocated Portfolio	\$121,000	\$121,000	\$70,000	\$312,000
<b>Total</b>	<b>\$977,000</b>	<b>\$1,453,000</b>	<b>\$850,000</b>	<b>\$3,280,000</b>

**RG&E Block Bidding Program  
Proposed 2010-2012 Participants and Energy Savings**

	2010	2011	2012	Total
Participants	N/A	N/A	N/A	N/A
MWh Savings	1,695	4,135	2,440	8,270

As a result of the bidding process, aspects of the program that would otherwise be defined by NYSEG and RG&E will be determined through bid selection including, but not limited to:

- Developing eligible measures and incentives
- Deciding on methods for program promotion, administration, and implementation
- Training of employers/subcontractors for customer assistance and performance
- Complying with program standards and regulatory requirements
- Pre- and post-program participation inspections.

NYSEG and RG&E state that they will be responsible for selecting, monitoring, and overseeing the Block Bidding projects that are selected and that specific program



management responsibility will vary for different programs. Bid selection would use a sealed-bid, pay-as-bid Request for Proposals methodology. NYSEG/RG&E state that consideration of TRC ratios would be reflected in their evaluation of the bids received.

**NYSERDA – Benchmarking  
and Operations Efficiency (Electric)**

On September 22, 2008, NYSERDA filed a portfolio of proposed energy efficiency programs. It submitted an update for the proposed Benchmarking and Operations Efficiency program on November 10, 2009. The proposed program targets existing buildings in the commercial real estate, hospitality, healthcare, school, and college sectors. The program would be offered state-wide, with a particular focus in New York City.

NYSERDA proposes a total budget of \$11,111,111 (encumbered) for the 2010-2011 period. NYSERDA estimates that 500 customers would participate, with electric savings of 56,000 MWh through 2011. Budget details and savings estimates for the years 2010 through 2013 are shown below:

**NYSERDA Benchmarking and Operations Efficiency Program**

**Proposed 2010-2013 Program Costs**

<b>Year</b>	<b>Administration</b>	<b>Marketing</b>	<b>Implementation</b>	<b>Incentives and Services</b>	<b>Evaluation</b>	<b>Total</b>
2010	473,428	275,000	641,667	4,250,000	277,778	5,917,873
2011	391,627	225,000	125,000	4,000,000	153,714	4,895,341
2012	14,574	0	75,000	0	92,600	182,174
2013	9,258	0	75,000	0	31,464	115,722
<b>Total</b>	<b>888,889</b>	<b>500,000</b>	<b>916,667</b>	<b>8,250,000</b>	<b>555,556</b>	<b>11,111,111</b>

**NYSERDA Benchmarking and Operations Efficiency Program  
Proposed 2010-2013 Program Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total</b>
Participants	N/A	N/A	N/A	N/A	500
MWh Savings	14,000	23,240	14,000	4,760	56,000

The Benchmarking and Operations Efficiency program is not a direct incentive program. It would offer benchmarking of the energy performance of customer buildings, identify improvement opportunities, and assist with implementation of low- and no-cost operational improvements. The program would also encourage customer participation in NYSERDA's incentive programs for capital intensive efficiency measures.

The proposed program would be focused on developing benchmarking tools and the provision of direct customer benchmarking services. Tools to be offered would include a web-based portal to national benchmarking systems as well as a database of energy use information from peer buildings. Direct customer assistance would be available for building owners to collect and analyze their own data. Energy management "SWAT" teams would provide individualized assistance to customers.

The program would also support New York City's benchmarking effort and provide general marketing and outreach to improve customer participation in NYSERDA and utility incentive programs. There are no savings attributed to these two components of the program.

NYSERDA proposes to use competitively selected Energy Smart Focus contractors to provide program services to customers. NYSERDA also plans to use these program partners to develop and deploy new benchmarking tools and resources.

With respect to coordination with other program administrators, NYSERDA stated in its September 28, 2008 filing that it is continuing to collaborate and coordinate with interested parties, stakeholders, and the utilities to improve coordination of program delivery, maximize resource acquisitions, and minimize costs to ratepayers.

#### NYSERDA – Block Bidding within Industrial and Process Efficiency Program (Electric and Gas)

NYSERDA proposes to include a bidding component within the Industrial and Process Efficiency program that would offer gas and electric savings to commercial and industrial customers. NYSERDA originally filed the proposed program on September 22, 2008 and filed an update June 2, 2009. The proposed program is directed at large industrial customers

In its June 2, 2009 proposal update, NYSERDA proposed a cumulative electric program budget for bidding solicitations of \$20,000,000 for program years 2010 and 2011 and

stated that the program would achieve 187,000 MWh of savings. For the natural gas component of the bidding program, NYSERDA proposes \$8,000,000 to achieve a minimum of 730,000 MMBtu of savings. The program proposal did not include an estimate of the expected number of program participants. The funding for the program would come from previously approved funding for the Industrial and Process Efficiency Program. No additional program details have been provided at this time.

**NYSERDA Block Bidding Within Industrial and Process Efficiency Program – Electric  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Program Costs	\$10,000,000	\$10,000,000	\$20,000,000
Participants	N/A	N/A	N/A
MWh Savings	93,500	93,500	187,000

**NYSERDA Block Bidding Within Industrial and Process Efficiency Program – Gas  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Program Costs	\$4,000,000	\$4,000,000	\$8,000,000
Participants	N/A	N/A	N/A
MMBtu Savings	1,151,000	1,151,000	2,302,000

**NYSERDA – Commercial Loan Fund  
And Finance Program (Electric and Gas)**

NYSERDA proposes an expansion of the existing Loan Fund and Finance program for electric and gas measures. Currently, the program encourages the installation of energy-efficiency equipment and process improvements in commercial buildings by increasing the availability of low-interest capital. The program uses a network of participating lenders and leasing companies to provide reduced-interest rate financing. Current interest-rate reductions are 6.5% in Con Edison’s service territory and 4.0% in other utility service territories. The subsidy is paid to a participating lender upon evidence that the customer has received the reduced rate on the issued loan or lease. Loan or leases up to \$1,000,000 are eligible for the program.

NYSERDA’s proposes expansion plans include identifying new lenders and targeting commercial customers in underserved markets and sectors. To date, the program has allowed customers to receive an interest rate reduction for projects receiving direct incentives from other NYSERDA programs. NYSERDA proposes to eliminate this overlap by requiring

customers to choose between the direct incentive offered by other programs or the low-interest capital available through the loan fund. NYSERDA also proposed to explore partnering with other entities on “green bonds” and loan guarantees.

NYSERDA’s proposed Commercial Loan Fund and Finance Program budget and savings goals are provided separately for electric and gas below. NYSERDA proposes that the entire budget would be encumbered by the end of 2011 but that the actual expenditures would take place as presented.

**NYSERDA’s Commercial Loan Fund and Finance Program – Electric  
Proposed 2010-2013 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total</b>
Program Planning and Administration	\$197,207	\$262,943	\$131,471	\$65,736	\$657,357
Program Marketing & Trade Ally	\$214,463	\$214,463	\$0	\$0	\$428,926
Customer Incentives or Services	\$1,801,488	\$2,401,984	\$1,200,992	\$600,496	\$6,004,960
Program Implementation	\$ 214,462	\$285,949	\$142,974	\$71,487	\$714,872
Evaluation and Market Research	\$123,254	\$164,339	\$82,170	\$41,085	\$410,848
<b>Total Cost</b>	<b>\$2,550,874</b>	<b>\$3,329,678</b>	<b>\$1,557,607</b>	<b>\$778,804</b>	<b>\$8,216,963</b>

**NYSERDA’s Commercial Loan Fund and Finance Program – Gas  
Proposed 2010-2013 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>Total</b>
Program Planning and Administration	\$26,131	\$34,841	\$17,421	\$8,710	\$87,103
Program Marketing & Trade Ally	\$28,417	\$28,417	\$0	\$0	\$56,834
Customer Incentives or Services	\$238,704	\$318,272	\$159,136	\$79,568	\$795,680
Program Implementation	\$28,418	\$37,891	\$18,946	\$9,473	\$94,728
Evaluation and Market Research	\$16,332	\$21,776	\$10,888	\$5,444	\$54,439
<b>Total Cost</b>	<b>\$338,002</b>	<b>\$441,197</b>	<b>\$206,390</b>	<b>\$103,195</b>	<b>\$1,088,784</b>

NYSERDA indicates that conducting a comprehensive, rigorous evaluation with a limited evaluation budget would be difficult because of the great diversity of projects, sectors, and technologies to be funded through the program. NYSERDA proposes the creation of different evaluation groups composed of similar sectors or technologies and proposes to complete its measurement and verification by 2011.

### NYSERDA - High Performance New Construction (Gas)

NYSERDA filed its High Performance New Construction proposal on September 22, 2008 and provided an update on June 5, 2009 as part of the Systems Benefit Charge Supplemental Revision for New York Energy Smart<sup>SM</sup> programs. The proposed program is intended to achieve natural gas savings and is complementary to the currently approved New Construction Program, which is currently for electricity only. NYSERDA's High Performance New Construction (Gas) program would serve local governments, businesses, not-for-profit and private institutions, public and private schools, multifamily buildings, and health care facilities. NYSERDA proposes a cumulative program budget of \$8,625,262 Million through 2014 and a participation level of 111 customers, with cumulative savings of 580,205 MWh through 2014.

Program candidates must pay into the Systems Benefit Charge to qualify and participating projects are required to meet new building or substantial renovation criteria. The program would provide financial incentives, up to a maximum of \$850,000 in service territories other than Con Edison and \$1,650,000 in the Con Edison area, to help offset the cost of energy efficient natural gas improvements.

NYSERDA provided a proposed breakdown of the High Performance New Construction program costs for the years 2010 to 2014 as shown below.

#### **NYSERDA High Performance New Construction – Gas** **Proposed 2010-2014 Program Costs**

<b>Expenditures</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total 2010-2014</b>
Customer Incentives	\$800,187	1,066,916	\$1,635,938	\$1,756,856	\$743,285	\$6,003,182
Program Implementation	\$150,035	\$200,047	\$306,738	\$329,411	\$139,366	\$1,125,597
Evaluation	\$95,460	\$109,351	\$178,637	\$147,812	\$78,639	\$431,263
Evaluation	\$95,460	\$150,080	\$0	\$0	\$0	\$375,199
Marketing and Outreach	\$225,119	\$150,080	\$0	\$0	\$0	\$375,199
<b>Total Cost</b>	<b>\$1,378,879</b>	<b>\$1,656,697</b>	<b>\$2,121,313</b>	<b>\$2,425,920</b>	<b>\$1,042,453</b>	<b>\$8,625,262</b>

#### **NYSERDA High Performance New Construction – Gas** **Proposed 2010-2014 Program Participant and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total 2010-2014</b>
Participants	N/A	N/A	N/A	N/A	N/A	111
MMBtu Savings	77,338	103,117	158,113	169,799	71,838	580,205

NYSERDA proposes to deliver the program by expanding its consultant network and using the Smart Focus program to reach the new construction market. NYSERDA identifies program delivery methods including: using direct outreach, small scale informal events, attendance at trade shows and construction showcases, press releases, training and education; creating an awards program; expanding partnerships with key industry allies and professional associations; developing project case studies; advertising in trade journals and magazines; using website enhancements and webinars; and leveraging trade ally opportunities, trade association trainings, and annual meetings.

The program would seek to achieve gas savings by amending the current New Construction Program to offer gas incentives. Gas program funding would be dedicated to gas measures. The program would offer a list of 30 pre-qualified gas measures for applicants that are looking to replace a single piece of equipment. NYSERDA states that pre-qualified measures are anticipated to account for approximately 10% of program participation; the remainder of applicants would participate with custom measures. Custom measures would be individually analyzed for energy efficiency improvements above an established baseline. Examples of potential measures include, but are not limited to, high efficiency gas domestic hot water boilers, condensing boilers, heat recovery equipment for fresh air supply, gas-fired humidification, demand-based ventilation, building management systems, enthalpy wheels, and building envelope measures.

The proposed incentive rate would be \$1.03 per therm saved. Non-incentive costs would be divided between electricity and gas EEPS funding in proportion to overall EEPS funding. The program would have a cap on basic financial incentives of 50% of incremental costs, or 75% of incremental costs for Leadership in Energy and Environmental Design (LEED) projects.

**NYSERDA High Performance New Construction (Gas) Pre- Qualified Measures**

<b>Measure</b>	<b>Unit Size kBtu/h if Applicable</b>	<b>Eligibility Criteria</b>
AF-1 High Efficiency Natural Gas -fired Air Furnace	≤300	Minimum annual fuel utilization efficiency of 90%
B-1 High Efficiency Natural Gas -fired Hot Water Boiler	≤300	Meets or exceeds ENERGY STAR® requirements
CB-1 High Efficiency Natural Gas -fired Hot Water Boiler	≤300	Minimum annual fuel utilization of 90%
SB-1 High Efficiency Natural Gas -fired Steam Boiler	≤300	Minimum annual fuel utilization of 82%

UH-1 High Efficiency Natural Gas –fired Unit Heater	≤300	Minimum thermal efficiency of 90%
<b>High Efficiency Furnaces and Boilers (&gt;300,000 Btu/h rated input capacity)</b>		
<b>Measure</b>	<b>Unit Size kBtu/h if Applicable</b>	<b>Eligibility Criteria</b>
B-2 High Efficiency Natural Gas –fired Hot Water Boiler	>300 to ≤500	Minimum thermal efficiency of 85%
B-3 High Efficiency Natural Gas –fired Hot Water Boiler	>500 to ≤1,000	Minimum thermal efficiency of 85%
B-4 High Efficiency Natural Gas –fired Hot Water Boiler	>1,000 to ≤1,700	Minimum thermal efficiency of 85%
B-5 High Efficiency Natural Gas –fired Hot Water Boiler	>1700	Minimum thermal efficiency of 85%
CB-2 High Efficiency Natural Gas –fired Hot Water Boiler	>300 to ≤500	Minimum thermal efficiency of 90%
CB-3 High Efficiency Natural Gas –fired Hot Water Boiler	>500 to ≤1,000	Minimum thermal efficiency of 90%
CB-4 High Efficiency Natural Gas –fired Hot Water Boiler	>1000 to ≤1,700	Minimum thermal efficiency of 90%
CB-5 High Efficiency Natural Gas –fired Hot Water Boiler	>1,700	Minimum thermal efficiency of 90%
SB-2 High Efficiency Natural Gas –fired Steam Boiler	>300 to ≤2,500	Minimum thermal efficiency of 79%
SB-3 High Efficiency Natural Gas –fired Steam Boiler	>2500 to ≤10,000	Minimum thermal efficiency of 79%
WH-1 Storage Water Tank Insulation	N/A	Water heater is natural gas fired
WH-2 New Circulation Controls Applicable for Reducing Standby Losses on Domestic Hot Water	N/A	Control is installed on natural-gas fired heating systems
<b>Space Heating Equipment</b>		
<b>Measure</b>	<b>Eligibility Criteria</b>	
HE-1 New, Low-intensity, infrared Gas-fired Unit Heaters	Is a building heating application	
HE-2 New Vent Damper	Vent Damper is being added to an existing natural-gas fired furnace/boiler	
	Furnace/boiler is not new	
HE-3 New Pipe Insulation	Insulation R-value > 4 Insulation is installed on pipe in a natural-gas fired heating system	
HE-4 New Duct Insulation	Insulation R-value > 10 Insulation is installed on duct in a natural-gas fired heating system	
HE-5 New Programmable Thermostats	Meets or exceeds ENERGY STAR® Requirements	
HE-6 Demand Control Ventilation	Carbon dioxide sensor is installed in conjunction with a fully functioning controls-governed economizer	
<b>Commercial Kitchen Equipment</b>		
<b>Measure</b>	<b>Eligibility Criteria</b>	
GK-1 New Gas Fired Fryer	Open deep-fat, pressure/kettle, flat bottom or specialty fryer Meets or exceeds ENERGY STAR® requirements	
GK-2 New NATURAL Gas Cooking Broiler	Open-fired upright, salamander, cheese-melting broiler or under-fired (charbroiler) gas broiler Cooking efficiency over 30%	
GK-3 New Full Size Gas-fired	Infrared and powered burners, convection, or etc.	

Convection Oven	Cooking efficiency over 40%
GK-4 New Natural Gas Combination Oven	Cooking efficiency over 40%
GK-5 New Natural Gas fired Steamer	Meets or exceeds ENERGY STAR® Requirements
GK-6 New Gas Griddle	3-foot, flat glass griddle with infrared burners
	Cooking efficiency >45% and idle energy rate <14,500 Btu/h
GK-7 Commercial Kitchen Spray Valve	Low-flow, pre-rinse spray valve with a flow rate of < 1.6 gallons per minute at 60 psi

The program would offer technical assistance on a cost-share basis including energy analysis, green building assistance, and building commissioning. Design team incentives, which are offered to Whole Building Design and Green Buildings Projects, would be offered on a sliding scale based on the percentage of energy savings achieved above New York State's Energy Building Code. Cost share rates applicable to the proposed program were not provided.

In order to receive incentive payments, custom energy efficiency measures need to be installed, documented, and confirmed by NYSERDA. Pre-qualified measures are self-certified by the applicant. A NYSERDA Outreach Project Consultant (OPC) is required to conduct a post-installation inspection for all projects using the Custom Measure, Whole Building Design, or Green Building approach. Assessments require that applicants submit cut sheets (factory specification data describing the equipment or system in detail) and invoices for equipment and systems that were studied for incentives. Using the cut sheets, the OPC would conduct a field review to visually observe the installation, when possible.

NYSERDA states in its June 5, 2009 program revision that “[c]ollaboration and coordination with interested parties, stakeholders and participants is an ongoing focus and a foundation of a successful program development and implementation. Program administrators, including the utilities and NYSERDA, have recently begun more formal collaborative efforts to address common issues such as: double-counting, referrals, contract qualification, training, web content, architectural and engineering standards and procurement.”

#### NYSERDA – Institutional Block Bidding Program (Electric and Gas)

NYSERDA proposes a bidding program that would offer gas and electric savings to commercial and industrial customers. It originally filed the proposed program on September 22, 2008 and filed revisions on June 5, 2009. Currently the program does not have any detailed



program design description other than that it would have a two year budget of \$9,000,000 (according to the June 5, 2009 revision).

NYSERDA – New York Energy  
Smart Business Partners Program (Electric)

On September 22, 2008, NYSERDA proposed an expansion of its existing electric SBC-funded Business Partners Program. NYSERDA provided more detailed budget numbers at an October 22, 2009 meeting with Staff. It describes the program as a mid-stream market development program that encourages program partners to use strategies that coincide with their own business models to “influence markets toward efficiency.” NYSERDA’s proposed expansion would include efforts to recruit new participants and target technologies and practices that have the highest energy savings potential.

