

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

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

CASE 10-M-0457 - In the Matter of the System Benefits Charge IV.

ORDER MODIFYING BUDGETS AND TARGETS FOR ENERGY EFFICIENCY
PORTFOLIO STANDARD PROGRAMS AND PROVIDING FUNDING FOR COMBINED
HEAT AND POWER AND WORKFORCE DEVELOPMENT INITIATIVES

(Issued and Effective December 17, 2012)

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PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on December 13, 2012

COMMISSIONERS PRESENT:

Garry A. Brown, Chairman
Patricia L. Acampora
Maureen F. Harris, dissenting, in part
James L. Larocca
Gregg C. Sayre

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BY THE COMMISSION:

INTRODUCTION

This order addresses four inter-related petitions filed by the New York State Energy Research and Development Authority (NYSERDA) on March 30 2012. In these petitions, all of which were expressly required or permitted by previous orders in these proceedings, NYSERDA seeks authorization to modify the energy efficiency savings goals currently defined for Energy Efficiency Portfolio Standard (EEPS) programs; to provide funding for the Combined Heat and Power (CHP) program we

authorized in October 2011;¹ to partially fund the supplemental EmPower gas program authorized in October 2011;² to fund a continuation and expansion of workforce development initiatives; and to reallocate funds among various EEPS programs. This order generally grants the relief NYSERDA requests, but with some significant modifications in the details.

BACKGROUND

In the T&MD Order, we authorized a CHP program for five years at a total program cost of \$75 million. Of this amount, \$25 million was to be funded through System Benefits Charge collections. The remaining \$50 million was to come from other sources, potentially including funds that might become available through an optimization of programs within the EEPS portfolio. We directed NYSERDA to submit a funding plan for our consideration no later than March 31, 2012, and we specified that the plan set forth the criteria to be used by NYSERDA in selecting CHP projects for funding, including an explanation of how the criteria would address the potential impact of projects on the Consolidated Edison steam system.³

In our EEPS-2 Order, we declined to authorize the expenditure of uncommitted EEPS funds from the period ending December 31, 2011, (referred to as "EEPS-1") during the 2012-2015 period (referred to as "EEPS-2"). Instead, we directed

¹ Cases 10-M-0457 et al., In the Matter of the System Benefits Charge IV, Order Continuing the System Benefits Charge and Approving an Operating Plan for a Technology and Market Development Portfolio of System Benefits Charge Funded Programs (issued October 24, 2011) (T&MD Order).

² Cases 07-M-0548 et al., Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule (issued October 25, 2011) (EEPS-2 Order), pp.15-16 and Appendix 1, Table 9.

³ T&MD Order, p. 14-15.

energy efficiency program administrators, including NYSERDA, to provide a full accounting of such funds by March 31, 2012, and we invited them to petition for authorization to use those funds for particular programs.⁴

Also in the EEPS-2 Order, we noted that because many programs had only recently begun to operate, it was not yet feasible to re-evaluate their energy efficiency savings targets. Therefore, we set targets for EEPS-2 based on those in effect for 2011. We noted, however, that if a program administrator had a serious concern about the reasonableness of a program target, that concern should be addressed. Therefore, we directed program administrators to identify issues with their current programs that might result in substantive changes to targets and/or budgets, and to submit them for our consideration no later than March 31, 2012.⁵

Four petitions filed by NYSERDA on March 30, 2012, respond to these various directives. They are the Petition for Modification of Energy Efficiency Portfolio Standard Budgets and Targets (Budgets and Targets Petition), the Petition for Approval of Combined Heat and Power Performance Program Funding Plan (CHP Funding Petition), the Petition for Allocation of Uncommitted EEPS Funds to the Combined Heat and Power Performance and EmPower Programs (CHP/EmPower Petition), and the Petition for Allocation of Uncommitted EEPS Funds for Workforce Development Initiatives (Workforce Development Petition).

Notices of Proposed Rulemaking identifying these petitions were published in the New York State Register on May 9, 2012. In addition, on May 11, 2012, we issued a notice inviting all interested parties to submit comments on the petitions and to respond to the comments submitted by others.

⁴ EEPS-2 Order, p. 24.

⁵ EEPS-2 Order, p. 12.

In all, we received 23 sets of initial comments and 9 sets of reply comments from a diverse group of entities including utilities, municipalities, end users, unions, manufacturers, environmental organizations, community organizations, building and trade groups and energy research centers. A summary of the comments and list of the commenters is attached as Appendix 2.⁶

SUMMARY OF THE PETITIONS AND COMMENTS RECEIVED

Budgets and Targets Petition

NYSERDA requests authorization to make substantial reductions to the targets for its EEPS programs and also to make certain budget reallocations among programs in order to optimize the use of funds. The net impact of these changes as initially proposed would have been a reduction of 2,233,752 MWh, or 43%, in EEPS-2 electric efficiency savings and 1,579,507 Dt, or 17%, in EEPS-2 gas efficiency savings.

Residential Point-of-Sale Lighting. Fully 58% of the target reductions proposed in NYSERDA's petition would have come from a single program: the Residential Point-of-Sale Lighting (POS Lighting) program. During EEPS-1, NYSERDA says, this program was aimed at augmenting sales of compact fluorescent light bulbs (CFLs) using strategies such as increased marketing and co-op advertising promotions, increased consumer accessibility to a wider variety of bulbs, new distribution channels forged with manufacturers and retailers, incentives for retailers to increase CFL sales, and increased in-store promotions and point-of-purchase information. The result,

⁶ On October 17, 2012, Consolidated Edison filed supplemental comments concerning the impact of CHP on its steam system. Responses to the comments were submitted by New York City and NYSERDA. These comments are discussed in the body of this order, but are not summarized in Appendix 2.

NYSERDA says, was an additional 9.4 million in sales of CFLs in New York.

In our EEPS-2 Order we recognized the success of the POS Lighting program, but we also saw that very success as having severely limited the potential for the program going forward. Due in large part to NYSERDA's market transformation efforts, we found, CFLs were widely available throughout the State. Program evaluation results indicated that the CFL market had been strengthened and that New Yorkers were purchasing CFLs without the impetus provided by the POS Lighting program. As a result of those findings, we directed NYSERDA to refocus the POS Lighting program away from CFLs and toward solid state lighting and other emerging lighting technologies, including exterior and specialty CFL bulbs, for which the market was still relatively undeveloped. NYSERDA's proposal in this petition did just that.