The heating, ventilation, and air conditioning (HVAC) portion of the proposed expansion would promote the efficient operation of existing unitary air conditioning units and facilitate the specification, purchase, and installation of high efficiency commercial HVAC equipment. NYSERDA also proposes to expand the delivery network of qualified HVAC service providers. Participating “Business Partners” (contractors) would be eligible for incentives for diagnosing the energy efficiency of small commercial unitary HVAC units and, where appropriate, complete HVAC testing and tuning services, economizer repairs, and enhanced control strategies for existing units. NYSERDA also proposed an outreach component that would target new construction.

The commercial lighting portion of the proposed New York Energy Smart Business Partners program would focus on market development and incentive structures to support the training of lighting practitioners on the benefits and attributes of effective, energy-efficient lighting. Business partners would also be trained on advanced and “comparative” lighting technologies. Recruitment of lighting business partners would include energy service companies and interior designers. NYSERDA also proposes to increase the number of account managers in the New York City and Western New York areas. The proposal includes an expansion of end-user marketing efforts aimed at educating end-users on the benefits of energy-efficient lighting and leading them to business partners trained under the program.

NYSERDA also proposes an expansion of the energy-efficient motors and drives portion of the New York Energy Smart Business Partners program. This segment of the program would focus on procuring kWh savings through incentives and other strategies, including educating vendors and purchasers and conducting customer site visits. Midstream incentives would be provided to business partners for the sale of qualified motors and variable speed drives. NYSERDA indicated that the incentives are designed to prime the motor market by encouraging vendors and distributors to stock motors that will meet regulatory requirements that are to take effect in late 2011.

NYSERDA's proposed budgets and savings goals are provided below.

**NYSERDA's New York Energy Smart Business Partners Program – Electric  
Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$289,575	\$289,575	\$579,150
Program Marketing & Trade Ally	\$160,000	\$160,000	\$320,000
Partner Incentives or Services	\$680,625	\$680,625	\$1,361,250
Program Implementation	\$2,308,500	\$2,308,500	\$4,617,000
Evaluation and Market Research	\$180,984	\$180,954	\$361,968
<b>Total Cost</b>	<b>\$3,619,684</b>	<b>\$3,619,684</b>	<b>\$7,239,368</b>

**NYSERDA's New York Energy Smart Business Partners Program –Electric  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	1,380	2,480	3,860
MWh Savings	23,075	23,075	46,150

For the HVAC portion of the program, NYSERDA's proposed measurement and verification efforts would track all partner program activities and incentives paid for those activities in order to develop a population of projects. NYSERDA proposed to stratify that population by electrical savings with specific evaluation methods developed for each strata after a population assessment is conducted. The ultimate goal will be to conduct on-site verification of a sample of projects to develop savings data with a 90/10 confidence level, the evaluation of which can be extrapolated to the entire population by strata.

For the lighting portion of the program, NYSERDA proposes site visits at a sample of completed projects to ensure installation, to determine lighting densities, and to install loggers to verify annual operating hours. NYSERDA proposes to supplement its own data collection and analysis efforts by leveraging any overarching commercial/industrial baseline and measure saturation studies if the studies provide lighting densities for non-participants by area usage type, building type, and building vintages. For the motor and drives portion of this program, NYSERDA suggests that it may perform a pre- and post-evaluation study, the details of which would be developed during the detailed evaluation planning process. Data collection and analysis would be performed by NYSERDA's independent evaluation contractors using accepted methods. NYSERDA also proposes to conduct a process evaluation.

## DESCRIPTIONS OF PROPOSED PROGRAMS

### Residential Programs

#### Central Hudson – Expanded Residential HVAC Program (Electric)

This program would promote energy efficiency by offering rebates for installations of ground-source heat pumps and for electronically commutated (ECM) fans and programmable thermostats. The program would target electric customers and expand the existing residential ENERGY STAR® heating, ventilation, and air conditioning (HVAC) program by including ground source heat pumps. The proposed incentives for the installation of a ground source heat pump include \$200 per ton for EER (Energy Efficiency Ratio) 15 or \$300 per ton for EER 16 and \$700 for installing a new ground circulation loop. Additional incentives would include \$200 for an ECM fan when installing a ground source heat pump and \$25 for installation of a programmable thermostat. The customer would have a choice among pre-selected eligible thermostats and be limited to two per household.

Central Hudson's proposed total program budget for the Expanded Residential HVAC Program is \$483,500 through 2011. The projected participation level through 2011 is 650 to 800 customers and the proposed annual electric savings goal is 1,488 MWh for the same period.

#### **Central Hudson Expanded Residential HVAC Program Proposed 2010- 2011 Program Costs**

<b>Expanded Residential HVAC Program</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$35,000	\$35,000	\$70,000
Program Marketing & Trade Ally	\$45,000	\$45,000	\$90,000
Customer Incentives or Services	\$76,500	\$117,000	\$197,500
Program Implementation	\$50,000	\$50,000	\$100,000
Evaluation and Market Research	\$15,000	\$15,000	\$30,000
<b>Total Utility Cost</b>	<b>\$221,500</b>	<b>\$262,000</b>	<b>\$483,500</b>

#### **Central Hudson Expanded Residential HVAC Program Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	220-330	430-500	650-800
MWh Savings	560	928	1,488

**Central Hudson Expanded Residential HVAC Program**  
**List of Measures and Incentives**

<b>Equipment type</b>	<b>Minimum Performance</b>	<b>Incentive</b>
Ground Source Heat Pump (GSHP)	EER=15/ base HSPF = 6.8	\$200/ton
	EER=16/ base HSPF = 3.7	\$300/ton
	New Ground Loop (well or trench)	\$700/ton
ECM fan	Installed with GSHP	\$200
Programmable Thermostat	ENERGY STAR®	\$25

**Central Hudson – Residential**  
**Appliance Recycling (Electric)**

This program would achieve energy savings by removing and recycling old refrigerators, freezers, and through-the-wall and room air conditioning units. A customer that recycles an older model refrigerator would receive a \$50 per unit “bounty” for one or two working refrigerators and/or freezers. A customer who turns in an inefficient older model room air conditioning unit would receive an incentive of \$35 toward the purchase of a new ENERGY STAR® qualified room air conditioning unit. A customer who turns in an inefficient through-the-wall air conditioner would receive a \$100 incentive to purchase a new ENERGY STAR® qualified through-the-wall air conditioning unit.

Central Hudson proposes that no age restriction be placed on eligible refrigerators, but that a unit size limit would be set at 10-30 cubic feet and bounties would be paid only for primary refrigerators that have been replaced or working secondary refrigerators and freezers. ENERGY STAR® refrigerators would not be eligible for a bounty payment. There would be a limit of two refrigerators and/or freezers per customer account per calendar year and the appliance must be in working order when it is picked up.

Refrigerators and freezers would be collected from a participant’s home by a refrigerator recycling program contractor. At the time of the refrigerator pickup, the contractor would also pick up working inefficient air conditioners; however, a pickup would not be scheduled for air conditioners only. The collected refrigerators, freezers, and air conditioners would be collected and recycled to ensure that they are not be donated, gifted, or resold. Central Hudson would hire a contractor to operate a call center for customers to arrange appliance pick ups. During the pick up, the program delivery contractor would confirm that the discarded appliances are in working order.

Central Hudson proposed that customers could bring window and through-the-wall air conditioning units to turn-in events that will be held at various locations in Central Hudson's territory. The air conditioning units must be in working condition. No age restrictions are proposed for the air conditioners; units providing 6,000 BTU/hour of cooling or more would be eligible. ENERGY STAR® air conditioners would not be eligible for a rebate.

Customers that turn in eligible air conditioning units would receive a receipt that would grant them eligibility for rebates on qualifying ENERGY STAR® air conditioners. Once a customer purchases an eligible air conditioning unit, he/she would complete an application and submit it with the appropriate receipts to receive the rebate.

Central Hudson's proposed total program budget for the Residential Appliance Recycling Program is \$1,779,000 through 2011. The projected participation level through 2011 is 6,000-8,000 customers and the proposed electric savings goal is 3,898 MWh through the same period.

**Central Hudson Residential Appliance Recycling Program  
Proposed 2010- 2011 Incentives**

Appliance Type	Turn in Limit	Incentive
Refrigerator/freezer	2 per calendar year	\$50/unit
Through the wall AC units	None	\$100 towards purchase of ENERGY STAR® AC
Room AC units	None	\$35 towards purchase of ENERGY STAR® AC

**Central Hudson Residential Appliance Recycling Program  
Proposed 2010- 2011 Program Costs**

Residential Appliance Recycling Program	2010	2011	Total
Program Planning and Administration	\$60,000	\$60,000	\$120,000
Program Marketing & Trade Ally	\$85,000	\$85,000	\$170,000
Customer Incentives or Services	\$194,500	\$194,500	\$389,000
Program Implementation	\$500,000	\$500,000	\$1,000,000
Evaluation and Market Research	\$50,000	\$50,000	\$100,000
<b>Total Utility Cost</b>	<b>\$889,500</b>	<b>\$889,500</b>	<b>\$1,779,000</b>

**Central Hudson Residential Appliance Recycling Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	2010	2011	Total 2010-2011
Participants	3,000-4,000	3,000-4,000	6,000-8,000
MWh Savings	1,949	1,949	3,896

Central Hudson - Residential Lighting  
Community Group CFL Sales Program (Electric)

Central Hudson proposes to promote efficient lighting by distributing compact fluorescent light (CFL) bulbs to customers via fundraising campaigns conducted by community groups. The community groups would use the CFLs to raise funds, earning about \$4.00 for every CFL sold. Central Hudson proposes to offer screw-in CFLs at three different wattages (14W, 19W, and 23W) in either soft white or natural light.

A training session would be held to educate community groups about the use of CFLs. The sales campaign would run at least once, and possibly twice, a year for two to three months at a time. The community groups would be responsible for ensuring that they are selling bulbs to Central Hudson customers.

Central Hudson proposes to recruit community groups that the Company's employees or associates are involved with into the program. Informational events, direct mail, and electronic mail would also be used to promote this program to community groups.

Central Hudson's proposed total program budget for the Residential Lighting – Community Group CFL Sales Program is \$260,000 through 2011. The projected participation level is 10,000 to 20,000 customers through 2011 and the proposed electric savings goal is 1,167 MWh through the same period.

**Central Hudson Residential Lighting – Community Group CFL Sales Program**  
**Proposed 2010- 2011 Program Costs**

<b>Residential Lighting Community Group CFL Sales Program</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$35,000	\$50,000	\$85,000
Program Marketing & Trade Ally	\$25,000	\$35,000	\$60,000
Customer Incentives or Services	\$9,000	\$21,000	\$30,000
Program Implementation	\$25,000	\$35,000	\$60,000
Evaluation and Market Research	\$10,000	\$15,000	\$25,000
<b>Total Utility Cost</b>	<b>\$104,000</b>	<b>\$156,000</b>	<b>\$260,000</b>

**Central Hudson Residential Lighting – Community Group CFL Sales Program**  
**Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2009-2011</b>
Participants	3,000-6,000	7,000-14,000	10,000-20,000
MWh Savings	350	817	1,167

Central Hudson – Residential  
Lower Income Assistance Program (Electric and Gas)

Central Hudson made the original program filing on September 22, 2008 with a subsequent update on November 12, 2009. This program would address energy efficiency for lower-income residential customer using a whole-house approach. The program would provide free assessments to building owners or homeowners that would explain how a combination of improvements (including weatherization measures, improved heating, ventilation, and air conditioning (HVAC) equipment, and upgraded lighting and appliances) could lower energy consumption and create a more comfortable home. Targeted customers would be those in existing residential dwelling units whose total annual household income level is at or below 60% of the New York State median household income level, consistent with HEAP guidelines. For customers not meeting HEAP income-eligibility requirements, Central Hudson would consider including them in the program, where appropriate, so that the customer would be able to maintain continuous service without compromising other essential household needs.

Proposed efficiency measures include weatherization; improving heating, ventilation, and air conditioning (HVAC), primarily through re-commissioning; and upgrading existing lighting and appliances. Central Hudson proposes a maximum incentive level of \$3,000 for homeowners and \$6,000 for 2-4 unit building owners. These caps are based on average cost assumptions for efficiency upgrades after the on-site assessment has been conducted. A qualified owner, occupying a unit in a 2-4 unit building, could receive a subsidy of up to \$3,000 for the whole building without an income verification required of the tenants. A higher subsidy, of up to \$6,000 for the building, is available if one or more tenants are also income-eligible.

Contractors would be capable of providing whole-house energy services and would be offered training opportunities to become quality-certified by the Building Performance Institute and the National Association of Technical Excellence, for which Central Hudson would provide payment.

The program would be administered and overseen by Central Hudson and implemented by a competitively selected third-party contractor. The implementation contractor would coordinate with trade allies to increase the number of trained and certified contractors available in the service territory.



Central Hudson's proposed overall program budget for electric and gas expenses associated with the Residential Lower Income Assistance Program is \$1,879,000 through 2011. Of this amount, \$1,409,250 is proposed for electric energy efficiency and \$469,750 is proposed for natural gas efficiency. Central Hudson anticipates a cumulative participation level of 250 customers, with projected total electric savings of 602 MWh and total projected gas savings of 53,775 therms achieved through 2011. , per customer. According to the company, these estimated savings are based in part on single-family dwelling therms saved per unit from the NYSERDA September 2009 Low Income Scorecard in the Central Hudson service territory. Total gas savings for the period 2010-2011 are expected to be 5,378 Dth. The proposed general budget cost allocation apportionment is 75% for electric low-income residential energy efficiency and 25% for gas low-income residential efficiency.

**Central Hudson Residential Lower Income Assistance Program  
Proposed Program Costs 2010-2011**

<b>Residential Lower Income Assistance Program</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$85,000	\$85,000	\$170,000
Program Marketing & Trade Ally	\$80,000	\$90,000	\$170,000
Customer Incentives or Services	\$375,000	\$564,000	\$939,000
Program Implementation	\$200,000	\$300,000	\$500,000
Evaluation and Market Research	\$40,000	\$60,000	\$100,000
<b>Total Utility Cost</b>	<b>\$780,000</b>	<b>\$1,099,000</b>	<b>\$1,879,000</b>

**Central Hudson Residential Lower Income Assistance Program  
Proposed Program Participation and Energy Savings 2010- 2011**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Building Owner Participants	25	38	63
Single-family Participants	75	112	187
MWh Savings	241 MWh	361 MWh	602 MWh
Dth Savings	2,151 Dth	3,227 Dth	5,378 Dth

Outreach initiatives would include direct referrals to the Lower Income Assistance Program in response to calls to the company's customer service number; program

referral and participation links through Central Hudson websites ([http://www.cenhud.com/residential/payment\\_assistance.html](http://www.cenhud.com/residential/payment_assistance.html)) and ([www.savingscentral.com/incomesavings.html](http://www.savingscentral.com/incomesavings.html)); mailings and program brochures distributed to social service agencies serving Central Hudson customers throughout the service territory; literature distribution from Central Hudson booths at consumer oriented workshops, shows and fairs; general media press releases; program presentation at the bi-annual Outreach Forum and the Low-income Forum on Energy (LIFE); and articles in senior-oriented publications serving the Central Hudson customer base.

Con Edison – Appliance Bounty Program (Electric)

Con Edison submitted a set of electric-only program proposals in its September 22, 2008 filing and provided an update to the Appliance Bounty program proposal on November 24, 2009. Con Edison designed the program to encourage customers to dispose of older, working, inefficient room air conditioners and second refrigerators in 1-4 family homes. Energy and capacity savings would be achieved by removing the appliances from the electric system and ensuring, with proper disposal, that they would not be used again.

To encourage participation, Con Edison proposes to offer customers free appliance disposal and recycling, and incentive bounties of up to \$100 per appliance. Con Edison would limit customer incentive payments to two incentives for each type of appliance per customer address. Con Edison plans to recycle 27,000 refrigerators and 2,700 room air conditioners.

The proposed cumulative budget for 2010 and 2011 is \$6,217,000. The proposed energy savings goal is 16,940 MWh for the same time period. Con Edison expects that the program would serve 29,700 participants through 2011.

Con Edison provided budget and other program details for the proposed Appliance Bounty program as shown in the tables below for the years 2010 and 2011.

**Con Edison Appliance Bounty Program  
Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$150,000	\$153,000	\$303,000
Program Marketing & Trade Ally	\$304,000	\$311,000	\$615,000
Customer Incentives or Services	\$1,146,000	\$3,343,000	\$4,489,000
Program Implementation	\$250,000	\$255,000	\$505,000
Evaluation and Market Research	\$100,000	\$205,000	\$305,000
<b>Total Utility Cost</b>	<b>\$1,950,000</b>	<b>\$4,267,000</b>	<b>\$6,217,000</b>

**Con Edison Appliance Bounty Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	27,000	2,700	29,700
MWh Savings	4,390	12,550	16,940

To be eligible for the program, residential customers would have to pay the System Benefits Charge and have either a second refrigerator or be in the market to replace a room air conditioning unit. As part of the program, customers would be encouraged to properly dispose of their existing working air conditioners or to eliminate second refrigerators that are not needed. All appliances accepted for disposal under the program must be working units and refrigerators must be at least 10 cubic feet in size.

Con Edison proposes the measures and incentive bounties shown in the table below. A third party contractor would handle the processing and payments for appliance incentives.

**Con Edison Appliance Bounty Program  
Proposed Measures and Incentive Bounties**

<b>Measures</b>	<b>Incentive Bounties</b>
Refrigerator (Working Unit $\geq$ 10 Cubic Feet)	\$30
Wall Room Air Conditioner (Working Unit)	\$100
Window Room Air Conditioner (Working Unit)	\$35
All Measures include free pick up and disposal	

Con Edison proposes to use a combination of internal staff and third party contractors to administer, deliver, and implement the proposed Appliance Bounty program. Con Edison would train staff and contractors on processes and procedures associated with the program, such as reporting, roles and responsibilities, quality assurance, administrative procedures, budgets, and timelines.

Con Edison proposes to work with NYSERDA, other utilities, and the program contractor to promote the program to customers, trade allies, and appliance dealers. Promotion would be through brochures, one-on-one meetings with trade allies, and distributed materials to customers and appliance dealers.

#### Con Edison – Residential Direct Installation Program (Electric)

Con Edison submitted an electric-only Residential Direct Install Program proposal in its September 22, 2008 filing and updated the proposal on November 6, 2009. Con Edison designed its proposed Residential Direct Install as an entry point for residential customers to evaluate their home's energy performance and identify energy efficiency opportunities. Customers would be charged approximately \$35 for an energy audit that would encourage customer participation, recommend energy efficiency upgrades, and document existing equipment. At the time of the audit, Con Edison would install free low-cost efficiency measures which include: six compact fluorescent bulbs, a smart strip,<sup>1</sup> hot water pipe insulation, low-flow showerheads, a water heater setback, weather stripping and door sweeps, window air conditioner timers, and faucet aerators.

Con Edison proposes to serve 6,500 participants with a budget of \$4,242,000 through 2011. The proposed program energy savings goal is 6,880 MWh with 1.7 MW coincident peak demand savings expected in 2011.

Con Edison provided budget and other program details for the proposed Residential Direct Install program as shown in the tables below for the years 2010 and 2011.

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<sup>1</sup> A smart strip is a power strip with a control device outlet and switched outlets that automatically shut down when the controlled device is shut down. This type of device is commonly used with computer and entertainment systems.

**Con Edison Residential Direct Install Program  
Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$300,000	\$304,000	\$604,000
Program Marketing & Trade Ally	\$300,000	\$304,000	\$604,000
Customer Incentives or Services	\$536,000	\$1,824,000	\$2,360,000
Program Implementation	\$225,000	\$234,000	\$459,000
Evaluation and Market Research	\$73,000	\$142,000	\$215,000
<b>Total Utility Cost</b>	<b>\$1,434,000</b>	<b>\$2,808,000</b>	<b>\$4,242,000</b>

**Con Edison Residential Direct Install Program  
Proposed 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participant Surveys	1,500	5,000	6,500
MWh Savings	1,590	5,290	6,880
MW Savings	0.4	1.3	1.7

To be eligible for the program, the participant must be a residential customer that pays the System Benefits Charge and lives in a 1-4 family existing building. Con Edison plans to refer customers seeking a whole house or custom energy efficiency approach to NYSERDA's Home Performance with ENERGY STAR® program. Con Edison's low-income residential customers would be referred to NYSERDA's EmPower NY program.

Con Edison proposes to use internal staff to market the program, conduct various program implementation activities, and engage in customer intake for the Residential Direct Install program. In addition, Con Edison proposes to use a third party contractor for program delivery and implementation, to perform on-site energy audits, and to install free measures.

Con Edison proposes to use a mix of marketing strategies to reach the residential market segment and to leverage existing relationships and customer data to market the program through direct mail. In addition, Con Edison will focus its marketing in specific geographic areas where network relief is most needed and where customers may be underserved.

**Con Edison – Residential  
Room Air Conditioning Program (Electric)**

Con Edison submitted a set of electric-only energy efficiency program proposals in its September 22, 2008 filing and provided an update to the Residential Room Air Conditioning program proposal on November 6, 2009. Con Edison proposes to add high-

efficiency room air conditioners to its existing Fast Track Residential HVAC program to make efficient air conditioner rebates more widely available. The program would target all Con Edison residential electric customers.

The proposed 2010-2011 cumulative budget is \$2,010,000 and the cumulative annual energy savings goal is 2,310 MWh through 2011. Con Edison expects that the program would serve 35,750 customers through 2011 and provide for a coincident peak demand reduction of 4.9 MW.

Con Edison provided a breakdown of the Residential Room Air Conditioning program as shown in the tables below for annual and total costs, installations, and savings for the years 2010 and 2011.

**Con Edison Residential Room Air Conditioning Program  
Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$150,000	\$153,000	\$303,000
Program Marketing & Trade Ally	\$200,000	\$204,000	\$404,000
Customer Incentives or Services	\$295,000	\$701,000	\$996,000
Program Implementation	\$100,000	\$105,000	\$205,000
Evaluation and Market Research	\$40,000	\$62,000	\$102,000
<b>Total Utility Cost</b>	<b>\$785,000</b>	<b>\$1,225,000</b>	<b>\$2,010,000</b>

**Con Edison Residential Room Air Conditioning Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	10,750	25,000	35,750
MWh Savings	690	1,620	2,310
MW Savings	1.5	3.4	4.9

The proposed program would target all residential electric customers (both owners and tenants) who pay the System Benefits Charge (SBC). These customers could include occupants in master-metered buildings where the owner pays the SBC charges. Con Edison would offer incentives to encourage customer participation for upgrading to higher-efficiency room air conditioners. The program offers a dealer incentive for retailers who up-sell room air conditioners to higher efficiency levels. Eligible customers who install high-efficiency room air conditioners would qualify for rebates of up to 70% of the incremental measure cost, or the equivalent of \$30 per ENERGY STAR® rated unit. Once a customer purchases an air

conditioner, he/she could submit a rebate form to Con Edison for approval. After the rebate form is approved, Con Edison would issue the customer a rebate check. Within the Con Edison service territory, the program proposed to install 35,750 room air conditioners.

Con Edison plans to use a combination of internal staff and third party contractors to administer, deliver, and implement the proposed Residential Room Air Conditioning program. It would train staff and contractors on processes and procedures associated with the program, such as reporting, roles and responsibilities, quality assurance, administrative procedures, budgets, and timelines. Con Edison would integrate its program with its existing Residential HVAC program, NYSERDA's residential programs, and other energy efficiency programs.

Con Edison plans to use a mix of marketing strategies to reach the residential market segment. Con Edison plans to leverage existing relationships and to market the program through customer education, direct mail, Internet postings, speaking engagements, and through outreach to trade allies and industry partners.

#### KEDLI/KEDNY – Enhanced Home Sealing Incentives Program (Gas)

On September 22, 2008, KEDNY and KEDLI filed a suite of residential programs for its gas customers to encourage the installation of energy efficiency measures. In later updates KEDNY/KEDLI filed revisions to their residential programs, including new program descriptions, budgets and savings goals.

KEDLI and KEDNY propose to modify the program description in the September 22, 2008 filing for the Enhanced Home Sealing Incentive Program by combining the objectives of both the Energy Audit Program and Home Sealing Program into a single program. They state that by combining the two programs, they anticipate that there will be an increase in savings due to the synergies between these two programs. This program would replace the current Weatherization program being offered by KEDLI/KEDNY under its current rate plan.

The new “one stop shopping” approach would offer customers a home visit by a KEDLI/KEDNY energy auditor and a Building Performance Institute (BPI) certified contractor to conduct a free energy audit, including a blower-door test to identify air leaks. (Beginning January 1, 2010, National Grid will require all of its participating weatherization contractors to be BPI-certified.) The KEDLI/KEDNY Energy Auditor would inspect all areas of the home, as well as unheated areas such as the attic and basement. At the conclusion of the assessment, the customer would receive a report detailing prioritized recommendations for energy efficiency of

the home, along with information about the financial incentives available from KEDLI/KEDNY. According to KEDLI/KEDNY the average audit cost is \$150.

KEDLI and KEDNY propose that electric and gas measures would be addressed during the same home visit, allowing for a single customer contact. According to KEDLI/KEDNY, the energy auditor would inform customers about all possible energy efficiencies at the time of the audit, including electric measures. However, there are no KEDLI/KEDNY electric rebates available to its gas customers; therefore, KEDLI/KEDNY would coordinate with NYSERDA, Con Edison, and the Long Island Power Authority for electric measures.

With the customer's permission, the contractor would seal some low-cost building envelope and duct leaks in the house at no cost to the customer. In addition, the BPI-certified contractor would give the customer an estimate for installing additional cost-effective air-sealing, insulation, and other weatherization measures and the accompanying estimated savings for each measure eligible under the KEDLI/KEDNY Home Sealing Program. A post-installation blower-door test would be performed after the contractor completes all the sealing measures during the visit. A customer could elect to receive an estimate from another contractor for installation services as long as the contractor is a pre-approved, BPI-certified contractor.

KEDLI/KEDNY proposed to offer customers 75% of the installed costs, up to \$5,000, of the eligible measures installed by pre-approved BPI-certified contractors. Eligible measures include: attic, wall, rim, basement/crawl space, duct/pipe and attic stairs insulation; infrared and blower-door assisted air sealing; mechanical ventilation; and related health and safety measures. The energy auditor and the BPI-certified contractor would provide follow up with participating customers after the audit to encourage their participation in other energy efficiency programs.

The program would be administered by vendors selected through a competitive solicitation. KEDLI and KEDNY propose to inspect 10% of the projects completed through a third party vendor to ensure quality installations.

KEDNY proposes a total budget of \$3,706,704 through 2011, with cumulative energy savings of 35,694 MMBtu. It projects that 1,200 customers would participate in the program through 2011.



KEDLI proposes a total budget of \$3,168,011 through 2011, with cumulative energy savings of 34,534 MMBtu. It projects that 1,161 customers would participate in the program through 2011.

**KEDNY Enhanced Home Sealing Program  
Proposed 2010-2011 Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$104,947	\$177,034	\$1,688,931	\$142,233	\$107,694	\$2,220,840
2011	\$104,947	\$177,057	\$988,931	\$142,233	\$72,696	\$1,485,864
<b>Total</b>	<b>\$209,894</b>	<b>\$354,091</b>	<b>\$2,677,862</b>	<b>\$284,466</b>	<b>\$180,390</b>	<b>\$3,706,704</b>

**KEDLI Enhanced Home Sealing Program  
Proposed 2010-2011 Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$79,021	\$134,030	\$1,034,737	\$107,209	\$69,087	\$1,424,083
2011	\$79,021	\$120,376	\$1,353,005	\$107,209	\$84,317	\$1,743,928
<b>Total</b>	<b>\$158,042</b>	<b>\$254,406</b>	<b>\$2,387,742</b>	<b>\$214,418</b>	<b>\$153,404</b>	<b>\$3,168,011</b>

**KEDNY Enhanced Home Sealing Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	600	600	1,200
MMBtu Savings	17,847	17,847	35,694

**KEDLI Enhanced Home Sealing Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	581	581	1,161
MMBtu Savings	17,267	17,276	34,534

KEDLI/KEDNY - Internet Audit Program and E-Commerce Sales (Gas)

On September 22, 2008, KEDNY and KEDLI filed a suite of residential programs for their gas customers to encourage the installation of energy efficiency measures. In later updates KEDNY/KEDLI filed revisions to their residential programs, including new program descriptions, budgets and savings goals.

KEDLI and KEDNY propose to provide an Internet Audit Program which would allow customers to complete an electronic survey of their home that would gather information

about the home's age, size, appliances, and average energy use patterns. The program would educate customers about energy savings measures that they can either install themselves or contact a contractor to install; it also would provide information about how to participate in KEDLI/KEDNY energy efficiency programs. The program would produce a report that compares the energy consumed in a customer's home with that of similar homes, and would generate a "top ways to save" report with estimated annual cost savings if the recommended measures are taken. The program would allow customers to progress further into the internet program if they provide more detailed information, resulting in more personalized tips to improve the home's energy efficiency. The program would be administered by a third party through KEDLI/KEDNY's website [www.powerofaction.com](http://www.powerofaction.com). KEDLI and KEDNY propose to use the online energy audit as a marketing tool for directing customers to other utility and NYSERDA energy efficiency programs.

KEDLI and KEDNY propose no separate budget for this program but propose to fund and promote the program as part of their other residential programs. The total costs of the program through 2011 are \$50,584 for KEDNY and \$43,406 for KEDLI. KEDLI and KEDNY propose to recover the costs of the program through the marketing costs of other approved gas residential programs.

#### KEDLI/KEDNY – Residential Building Practices and Demonstration Program (Gas)

On September 22, 2008, KEDNY and KEDLI filed a suite of residential programs for its gas customers to encourage the installation of energy efficiency measures. In later updates KEDNY/KEDLI withdrew the program.

#### KEDLI/KEDNY – Residential ENERGY STAR® Products (Gas)

On September 22, 2008, KEDNY and KEDLI filed a suite of residential programs for its gas customers to encourage the installation of energy efficiency measures. In later updates KEDNY/KEDLI filed revisions to their residential programs, including new program descriptions, budgets, and savings goals.

KEDLI and KEDNY propose to offer financial incentives to its customers who heat with natural gas for the installation of energy efficient windows and ENERGY STAR® labeled programmable thermostats. Customers would be eligible for a \$10 mail-in rebate for

each high-efficiency window installed with a U-factor of .35 or lower in existing homes, with a maximum incentive of \$500 per account. Customers would be able to receive a \$25 rebate for each ENERGY STAR® labeled programmable thermostat, up to a maximum of two thermostats per account. These programmable thermostats are aimed at do-it-yourself customers and are not to be confused with the thermostats installed by the contractor as part of the Residential High Efficiency Heating, Water Heating, and Controls Program. According to KEDLI/KEDNY, rebates would be monitored to make sure that customers are not receiving rebates from both programs. KEDLI and KEDNY propose to attribute savings by calculating the savings from each product to which the incentive is paid.

Customers would be required to submit a proof of purchase as well as proof of the U-factor for each window for each rebate claimed. KEDLI/KEDNY would conduct inspections of the first two installations per new participating installation contractor; random inspections of self-installations may be administered to verify proper installation.

KEDNY proposes a total budget of \$138,250 through 2011 with cumulative energy savings of 4,186 MMBtu. The company projects that 900 window rebates and 400 thermostat rebates would be offered.

KEDLI proposes a total budget of \$138,250 through 2011 with cumulative energy savings of 4,186 MMBtu. It projects that 900 window rebates and 400 thermostat rebates would be distributed.

**KEDNY ENERGY STAR® Products Program  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$5,000	\$5,000	\$50,000	\$5,000	\$5,000	\$70,000
2011	\$5,000	\$5,000	\$50,000	\$5,000	\$3,250	\$68,250
<b>Total</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$100,000</b>	<b>\$10,000</b>	<b>\$8,250</b>	<b>\$138,250</b>

**KEDLI ENERGY STAR® Products Program  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$5,000	\$5,000	\$50,000	\$5,000	\$5,000	\$70,000
2011	\$5,000	\$5,000	\$50,000	\$5,000	\$3,250	\$68,250
<b>Total</b>	<b>\$10,000</b>	<b>\$10,000</b>	<b>\$100,000</b>	<b>\$10,000</b>	<b>\$8,250</b>	<b>\$138,250</b>

**KEDNY ENERGY STAR® Products Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants (Rebates Processed)	650	650	1,300
MMBtu Savings Goal	2,090	2,090	4,180

**KEDLI ENERGY STAR® Products Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants (Rebates Processed)	650	650	1,300
MMBtu Savings Goal	2,090	2,090	4,180

**KEDLI/KEDNY–  
Residential Low Income Program (Gas)**

KEDNY and KEDLI propose to offer the Residential Low Income Program to their customers with annual incomes up to 60% of the median New York State household income and who live in single family homes or multifamily buildings that heat with natural gas. Tenants of 2-4 unit buildings would also be able to participate if the tenant is the bill paying customer and the landlord agrees not to raise rents based on improvements to the property made through the program. KEDNY and KEDLI currently provide an interim low income residential program to the same customer segment, administered by the Association of Energy Affordability (AEA) of Bronx, New York and delivered by AEA and a coalition of community-based organizations. KEDNY and KEDLI propose to continue the existing administration and delivery structure. KEDLI and KEDNY further propose to continue their current coordination and outreach efforts through existing relationships with NYSERDA and the City and State of New York. They also indicated that they would work closely with customer advocacy personnel, call centers, and internal collections groups to identify bill-stressed customers who may be eligible to participate in the proposed Residential Low Income Program.

Energy efficiency measures would include attic, crawl space, and wall insulation; blower-door assisted air sealing; inert-gas-filled windows; heating pipe insulation; heating system repairs, upgrades, or replacements; heating controls; energy management systems; and related health and safety measures. According to KEDNY/KEDLI, these are some of the same measures that are available to customers through the Weatherization Assistance Program (WAP) administered by the New York State Division of Housing and Community Renewal.

The KEDLI program has proposed annual budgets of \$2,949,463 in 2010 and \$2,949,396 in 2011, for a total two-year program cost of \$5,898,859. Program participation is estimated at 878 in 2010 and in 2011, with expected savings of 23,173 Dth in each year, for a total participation level of 1,756 and cumulative energy savings of 47,346 Dth.

**KEDLI Residential Low Income Program  
Proposed 2010-2011 Program Costs**

<b>KEDLI</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$220,584	\$220,584	\$441,168
Program Marketing & Trade Ally	\$382,591	\$382,528	\$765,119
Customer Incentives or Services	\$1,764,670	\$1,764,670	\$3,529,340
Program Implementation	\$441,167	\$441,167	\$882,334
Evaluation and Market Research	\$140,451	\$140,447	\$280,898
<b>Total Utility Cost</b>	<b>\$2,949,463</b>	<b>\$2,949,396</b>	<b>\$5,898,859</b>

**KEDLI Residential Low Income Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	878	878	1,756
Dth Savings Goal	23,173	23,173	47,346

KEDNY proposes annual budgets of \$5,887,804 in 2010 and \$5,888,015 in 2011 for a total program cost of \$11,775,819. Program participation is estimated to be 1,754 in 2010 and in 2011, with an expected savings of 46,253 Dth in each year for a total two-year participation level of 3,508 and cumulative energy savings of 92,506 Dth.

**KEDNY Residential Low Income Program  
Proposed 2010-2011 Program Costs**

<b>KEDNY</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$441,177	\$441,177	\$882,354
Program Marketing & Trade Ally	\$754,490	\$754,691	\$1,509,181
Customer Incentives or Services	\$3,529,412	\$3,529,412	\$7,058,824
Program Implementation	\$882,353	\$882,353	\$1,764,706
Evaluation and Market Research	\$280,372	\$280,382	\$560,754
<b>Total Utility Cost</b>	<b>\$5,887,804</b>	<b>\$5,888,015</b>	<b>\$11,775,819</b>

**KEDNY Low Income Program**  
**Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	1,754	1,754	3,508
Dth Savings	46,253	46,253	92,506

KEDLI/KEDNY –New Construction Program (Gas)

On September 22, 2008, KEDNY and KEDLI filed a suite of residential programs for their gas customers to encourage the installation of energy efficiency measures. In later updates KEDNY/KEDLI filed revisions to their residential programs, including new program descriptions, budgets, and savings goals.

In its September 22, 2008 EEPS Residential Program Portfolio, KEDLI proposed to work with the Long Island Power Authority (LIPA) on the design of a New Construction/ENERGY STAR® Homes Program. However, it has been unable to reach an agreement with LIPA at this time. On November 16, 2009, KEDLI/KEDNY submitted a revised proposal for a New Construction Program in the KEDNY service territory as well, and renamed the offering in both territories the “New Construction Program”.

The program would encourage energy efficiency in residential single family new construction projects in New York City and Long Island. The program would support professional training for building partners to increase their awareness and encourage them to apply energy efficiency technologies in building new homes, including Manual J and D training.<sup>2</sup> The program would provide financial incentives for participating building partners to offset the increased costs of installing high efficiency products that surpass the current energy building codes for residential construction. Eligible measures might include: upgrades to homes’ thermal, moisture, and air control as measured by approved industry diagnostics; windows rated at a U factor of .33 or lower; solar domestic hot water systems; and heating and domestic hot water systems placed in conditioned space. To qualify for new construction incentives, participants would be required to submit Manual J and D heat load and duct calculations for participating homes.

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<sup>2</sup> Manual J calculation is the industry standard for calculating the right size equipment for heating and cooling equipment for homes. Manual D calculation is the industry standard for calculating the right size duct and airflow system for a home.

KEDNY proposes a total budget through 2011 of \$77,101 with a cumulative energy savings goal of 986 MMBtu. It projects that 40 customers would participate in the program through 2011.

KEDLI proposes a total budget of \$712,337 through 2011 with a cumulative energy savings goal of 9,864 MMBtu. It projects that 400 customers would participate in the program through 2011.