The result of the change in focus, however, was a substantial increase in the projected cost of each megawatt hour of energy savings achieved. That increased cost, combined with a fixed budget, produced a very significant reduction in the savings target. NYSERDA cited four primary reasons for the increases. The most significant was "spillover uncertainty." In planning the original POS Lighting program, NYSERDA assumed a "net-to-gross" ratio of 1.6, meaning that it expected, based on past experience, that the program would yield 1.6 megawatt hours of savings for every one megawatt hour directly associated with CFL sales promoted by the program. Due to the infancy of the solid state market, NYSERDA does not feel it can predict such a spillover effect for the new program, and instead uses the EEPS default net-to-gross ratio of 0.9 in projecting its target.

The second reason cited for the increased savings cost was the higher retail cost of the bulbs, necessitating higher incentives to induce purchases. NYSERDA estimated that

incentives would have to be in the \$7 to \$8 range for light emitting diode (LED) bulbs, compared with an average buy-down per CFL bulb of only \$1.25.

The third reason given by NYSERDA pertained to the per bulb energy savings. NYSERDA stated that the EEPS Technical Manual estimates savings at 54 kilowatt hours per bulb. The target established for the POS Lighting program in our EEPS-2 Order was based on the EEPS-1 estimate of 64 kilowatt hours per bulb. In addition, NYSERDA says, the EEPS-2 target did not take into account the impact of the phase-out of general purpose incandescent lamps mandated by the federal Energy Independence and Security Act (EISA), which will lower the baseline from which savings estimates are calculated during the latter part of the EEPS-2 period.

Finally, NYSERDA says, the cost per megawatt hour used in calculating the EEPS-2 target for the POS Lighting program was too low. In the EEPS-2 Order, it was calculated at \$13.98 based on the EEPS-1 budget and goals for 2011. However, the average annual cost per megawatt hour based on the full EEPS-1 period was \$18.03, a 22% difference.

Comments received concerning the revised POS Lighting program were generally quite negative. New York City urges us not to approve the conversion of a highly successful EEPS energy efficiency resource acquisition program into a market transformation program better suited for implementation under the T&MD portfolio. If NYSERDA seeks to implement a market transformation program to increase the acceptance and use of LED bulbs -- which, the City notes, may well be a worthy goal given the rapid technological progress now being made in the LED lighting sector -- it should do so under the auspices of the SBC rather than by compromising one of the most successful existing EEPS programs. The POS Lighting program, New York City argues,

should be focused on established and cost-effective lighting technologies with a greater emphasis on obtaining higher penetration rates in New York City. In addition, it says, higher priority should be given to lighting, generally, in New York City, where a large number of readily accessible opportunities exist for cost-effective, efficient lighting measures. It says the Commission should direct NYSERDA to coordinate with Green Light New York in order to reduce interference and confusion among similar but disconnected programs.

The PACE Energy and Climate Center, Natural Resources Defense Council, Northeast Energy Efficiency Partnerships and Sierra Club (collectively, the Environmental Organizations) assert that our decision to end programs for standard CFLs was premature and out of step with other states in the region. They say that decision leaves significant cost-effective savings potential untapped, given that recent data indicate only 36% of sockets in the Northeast region are supplied with high efficiency lighting. A better approach, they say, would be to include LEDs and specialty CFLs in the program while continuing to support standard CFLs. They recommend that the Commission invite NYSERDA to propose a program that better reflects the current status of this market.

The Joint Utilities also urge us to reject NYSERDA's proposal to convert the Residential POS Lighting Program from a resource acquisition program into a market transformation program combining a larger budget with an over 85% reduction in

the energy savings target.⁷ They agree with New York City that if a market transformation program for LED lighting is to be pursued, it should be funded under the T&MD portfolio rather than compromising the successful EEPS program. NYSERDA, they say, should continue to support resource acquisition with, perhaps, a more diverse universe of lighting measures that could include CFLs and LEDs.

Furthermore, the Joint Utilities say, NYSERDA's request for its proposed target reduction is not adequately supported. Neither the Petition nor a July 17, 2012, NYSERDA response to Staff inquiries⁸ explains why the \$18.03 average EEPS-1 cost per MWh is a better indicator of likely EEPS-2 costs than the \$13.98 estimate based on the calendar 2011 budget and goals. Since 2011 data is the most recent and presumably most accurate, NYSERDA's proposed targets should be adjusted based on that information.

In light of the concerns expressed in these comments, Staff asked NYSERDA to re-examine its POS Lighting proposal to determine whether the promotion of standard CFL bulbs could continue to be supported in a manner that addresses the Commission's concerns about the declining net-to-gross ratio of the current program. NYSERDA did so, and in a letter to the

⁷ The Joint Utilities comprise Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, KeySpan Gas East Corporation d/b/a National Grid, and Central Hudson Gas and Electric Corporation.

⁸ Letter to Jeffrey C. Cohen, Deputy, Policy & Legal Affairs, from Janet Joseph, Vice President, Technology and Strategic Planning.

Secretary dated October 4, 2012, it submitted a proposal to revise the program described in the original petition.⁹

Under the revised proposal, NYSERDA would continue to promote sales of solid state and other advanced lighting technologies, but at a reduced level. Primary emphasis would be placed on increasing the "socket saturation" of standard CFLs through a program designed to minimize "free ridership," defined as sales attributed to program incentives that actually would have occurred in their absence. It is this free ridership that produces the low net-to-gross ratio that was of concern to us in our EEPS-2 Order.

The type of program envisioned by NYSERDA, referred to as a "Market Lift" or "Sales Promotion" model, is designed to pay incentives to retailers for increased sales of a targeted product above a defined historic sales baseline. NYSERDA says that studies have shown that this model generates more sales, more market support from retailers, a greater pass-through of the incentive to customers, and more sustained retailer demand for the product than more traditional promotions.