**KEDNY Residential New Construction Program  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally Support	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$8,581	\$10,133	\$15,000	\$3,000	\$1,8360	\$38,550
2011	\$8,581	\$10,133	\$15,000	\$3,000	\$1,836	\$38,550
<b>Total</b>	<b>\$17,162</b>	<b>\$20,266</b>	<b>\$30,000</b>	<b>\$6,000</b>	<b>\$3,672</b>	<b>\$70,100</b>

**KEDLI Residential New Construction Program  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$27,461	\$47,187	\$200,000	\$75,000	\$17,482	\$387,130
2011	\$27,461	\$26,308	\$200,000	\$75,000	\$16,438	\$345,207
<b>Total</b>	<b>\$54,921</b>	<b>\$73,495</b>	<b>\$400,000</b>	<b>\$150,000</b>	<b>\$33,921</b>	<b>\$712,337</b>

**KEDNY Residential New Construction Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants (Rebates Processed)	20	20	40
MMBtu Savings	493	493	986

**KEDNY Residential New Construction Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants (Rebates Processed)	200	200	400
MMBtu Savings	4,932	4,932	9,864

Niagara Mohawk – Enhanced  
Home Sealing Incentives Program (Electric and Gas)

On September 22, 2008, Niagara Mohawk filed a suite of residential programs for its gas and electric customers to encourage the installation of energy efficiency measures. In later updates Niagara Mohawk filed revisions to its residential programs, including new program descriptions, budgets, and savings goals.

Niagara Mohawk proposes to modify the September 22, 2008 filing for the Enhanced Home Sealing Incentive Program by combining the objectives of both the Energy Audit Program and Home Sealing Program into a single program. Niagara Mohawk states that by combining the two programs, it anticipates that there will be an increase in savings due to the synergies between the two programs. The new “one stop shopping” approach would offer customers a home visit by a Niagara Mohawk energy auditor and a Building Performance Institute (BPI) certified contractor who would conduct a free energy audit, including a blower-door test to identify air leaks. (Beginning January 1, 2010, National Grid will require all of its participating weatherization contractors to be BPI-certified.) The Energy Auditor would inspect all areas of the home, including unheated areas such as the attic and basement. At the conclusion of the assessment, the customer would receive a report detailing prioritized recommendations for energy efficiency improvements for the home, along information about financial incentives available from Niagara Mohawk. According to Niagara Mohawk, the average audit cost is \$150.00. Niagara Mohawk proposed that electric and gas measures would be addressed during the same home visit, allowing for a single customer contact.

With the customer’s permission, the contractor would seal some air and duct leaks in the house at no cost to the customer. In addition, the contractor would provide the customer with a quote for installing additional cost-effective air-sealing and weatherization measures and would provide the accompanying estimated savings for each measure eligible for the Home Sealing Incentives Program. A post-installation blower-door test would be performed after the contractor completes installation of all the sealing measures. A customer could elect to receive an estimate from another contractor for installation services as long as the contractor is pre-approved and BPI-certified.

Niagara Mohawk proposes to offer eligible customers 75% of the installed costs, up to \$5,000, of the eligible measures installed by pre-approved BPI-certified contractors. Eligible measures would include: attic, wall, rim, basement/crawl space, duct/pipe and attic stairs



insulation; infrared and blower-door assisted air sealing; mechanical ventilation; and related health and safety measures. Customers must be electric heating, air conditioning, or gas heating customers of Niagara Mohawk to be eligible for the incentives. The energy auditor and the BPI-certified contractor would provide follow up with participating customers after the audit to encourage their participation in energy efficiency programs. Niagara Mohawk would inspect 10% of the projects completed through a third party vendor to ensure quality installations.

Niagara Mohawk proposes a total electric program budget of \$4,437,000 through 2011 and a cumulative energy savings goal of 7,458 MWh. It projects that 3,030 customers would participate in the program.

Niagara Mohawk proposes a total gas program budget of \$1,745,385 through 2011 and a cumulative energy savings goal of 27,939 MMBtu. It projects that 501 customers would participate in the program.

**Niagara Mohawk Enhanced Home Sealing Program – Electric  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$70,000	\$763,000	\$1,092,000	\$180,000	\$88,800	\$2,193,800
2011	\$80,000	\$677,000	\$1,888,000	\$103,200	\$103,200	\$2,243,200
<b>Total</b>	<b>\$150,000</b>	<b>\$1,440,000</b>	<b>\$2,280,000</b>	<b>\$375,000</b>	<b>\$192,000</b>	<b>\$4,437,000</b>

**Niagara Mohawk Enhanced Home Sealing Program – Gas  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$96,400	\$149,373	\$420,000	\$123,000	\$37,439	\$828,212
2011	\$177,600	\$166,247	\$480,000	\$49,651	\$43,675	\$917,173
<b>Total</b>	<b>\$274,000</b>	<b>\$315,620</b>	<b>\$900,000</b>	<b>\$172,651</b>	<b>\$83,114</b>	<b>\$1,745,385</b>

**Niagara Mohawk Enhanced Home Sealing Program – Electric  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	1,515	1,515	3,030
MWH Savings	3,729	3,729	7,458

**Niagara Mohawk Enhanced Home Sealing Program - Gas  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants (Rebates Processed)	250	251	501
MMBtu Savings	13,970	13,970	27,939

Niagara Mohawk – Residential  
Building Practices and Demonstration Program (Electric and Gas)

On September 22, 2008, Niagara Mohawk filed a suite of residential programs for its gas and electric customers to encourage the installation of energy efficiency measures. In later updates Niagara Mohawk filed revisions to its residential programs, including new program descriptions, budgets, and savings goals.

Niagara Mohawk proposes pilot program to test a behavioral modification marketing approach to achieving gas and electric energy savings through the use of home energy reports. The program would provide reports by mail and website benchmarks of customers' electricity and gas use compared with the amounts used by other customers in the surrounding neighborhood. The program would provide the customer with six to eight reports a year, providing recommendations to reduce energy usage, coupons, and rebates to assist with implementing the energy efficiency improvements. This behavioral modification approach to reducing energy use has been implemented successfully in other utility service territories outside of New York.

Eligible customers would include homeowners, landlords, and home builders. Niagara Mohawk would select 150,000 gas and electric customers to participate through direct mail. Niagara Mohawk would work with its vendor to select a geographic area to implement the program.

In addition, Niagara Mohawk proposes a Tune-Up Pilot Program for its gas heating customers. The company would offer customers a \$50 incentive to have their gas heating system tuned and cleaned by a qualified contractor. The program would be offered for a limited time to a selected area of the service territory to gather information about customer and contractor interest. Niagara Mohawk would target customers who are unable to replace an older inefficient heating system. The company would offer the program as a pilot to determine if it would be cost effective for the long term.

Niagara Mohawk proposes a total electric program budget of \$1,330,845 through 2011 with cumulative energy savings goal of 24,300 MWh. It projects that 150,000 customers (75,000 per year) would participate in the program.

Niagara Mohawk proposes a total gas program budget of \$1,437,553, with cumulative savings of 201,690 MMBtu. It projects that 152,400 customers would participate in the program. The total gas budget for behavioral modification marketing through 2011 is \$1,267,553, with cumulative energy savings goal of 194,130 MMBtu and an estimated 150,000 participants (75,000 per year). The Tune-Up Program total gas budget is \$170,000, with cumulative energy savings goal of 7,560 MMBtu, with projections of 2,400 participants.

**Niagara Mohawk Building Practices and Demonstration Program – Electric  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$89,600	\$84,000	\$387,000	\$31,220	\$39,991	\$632,311
2011	\$102,400	\$96,000	\$418,750	\$35,680	\$45,704	\$698,534
<b>Total</b>	<b>\$192,000</b>	<b>\$180,000</b>	<b>\$860,250</b>	<b>\$66,900</b>	<b>\$85,695</b>	<b>\$1,330,845</b>

**Niagara Mohawk Building Practices and Demonstration Program  
(Behavioral Modification Marketing and Tune-Up) – Gas  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$91,668	\$69,811	\$447,500	\$34,528	\$40,630	\$684,138
2011	\$105,501	\$81,418	\$478,750	\$40,742	\$47,003	\$753,415
<b>Total</b>	<b>\$187,169</b>	<b>\$151,230</b>	<b>\$926,250</b>	<b>\$75,270</b>	<b>\$87,633</b>	<b>\$1,437,553</b>

**Niagara Mohawk Building Practices and Demonstration Program – Electric  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	75,000	75,000	150,000
MWH Savings	12,150	12,150	24,300

**Niagara Mohawk Building Practices and Demonstration Program  
(OPower and Tune Up) – Gas  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	76,200	76,200	152,400
MMBtu Savings	100,845	100,845	201,690

Niagara Mohawk – Residential  
ENERGY STAR® Products and Recycling Program (Electric and Gas)

Niagara Mohawk proposes to offer financial incentives to its gas and electric customers for the installation of energy-efficient windows and ENERGY STAR® labeled programmable thermostats. Customers would be eligible for a \$10 mail-in rebate for each high-efficiency window with a U-factor of .35 or less installed in existing homes, with a maximum incentive of \$500 per account. Customers would be able to receive a \$25 rebate for each ENERGY STAR® labeled programmable thermostats, up to a maximum of two thermostats per account.

Customers would be required to submit a proof of purchase as well as proof of the U-factor for each window for which a rebate is claimed. Niagara Mohawk would conduct inspections of the first two installations per new participating installation contractor; random inspections of self-installations may be administered to verify proper installation.

Niagara Mohawk proposes an electric-only Recycling Program to encourage customers to replace inefficient second refrigerators and freezers. Niagara Mohawk would provide customers with a \$30 rebate and in-home appliance pick-up to remove their second refrigerator or freezer for recycling.

Niagara Mohawk proposes a total electric program budget of \$9,502,500 through 2011 and a cumulative energy savings goal of 22,767 MWh. It projects that 90,700 customers would participate in the program.

Niagara Mohawk proposes a total gas program budget of \$215,836 through 2011 and a cumulative energy savings goal of 8,259 MMBtu. It projects that 1,750 customers would participate in the program.

**Residential ENERGY STAR® Products and Recycling Program – Electric  
Proposed 2010-2011 Program Costs**

	<b>Program Planning and Admin</b>	<b>Program Marketing &amp; Trade Ally</b>	<b>Customer Incentives</b>	<b>Program Implementation</b>	<b>Evaluation</b>	<b>Total</b>
2010	\$430,000	\$690,000	\$840,000	\$2,200,000	\$215,000	\$4,515,000
2011	\$470,000	\$760,000	\$910,000	\$2,400,000	\$237,500	\$4,987,500
<b>Total</b>	<b>\$900,000</b>	<b>\$1,450,000</b>	<b>\$1,750,000</b>	<b>\$4,800,000</b>	<b>\$452,500</b>	<b>\$9,502,500</b>

**Niagara Mohawk ENERGY STAR® Products Program – Gas  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$7,000	\$21,321	\$62,000	\$7,000	\$4,866	\$102,187
2011	\$8,000	\$24,238	\$68,000	\$8,000	\$5,412	\$113,650
<b>Total</b>	<b>\$15,000</b>	<b>\$45,558</b>	<b>\$130,000</b>	<b>\$15,000</b>	<b>\$10,278</b>	<b>\$215,837</b>

**Niagara Mohawk ENERGY STAR® Products Program – Electric  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	45,350	45,350	90,700
MWH Savings	11,383	11,384	22,767

**Niagara Mohawk ENERGY STAR® Products Program – Gas  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	875	875	1,750
MMBtu Savings	4,129	4,130	8,259

Niagara Mohawk –  
Residential Low Income (Gas)

Niagara Mohawk proposes to provide additional funding for NYSERDA’s EmPower NY and Assisted Home Performance with ENERGY STAR® programs. The additional funding would expand participation by its eligible low-income residential gas heating customers in the NYSERDA programs.

Customers with incomes of up to 60% of the median annual New York State household income would be eligible for the EmPower NY program. Those with incomes in the range of 60%-80% of the New York State median household income would be eligible for the Assisted Home Performance with ENERGY STAR® program. Customers in single family residences and tenants of 2-4 unit buildings would be able to participate if the tenant is the bill paying customer and the landlord agrees not to raise rents based on improvements made through the program.

Niagara Mohawk proposes to promote the program directly to low income customers and other customers who have trouble paying their bills. It would develop, design, and print educational materials in English and Spanish.

Gas energy efficiency measures would include attic, crawl space, and wall insulation; blower-door assisted air sealing; inert gas-filled windows; heating pipe insulation; heating system repairs, upgrades, or replacements; heating controls; energy management system; and related health and safety measures.

Niagara Mohawk proposes total funding of \$15,000,000 in 2010 and 2011, and expects that 1,876 gas customers would participate in the program in 2010 and 2,144 would participate in 2011. It did not provide an energy savings goal and states that it does not plan to claim savings from the program. Niagara Mohawk proposes that any savings that are achieved should be attributable to the programs administered by NYSERDA.

**Niagara Mohawk Residential Low Income Program  
Proposed 2010-2011 Program Costs**

<b>Niagara Mohawk</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$0	\$0
Program Marketing & Trade Ally	\$0	\$0	\$0
Customer Incentives or Services	\$7,000,000	\$8,000,000	\$15,000,000
Program Implementation	\$0	\$0	\$0
Evaluation and Market Research	\$0	\$0	\$0
<b>Total Utility Cost</b>	<b>\$7,000,000</b>	<b>\$8,000,000</b>	<b>\$15,000,000</b>

**Niagara Mohawk Residential Low Income Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	1,876	2,144	4,020
Annualized Dth Savings Goal	None attributed to Niagara Mohawk	None attributed to Niagara Mohawk	None attributed to Niagara Mohawk

**Niagara Mohawk – Residential  
Internet Audit Program and E-Commerce Sales (Electric)**

Niagara Mohawk proposes an Internet Audit Program that would allow customers to complete an electronic survey of their home, including information about its age, size, appliances, and average use patterns. The program would produce a report that compares the customer's home with similar homes and would generate a "top ways to save" report with estimated annual cost savings if the recommended actions are taken. The program would allow

customers to progress further into the Internet program if the customer provides more detailed information, resulting in more personalized tips to improve the home's energy efficiency.

The program would be administered by a third party through Niagara Mohawk's website [www.powerofaction.com](http://www.powerofaction.com). Niagara Mohawk proposes to use the online energy audit as a marketing tool to direct customers to other available utility and NYSERDA energy efficiency programs.

Niagara Mohawk proposes no separate budget for this program. It would fund and market the program as part of its other residential programs. The total cost of the program through 2011 would be \$588,336. Niagara Mohawk proposes to recover \$91,668 of the costs through the marketing costs of gas residential programs and \$405,000 through the marketing costs of the electric residential programs through 2011.

In addition, Niagara Mohawk would provide its customers on-line access to the purchase of energy efficiency equipment, such as compact fluorescent light bulbs, weatherization materials, and other do-it-yourself products.

#### Niagara Mohawk – Residential Pricing Pilot with Load Control Program (Electric)

On September 22, 2008, Niagara Mohawk filed a suite of residential programs for its gas and electric customers to encourage the installation of energy efficiency measures. On November 16, 2009, Niagara Mohawk filed updates to its residential programs, including new program descriptions, budgets, and savings goals.

Niagara Mohawk proposes to provide up to 1,000 residential electric customers who currently have broadband connectivity with tools to show their electric use in real time. Customers would receive load control devices to assist them in voluntarily controlling the loads of equipment such as window air conditioning units, central HVAC equipment, and pool pumps. Niagara Mohawk would provide these customers with an optional tariff, such as critical peak pricing, a time of use rate, or an hourly pricing tariff. Usage would be shadowed billed so that participating customers would be protected from paying more than they would pay under their normal rate. The customer would be able to earn credit if they do better than the normal tariff. Niagara Mohawk estimates that the average cost of products and service per home would be \$1,500 to \$2,000 per home.

Niagara Mohawk proposes a total electric budget of \$2,415,000 through 2011, with no projected energy savings. The company projects 1,000 participants.

**Niagara Mohawk Residential Pricing with Load Control Program  
Proposed 2010-2011 Program Costs**

	Program Planning and Admin	Program Marketing & Trade Ally	Customer Incentives	Program Implementation	Evaluation	Total
2010	\$90,000	\$95,000	\$1,600,000	\$150,000	\$96,750	\$2,031,750
2011	\$85,000	\$30,000	\$200,000	\$50,000	\$18,500	\$383,250
<b>Total</b>	<b>\$175,000</b>	<b>\$125,000</b>	<b>\$1,800,000</b>	<b>\$200,000</b>	<b>\$115,000</b>	<b>\$2,415,000</b>

**Niagara Mohawk Residential Pricing with Load Control Program  
Proposed 2010-2011 Program Participants and Energy Savings**

	2010	2011	Total 2010 - 2011
Participants	500	500	1,000
MWh Savings	No projected savings	No projected savings	No projected savings

NYSEG/RG&E – Residential ENERGY STAR® HVAC Electric Program (Electric)

NYSEG and RG&E originally submitted an energy efficiency proposal on September 9, 2009. They filed subsequent updates to their proposals on April 22, April 24, and August 24, 2009.

In the Commission’s June 23, 2008 EEPS Order, electric utilities were invited to submit proposal for “fast track” energy efficiency programs that included a Residential ENERGY STAR® HVAC program. NYSEG and RG&E did not submit electric “fast track” program proposals but included these proposed programs in their 90-day program portfolio proposal. According to NYSEG and RG&E, the proposed program is designed to conform to the requirements of the Residential ENERGY STAR® HVAC programs that the Commission approved in its January 16, 2009 EEPS “Order Approving ‘Fast Track’ Utility-Administered Electric Energy Efficiency Programs with Modifications”.

This program would promote efficiency improvements in residential heating and cooling equipment. Rebates would be available for qualifying central air conditioning equipment, heat pumps, duct sealing, electronically commutated (ECM) furnace fans, electric heat pump water heaters, and programmable thermostats. Rebates of varying amounts have been proposed based on the measure type and/or efficiency rating. These incentives would be offered



to encourage customers to purchase higher efficiency electric equipment and to motivate equipment vendors and contractors to stock and promote the installation of energy efficient ENERGY STAR® labeled HVAC equipment in residential homes.

An additional incentive of \$200 is proposed for contractors who are Building Performance Institute certified and have completed documentation that a Manual J calculation has been performed to determine that the proper size central air conditioning equipment was installed.

The proposed eligible measures, performance characteristics, and rebate levels are shown in the table below.

**NYSEG and RG&E Residential Energy Star® HVAC Program  
Proposed Incentive Levels**

<b>MEASURE</b>	<b>ELIGIBILITY</b>	<b>REBATE</b>
Central Air Conditioning	SEER ≥ 15 EER ≥ 12.5 Plus eligible for “quality installation”	\$400
Central Air Conditioning	SEER ≥ 16 EER ≥ 13.0 Plus eligible for “quality installation”	\$600
Central Air Source Heat Pump	SEER ≥ 15 EER ≥ 12 HSPF ≥ 8.5 Plus eligible for “quality installation”	\$400
Central Air Source Heat Pump	SEER ≥ 16 EER ≥ 13.0 HSPF ≥ 9.0 Plus eligible for “quality installation”	\$600
Duct Sealing	Duct Sealing	\$600
ECM Furnace Fan	Electronically Commutated Motor (ECM) Fan	\$200
Electric Heat Pump Water Heater	Energy Factor >2.0	\$400
Programmable Thermostats	Programmable thermostats installed by a contractor at the time of qualifying CAC only	\$25
Quality Installation Incentive	Incentive paid to contractor for proper sizing analysis for CAC and heat pump measures.	\$200
SEER – Seasonal Energy Efficiency Ratio EER - Energy Efficiency Ratio HSPF – Heating Season Performance Factor ECM Furnace Fan – Electronically Commutated Motor used to control furnace fan (setting is matched to the ductwork and furnace characteristic) Quality Installation – Installation by a BPI-certified contractor and documentation that an Air Conditioning Contractors of America (ACCA) Manual J calculation has been completed to determine the proper size of the installed central air conditioning equipment. This makes the contractor eligible for an incremental financial inducement of \$200.		