NYSERDA says the program it proposes is based on lessons learned in a pilot program conducted in Wisconsin, NYSERDA's own experience with market lift activities in other product categories, programs currently being implemented in the Northwest and Massachusetts, NYSERDA's long-term relationships with manufacturers and retailers through its existing program, and NYSERDA's experience with sales data collection and analysis. It proposes to use a tiered approach, with higher incentives as sales above the baseline increase. If sales do not reach the lowest tier above the baseline, no incentives will

⁹ On October 11, 2012, NYSERDA filed a revised version of the proposal which corrected certain calculations in the October 4, 2012, filing.

be paid. NYSERDA says this approach will leverage the sales volume and buying power of large retailers, while at the same time addressing the free ridership issues associated with providing incentives for all bulbs sold.

NYSERDA proposes the CFL Market Lift initiative as an add-on to the POS Lighting program proposed in the Budgets and Targets Petition. The balance of the calendar year 2012 incentive budget for the program would be dedicated to the new initiative. During the remaining years of EEPS-2, 75% of the incentive budget would be used for standard CFLs; 25% would continue to be dedicated to specialty CFLs and LED lighting.

With the incorporation of the CFL Market Lift initiative in the POS Lighting program, NYSERDA projects that it will be able to achieve 73% of the target we established for the program in our EEPS-2 order, with the budget authorized in that order. In the Budgets and Targets Petition, however, NYSERDA also requests that the POS Lighting budget be augmented by a transfer of \$3.8 million from other NYSERDA residential programs. With that increased budget, NYSERDA projects that it will be able to achieve 90% of the original program savings target. That 10% shortfall would be a dramatic improvement over the 85% target reduction projected for the program without the CFL Market Lift initiative.

Consistent with the comments we have received, NYSERDA argues that the case for continuing incentives for residential sales of standard CFLs is compelling. The U.S. Environmental Protection Agency, it says, has predicted that removal of incentives will negatively impact the market share of CFLs, as was shown to be the case in California and Hawaii, where CFL sales dropped by 60% or more when incentives were ended. Data from the National Electrical Manufacturers Association also support the observation that CFL sales are not increasing,

NYSERDA says. For the first quarter of 2011, the data show CFL market share dropping from 22% to 21% while incandescent bulbs' share of sales increased from 78% to 79%.

Implementation of federal lighting standards pursuant to EISA is also likely to have the unintended consequence of hurting CFL sales, NYSERDA argues. Under the act, incandescent bulbs are not banned; they merely are required to meet higher efficiency standards. Halogen incandescents meet those standards and they are likely to become increasingly commonplace as standard incandescents are phased out. Halogen bulbs are typically marketed as "energy efficient," NYSERDA points out, and studies have indicated that many consumers believe they are more efficient than CFLs. In fact, however, they are much less efficient. The EPA has predicted that these misconceptions are likely to persist and have the potential to erode the market share for CFLs as sales of halogen bulbs increase.

Finally, NYSERDA argues, there is still a very substantial potential for energy savings from increased use of CFLs in New York. Current socket saturation rates for CFLs in the Northeast region are only in the 25 to 30 percent range, and 82% of New York State households, according to one study, have only one CFL for every four sockets. This means, NYSERDA says, that the majority of New York households have incandescent bulbs in 75% of their fixtures. All of this, NYSERDA argues, suggests that promotion of CFLs continues to offer the potential for significant energy efficiency savings.

Other Target Modifications. In addition to the POS Lighting program, NYSERDA requests reductions in the energy efficiency savings targets for 11 other electric programs, totaling approximately 900,000 megawatt hours, and seven gas programs, totaling 2 million dekatherms. NYSERDA's proposal includes increases in energy savings targets for four of its gas

programs yielding a proposed net portfolio aggregate reduction of 1.6 million dekatherms. Generally, those target modifications that are not the result of requested budget changes (such as the reallocation of certain EEPS program funds to the CHP program, described below) are attributed by NYSERDA to the impact of changes in the economy, the energy sector and the rules and requirements for implementing energy efficiency programs that have occurred since the 2007-2008 period when we set the 2011 EEPS-1 budgets and targets from which the targets for EEPS-2 were derived.

First, NYSERDA points out that EEPS requirements have evolved over time, affecting the qualification of individual measures, the calculation of savings, data collection requirements, and reporting requirements. To comply with the changes, NYSERDA says it has continually revamped its programs, usually at increased cost. At the same time, neither budgets nor targets have been revised. Increasing costs while keeping the budget fixed means fewer savings achieved.

Next, NYSERDA notes that EEPS-1 targets were projected based on adjustment factors developed through studies of prior SBC-funded programs. In a number of cases, the net-to-gross ratios used were greater than the 0.9 that is now recommended by the EEPS Technical Manual as a placeholder pending evaluation of actual program results. Using the 0.9 factor for EEPS-2 as recommended results in a reduction of targets in those cases.

Savings claimed by NYSERDA's new construction programs have also been significantly affected by changes to the New York Energy Conservation Construction Code, NYSERDA says. The 2012 model code requires a 30% increase in efficiency from the 2007 New York code, a rate of increase that was not envisioned when EEPS programs were initiated. Savings which would have been attributed to EEPS before the code changes will now accrue to

the non-jurisdictional codes and standards "wedge." The savings will still occur; they simply cannot be credited to a specific NYSERDA program.

General economic changes have also affected forecast savings, NYSERDA says. The downturn in the economy, lower energy costs and competition in the energy efficiency market have all made it more difficult to attract customers for NYSERDA programs. The increased effort required for customer acquisition pushes up costs and reduces the funds available to provide incentives, thereby reducing the level of savings achievable.

Finally, NYSERDA points out that both its administrative costs and the New York State Cost Recovery Fee that it is legally required to pay have increased from the levels incorporated in EEPS-1 budgets, a fact which we acknowledged in allowing the increased levels to be reflected in the budgets for T&MD programs.¹⁰ This increased cost also reduces funds available to finance specific efficiency measures, reducing projected savings.