NYSEG's proposed total budget is \$1,461,000 for 2010 and 2011, with an energy savings goal of 500 MWh during the same period. NYSEG has estimated that 1,400 customers would participate in the program through 2011.

RG&E proposed total budget is \$679,000 for 2010 and 2011, with an energy savings goal of 222 MWh during the same period. RG&E anticipates that a total of 600 electric customers would participate through 2011.

NYSEG and RG&E propose that the residential ENERGY STAR® HVAC electric program would complement the existing Residential Efficient Gas Equipment Programs that they currently offer and would serve the same customer base. NYSEG and RG&E propose to market the program by targeting customers who are currently installing replacement HVAC systems and involving trade allies by educating them about the availability of rebates and the benefits of installing higher efficient equipment. In addition, the program has been designed to complement NYSERDA's Home Performance with ENERGY STAR® program.

NYSEG and RG&E propose to allow incentive payment alternatives, including allowing customers to assign payments to equipment vendors or contractors, to donate all or part of the rebates to low-income residential heating funds, and to receive rebates by bill credit rather than by check. The proposed program would be administered by NYSEG and RG&E and implemented through the use of a competitively-selected contractor. The implementation contractor would be employed for promotional activities, trade ally recruitment and training, validation of rebate applications and payment of incentives, responses to customer inquiries, resolution of problems, data management and tracking, field inspection, and reporting.

**NYSEG Residential ENERGY STAR® HVAC Program  
Proposed 2010-2011 Program Costs**

<b>NYSEG</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$43,000	\$43,000	\$86,000
Program Marketing & Trade Ally	\$18,000	\$41,000	\$41,000	\$100,000
Customer Incentives or Services	\$0	\$324,000	\$324,000	\$648,000
Program Implementation	\$50,000	\$241,000	\$241,000	\$532,000
Evaluation and Market Research	\$3,000	\$46,000	\$46,000	\$95,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$695,000</b>	<b>\$695,000</b>	<b>\$1,461,000</b>

**RG&E Residential ENERGY STAR® HVAC Program  
Proposed 2010-2011 Program Costs**

<b>RG&amp;E</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$17,000	\$17,000	\$34,000
Program Marketing & Trade Ally	\$18,000	\$20,000	\$20,000	\$58,000
Customer Incentives or Services	\$0	\$139,000	\$139,000	\$278,000
Program Implementation	\$50,000	\$108,000	\$108,000	\$266,000
Evaluation and Market Research	\$3,000	\$20,000	\$20,000	\$43,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$304,000</b>	<b>\$304,000</b>	<b>\$679,000</b>

**NYSEG Residential ENERGY STAR® HVAC Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	700	700	1,400
MWh Savings	250	250	500

**RG&E Residential  
ENERGY STAR® HVAC Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	300	300	600
MWh Savings	111	111	222

NYSEG/RG&E – Residential Lighting Program (Electric)

NYSEG and RG&E originally submitted this energy efficiency proposal on September 9, 2008. They filed subsequent updates to their energy efficiency proposals on April 22, April 24, and August 24, 2009.

NYSEG and RG&E propose this program to increase energy efficient compact fluorescent light (CFL) bulb usage by encouraging community agencies and not-for-profit organizations to sell CFLs as part of their fund-raising activities. Participating fund-raising organizations would be allowed to purchase CFL “fundraising packs”. A variety of CFL “fundraising packs”, such as 2-lamp, 4-lamp, and 5-lamp, would be offered as purchase options.

The program would be conducted by a program implementation contractor who would work directly with the organizations selling the CFLs. The implementation contractor would be responsible for recruiting and training not-for-profit agencies, selling the CFLs, consolidating group orders, sending payments to CFL vendors, and shipping the CFLs to the not-for-profit agencies for distribution.

NYSEG proposes a total budget of \$1,301,000 for 2010 and 2011 and an energy savings goal of 15,032 MWh during the same period. NYSEG has estimated that 75,000 customers would participate in the electric program component through 2011.

RG&E proposes a total budget of \$603,000 for 2010 and 2011 and an energy savings goal of 6,264 MWh during the same period. RG&E anticipates that a total of 32,000 electric customers would participate through 2011.

**NYSEG Residential Lighting Program  
Proposed 2010-2011 Program Costs**

<b>NYSEG</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$145,000	\$145,000	\$290,000
Program Marketing & Trade Ally	\$20,000	\$45,000	\$45,000	\$110,000
Customer Incentives or Services	\$0	\$300,000	\$300,000	\$600,000
Program Implementation	\$50,000	\$103,000	\$103,000	\$256,000
Evaluation and Market Research	\$3,000	\$21,000	\$21,000	\$45,000
<b>Total Utility Cost</b>	<b>\$73,000</b>	<b>\$614,000</b>	<b>\$614,000</b>	<b>\$1,301,000</b>

**RG&E Residential Lighting Program  
Proposed 2010-2011 Program Costs**

<b>RG&amp;E</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$61,000	\$61,000	\$122,000
Program Marketing & Trade Ally	\$20,000	\$19,000	\$19,000	\$58,000
Customer Incentives or Services	\$0	\$128,000	\$128,000	\$256,000
Program Implementation	\$50,000	\$48,000	\$48,000	\$146,000
Evaluation and Market Research	\$3,000	\$9,000	\$9,000	\$21,000
<b>Total Utility Cost</b>	<b>\$73,000</b>	<b>\$265,000</b>	<b>\$265,000</b>	<b>\$603,000</b>

**NYSEG Residential Lighting Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	37,500	37,500	75,000
MWh Savings	7,516	7,516	15,032

**RG&E Residential Lighting Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	16,000	16,000	32,000
MWh Savings	3,132	3,132	6,264

NYSEG/RG&E – Residential Limited Income Program (Electric)

NYSEG and RG&E originally submitted this energy efficiency proposal on September 9, 2008. They filed subsequent updates to their energy efficiency proposals on April 22, April 24, and August 24, 2009.

NYSEG and RG&E propose to offer this program to residential customers whose annual household income is 60% to 80% of New York State median income. The program would replace older, inefficient refrigerators with new high efficiency ENERGY STAR® refrigerators at no charge to the participant. NYSEG and RG&E also propose to have the implementation contractor install six CFL lights in homes when refrigerators are being replaced.

NYSEG and RG&E propose to provide participating residences with a \$600 rebate for a refrigerator. The older refrigerator would be disposed of in an environmentally responsible manner. Any costs above \$600 would be covered by the customer or the landlord. Replacement CFL lighting would be covered by the general program costs at no cost to the consumer.

NYSEG proposes a total program budget of \$1,971,000 through 2011 to achieve a cumulated annual energy savings goal of 2,158 MWh. NYSEG estimates that 2,000 customers would participate in the electric program component through 2011.

RG&E proposes a budget of \$1,017,000 through 2011 to achieve a cumulative annual energy savings goal of 1,078 MWh. RG&E anticipates that a total of 1,000 electric customers would participate through 2011.

**NYSEG Residential Limited Income Program  
Proposed Program Costs 2010-2011**

<b>NYSEG</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$64,000	\$64,000	\$128,000
Program Marketing & Trade Ally	\$18,000	\$41,000	\$41,000	\$100,000
Customer Incentives or Services	\$0	\$600,000	\$600,000	\$1,200,000
Program Implementation	\$50,000	\$206,000	\$206,000	\$462,000
Evaluation and Market Research	\$3,000	\$39,000	\$39,000	\$81,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$950,000</b>	<b>\$950,000</b>	<b>\$1,971,000</b>

**RG&E Residential Limited Income Program  
Proposed Program Costs 2010-2011**

<b>RG&amp;E</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$30,000	\$30,000	\$60,000
Program Marketing & Trade Ally	\$18,000	\$22,000	\$22,000	\$62,000
Customer Incentives or Services	\$0	\$300,000	\$300,000	\$600,000
Program Implementation	\$50,000	\$101,000	\$101,000	\$252,000
Evaluation and Market Research	\$3,000	\$20,000	\$20,000	\$43,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$473,000</b>	<b>\$473,000</b>	<b>\$1,017,000</b>

**NYSEG Limited Income Program  
Proposed Program Participation and Savings 2010- 2011**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	1,000	1,000	2,000
MWh Savings	1,,079	1,079	2,158

**RG&E Limited Income Program  
Proposed Program Participants and Savings 2010- 2011**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	500	500	1,000
MWh Savings	539	539	1,078

NYSEG/RG&E propose targeting the program to tenants and building owners who are income-limited. An implementation contractor would be responsible for delivering program services and determining income eligibility. According to NYSEG/RG&E, eligible customers would have an annual income that is up to 80% of the New York State median income level. NYSEG/RG&E state that the program would be particularly useful in rural areas of the service territories where customers would be less likely to have an opportunity to participate in the Residential Electric HVAC Program or the Residential Recommissioning Program (if they are approved by the Commission).

NYSEG/RG&E – Residential  
Recommissioning/Early Replacement Program (Electric)

NYSEG and RG&E originally submitted this energy efficiency proposal on September 9, 2008. They filed subsequent updates to their energy efficiency proposals on April 22, April 24, and August 24, 2009.

NYSEG and RG&E propose to offer incentives to residential customers to recondition their existing central air conditioning systems to bring them back to original operating energy use specifications and efficiency performance. If the existing central air conditioning system can not be brought back to original specification, the customer will be offered a rebate to replace the system. Rebates would be available for central air conditioning recommissioning<sup>3</sup> and early replacement.

**NYSEG and RG&E Recommissioning/Early Replacement  
Proposed Incentive Levels**

MEASURE	ELIGIBILITY	REBATE
Recommissioning	SEER restored to original	FREE
Central Air Conditioning – Early Replacement	SEER ≥ 15 EER ≥ 12.0 Plus eligible for “quality installation”	\$750
Central Air Conditioning – Early Replacement	SEER ≥ 16 EER ≥ 13 Plus eligible for “quality installation”	\$950
SEER – Seasonal Energy Efficiency Ratio EER - Energy Efficiency Ratio HSPF – Heating Season Performance Factor Quality Installation – Installation by a BPI-certified contractor and documentation that an Air Conditioning Contractors of America (ACCA) Manual J calculation has been completed to determine the proper size of the installed central air conditioning equipment makes the contractor eligible for an incremental financial inducement of \$200.		

NYSEG and RG&E propose that the program implementation contractor provide customers with an analysis of their existing central cooling system to assess the potential for recommissioning of the system. When the system recommissioning analysis is being conducted, the implementation contractor would directly install up to six CFLs at the customer’s home. If recommissioning is feasible, the customer would have a choice of 1) restoring the system to the manufacture’s specifications or a minimum EER of 8 or 2) replacing the system with a minimum SEER 15. NYSEG and RG&E are offering higher incentives in this program compared to the Residential ENERGY STAR® HVAC program because in most cases the systems would remain

<sup>3</sup> “Recommissioning” is the process of bringing an appliance or piece of equipment back to its original design specifications.

operating and an additional incentive would be necessary to induce the customer to replace the existing system with a energy efficient one. An additional incentive of \$200 is proposed for contractors who are Building Performance Institute certified and have completed documentation that a Manual J calculation was performed to ensure the installation of properly sized central air conditioning equipment.

NYSEG proposes a total budget of \$4,937,000 for 2010 and 2011 and an energy savings goal of 2,760 MWh during the same period. NYSEG has estimated that 4,400 customers would participate in the program through 2011.

RG&E proposes a total budget of \$3,093,000 for 2010 and 2011 and an energy savings goal of 1,764 MWh during the same period. RG&E anticipates that a total of 2,800 electric customers would participate through 2011.

The proposed program would be administered by the two utilities and implemented through the use of a competitively-selected contractor. The implementation contractor would be employed for promotional activities, trade ally recruitment and training, validation of rebate applications and payment of incentives, responses to customer inquiries, resolution of problems, data management and tracking, field inspection, and reporting.

NYSEG and RG&E propose to coordinate program delivery with HVAC dealers and contractors, other utility programs, and NYSERDA.

**NYSEG Residential Recommissioning/Early Replacement  
Proposed 2010-2011 Program Costs**

<b>NYSEG</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$185,000	\$185,000	\$370,000
Program Marketing & Trade Ally	\$18,000	\$108,000	\$108,000	\$234,000
Customer Incentives or Services	\$0	\$1,136,000	\$1,136,000	\$2,272,000
Program Implementation	\$50,000	\$910,000	\$910,000	\$1,870,000
Evaluation and Market Research	\$3,000	\$94,000	\$94,000	\$191,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$2,433,000</b>	<b>\$2,433,000</b>	<b>\$4,937,000</b>



**RG&E Residential Recommissioning/Early Replacement  
Proposed 2010-2011 Program Costs**

<b>RG&amp;E</b>	<b>Startup</b>	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$0	\$120,000	\$120,000	\$240,000
Program Marketing & Trade Ally	\$18,000	\$70,000	\$70,000	\$158,000
Customer Incentives or Services	\$0	\$712,000	\$712,000	\$1,424,000
Program Implementation	\$50,000	\$551,000	\$551,000	\$1,152,000
Evaluation and Market Research	\$3,000	\$58,000	\$58,000	\$119,000
<b>Total Utility Cost</b>	<b>\$71,000</b>	<b>\$1,511,000</b>	<b>\$1,511,000</b>	<b>\$3,093,000</b>

**NYSEG Residential Recommissioning/Early Replacement  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	2,200	2,200	4,400
MWh Savings	1,380	1,380	2,760

**RG&E Residential Recommissioning/Early Replacement  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	1,400	1,400	2,800
MWh Savings	882	882	1,764

**Orange and Rockland – Residential  
Efficient Products Program (Electric)**

Orange and Rockland (O&R) submitted a set of electric-only program proposals in its September 22, 2008 filing and provided an update to the Residential Efficient Products Program (Efficiency Products) proposal on November 19, 2009. Under the proposed program O&R would work with retailers and manufacturers to promote efficient electric products to residential customers and would allow any customer in the service territory to participate in receiving incentives, including commercial and industrial customers. The program would focus on promoting, stocking, and selling efficient lighting, appliances, and other customer products at the retail level. O&R proposed to encourage customer participation through the use of mail-in or online rebates.

The proposed 2010-2011 cumulative budget is \$1,408,164. The proposed cumulative annual energy savings goal is 9,428 MWh through 2011. O&R expects that the program would serve 9,200 participants through 2011.

O&R provided budget and other program details for the proposed Residential Efficient Products program as shown in the tables below for annual and total costs, participants, and energy savings for the years 2010 and 2011.

**Orange & Rockland Residential Efficient Products Program  
Proposed Electric Program Costs for 2010- 2011**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Program Planning and Administration	\$196,750	\$196,871	\$393,621
Program Marketing & Trade Ally	\$105,063	\$67,306	\$172,368
Customer Incentives or Services	\$100,084	\$286,338	\$386,422
Program Implementation	\$127,275	\$260,392	\$387,667
Evaluation and Market Research	\$24,559	\$43,526	\$68,085
<b>Total Utility Cost</b>	<b>\$553,731</b>	<b>\$854,433</b>	<b>\$1,408,164</b>

**Orange & Rockland Residential Efficient Products Program  
Proposed Electric Program Participants and Savings for 2010- 2011**

	<b>2010</b>	<b>2011</b>	<b>Total 2010 - 2011</b>
Participants	2,300	6,900	9,200
MWh Savings	2,389	7,039	9,428

O&R would offer rebates for purchases of new equipment to encourage customer participation. The program would require that products have efficiency levels equal to or above ENERGY STAR® specifications. The rebate amounts would vary depending on the total and incremental cost of a measure. O&R proposes to offer rebates to customers initially and over time move the incentive payments upstream to retailers and manufacturers.

The Efficient Products program would initially focus on rebating energy efficient lighting, followed by providing rebates for efficient appliances and consumer electronics. During the program's lighting campaign, O&R proposes to offer an approximately 15 CFL rebates per participant.

O&R expects to have 141,031 energy efficient measures installed under this program. It provided a complete listing of measures and rebates as part of the Efficient Products program shown in the table below.

**Orange & Rockland Residential Efficient Products Program**  
**Proposed Electric Program Measures and Rebates**

<b>Measures</b>	<b>Rebates</b>
ENERGY STAR® screw base CFL	\$2
ENERGY STAR® Fixture	\$15
Refrigerator – Bottom Freezer _ES	\$25
Refrigerator – Bottom Freezer _Tier 2	\$40
Refrigerator – Top Freezer _ES	\$25
Refrigerator – Top Freezer _Tier 2	\$40
Refrigerator – side x side _Tier 2	\$40
Refrigerator – side x side _Tier 3	\$75
Clothes washer – Tier 3 (2.2)	\$50
Dehumidifier	\$10
Room AC – 8000 Btu/hr – ENERGY STAR®	\$20

O&R proposes to administer the program using internal staff and a field support contractor. The company met with NYSERDA regarding a similar NYSERDA residential rebate programs under development and plans to coordinate with NYSERDA and other utilities to ensure that there is no confusion for contractors or customers. O&R proposes to coordinate consumer outreach for the program with trade allies. In areas where O&R delivers electric service and NYSEG or Central Hudson delivers gas, O&R proposed to work with the appropriate utility to integrate and coordinate all energy efficiency programs to offer similar features and benefits.

O&R proposes to market the program through the use of co-op advertising with retailers and manufacturers, the Internet, mass media advertising, in store demonstrations and promotions, point of purchase materials, direct mailings, and in-house corporate events. O&R also proposed to leverage and coordinate with federal campaigns where appropriate, such as the “Start with ENERGY STAR®, Change the World” campaign.

**NYSERDA – Assisted**  
**Home Performance with ENERGY STAR® (Gas)**

NYSERDA filed its gas Assisted Home Performance with ENERGY STAR® program on June 5, 2009, with subsequent updates filed on November 18, 2009. The Assisted Home Performance with ENERGY STAR® program is the income-eligible component of NYSERDA’s existing, electric SBC-funded, Home Performance with ENERGY STAR® Program, for 1-4 family households. It is designed to reduce the energy burden on households with incomes that are between 60%-80% of New York State’s annual median household income

that are not eligible for the low-income Weatherization Assistance Program (WAP) or EmPower NY.

Eligibility for the program varies by county and is determined by comparing 80% of State Median Income (SMI) with 80% of the county's Area Median Income (AMI) and choosing whichever is higher as the maximum allowable income level. Qualified single family households are eligible for a subsidy of 50% of the project cost, with a maximum subsidy of \$5,000. For 2-4 family buildings, the maximum subsidy is 50% of project costs, with a maximum of \$10,000 per building. NYSERDA proposes to continue to offer reduced interest rate financing for program participants through its New York Energy Smart Loan Fund Program.

As with NYSERDA's Home Performance with ENERGY STAR® Program, a whole building, all fuels approach is used to target efficiency savings through partnerships with Building Performance Institute (BPI) certified contractors. Contractors perform home assessments; make recommendations; and prepare cost estimates for a variety of energy efficiency measures, including HVAC, lighting, appliances, and building shell improvements (insulation, duct sealing, windows, etc.).

NYSERDA proposes a cumulative budget of \$34.17 million through 2011 with a projected participation level of 7,414 customers. The projected energy savings are 219,454 MMBtu through 2011.

**NYSERDA Assisted Home Performance with ENERGY STAR® Program  
Proposed Gas Program Costs 2010-2011 (\$ millions)**

	2010	2011	Total
Total Annual EEPS Program Spending	\$14.87	\$14.87	\$29.73
Implementation/QA	\$2.71	\$2.71	\$5.41
Incentives	\$11.44	\$11.44	\$22.88
Outreach/Marketing	\$0.72	\$0.72	\$1.44
Administration/Cost Recovery	\$1.37	\$1.37	\$2.73
Evaluation	\$0.86	\$0.86	\$1.71
<b>Total Annual EEPS Spending</b>	<b>\$17.09</b>	<b>\$17.09</b>	<b>\$34.17</b>

**NYSERDA - Assisted Home Performance with ENERGY STAR® Program  
Proposed Gas Program Participants and Savings for 2010- 2011**

	2010	2011	Total 2010 - 2011
Participants	3,707	3,707	7,414
MMBtu Savings	109,727	109,727	219,454

NYSERDA – EmPower NY (Gas)

NYSERDA proposes to target cost-effective gas efficiency measures (such as insulation, blower-door assisted air-sealing, domestic hot-water improvements, free energy audits, shower head installation, domestic hot-water tank wrapping, programmable thermostats, and heating system repair and replacement) for customers receiving natural gas service who are currently eligible to receive electric efficiency measures under the EmPower NY Program that the Commission approved as a “fast track” program and which is also an SBC-funded program. As part of the program NYSERDA proposes to install “health and safety” measures, which may vary from location to location. These would include, but not be limited to, carbon monoxide detectors, smoke detectors, system repairs to eliminate back-draft problems, and gas leak repairs. Since these types of measures may not directly result in energy savings, NYSERDA has excluded them from the cost/benefit ratio calculations.

Households with total annual income below 60% of the New York State median income level would be eligible to participate at no cost to the customer. Rental units would receive energy-efficiency measures directly benefiting the eligible tenant without requiring a landlord contribution to the cost of the installed measure. Further efficiency measures (i.e., building-wide measures) would require a landlord contribution amounting to 25% of the measure cost.

The EmPower NY gas proposal would rely on existing utility referral practices and would not market directly to participants. In addition, NYSERDA proposes to contact participating utilities to develop customer referral mechanisms that would help ensure that resources are committed in accordance with utility collections. Utility referrals would be supplemented by referrals from community service organizations, such as offices for the aging, departments of social services, and weatherization agencies. The majority of referrals from utilities are expected to be customers in utility payment assistance programs.

NYSERDA has proposed a cumulative gas budget for the state-wide administration and implementation of the EmPower NY program of \$21,036,842 (\$10,518,241 per year for 2010 and 2011) with a total estimated gas energy savings of 182,880 Dth (91,440 Dth per year). NYSERDA proposes to combine EEPS gas funding with resources available through SBC and EEPS Fast Track for electric measures. Of this budget, NYSERDA proposes that \$50,000 be used annually for outreach and marketing/trade ally recruitment and training.

NYSERDA estimates that there may be as many as 2.2 million households in New York State with total household incomes below 60% of the state median household income level. The federal Weatherization Assistance Program (WAP, administered by the New York State Division of Housing and Community Renewal) also serves households with incomes of 60% or less of the state median household income level. According to NYSERDA, limitations on available WAP funding, have historically resulted in an unmet need for energy efficiency services.

NYSERDA describes a potential customer base for the EmPower NY program of 4,095,085 dwelling units. Of these, the anticipated number of program participants would be 4,572 natural gas customer households.

**NYSERDA EmPower NY  
Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>TOTAL</b>
Marketing & Outreach/Trade Ally	\$50,000	\$50,000	\$100,000
Implementation	\$1,100,000	\$1,100,000	\$2,200,000
Administration & Planning	\$842,241	\$842,241	\$1,684,482
Incentives	\$8,000,000	\$8,000,000	\$16,000,000
M&V	\$526,000	\$526,000	\$1,052,000
<b>Total</b>	<b>\$10,518,241</b>	<b>\$10,518,241</b>	<b>\$21,036,842</b>

**NYSERDA EmPower NY Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	2,286	2,286	4,572
Dth Savings	91,440	91,440	182,880

NYSERDA – Home Performance with ENERGY STAR® (Gas)

NYSERDA filed its gas Home Performance with ENERGY STAR® program on June 5, 2009 with subsequent updates filed on November 18, 2009. NYSERDA's Home Performance with ENERGY STAR® program is an existing electric System Benefits Charge (SBC) program that uses BPI-accredited contracting firms to install comprehensive energy efficiency improvements and technologies in one-to-four-family homes and low-rise multifamily residential buildings. The existing program uses a whole-house approach and promotes savings of all types of fuels. This program proposal seeks natural gas efficiency funding for the

installation of gas measures, which is expected to free up SBC funds to be applied to electricity saving measures and cost-effective renewable technologies.

The existing Home Performance with ENERGY STAR® Program is currently funded using only electric SBC funds and employs a whole-house approach that promotes savings from all fuels. Assistance and incentives are provided to contractors to help defray the cost of diagnostic equipment and support and funding is provided for training centers, at which contractors can become BPI-accredited. NYSERDA states it has helped over 160 New York contractors receive training through the program. NYSERDA promotes BPI contractors through its website and marketing efforts and directs leads to qualified contractors.

The existing Home Performance with ENERGY STAR® program has focused on building shell and heating related savings, as well as electricity savings; NYSERDA proposes to continue this approach. The approval of additional gas monies will, in NYSERDA's view, allow additional focus to be placed on gas efficiency measures and will increase participation in the program.

NYSERDA proposes a cumulative budget of \$25.08 million through 2011 with a projected participation level of 13,782 customers. The projected energy savings are 407,948 MMBtu through 2011.

**NYSERDA Home Performance with ENERGY STAR® Program  
Proposed 2010-2011 Program Costs (\$ millions)**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total Annual EEPS Program Spending	\$10.91	\$10.91	\$21.82
<i>Implementation/QA</i>	\$5.03	\$5.03	\$10.06
<i>Incentives</i>	\$5.16	\$5.16	\$10.32
<i>Outreach/Marketing</i>	\$0.72	\$0.72	\$1.44
Administration/Cost Recovery	\$1.01	\$1.01	\$2.01
Evaluation	\$0.63	\$0.63	\$1.25
<b>Total Annual EEPS Spending</b>	<b>\$12.54</b>	<b>\$12.54</b>	<b>\$25.08</b>

**NYSERDA Home Performance with ENERGY STAR® Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	6,891	6,891	13,782
MMBtu Savings	203,974	203,974	407,948

NYSERDA - New York ENERGY STAR® Homes (Gas)

NYSERDA filed its gas New York ENERGY STAR® Homes program on June 5, 2009 with subsequent updates filed on November 18, 2009. New York ENERGY STAR® Homes is an existing electric SBC-funded program that provides technical and financial assistance to one-to-four family new home builders and home energy rating system (HERS) providers. NYSERDA's proposed gas program component is designed to increase the market penetration of the existing program statewide and to expand the installation of high efficiency gas equipment.

The New York ENERGY STAR® Homes program provides a number of benefits and incentives to participating home builders. Financial incentives paid to builders range from \$750 to \$1,500 per home, depending on the home's energy efficiency rating and location. Homes used as display homes or model homes can qualify for larger incentives (\$2,500 and \$3,000, respectively). In addition to financial incentives, NYSERDA offers technical assistance to builders and marketing and sales support. NYSERDA also provides support to home energy raters, who work alongside home builders and verify achieved efficiency. Every home built under the program must have an energy analysis performed prior to construction; completed homes are required to be inspected and energy savings verified by an approved energy rater in order to be eligible for incentive payments.

According to NYSERDA, the existing New York ENERGY STAR® Homes program, supported by electric SBC funding, has encouraged the use of energy efficient construction techniques, the installation of high efficiency HVAC equipment, electricity savings from ENERGY STAR® appliances, building shell improvements, and efficient lighting measures.

The proposed program would have a cumulative budget of \$18.48 million to achieve a cumulative energy savings goal of 435,310 MMBtu through 2011.



**NYSERDA - New York ENERGY STAR® Homes Program - Gas  
Proposed 2010-2011 Program Costs (\$ millions)**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total Annual EEPS Program Spending	\$8.04	\$8.04	\$16.07
<i>Implementation/QA</i>	\$7.10	\$7.10	\$14.19
<i>Incentives</i>	\$0.00	\$0.00	\$0.00
<i>Outreach/Marketing</i>	\$0.94	\$0.94	\$1.88
Administration/Cost Recovery	\$0.74	\$0.74	\$1.48
Evaluation	\$0.46	\$0.46	\$0.92
<b>Total Annual EEPS Spending</b>	<b>\$9.24</b>	<b>\$9.24</b>	<b>\$18.48</b>

**NYSERDA New York ENERGY STAR® Homes Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	<b>2010</b>	<b>2011</b>	<b>Total 2010-2011</b>
Participants	-	-	9,610
MMBtu Savings	217,655	217,655	435,310

NYSERDA – Power Management Pilot Program (Electric)

NYSERDA filed its electric Power Management Pilot Program on June 5, 2009 with subsequent updates filed on November 18, 2009. The program would be implemented as part of the existing New York Energy Smart Products Program, using new products and promoting proactive energy saving actions.

NYSERDA’s proposal would focus on the development and demonstration of three devices: advanced power strips, whole-house switches, and energy monitors. The aim of the program would be to educate consumers on these new devices through deployment and data collection projects in concert with the EmPower NY Program, collaborative efforts with utilities, and other existing NYSERDA programs.

According to NYSERDA, advanced power strips provide all the benefits of traditional surge protection technology with the added feature of energy saving capability. Whole-house switches are devices that can power down, change settings, and put a home to “sleep” with the flip of a switch. Energy monitors are devices that monitor and forecast energy use.

NYSERDA proposes a total program budget of \$2.85 million through 2011, and projects that the program would realize an annual peak demand savings of approximately 4,308 KW, with total cumulative energy reductions of about 15,292 MWh, through 2011. NYSERDA

stresses that actual demand and energy savings would be determined through the evaluation of the program and depends on successful education of participants to effectively use the tools included in the program.

NYSERDA reports that, to date, five utilities have expressed interest in participating in short-term deployment projects. NYSERDA considers collaboration with utilities on disseminating outreach and educational information to customers an integral part of the program going forward. Contractors needed to support the program have already been competitively selected to implement the New York Energy Smart Products program. NYSERDA, in coordination with utility partners and PSC staff, would develop specifications for products to be used in the program and a solicitation for program participants would be issued to NYSERDA's Products Program manufacturing partners.

#### **NYSERDA – Power Management Pilot Program Proposed Measure Cost**

	<b>Total Measure Cost</b>
Advanced Power Strip: Manufacturing Incentives	\$4,800,000
Advanced Power Strip: EmPower Program	\$160,000
Advanced Power Strip: Utility/NYSERDA Program Pilot	\$240,000
Energy Monitor: Utility/NYSERDA Program Pilot	\$499,200
Whole-House Switch: Utility/NYSERDA Program Pilot	\$543,600
<b>Total for 2010-2011</b>	<b>\$6,242,800</b>
<i>Annualized</i>	<i>3,121,400</i>

#### **NYSERDA Power Management Pilot Program Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total Annual EEPS Program Spending	\$1.25	\$1.25	\$2.49
<i>Implementation/QA</i>	<i>\$0.13</i>	<i>\$0.13</i>	<i>\$0.25</i>
<i>Incentives</i>	<i>\$0.83</i>	<i>\$0.83</i>	<i>\$1.66</i>
<i>Outreach/Marketing</i>	<i>\$0.29</i>	<i>\$0.29</i>	<i>\$0.58</i>
Administration/Cost Recovery	\$0.11	\$0.11	\$0.22
Evaluation	\$0.07	\$0.07	\$0.14
<b>Total Annual EEPS Spending</b>	<b>\$1.43</b>	<b>\$1.43</b>	<b>\$2.85</b>

**NYSERDA Power Management Pilot Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	2010	2011	Total 2010-2011
Participants *	-	-	-
MWh Savings	15,455	18,405	33,860

\* NYSERDA did not estimate customer participation in this program, but rather the number of product sales transactions, which it estimated to be 33,575 per year.

NYSERDA – ReModel with ENERGY STAR® Program (Electric)

NYSERDA filed its electric ReModel with ENERGY STAR® Program on September 22, 2008 with subsequent updates filed on November 23, 2009. This program is designed to target the home renovation market, offering incentives consisting of package rebates for the purchase of energy efficient appliances and lighting.

NYSERDA proposes a total program budget of \$11.36 million through 2011, and projects that the program will realize a peak demand savings of approximately 5,521 KW by 2011, with an annual energy savings of 13,311 MWh by that time.

The ReModel with ENERGY STAR® Program is designed to offer appliance rebates through a Higher Efficiency Appliance Package Rebate which uses various program tiers. Participation in this category requires the purchase of three high efficiency appliances (the package must include Refrigerator CEE Tier 2 or 3, Clothes Washer CEE Tier 2 or 3, and Dishwasher CEE Tier 1 or 2). Under the proposed plan, customers purchasing appliance packages would qualify for a rebate of \$500. Additional rebates would be offered to homeowners for the addition of CFLs, CFL fixtures, and a dehumidifier. Contractors in this program would receive a \$150 incentive for projects that include the higher efficiency appliance package.

**NYSERDA – ReModel with ENERGY STAR® Program  
Consumer Incentive Structure: Higher Efficiency Appliance Package Rebate**

Eligible Products	Package Rebates	Rebate Level (\$)
Refrigerator – ENERGY STAR (CEE Tier 2 or 3)	Yes	\$200
Clothes Washer – ENERGY STAR (CEE Tier 2 or 3)	Yes	\$200
Dishwasher – ENERGY STAR (CEE Tier 1 or 2)	Yes	\$100
Total Packaged Rebate Amount		\$500
Dehumidifier		\$25
Energy Efficient Lighting		2.5 cents/kWh saved

NYSERDA recognizes that some utilities may offer rebates on specific products that might be included in a remodeling effort. NYSERDA's intention is to ensure that comprehensive remodeling projects place a higher priority on efficiency, not to compete with rebate programs. Where utility rebates are offered, NYSERDA would coordinate offerings with the utilities by:

- offering targeted incentives to customers and participating remodeling contractors for incorporating highly efficient products in their remodeling projects
- obligating participating remodeling contractors to present energy efficient lighting, appliance, ventilation, and domestic hot water options to homeowners
- requiring customer education on the benefits of comprehensive energy saving techniques and other efficiency programs offered by NYSERDA and utilities for which the homeowner may be eligible
- offering tiered incentives based on deemed energy savings, with the most efficient packages garnering the greatest incentives

**ReModel with ENERGY STAR® Program  
Proposed Program Costs**

	2010	2011	Total
Total Annual EEPS Program Spending	\$4.94	\$4.94	\$9.88
<i>Implementation/QA</i>	\$1.48	\$1.48	\$2.95
<i>Incentives</i>	\$2.62	\$2.62	\$5.23
<i>Outreach/Marketing</i>	\$0.85	\$0.85	\$1.70
Administration/Cost Recovery	\$0.46	\$0.46	\$0.91
MV&E	\$0.29	\$0.29	\$0.57
<b>Total Annual EEPS Spending</b>	<b>\$5.68</b>	<b>\$5.68</b>	<b>\$11.36</b>

**NYSERDA ReModel with ENERGY STAR® Program  
Proposed 2010- 2011 Program Participants and Energy Savings**

	2010	2011	Total 2010-2011
Participants	-	-	9,750
Annualized MWh Savings	4,458	5,202	9,660

NYSERDA - Residential Green Building Program (Electric and Gas)

NYSERDA filed its Residential Green Building Program on June 5, 2009, with revisions filed on November 23, 2009. The program would incorporate the efficiency standards of NYSERDA's New York ENERGY STAR® Homes Program as a minimum standard for

energy efficiency in one-to-four family buildings. The program is designed to provide financial incentives to new homeowners and builders who decide to “go green” when building a new home or extensively renovating an existing home.

Residential buildings with fewer than 12 dwelling units would be eligible to participate. Incentives would be provided to the building owner (either the homeowner or builder) once the home receives a certificate of occupancy and a third party certification that it meets the green standards established for the program.

NYSERDA proposes a total program budget of \$1.10 million electric funds and \$6.74 million gas funds through 2011 and projects total cumulative energy savings of 53,264 MWh and 2,502 MMBtu.

**NYSERDA Residential Green Building Program – Electric (\$ million)**  
**Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total Annual EEPS Program Spending	\$0.48	\$0.48	\$0.95
<i>Implementation/QA</i>	<i>\$0.05</i>	<i>\$0.05</i>	<i>\$0.09</i>
<i>Incentives</i>	<i>\$0.39</i>	<i>\$0.39</i>	<i>\$0.77</i>
<i>Outreach/Marketing</i>	<i>\$0.05</i>	<i>\$0.05</i>	<i>\$0.09</i>
Administration/Cost Recovery	\$0.05	\$0.05	\$0.09
MV&E	\$0.03	\$0.03	\$0.05
<b>Total Annual EEPS Spending</b>	<b>\$0.55</b>	<b>\$0.55</b>	<b>\$1.10</b>

**NYSERDA Residential Green Building Program - Gas (\$ million)**  
**Proposed 2010-2011 Program Costs**

	<b>2010</b>	<b>2011</b>	<b>Total</b>
Total Annual EEPS Program Spending	\$2.93	\$2.93	\$5.86
<i>Implementation/QA</i>	<i>\$0.30</i>	<i>\$0.30</i>	<i>\$0.60</i>
<i>Incentives</i>	<i>\$2.37</i>	<i>\$2.37</i>	<i>\$4.73</i>
<i>Outreach/Marketing</i>	<i>\$0.27</i>	<i>\$0.27</i>	<i>\$0.53</i>
Administration/Cost Recovery	\$0.27	\$0.27	\$0.54
MV&E	\$0.17	\$0.17	\$0.34
<b>Total Annual EEPS Spending</b>	<b>\$3.37</b>	<b>\$3.37</b>	<b>\$6.74</b>

**NYSERDA Residential Green Building Program  
Proposed 2010-2011 Program Participation and Energy Savings**

	2010	2011	Total
Participants	-	-	944 electric/ 944 gas
Annual Savings (MMBtu)	1,251	1,251	2,502
Annual Savings (MWh)	26,632	26,632	53,264

The upper bound of the incentive structure is set by statute (Public Authorities Law 1872). NYSERDA is authorized to award up to a \$7,500 in incentive payment for a 1-2 unit building, \$11,250 for a 3-5 unit building, and \$15,000 for a 6-11 unit building. These maximum incentives are calculated based on a formula that considers the “qualified occupied square footage” in the buildings. In setting the proposed incentive levels, NYSERDA’s cost analysis looked at actual market and published additional incremental costs for achieving certification using Leadership in Efficiency and Environmental Design (LEED) or National Green Building Standard and set the incentive levels at roughly 50 percent of this level. NYSERDA proposes making the program more straightforward for participants by using the incentive structure in the table below that graduates upward based on the number of dwelling units in the building.