Comments received address several implications of NYSERDA's proposed target changes. The Joint Utilities argue that the Commission should recognize that the target reductions proposed by NYSERDA jeopardize achievement of the 15 x 15 goal. NYSERDA lists reasons for the reductions, the utilities say, but does not quantify how those reasons produced the reductions. NYSERDA should be required to provide more support for the lack of symmetry between goal reductions and budget changes. The utilities add that the proposed target reductions also impair the ability of other program administrators to obtain

¹⁰ Cases 10-M-0457 et al., Order Continuing Systems Benefits Charge Funded Programs (issued December 30, 2010), Appendix A, Table 3.

Step 2 awards under the Commission's utility financial incentives mechanism. If NYSERDA's goals are reduced, the goals for calculating Step 2 awards should be as well, they contend.

Similarly, the Joint Utilities point out, all other EEPS program administrators currently use the Commission-mandated 0.90 net-to-gross ratio. NYSERDA should be required to convert all program net savings in its proposal using the .90 factor. NYSEG/RG&E also support the use of the same net-to-gross factors for all program administrators when comparing savings achievements.

NYSERDA responds that it supports the premise that evaluation adjustment factors should be applied in a consistent manner across all program administrators. It disagrees with the Joint Utilities' assertion that NYSERDA has applied factors inconsistently. It says its choice of factors is based on Commission guidance calling for the use of a .90 net-to-gross factor until a more accurate factor is established through evaluation. Where programs have been significantly modified, NYSERDA has used the .90 factor, believing that past evaluation-based factors are no longer relevant.

Multiple Intervenors (MI) says it is very concerned with the relief sought in the petitions. It notes that NYSERDA proposes substantial reductions in the projected level of energy savings for programs approved previously by the Commission, and in some cases also proposes to increase spending on programs that are now projected to result in the same or fewer savings than had been targeted. MI says that it appears the Commission's prior decisions to approve implementation of these programs were based on faulty information and/or overly-optimistic savings projections. If the Commission approves the program modifications set forth in the NYSERDA and/or utility petitions, then it also should provide a discussion of why such

changes are necessary now, a discussion of how the process of establishing reasonable program budgets and targets will be improved on a prospective basis, and a reevaluation of the threshold Total Resource Cost (TRC) score necessary for an efficiency program to be deemed "cost-effective." If program targets must be reduced because prior savings projections were excessive, this supports MI's contention that programs should be implemented only when the benefit-cost ratio provides a "cushion" of at least 1.5 or 1.25.

Proposals to reduce targets with little or no reduction in budgets, MI argues, suggest that programs are much less cost-effective than anticipated. If the Commission authorizes NYSERDA and/or the utilities to modify program budgets and/or savings targets, then it should ensure that program savings targets are adjusted in reasonable proportion to program budget adjustments. It should not authorize program administrators to increase or maintain program budgets while reducing program savings targets, particularly when such reductions are substantial.

If the large number of existing programs is leading to less cost-effective programs, the solution may be to implement fewer programs, rather than continuing to pay more to save less, MI argues. The Commission should reexamine whether it makes sense, in the current economic environment, to increase or continue existing customer collections levels if savings levels are declining materially.

If the Commission determines that NYSERDA and/or the utilities may adjust efficiency program costs or savings targets, then it should, at a minimum, re-evaluate the TRC "score" for each program, as modified, MI asserts. Where the proposed modification would adjust either a program budget or savings target by a material amount or adjust the budget and

savings target in a disproportionate manner, an updated TRC analysis should be a compulsory prerequisite to Commission approval. The Commission should decline to approve any modified EEPS program that "fails" the TRC test, MI argues.

NYSEG/RG&E state that the same conditions leading NYSERDA to request significant target reductions have constrained the ability of all EEPS program administrators to achieve targets modeled prior to those conditions. Therefore, any reductions provided to NYSERDA should be considered for all program administrators. In addition, the Commission's policy of transparency in evaluating program savings and benefits should be continued.

The Environmental Organizations agree with NYSERDA that some energy efficiency savings that can no longer be counted toward EEPS targets are not actually lost. They support the suggestion that the Commission consider establishing a new non-jurisdictional wedge that could account for savings achieved as a result of market transformation. While such an exercise may require some time and resources to achieve, they say, it is worth pursuing. In addition, the Environmental Organizations call on the Commission to revisit the non-jurisdictional wedges of its original 15 x 15 order. They argue that these wedges can and must be better integrated into the process and the Commission should provide stakeholders and the public at large with regular updates on where things stand with those other important initiatives.

Budget Reallocations. NYSERDA also requests authorization for several reallocations of funds among programs. The most significant of these, the reallocation of \$35.9 million to support the CHP program, is discussed below. The others are as follows:

a. The transfer of \$3.8 million to the POS Lighting program from the Single Family Home Performance electric program (\$1.0 million) and the Low-Income Single Family Home Performance electric program (\$2.8 million). NYSERDA suggests that there is a predictable balance between the electric and gas measures installed through both these programs. Based on this expected ratio, the current budget for electric measures is excessive. Transferring the funds to the revised POS Lighting program, NYSERDA says, will increase forecast electric savings by 242,000 megawatt hours.

b. The shift of \$4.9 million of gas funding from the Multifamily Performance Program to the Existing Facilities Program (\$4.4 million) and the High Performance New Construction Program (\$0.5 million). NYSERDA says that at the existing level of incentives, spending the full amount currently budgeted for the Multifamily Performance Program would require it to undertake significantly more projects per year than it did under EEPS-1. Consequently, "in the spirit of optimizing the EEPS portfolio," it proposes the transfer of funds to the New Construction and Existing Facilities programs, each of which has a lower cost per dekatherm of savings achieved.

c. The reallocation of \$4.8 million of gas funds from the New York ENERGY STAR Homes Program (NYESH) to the Home Performance with ENERGY STAR Program (HPwES). NYSERDA argues that the change is necessitated by the impact of the economic downturn on the new construction market. Given anticipated growth in participation in the new construction program (NYESH) of only 3% annually, compared with 20% per year for the existing homes program (HPwES), NYSERDA says the funding shift is needed to make the most effective use of the authorized gas funding, and that the funding shift from the higher cost new construction program to the lower cost existing homes program will allow it

to optimize the gas savings resulting from its EEPS residential portfolio of programs.

New York City objects to reduced funding for the Multifamily Performance program. The failings of the program to date, the City says, are largely attributable to many program changes, a lengthy period of complete suspension of the program, and the imposition of less desirable incentives. New York City contends that the decision to require that each and every energy savings measure meet the strict TRC cost-benefit test has had the perverse result of foreclosing the pursuit of some genuinely beneficial efficiency measures. It continues to believe that the better public policy would be to adopt an aggregate building approach that would allow lighting and other such measures with a positive TRC ratio to subsidize the use of other beneficial, but less cost-effective, energy efficiency measures. Energy program developers and contractors, and the residential building owners and managers whom they serve, must be offered consistent, predictable program options in order to realize the full energy savings potential from each building that participates in the program, the City argues.

Outer Year Budgets. Our EEPS-2 Order included annual budgets and/or energy savings targets for a number of electric and gas programs that extended beyond 2015. NYSERDA now requests that both the energy savings targets and associated budgets for 2016 through 2018 be shifted forward to the 2012 through 2015 period. Specifically, NYSERDA requests the following budgets and/or targets be shifted forward: the 2016 Lighting program electric savings target; the 2016 EmPower program electric savings target; the 2016 through 2018 High Performance New Construction program electric savings targets and the 2016 through 2018 gas program budgets and savings targets; the 2016 and 2017 FlexTech/Technical Assistance program electric savings

targets and the 2016 through 2018 gas budgets and savings targets; the 2016 and 2017 Industrial Process Efficiency program electric savings targets; the 2016 through 2018 Existing Facilities electric program budgets and targets and the 2016 and 2017 gas program budgets and targets.

EmPower Program Customer Acquisition. NYSERDA states that although the EmPower New York program was originally designed to rely on utility referrals for 90% of households served, actual referral levels varied widely during EEPS-1. NYSERDA says that it is continuing to work with Staff and the utilities to increase utility referrals, but for now it must plan on less than 25% of referrals coming from participating utilities. In order to partially compensate for the lower referral levels, NYSERDA in its approved operating plan reallocated \$1.2 million annually to pay for increased outreach and education efforts. This reallocation, by reducing program funds, requires target reductions for the program of approximately 3,408 megawatt hours and 18,800 dekatherms, NYSERDA says.

CHP Funding Petition

Funding Alternatives. NYSERDA presents two alternative proposals for providing the \$58.6 million required to fully fund through 2015 the CHP program we authorized in our T&MD Order.¹¹ Its recommended proposal would reallocate \$35.9 million from two existing EEPS programs: the Benchmarking and Operations Efficiency (BOE) program and the Electric Reduction in Master-Metered Buildings (ERRM) program. The balance of the

¹¹ The \$58.6 million funding total comprises \$10 million in annual program costs for five years plus associated administration and evaluation expenses and a pro rata allocation of the New York State Cost Recovery Fee assessed to NYSERDA.

funding would come from an allocation of \$22.7 million in uncommitted EEPS-1 funds.

The alternative proposal, which NYSERDA does not favor, would replace the uncommitted EEPS-1 funds with a reallocation of \$22.7 million from a third EEPS program, the High Performance New Construction Program (NCP). NYSERDA presents the alternative only because our T&MD Order directed the authority to explain how it would fund the CHP program if all funding were derived from the EEPS-2 budget.

The objectives of the BOE program are to support participants who benchmark the energy performance of a facility, to fund site visits by certified engineers who identify opportunities for low cost energy and operational improvements, and to support implementation of those improvements. The BOE program is a distinct component of NYSERDA's FlexTech program which provides cost-sharing incentives to commercial, industrial, governmental and institutional customers to encourage the evaluation and implementation of cost-effective energy efficiency, peak load reduction and related measures.

In our EEPS-2 Order, we directed NYSERDA to analyze and report to us whether the BOE and FlexTech programs should be fully consolidated. In the Budgets and Targets Petition, NYSERDA states that it has concluded that the BOE program should be subsumed within the FlexTech program. It says that it believes the Commission has provided adequate funding for FlexTech to encompass BOE.¹²

The ERMM program provides financial assistance to the owners of master-metered buildings to support efforts to convert to submetering. It offers prescribed incentives for the use of submeters and advanced master meters, as well as for the replacement of in-unit appliances and lighting. According to

¹² Budgets and Targets Petition, p. 37.

NYSERDA, the current process for qualifying a facility for submetering is complex and involves a variety of predominantly non-financial hurdles, while ERMM provides only financial assistance. Consequently, NYSERDA does not believe that the number of projects it will be able to complete during the EEPS-2 period will be sufficient to justify the current level of funding. The excess funds can, therefore, be used to fund the CHP program without affecting the expected level of performance of the ERMM program, NYSERDA contends.

The High Performance New Construction Program provides customers with technical assistance for electric and natural gas efficiency analysis, and performance-based capital-cost incentives for electric energy efficiency improvements, in new construction or substantially renovated buildings. As noted above, NYSERDA proposes reallocating funds from this program only if we determine that all funding for the CHP program should be derived entirely from the current EEPS-2 budget, with no use of uncommitted EEPS-1 funds. It designates the NCP program for the budget reduction not because it believes the program is ineffective, but rather because the program's cost per megawatt hour of efficiency savings acquired is relatively high when viewed solely in the context of achieving the 2015 goal. NYSERDA argues that this narrow perspective understates the value of the program which, by its nature, implements energy efficiency measures that are expected to produce savings over the life of a building. That long life also means that opportunities to address efficiency in new and renovated structures, once missed, may not be repeated for decades.

Support for the CHP program in the comments remains as strong as it was when we authorized the program in our T&MD Order, but a number of concerns have been raised about NYSERDA's preferred funding approach. None of the comments advocates

adopting the alternative proposal, but several urge that we require NYSERDA to identify other sources of funding that would not impinge upon EEPS program budgets.