**NYSERDA Residential Green Building  
Incentive Structure**

Number of Dwelling Units	Maximum Incentive Award
1	\$5,125
2	\$6,125
3	\$7,125
4	\$8,125
5	\$8,875
6	\$9,625
7	\$10,375
8	\$11,125
9	\$11,875
10	\$12,625
11	\$13,375

Table 1a

**Approved Utility Commercial and Industrial Electric Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Total</u> <u>2010-2013</u>	
<b><u>NYSEG</u></b>						
<i>Block Bidding Program</i>						
Savings (MWh)	1,387	4,289	2,594	0	8,270	
Program & Administrative Costs	\$610,936	\$1,517,582	\$893,432	\$0	\$3,021,950	95%
Evaluation/M&V Costs	\$32,155	\$79,873	\$47,023	\$0	\$159,050	5%
Total	\$643,091	\$1,597,455	\$940,455	\$0	\$3,181,000	
<b><u>RG&amp;E</u></b>						
<i>Block Bidding Program</i>						
Savings (MWh)	1,387	4,289	2,594	0	8,270	
Program & Administrative Costs	\$759,395	\$1,464,727	\$891,877	\$0	\$3,116,000	95%
Evaluation/M&V Costs	\$39,968	\$77,091	\$46,941	\$0	\$164,000	5%
Total	\$799,364	\$1,541,818	\$938,818	\$0	\$3,280,000	

Table 1b

**Approved NYSERDA Commercial and Industrial Electric Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Total</u> <u>2010-2013</u>	
<b><u>NYSERDA</u></b>						
<i>Benchmarking and Operations Efficiency Program</i>						
Savings (MWh)	11,200	24,173	14,933	5,693	56,000	
Program & Administrative Costs	\$4,497,583	\$5,025,373	\$547,864	\$484,735	\$10,555,555	95%
Evaluation/M&V Costs	\$236,715	\$264,493	\$28,835	\$25,512	\$555,556	5%
Total	\$4,734,298	\$5,289,866	\$576,699	\$510,247	\$11,111,110	

Table 2

**Approved NYSERDA Commercial and Industrial Gas Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total 2010-2014</u>	
<b><u>NYSERDA</u></b>							
<i>High Performance New Construction Program</i>							
Savings (Dekatherms)	30,528	53,594	81,092	86,935	37,954	290,103	
Program & Administrative Costs	\$517,080	\$821,403	\$1,042,096	\$1,186,784	\$529,637	\$4,096,999	95%
Evaluation/M&V Costs	\$27,215	\$43,232	\$54,847	\$62,462	\$27,876	\$215,632	5%
Total	\$544,294	\$864,635	\$1,096,943	\$1,249,246	\$557,513	\$4,312,631	

Table 3

**Approved Utility Residential Electric Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total 2010-2011</u>	<u>% of Budget</u>
<b><u>Central Hudson</u></b>				
<i>Residential Appliance Recycling Program</i>				
Savings (MWh)	1,670	2,226	3,896	
Program & Administrative Costs	\$724,307	\$965,743	\$1,690,050	95%
Evaluation/M&V Costs	\$38,121	\$50,829	\$88,950	5%
Total	\$762,429	\$1,016,571	\$1,779,000	
<i>Expanded Residential HVAC Program</i>				
Savings (MWh)	480	1,008	1,488	
Program & Administrative Costs	\$180,364	\$278,961	\$459,325	95%
Evaluation/M&V Costs	\$9,493	\$14,682	\$24,175	5%
Total	\$189,857	\$293,643	\$483,500	
<b><u>Con Edison</u></b>				
<i>Appliance Bounty Program</i>				
Savings (MWh)	3,763	13,177	16,940	
Program & Administrative Costs	\$1,587,857	\$4,318,293	\$5,906,150	95%
Evaluation/M&V Costs	\$83,571	\$227,279	\$310,850	5%
Total	\$1,671,429	\$4,545,571	\$6,217,000	



Table 3 (Continued)

**Approved Utility Residential Electric Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total</u> <u>2010-2011</u>	<u>% of</u> <u>Budget</u>
<b><u>Con Edison (Continued)</u></b>				
<i>Residential Direct Installation Program</i>				
Savings (MWh)	1,363	5,517	6,880	
Program & Administrative Costs	\$1,167,686	\$2,862,214	\$4,029,900	95%
Evaluation/M&V Costs	\$61,457	\$150,643	\$212,100	5%
Total	\$1,229,143	\$3,012,857	\$4,242,000	
<i>Residential Room Air Conditioning Program</i>				
Savings (MWh)	591	1,719	2,310	
Program & Administrative Costs	\$639,214	\$1,270,286	\$1,909,500	95%
Evaluation/M&V Costs	\$33,643	\$66,857	\$100,500	5%
Total	\$672,857	\$1,337,143	\$2,010,000	
<b><u>Niagara Mohawk</u></b>				
<i>Residential Building Practices and Demonstration Program</i>				
Savings (MWh)	9,720	14,580	24,300	
Program & Administrative Costs	\$514,882	\$749,421	\$1,264,303	95%
Evaluation/M&V Costs	\$27,099	\$39,443	\$66,542	5%
Total	\$541,981	\$788,864	\$1,330,845	
<i>Residential ENERGY STAR Products and Recycling Program</i>				
Savings (MWh)	9,368	13,399	22,767	
Program & Administrative Costs	\$3,676,500	\$5,350,875	\$9,027,375	95%
Evaluation/M&V Costs	\$193,500	\$281,625	\$475,125	5%
Total	\$3,870,000	\$5,632,500	\$9,502,500	
<i>Enhanced Home Sealing Incentives Program</i>				
Savings (MWh)	3,068	4,390	7,458	
Program & Administrative Costs	\$1,786,380	\$2,428,770	\$4,215,150	95%
Evaluation/M&V Costs	\$94,020	\$127,830	\$221,850	5%
Total	\$1,880,400	\$2,556,600	\$4,437,000	

Table 4a

**Approved Utility Residential Gas Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total 2010-2011</u>	<u>% of Budget</u>
<b><u>KEDLI</u></b>				
<i>Enhanced Home Sealing Incentives Program</i>				
Savings (Dekatherms)	12,748	21,786	34,534	
Program & Administrative Costs	\$1,159,610	\$1,850,000	\$3,009,610	95%
Evaluation/M&V Costs	\$61,032	\$97,368	\$158,401	5%
Total	\$1,220,643	\$1,947,368	\$3,168,011	
<i>Residential ENERGY STAR Products Program</i>				
Savings (Dekatherms)	1,794	2,392	4,186	
Program & Administrative Costs	\$57,000	\$74,338	\$131,338	95%
Evaluation/M&V Costs	\$3,000	\$3,913	\$6,913	5%
Total	\$60,000	\$78,250	\$138,250	
<b><u>KEDNY</u></b>				
<i>Enhanced Home Sealing Incentives Program</i>				
Savings (Dekatherms)	15,297	20,397	35,694	
Program & Administrative Costs	\$1,808,398	\$1,712,971	\$3,521,369	95%
Evaluation/M&V Costs	\$95,179	\$90,156	\$185,335	5%
Total	\$1,903,577	\$1,803,127	\$3,706,704	
<i>Residential ENERGY STAR Products Program</i>				
Savings (Dekatherms)	1,794	2,392	4,186	
Program & Administrative Costs	\$57,000	\$74,338	\$131,338	95%
Evaluation/M&V Costs	\$3,000	\$3,913	\$6,913	5%
Total	\$60,000	\$78,250	\$138,250	
<b><u>Niagara Mohawk</u></b>				
<i>Enhanced Home Sealing Incentives Program</i>				
Savings (Dekatherms)	11,376	16,563	27,939	
Program & Administrative Costs	\$674,401	\$983,715	\$1,658,116	95%
Evaluation/M&V Costs	\$35,495	\$51,774	\$87,269	5%
Total	\$709,896	\$1,035,489	\$1,745,385	

Table 4a (Continued)

**Approved Utility Residential Gas Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total</u> <u>2010-2011</u>	<u>% of</u> <u>Budget</u>
<b><u>Niagara Mohawk (Continued)</u></b>				
<i>Residential Building Practices and Demonstration Program</i>				
Savings (Dekatherms)	77,652	116,478	194,130	
Program & Administrative Costs	\$487,870	\$716,306	\$1,204,175	95%
Evaluation/M&V Costs	\$25,677	\$37,700	\$63,378	5%
Total	\$513,547	\$754,006	\$1,267,553	
<i>Residential ENERGY STAR Products Program</i>				
Savings (Dekatherms)	3,345	4,914	8,259	
Program & Administrative Costs	\$83,209	\$121,836	\$205,045	95%
Evaluation/M&V Costs	\$4,379	\$6,412	\$10,792	5%
Total	\$87,589	\$128,248	\$215,837	

Table 4b

**Approved NYSEERDA Residential Gas Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total</u> <u>2010-2011</u>	<u>% of</u> <u>Budget</u>
<b><u>NYSEERDA</u></b>				
<i>Home Performance with Energy Star Program</i>				
Savings (Dekatherms)	174,835	233,113	407,948	
Program & Administrative Costs	\$10,211,143	\$13,614,857	\$23,826,000	95%
Evaluation/M&V Costs	\$537,429	\$716,571	\$1,254,000	5%
Total	\$10,748,571	\$14,331,429	\$25,080,000	
<i>New York Energy Star Homes (New Construction)</i>				
Savings (Dekatherms)	186,561	248,749	435,310	
Program & Administrative Costs	\$7,524,000	\$10,032,000	\$17,556,000	95%
Evaluation/M&V Costs	\$396,000	\$528,000	\$924,000	5%
Total	\$7,920,000	\$10,560,000	\$18,480,000	

Table 4b (Continued)

**Approved NYSERDA Residential Gas Program Costs and Savings Targets**

	April 1, 2010 through <u>December 31, 2010</u>	<u>2011</u>	<u>Total</u> <u>2010-2011</u>	<u>% of</u> <u>Budget</u>
<b><u>NYSERDA (Continued)</u></b>				
<i>Assisted Home Performance with Energy Star Program</i>				
Savings (Dekatherms)	20,211	26,949	47,160	
Program & Administrative Costs	\$2,989,677	\$3,986,236	\$6,975,913	95%
Evaluation/M&V Costs	\$157,351	\$209,802	\$367,153	5%
Total	\$3,147,028	\$4,196,038	\$7,343,066	
 <i>EmPower New York</i>				
Savings (Dekatherms)	27,354	36,472	63,826	
Program & Administrative Costs	\$2,989,677	\$3,986,236	\$6,975,913	95%
Evaluation/M&V Costs	\$157,351	\$209,802	\$367,153	5%
Total	\$3,147,028	\$4,196,038	\$7,343,066	

Table 5

**EEPS Electric Collections to be Transferred from Utilities to NYSERDA**

<b><u>NYSERDA Electric Program</u></b>	<b>April 1, 2010 through</b>					<b>Total</b>	
	<b><u>December 31, 2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2010-2014</u></b>	
<i>Benchmarking and Operations Efficiency Program</i>	\$4,734,298	\$5,289,866	\$576,699	\$510,247	\$0	\$11,111,110	
						<b>Total</b>	<b>Percentage</b>
<b><u>Transfers to NYSERDA</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2010-2014</u></b>	<b><u>of Total</u></b>
Central Hudson	\$276,152	\$308,558	\$33,639	\$29,763	\$0	\$648,112	5.833%
Con Edison	\$1,741,824	\$1,946,227	\$212,177	\$187,728	\$0	\$4,087,956	36.792%
NYSEG	\$667,006	\$745,278	\$81,250	\$71,888	\$0	\$1,565,422	14.089%
Niagara Mohawk	\$1,523,201	\$1,701,948	\$185,546	\$164,166	\$0	\$3,574,860	32.174%
O&R	\$204,251	\$228,220	\$24,880	\$22,014	\$0	\$479,366	4.314%
<b><u>RG&amp;E</u></b>	<b><u>\$321,864</u></b>	<b><u>\$359,635</u></b>	<b><u>\$39,207</u></b>	<b><u>\$34,689</u></b>	<b><u>\$0</u></b>	<b><u>\$755,395</u></b>	<b>6.799%</b>
<b>TOTAL ELECTRIC</b>	<b>\$4,734,298</b>	<b>\$5,289,866</b>	<b>\$576,699</b>	<b>\$510,247</b>	<b>\$0</b>	<b>\$11,111,110</b>	<b>100.000%</b>

Table 6

**EEPS Gas Collections to be Transferred from Utilities to NYSERDA**

<b><u>NYSERDA Gas Programs</u></b>	<b>April 1, 2010 through</b>					<b>Total</b>
	<b><u>December 31, 2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2010-2013</u></b>
<i>High Performance New Construction Program</i>	\$544,294	\$864,635	\$1,096,943	\$1,249,246	\$557,513	\$4,312,631
<i>Home Performance with Energy Star Program</i>	\$10,748,571	\$14,331,429	\$0	\$0	\$0	\$25,080,000
<i>New York Energy Star Homes (New Construction)</i>	\$7,920,000	\$10,560,000	\$0	\$0	\$0	\$18,480,000
<i>Assisted Home Performance with Energy Star Program</i>	\$3,147,028	\$4,196,038	\$0	\$0	\$0	\$7,343,066
<b><u>EmPower New York</u></b>	<b><u>\$3,147,028</u></b>	<b><u>\$4,196,038</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>	<b><u>\$0</u></b>	<b><u>\$7,343,066</u></b>
<b>TOTAL GAS</b>	<b>\$25,506,922</b>	<b>\$34,148,139</b>	<b>\$1,096,943</b>	<b>\$1,249,246</b>	<b>\$557,513</b>	<b><u>\$62,558,763</u></b>

<b><u>Transfers to NYSERDA</u></b>	<b>April 1, 2010 through</b>					<b>Total</b>	<b>Percentage</b>
	<b><u>December 31, 2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2010-2013</u></b>	<b><u>of Total</u></b>
Central Hudson	\$467,103	\$625,348	\$20,088	\$22,877	\$10,210	\$1,145,627	1.83%
Con Edison	\$6,490,339	\$8,689,132	\$279,122	\$317,876	\$141,861	\$15,918,330	25.45%
Conning	\$225,799	\$302,295	\$9,711	\$11,059	\$4,935	\$553,799	0.89%
NYSEG	\$1,584,835	\$2,121,744	\$68,157	\$77,620	\$34,640	\$3,886,997	6.21%
Niagara Mohawk	\$2,977,017	\$3,985,569	\$128,029	\$145,805	\$65,070	\$7,301,489	11.67%
O&R	\$709,418	\$949,754	\$30,509	\$34,745	\$15,506	\$1,739,931	2.78%
RG&E	\$1,519,853	\$2,034,747	\$65,362	\$74,437	\$33,220	\$3,727,620	5.96%
KEDLI	\$3,509,239	\$4,698,097	\$150,917	\$171,871	\$76,703	\$8,606,827	13.76%
KEDNY	\$5,225,965	\$6,996,414	\$224,746	\$255,951	\$114,226	\$12,817,302	20.49%
NFG	\$2,639,729	\$3,534,015	\$113,523	\$129,285	\$57,697	\$6,474,250	10.35%
St. Lawrence	<u>\$157,624</u>	<u>\$211,024</u>	<u>\$6,779</u>	<u>\$7,720</u>	<u>\$3,445</u>	<u>\$386,592</u>	<u>0.62%</u>
<b>TOTAL GAS</b>	<b>\$25,506,922</b>	<b>\$34,148,139</b>	<b>\$1,096,943</b>	<b>\$1,249,246</b>	<b>\$557,513</b>	<b>\$62,558,763</b>	<b>100.00%</b>

Table 7

***EEPS Additional Annual Collections from Electric Ratepayers by Service Territory***

	<b>April 1, 2010 - December 31, 2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Central Hudson	\$1,228,439	\$1,618,773	\$33,639	\$29,763
Con Edison	\$5,315,253	\$10,841,799	\$212,177	\$187,728
NYSEG	\$0	\$0	\$382,836	\$71,888
Niagara Mohawk	\$7,815,581	\$10,679,912	\$185,545	\$164,166
O&R	(\$275,172)	(\$204,310)	\$0	\$0
<u>RG&amp;E</u>	<u>\$0</u>	<u>\$2,469,934</u>	<u>\$978,026</u>	<u>\$34,689</u>
TOTAL	\$14,084,101	\$25,406,108	\$1,792,223	\$488,234

Table 8

***EEPS Additional Annual Collections from Gas Ratepayers by Service Territory***

	<b>April 1, 2010 - December 31, 2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Central Hudson	\$268,042	\$724,871	\$20,088	\$22,877	\$10,210
Con Edison	\$13,878,432	\$14,599,607	\$279,121	\$317,876	\$141,861
Corning	\$172,689	\$355,406	\$9,710	\$11,059	\$4,935
NYSEG	\$1,584,836	\$2,121,744	\$68,157	\$77,620	\$34,640
Niagara Mohawk	\$4,288,049	\$5,903,313	\$128,029	\$145,805	\$65,069
O&R	\$528,294	\$1,130,878	\$30,509	\$34,745	\$15,506
RG&E	\$1,519,853	\$2,034,748	\$65,362	\$74,438	\$33,220
KEDLI	\$5,334,707	\$7,159,576	\$150,918	\$171,871	\$76,702
KEDNY	\$9,714,405	\$10,897,681	\$224,746	\$255,951	\$114,226
NFG	\$2,639,729	\$3,534,014	\$113,523	\$129,286	\$57,697
<u>St. Lawrence</u>	<u>\$93,440</u>	<u>\$246,599</u>	<u>\$6,779</u>	<u>\$7,720</u>	<u>\$3,445</u>
TOTAL	\$40,022,476	\$48,708,437	\$1,096,942	\$1,249,248	\$557,511