The Joint Utilities acknowledge that CHP is an efficient means of producing electricity and heat that reduces the demand for grid-supplied generation, but argue that it does not reduce electric usage and, therefore, should not be supported by EEPS funds. They say that NYSERDA's assumption that the energy output of a CHP resource is comparable to saved energy that can be counted toward the EEPS electric goal should be rejected, because although CHP makes more efficient use of the primary energy source, it does not typically reduce a customer's electric usage at the site. The Joint Utilities point out that we have consistently required that EEPS programs produce natural gas and electricity usage reductions, and that we applied this principle in previously rejecting EEPS funding for NYSERDA's CHP program. There is no substantive difference, they say, between using EEPS funds directly for CHP and diverting funds from EEPS programs to be used for CHP. In either case, they argue, this would be a clear change in Commission policy which should not occur without analysis of the relative benefits of using EEPS for supply-side rather than end-use energy efficiency, preceded by notice, collaborative discussions and hearings if no consensus can be reached. If CHP is paid for with funds diverted from EEPS, the Joint Utilities argue, the program should be required to pass the TRC test.

NYSERDA responds that there is no legal obstacle to the Commission's moving funds from the EEPS portfolio to the T&MD portfolio. New York City agrees, arguing that the Joint Utilities' characterization of the proposed reallocation of funds to support CHP as a change in Commission policy is incorrect. Using funds formerly designated for EEPS programs,

it says, would not make CHP an EEPS program and would not change the Commission's policy of excluding CHP facilities from EEPS. Furthermore, ample notice of the proposed funding was provided in notices published in the State Register and issued by the Secretary. The Joint Utilities' call for collaborative discussions, possibly followed by litigation would be an unduly protracted and unnecessary process.

Similarly, New York City argues, the Joint Utilities' argument that CHP projects should be subject to the TRC test if the proposed reallocation of funds is approved, is unwarranted. The CHP Performance Program is not an EEPS program. The Northeast Clean Heat and Power Initiative (NECHPI) agrees, arguing that the total resource cost test applied at the individual measure level might foreclose some genuinely beneficial projects from being pursued.

The Environmental Organizations support NYSERDA's recommended proposal for funding CHP, but only if funds for benchmarking are not decreased but rather are, at a minimum, maintained as the BOE program is transferred to the FlexTech program. They say it is also important that NYSERDA ensure that it has an adequate budget to fulfill the objectives of the ERMM program, as programs to reduce electricity use in multi-family buildings, where residents currently do not pay directly for their electricity usage, are critical.

New York City, while continuing to support full funding for the CHP initiative, shares the Environmental Organizations' concerns that funding not come at the expense of the BOE and ERMM programs. Benchmarking and submetering, it says, are key components of the City's energy policies. Benchmarking is required for certain U.S. EPA programs, it notes, and the City's own initiatives will create demand for both benchmarking and submetering incentives. There are

thousands of buildings in New York City that could benefit from the BOE program, suggesting that widespread opportunities remain for the program to achieve its full potential. Given that the BOE program was only launched in April of 2011, New York City argues, cutting it based on low energy savings to date would be unfair.

New York City suggests that NYSERDA is taking a "defeatist position" when it says that the target audience for the ERMM program is limited and that undertaking submetering is a challenging proposition. The assertion that the target audience for ERMM is limited is difficult to credit, the City says, as there are over 15,000 buildings encompassed within the City's Greener, Greater Buildings Plan.

The contention that the ERMM and BOE programs are more costly than CHP on a dollars per MWh basis is irrelevant, the City argues. It notes, in agreement with the Joint Utilities, that the energy savings that are claimed for the CHP initiative do not reflect reduced energy consumption, which is the primary thrust of the EEPS initiative.

The Joint Utilities add that diverting funds to CHP from the ERMM and BOE programs also raises sector equity issues. Those programs, they say, benefit a broad cross-section of customers including the owners and residents of multi-family buildings, while only a very small group of customers can take advantage of incentives to invest in CHP. They urge the Commission to reject NYSERDA's proposed 70% reduction to the budget and energy savings target for the ERMM program, agreeing with New York City that NYSERDA is being unduly negative in assuming it cannot do a better job in reaching its target audience. Individual metering of dwelling units, they say, furthers the utilities' goal of encouraging and promoting the efficient use of electricity, which provides the utilities with

the opportunity to mitigate investments in costly infrastructure projects that are borne by all customers. NYSERDA responds that it did consider sector equity in proposing to re-allocate funds for the CHP program from programs in the multifamily and commercial-industrial sectors. It notes that the multifamily sector will likely benefit from CHP installations. Furthermore, it says, the Commission has considered sector equity in terms of the allocation of funds, not on the basis of energy savings achieved.

Both New York City and the Joint Utilities urge the Commission to direct NYSERDA to find an alternate revenue stream to fully fund its CHP initiative. The Joint Utilities recommend using the proceeds of Regional Greenhouse Gas Initiative (RGGI) auctions of carbon emission allowances or funds currently allocated to T&MD portfolio programs. Consumer Power Advocates argues that the search for alternative funding sources would simply delay the CHP initiative with another time-consuming process. As to the use of RGGI funds, NYSERDA responds that that the RGGI portfolio of programs has been developed through an extensive stakeholder process and is designed to fill gaps not covered by other state-funded and NYSERDA-administered programs. It is not intended to supplant existing funded activities. CHP was identified for funding in previous SBC portfolios and authorized for funding by the Commission. Therefore, NYSERDA says, CHP does not meet the RGGI portfolio criteria.

Project Selection Criteria. As directed in our T&MD Order, NYSERDA's CHP Funding Petition also sets forth the criteria to be used in selecting projects for funding, and explains how those criteria will take into account potential impacts on the Con Edison steam system. NYSERDA says the program will support projects based on site-specific designs

that use commercially available technology, reduce peak summer demand on the electric grid, generate at least 500 kilowatts of electricity, have a 60% fuel conversion efficiency, and produce no more than 1.6 pounds of nitrogen oxides (NO_x) per megawatt hour.

The Joint Utilities urge that the NO_x emission standards for CHP installations be made more stringent. The reasoning underlying NYSERDA's proposed 1.6 pounds per MWh, they say, is outdated. Average emissions from fossil fuel powered central generating stations in the Con Edison service territory have declined from 1.6 pounds to 1.2 pounds per MWh since the Commission approved the 1.6 pound per MWh rate in 2006. Distributed generation resources, particularly those incented by customer-provided SBC funds, should be held to stringent environmental standards. California, they say, has implemented a NO_x emissions standard of .07 pounds/MWh that reflects current technology. The Commission, they argue, should no longer wait for NYSDEC action and ignore the effect of CHP units on local ambient air quality.

NYSERDA responds that the proposed NO_x standard for CHP installations was established by Commission order supported by SEQRA analysis. It is, they say, an equipment-based standard that supplements the DEC's facility-based permitting by setting an upper limit for CHP units. It does not need to be tightened as suggested by the Joint Utilities.

NECHPI argues that the Commission should not "expand its jurisdiction" to lower the NO_x emissions rate for CHP. The level was set in 2005 and has been used for a number of other purposes. Changing it goes well beyond consideration of CHP funding and could delay the program for years, NECHPI contends.

The Joint Utilities also argue that NYSERDA should modify its proposed criteria to require that potential

recipients of CHP funding first implement all end-use energy efficiency measures shown by a facility audit to be more cost-effective than the proposed CHP installation. In addition, they say the program should be targeted to areas of the utility grid that are in need of additional support, with incentives increased where grid benefits are maximized. NYSERDA's open enrollment approach, the Joint Utilities argue, provides no price signal as to where CHP resources would most benefit the transmission and distribution system. Such targeting is already being used in the Renewable Portfolio Standard (RPS) Regional Program.

New York City responds that the amendments to NYSERDA's project selection criteria recommended by the Joint Utilities should be rejected. While each, individually, has some merit, the City says, they are overbroad and would impede CHP development. For example, while the adoption of energy efficiency measures is a desirable objective, mandating that potential CHP customers first implement all cost-effective measures recommended by an energy audit could increase total project costs unnecessarily, discouraging development efforts.

Impacts on the Con Edison Steam System. In our T&MD Order, we instructed NYSERDA to address the potential impact of proposed CHP projects on Con Edison's steam system. In response, NYSERDA proposes criteria for applications that would displace current steam deliveries. These criteria include: a five-year program cumulative potential impact threshold of 660 million pounds per year (MMlb/year) (approximately 3% of Con Edison's total annual sales), beyond which further applications would not be approved pending further review; requiring sites hosting projects displacing over 110 MMLb/year to participate in Back-Up/Supplemental Steam Service under Service Classification No. 4, which protects steam ratepayers and prevents host sites

from disengaging from Con Edison; and requiring a steam displacement analysis to be provided to Con Edison for all projects displacing 55 MMLb/year or more of Con Edison steam.

Con Edison does not object to the proposed criteria specifically, but claims that they ignore the most important issue, which is the potential impact on minimum steam load.¹³ Because of the configuration of the steam generation and distribution system, a minimum load must be maintained in order to prevent the need for cycling generation at Con Edison's East River plant or taking other measures that would be uneconomic and increase emissions. If a customer that currently contributes to the minimum load is removed from the steam system by virtue of participating in the CHP program, Con Edison argues that the CHP program will have produced unintended negative consequences for other steam customers and for air quality.

Therefore, Con Edison proposes that an annual review of minimum load impacts should be performed, and if those impacts exceed 50 thousand pounds per hour (Mlb/hour), no further CHP projects should be approved, pending further review. Con Edison further proposes that the requirement for CHP participants to take standby service be extended from customers taking 110 MMLb/year to all demand-billed customers (i.e. customers taking 14 MMLb/year or more). Finally, Con Edison proposes that NYSERDA be required to notify it of any application for CHP funding from an existing steam customer or from an applicant located within 250 feet of an existing steam distribution main.

Consumer Power Advocates (CPA) opposes the proposed restrictions on CHP projects, arguing that existing protections

¹³ Con Edison's comments regarding the steam system are contained within the comments of the Joint Utilities, but are specifically attributed within that document to Con Edison.

for the steam system, including those established within the Customer Sited Steam pilot program, are adequate. CPA also argues that a limit on displacement of total sales, if any is to be imposed, should be set at 5% rather than 3%. CPA acknowledges that Con Edison has valid concerns about maintaining its minimum load, but says that the Company has not provided data to support its proposed threshold.

In response to the objections, NYSERDA argues that its proposed criteria were designed to balance opportunities for CHP development with possible impacts on the steam system. Further, NYSERDA argues that minimum load information is not readily available. If a minimum load restriction were imposed, NYSERDA's application process would be compromised by the inability of applicants or NYSERDA to know where they stood with respect to a potentially critical criterion. NYSERDA acknowledges the challenges of maintaining balance in the steam system, but argues that the likely impacts of its CHP program are minimal.

The City of New York emphasizes the need for a balanced approach encouraging the development of CHP without undue impact on the steam system. The City argues that Con Edison's proposals would impair CHP development, and that existing protections provided by standby rates and the Customer Sited Steam pilot program are adequate. The City also opposes a requirement that Con Edison be informed of any CHP application within 250 feet of a steam main, because that would further pit the interests of Con Edison's customer development against the development of CHP. The City is not categorically opposed to a minimum load criterion, but states that such a metric must be properly established and should be flexible enough to allow reevaluation and adjustment so as not to simply shut down all pending CHP applications.

Subsequent to the filing of general comments, Con Edison filed supplemental comments to further document its claim that effects on minimum steam load from CHP could cause uneconomic curtailment of generating units. The supplemental comments show the potential effect on minimum steam load of a loss of 5% of system sales. Con Edison states that even the 50 Mlb/hour threshold that it proposed for a minimum load reduction criteria creates risk of uneconomic curtailment.

Responses to the supplement were filed by NYSERDA and the City of New York. Both observed that Con Edison's figures assumed an immediate 5% reduction in sales from CHP, while NYSERDA's CHP program is not likely to be fully complete until 2020. Both also observed that a minimum load analysis remains somewhat opaque. NYSERDA questioned why a 5% reduction in system sales would result in a 9.6% reduction in minimum load. The City raised numerous methodological questions, including the sensitivity of Con Edison's projections to unique load characteristics of steam customers adopting CHP. NYSERDA continues to urge that minimum load not be included as a criterion. The City urges that any minimum load criterion must be crafted in a way that is flexible and will not inhibit CHP development.