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
1	NYSEG RG&E	2009-11-06 NYSEG & RG&E Cover Ltr + Comments on EAG TEC MANUAL dated 10-22 09.pdf	Many	Missing EUL for furnace, boiler, tstat, reset control, duct insulation and sealing, instantaneous water heaters, solar water heaters, tank wrap		x	
2			High perf windows	Glazing orientation			x
3			Air leakage sealing	Different W/SF for AC and heat pump	x		
4			Central AC	Old and average values transposed		x	
5			Air source heat pumps	Binghamton HLH > Massena, but has less HDD		x	
6			Air source heat pumps	New building HLH seem high		x	
7			Setback thermostat	Also applies to boilers		x	
8			Furnaces	HLH too high for new construction; Binghamton too low		x	
9			Boiler reset control	Avg reduction in shoulder season > 20 deg	x		
10			Duct insulation and air leakage sealing	Add values up to 60% leakage			x
11			Water heating	Use same section for indirect water heaters; what should the baseline and compliance efficiencies be?			x
12	Community Environment al Center	CEC comments regarding single family technical manual proposal.pdf	Whole building analysis	Measure focus vs. whole building	x		
13			Whole building analysis	Each measure must be cost effective; encourages cream skimming	x		
14			Whole building analysis	Interactive effects between measures not accounted for	x		
15			Wall Insulation	Uninsulated wall R-value incorrect		x	
16			Whole building analysis	Duct distribution efficiencies ignored	x		
17			Furnace	No EC blower motors			x
18	Michael Blasnik	Blasnik CSG memo	Whole building analysis	Measure vs. Whole building approach	x		
19			Whole building analysis	Requirement to report deemed values under WB approach	x		
20			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
21			Wall Insulation	Savings estimates too small for wall insulation		x	
22			Attic insulation	Include uninsulated attic case			x
23			Attic insulation	Make measure case R-38 instead of R-30			x
24			Whole building analysis	Allow for adjustment to heating efficiency and distribution efficiency			x
25			Duct insulation and air leakage sealing	Duct efficiency numbers too high for unconditioned space		x	
26			Clothes washers	Ignore dryer savings?		x	
27			Clothes washers	New MEF ratings in July 2009		x	
28			Clothes washers	Error in demand equation		x	
29			CFL fixture	EUL should be > lamp EUL			x
30			NTG	Include 2 or three tiers of NTG based on market share	x		
31			CFL	Include in-service rate			x
32			CFL	Include more hours of use options			x
33			CFL	365 days per year biased upward			x



No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
34	Michael Blasnik	Blasnik CSG memo	Refrigerator	DI measures use program audit protocol (lookup or metering)		x	
35			Refrigerator	Use new unit kWh from nameplate information and directory lookup		x	
36			Refrigerator	Section is confusing		x	
37			Refrigerator	Check heating interactive effects		x	
38			Windows	U-values don't match appendix		x	
39			Windows	Not many single pane windows in NY, baseline not appropriate			x
40			Windows	U-value is for metal frame; most windows in NY are wood		x	
41			Windows	Set savings for specific window types; not relative to prototype assumption			x
42			Windows	Revise Energy Star specs for windows to comply with January 2010 update		x	
43			Air leakage sealing	Set savings for specific blower door test results	x		
44			CAC	Use billing analysis with delta EER			x
45			CAC	Equation form too complex			x
46			CAC	Allow for peak cooling load reduction in equation			x
47			CAC	List values for high load houses targeted by programs			x
48			CAC	SEER 10 early replacement baseline too high	x		
49			ASHP	Equation form too complex			x
50			ASHP	No RLF for AC			x
51			ASHP	Use billing data instead of stipulated HLH			x
52			HLH	HLH data in furnace and heat pump sections are different		x	
53			HLH	Values don't seem correct		x	
54			Setback tstat	Use billing data and % savings rather than HLH and capacity			x
55			Setback tstat	Measure interactions with WB program	x		
56			Gas furnace	Equation form too complex			x
57			Gas furnace	NAECA baseline too low			x
58			Gas furnace	EC motor savings too low			x
59			Water heating	Cold main temperature assumptions incorrect		x	
60			Water heating	Hot water use per person data out of date		x	
61			Low flow showerheads	2.5 gpm too high for measure		x	
62			Low flow showerheads	Account for occupancy differences and throttling effect		x	
63			Water heating	Inconsistency in recovery efficiency assumptions		x	
64			Faucet aerators	Include fixed draw vs. fixed run time			x
65			Tank wrap	1 inch of fiberglass in baseline too low		x	
66			Dehumidifier	Demand savings too low			x

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
67	Con Edison / O&R	Comments on TecMarket Manual from 10-22-09.pdf	Measure life table	Entries missing		x	
68			CAC	Average not the average of old and new	x		
69			Duct insulation and air leakage sealing	Expand leakage range > 30%			x
70	Building Performance Contractors Association	Comments to PSC re EEPS Tech Manual.pdf	Whole building analysis	Measure focus rather than WB focus	x		
71			Whole building analysis	Project vs. measure cost effectiveness	x		
72			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
73			Furnace	No EC blower motors			x
74			Air leakage sealing	Air sealing measure assumptions			x
75			Clothes washers	Include dryer effects with clothes washers		x	
76			Whole building analysis	Include duct distribution efficiencies and heating system efficiency in calculations			x
77			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
78			Whole building analysis	Measure focus effects on pricing	x		
79	Earth Kind Energy	EarthKind -EEPS Comments on NY Standard Approach for Estimating Savings 11.23.09.pdf	Solar water heating	Applicability of FCHART performance approach	x		
80			Solar water heating	Tank losses double counted	x		
81			Solar water heating	Water consumption assumptions out of date	x		
82			Solar water heating	2 collector system doesn't meet Federal Tax credit threshold of 50% for family of 4	x		
83			Solar water heating	Retscreen 57% solar fraction vs. 29.6%; similar results with Tsol and SRCCC OG-300	x		
84			Solar water heating	Use RETscreen	x		
85	Green Homes America	GHA Comments -- New York Public Service Commission 2009 November.pdf	Whole building analysis	Measure vs. Whole building approach	x		
86			Whole building analysis	Fuel restricted approach	x		
87			Whole building analysis	Health and safety measures ineligible	x		
88			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
89			Attic insulation	Provide value for uninsulated attic			x
90	JAG Construction	Jag Public Comment.pdf	Whole building analysis	Measure vs. Whole building approach	x		
91			Whole building analysis	Fuel restricted approach	x		
92			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
93			Attic insulation	Provide value for uninsulated attic			x
94	Northeast Energy Efficiency Council NY	NEEC-NY Tech Manual letter 11 23 09 .doc	Whole building analysis	Measure vs. Whole building approach	x		
95			Whole building analysis	Fuel restricted approach	x		
96			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
97			Attic insulation	Provide value for uninsulated attic			x
98			Clothes washers	Include dryer effects with clothes washers		x	
99			Air leakage sealing	Air leakage sealing calculations oversimplified	x		

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
100	Northeast Energy Efficiency Council NY	NEEC-NY Tech Manual letter 11 23 09 .doc	Whole building analysis	Measure focus effects on pricing; hard to break out individual measure costs		x	
101	National Grid	SF Tech Manual Comments.pdf	General	Mapping of zip codes to cities			x
102			General	Inconsistencies with minimum data collection requirements and manual formulas	x		
103			General	Some deemed parameters missing	x		
104			Additional measures	Instantaneous water heaters		x	
105			Additional measures	HW pipe wrap			x
106			Additional measures	Ind water heater			x
107			Additional measures	Quality Installation			x
108			Additional measures	EC fan motors			x
109			Additional measures	Furnace tuneup			x
110			Additional measures	Room AC bounty program			x
111			Refrigerator	Simplify for normal replacements using average size and features		x	
112			Refrigerator	ER savings too high; 2004 MA study showed 988 kWh/unit		x	
113			Refrigerator	Energy star table out of date		x	
114			Refrigerator	Clarify recycling program savings		x	
115			Refrigerator	Estar calculator savings all < 119 kWh		x	
116			Refrigerator	ER program values		x	
117			Refrigerator	Clarify differences between MF and SF manuals		x	
118			Refrigerator	Explain use of LF	x		
119			Clothes washers	Clarify measure life for ER	x		
120			Insulation, sealing, windows	How to determine house vintage	x		
121			Insulation, sealing, windows	Average vs. climate values	x		
122			Insulation, sealing, windows	Gas to oil heat conversion	x		
123			Insulation, sealing, windows	CF interaction with simulations; CF = 1 not likely			x
124			Insulation, sealing, windows	Use of blower door results	x		
125	Insulation, sealing, windows	Combine CF and DF			x		
126	AC and ASHP	Adopt new equations for AC and ASHP	x				
127	AC and ASHP	include summer kW savings for ASHP	x				
128	Furnaces and boilers	revise equation based on input capacity			x		
129	Furnaces and boilers	Upstate vs. down state HLH	x				
130	Boiler reset control	Average values for input capacity and AFUE	x				
131	Boiler reset control	Vintage criteria	x				
132	Boiler reset control	Revise equations consistent with furnace and boiler equations			x		
133	Boiler reset control	Use a single deemed value	x				

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
134	National Grid	SF Tech Manual Comments.pdf	Setback tstat	Clarify sources of deemed values	x		
135			Setback tstat	Clarify data collection requirements	x		
136			Setback tstat	ESF factors for heat pumps and ACs		x	
137			Setback tstat	Revise equations consistent with furnaces			x
138			Setback tstat	Heat pump COP missing on pg 43		x	
139			RCA	Update equations consistent with new AC equation			x
140			Duct insulation and air leakage sealing	Revise equations consistent with furnaces			x
141			Duct insulation and air leakage sealing	Combine distribution efficiency values into upstate and downstate	x		x
142			Duct insulation and air leakage sealing	Use of a curve fit vs. lookup table	x		
143			Duct insulation and air leakage sealing	Demand savings calc missing		x	
144			Water heating	Equation too complex given savings magnitude			x
145			Water heating	Calculate a deemed savings using algorithm	x		
146			Water heating	Provide all values	x		
147			Room AC	CLH values << central air; on order of 200 FLH			x
148			Room AC	Combine CF and DF			x
149			Heat pump water heater	Clarify min data requirements for nameplate efficiency and EF	x		
150			Heat pump water heater	Use average value pending M&V	x		
151			Solar water heating	Provide deemed values	x		
152			Solar water heating	Include pumping energy	x		
153			Solar water heating	Include space heating and pool heating applications	x		
154	Solar water heating	Use "displaced system efficiency factor"	x				
155	Shower heads and aerators	Use average values	x				
156	Shower heads and aerators	Old shower head / aerator gpm needed?	x				
157	Shower heads and aerators	Clarify deemed vs. site data requirements	x				
158	Tank wrap	Discrepancy between equations and minimum data requirements	x				
159	Tank wrap	Use deemed savings		x			
160	Tank wrap	Combine CF and DF			x		
161	NYSERDA	NYSERDA comments 1123-09.pdf	All	Provide incremental cost data for each measure	x		
162			CFL	Reduce operating hours as a function of number of lamps installed in household			x
163			Refrigerator	Provide background on 12 year assumption		x	
164			Clothes washers	Provide background on 11 year assumption	x		
165			Opaque shell insulation	Provide background on R-7 baseline assumption for uninsulated walls		x	
166			Opaque shell insulation	Update ceiling insulation measure R-value to R-38			x

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
167	NYSERDA	NYSERDA comments 1123-09.pdf	Windows	Identify timeframes for old and average vintages	x		
168			All	Map cities to climates			x
169			Windows	Clarify gas heat/no AC savings data		x	
170			Air leakage sealing	include calculation for excessive leakage, rather than percent reduction			x
171			Boilers	Include right-sizing effects			x
172			Gas furnace	Clarify inconsistency in minimum AFUE specification		x	
173			Gas furnace	Address right sizing			x
174			Duct insulation and air leakage sealing	Remove region dependency	x		
175			Water heating	Equation provides negative UA value given typical parameters.		x	
176			Water heating	Add gpd for single person household		x	
177			Water heating	Use statewide average outdoor temperature			x
178			Water heating	Revise gallon per day algorithm		x	
179			Low flow showerheads	2 showers per day or 2 occupants too low			x
180			Low flow showerheads	Equation provides savings that are too high		x	
181			Low flow showerheads	Stipulate the gpm	x		
182			Faucet aerators	Equation provides savings that are too high	x		
183			Tank wrap	Discrepancy between manual calcs and EmPower deemed values			x
184			Dehumidifier	Values don't match Energy Star calculator		x	
185	Advanced Energy Systems	Advanced Energy Systems.pdf	Whole building analysis	Measure vs. Whole building approach	x		
186			Whole building analysis	Fuel restricted approach	x		
187			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
188			Wall Insulation	Derate R-values for air movement			x
189			EC furnace motors	Not included			x
190			Clothes washers	Dryer effects not included		x	
191			Duct efficiency	Not included in measure calcs			x
192	Altren	Altren.pdf	Whole building analysis	Measure vs. Whole building approach	x		
193			Whole building analysis	Fuel restricted approach	x		
194			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
195			EC furnace motors	Not included			x
196			Clothes washers	Dryer effects not included		x	
197			Duct efficiency	Not included in measure calcs			x
198	BP Consulting	BP consulting.pdf	Whole building analysis	Measure vs. Whole building approach	x		
199			Whole building analysis	Narrow set of measures and measure efficiency increments	x		
200			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
201			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
202	BP Consulting	BP consulting.pdf	Wall Insulation	Derate R-values for air movement			x
203			Wall Insulation	Interactions with air leakage sealing			x
204			Whole building analysis	Potential for HVAC downsizing not addressed			x
205			Wall Insulation	Mismatch between R-values and ACH assumptions			x
206			Whole building analysis	Impact of proper installation on measure life			x
207			Whole building analysis	Impact of downsizing on equipment efficiency not addressed			x
208			Whole building analysis	Impact of consumer education on persistence not addressed	x		
209			RCA	Measure life should equal equipment life	x		
210			Whole building analysis	Measure by measure cost effectiveness not appropriate	x		
211			Whole building analysis	Convene a working group to handle unique aspects of whole building programs	x		
212			Comfort Home	comfort homes	Whole building analysis	Measure vs. Whole building approach not effective	x
213	Improvement	improvements.pdf	Whole building analysis	Need to update software	x		
214	George Stevens	George Stevens.pdf	Whole building analysis	Ignores measure interactions	x		
215			Life cycle savings	Should include persistence	x		
216			Life cycle savings	Early replacement should give full savings over full measure life	x		
217			Net to gross ratio	Need empirical data to support deemed NTG ratio	x		
218			HVAC interactive effects	Overwhelmed by air leakage in most houses	x		
219			Clothes washers	Dryer effects not included		x	
220			Opaque shell insulation	Air movement effects on R value ignored			x
221			High perf. windows	Measure not cost effective	x		
222			Air leakage sealing	Most cost effective measure	x		
223			HVAC controls and tuneups	More cost effective than equipment upgrades	x		
224			EC furnace motors	Duct balancing and sealing mitigates impacts of continuous fan operation			x
225			Whole building analysis	Allow incentives for oil heat	x		
226	Green Audit USA	Green Audit.pdf	Whole building analysis	Measure vs. Whole building approach not effective	x		
227			Whole building analysis	Ignores measure interactions	x		
228			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
229			Whole building analysis	Allow incentives for oil heat	x		
230	Huber Energy and Remodeling	Huber Energy	Whole building analysis	Measure vs. Whole building approach	x		
231	Remodeling	Remodeling.pdf	Whole building analysis	Fuel restricted approach	x		
232			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
233			Furnace	No EC blower motors			x
234			Clothes washers	Include dryer effects with clothes washers		x	
235			Whole building analysis	Measure savings don't adjust for duct efficiency			x

No.	Party	Document	Measure	Comment	ACTION		
					None	CHG	EAG
236	Remodeling	Remodeling.pdf	Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
237	Integral Building and Design	Integral Building and Design.pdf	Whole building analysis	Measure vs. Whole building approach	x		
238			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
239	Ivy Lea Construction	Ivy Lea Construction.pdf	Whole building analysis	Measure vs. Whole building approach	x		
240			Whole building analysis	Check savings against utility bills	x		
241	Blueox Energy Products and Services	Jeff Emersion.pdf	Whole building analysis	Measure focus rather than WB focus	x		
242			Whole building analysis	Project vs. measure cost effectiveness	x		
243			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
244			Furnace	No EC blower motors			x
245			Clothes washers	Include dryer effects with clothes washers		x	
246			Whole building analysis	Include duct distribution efficiencies and heating system efficiency in calculations			x
247			Whole building analysis	Measure focus effects on pricing	x		
248	McClure Construction	McClure Construction.pdf	Whole building analysis	Measure focus rather than WB focus	x		
249			Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
250			Furnace	No EC blower motors			x
251			Clothes washers	Include dryer effects with clothes washers		x	
252			Whole building analysis	Include duct distribution efficiencies and heating system efficiency in calculations			x
253			Whole building analysis	Measure focus effects on pricing	x		
254	New Buffalo Impact	New Buffalo Impact.pdf	Whole building analysis	Measure focus rather than WB focus	x		
255			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
256			Whole building analysis	Fuel restricted approach	x		
257	NYSBA	NYSBA.pdf	Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
258			Ceiling Insulation	Include an uninsulated attic case			x
259			Clothes washers	Include dryer effects with clothes washers		x	
260			Whole building analysis	Measure focus rather than WB focus	x		
261			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
262			Whole building analysis	Allow incentives for oil heat	x		
263			Whole building analysis	Measure focus effects on pricing; hard to break out individual measure costs	x		
264			Whole building analysis	Require redesign of program and marketing materials	x		
265	Essex Homes of Western New York	Essex Comments.pdf	Whole building analysis	Measure focus rather than WB focus	x		
266			Whole building analysis	Allow incentives for oil heat	x		
267			Whole building analysis	Measure focus effects on pricing	x		

<u>No.</u>	<u>Party</u>	<u>Document</u>	<u>Measure</u>	<u>Comment</u>	<u>ACTION</u>		
					<u>None</u>	<u>CHG</u>	<u>EAG</u>
268	Essex Homes of Western New York	Essex Comments.pdf	Whole building analysis	Require redesign of program and marketing materials	x		
269	Sunnybrook Builders	Sunnybrook comments.pdf	Wall Insulation	Wrong R-value assumption for uninsulated wall		x	
270			Ceiling Insulation	Include an uninsulated attic case			x
271			Clothes washers	Include dryer effects with clothes washers		x	
272			Whole building analysis	Measure focus rather than WB focus	x		
273			Whole building analysis	Non energy benefits of whole building retrofit ignored	x		
274			Whole building analysis	Allow incentives for oil heat	x		
275			Whole building analysis	Measure focus effects on pricing	x		
276			Whole building analysis	Require redesign of program and marketing materials	x		
277			TAG Mechanical	TAG comments.pdf	Whole building analysis	Measure focus rather than WB focus	x
278	Wall Insulation	Wrong R-value assumption for uninsulated wall				x	
279	Furnace	No EC blower motors					x
280	Clothes washers	Include dryer effects with clothes washers				x	
281	Shell measures	Duct efficiency effects					x
282	Whole building analysis	Ignores measure interactions			x		
283	Air conditioning	Does not address quality installation effects					x
284	Whole building analysis	Non energy benefits of whole building retrofit ignored			x		
285	Whole building analysis	Measure focus effects on pricing			x		
286	Whole building analysis	Allow incentives for oil heat			x		