CHP/EmPower Petition

In this petition, NYSERDA formally requests reallocation of \$14.9 million in uncommitted EEPS-1 electric funds and \$4.4 million in uncommitted EEPS-1 gas funds to the CHP Performance Program, consistent with NYSERDA's preferred alternative set forth in the CHP Funding Petition. That petition is discussed in more detail above.

NYSERDA also requests that \$13.76 million in uncommitted EEPS-1 gas funds be allocated to support the EmPower New York program which provides cost-effective gas and electric

reduction and home performance measures at no cost to low-income households, including energy audits, in-home energy-use education, and energy-use management workshops in low-income neighborhoods. As NYSERDA explains, our EEPS-2 Order authorized an \$18.6 million increase in the annual gas budget for EmPower, but provided funding for only about \$7.8 million, leaving an annual shortfall of approximately \$10.8 million. At that time, we anticipated that uncommitted EmPower funds at the end of 2011 would be sufficient to fund the 2012 budget shortfall, and we expressly authorized those funds to be carried forward for use during the EEPS-2 period.

Ultimately, NYSERDA reports, about \$3.3 million was available for carry-over, leaving a budget shortfall for 2012 of \$7.5 million. NYSERDA's request in this petition would cover that 2012 shortfall and provide an additional \$6.2 million to be applied toward the EmPower budget during the remaining EEPS-2 period in order to partially offset the need for SBC collections that have not yet been established.

These funding requests are based on the assumption that we adopt NYSERDA's preferred proposal for funding CHP. If we decide to adopt the alternative proposal, which does not call for the use of uncommitted EEPS-1 funds, then NYSERDA asks that the \$4.4 million in gas funds designated for CHP be allocated instead to the EmPower New York program to offset future year collections, and the \$14.9 million in electric funds be split between the New Construction and Existing Facilities program.

Unrelated to any specific program, NYSERDA also requests authorization to retain any EEPS-1 funds that were committed as of December 31, 2011, but subsequently become uncommitted, through project cancellations, for example. It proposes to apply those funds within the same EEPS-1 program to which they were allocated, to the extent necessary to fund

projects that were committed as of December 31, 2011. If any balance still remained, it would be reallocated to "the most closely aligned NYSERDA EEPS-2 program."¹⁴

Comments concerning NYSERDA's proposed use of uncommitted EEPS-1 funds for CHP are discussed above in the CHP Funding Petition section. The EmPower proposal engendered very little specific comment. Solar One, which provides training and testing for the energy efficiency industry, supports the allocation of funds to EmPower, noting that federal funding sources for this type of program have been substantially reduced.

Workforce Development Petition

In this Petition, NYSERDA requests that \$12 million in uncommitted EEPS-1 electric funds and \$12 million in uncommitted EEPS-1 gas funds be reallocated to support workforce development initiatives that we originally approved three years ago.¹⁵ At that time, we authorized expenditures at an annual level of \$6.6 million to implement a plan designed by NYSERDA which we projected would serve some 6,122 participants statewide. However, because there was an expectation that federal funding would become available for much of the cost of the program, but the timing of that availability remained uncertain, we decided to approve funding through the SBC for only one year as a bridging measure.

In this petition, NYSERDA reports that it has exceeded the goals of that initial program by contracting to provide training and skills upgrades for over 8,830 energy efficiency workers. In the process, however, essentially all of the funds

¹⁴ CHP/EmPower Petition, p. 2.

¹⁵ Case 07-M-0548, Order Authorizing Workforce Development Initiatives (issued June 22, 2009).

we authorized in 2009 have been committed, leveraged federal funds have been fully expended, and no additional funding is anticipated. The additional funding requested for expenditure during the EEPS-2 period, NYSERDA says, is essential to meet the workforce demands created by our energy efficiency goals.

Workforce development is essential to ensure the success of EEPS programs, NYSERDA argues. It points out that studies have consistently concluded that efficiency measures installed and maintained by properly trained workers produce greater savings, but such workers are in short supply. A New York Department of Labor study cited by NYSERDA found that 17% of green construction firms had difficulty finding qualified green workers, and 77% reported a need for employees with enhanced skills.

Future workforce development initiatives, NYSERDA says, will focus on the skills needed to support the current EEPS programs, including new construction, new market-ready technologies, existing homes and commercial facilities, operations and maintenance and low-income programs. Using competitive and open enrollment solicitations, NYSERDA plans to work with new and existing training partners to offer local training that meets specific employer needs, and to build on existing programs and infrastructure established during EEPS-1.

The comments we received on this proposal were uniformly supportive. Six local International Brotherhood of Electrical Workers/National Electric Contractors Association Joint Apprenticeship and Training Committees from across the State report that NYSERDA programs have enabled their members to be trained in the most current technologies, and that such training might not have been available without NYSERDA funding. The Altamont Program, Workforce Development Institute, New Buffalo Impact, Northeast Parent and Child Society, Solar One,

Urban League of Rochester and YouthBuild Coalition all cite the benefits of the program in overcoming barriers for disadvantaged workers to obtain skills relevant to the growing field of clean energy. The Building Performance Contractors Association notes that smaller companies have difficulty growing because of the amount of training needed to meet advanced building performance standards, and says NYSERDA support has been critical to overcoming these barriers.

New York City also urges the Commission to approve the Workforce Development Petition. Continued funding for the initiative, the City says, is necessary to meet the market demand for trained, green workers. Implementation of the City's energy policy initiatives, it says, will require a workforce with appropriate training and skills, and the need for workforce development opportunities exceeds the City's capacity to provide them. NYSERDA's efforts can help address this gap.

Program Oversight - EEPS Advisory Board

Unrelated to any specific petition, the Environmental Organizations recommended creation of a stakeholder advisory board to facilitate various improvements to the EEPS efforts, such as integration and coordination of programs and reduction of data collection and reporting burdens. The Joint Utilities, NYSEG, and RG&E point to the existing Implementation Advisory Group (IAG) as the appropriate advisory group to address changes and improvements to EEPS processes.

DISCUSSION

EEPS Budgets and Targets

POS Lighting Program. In considering the POS Lighting program in our EEPS-2 Order, we were faced with evidence of a declining net-to-gross ratio, which suggested that EEPS funds were being expended to promote purchases of standard CFL bulbs

that customers would have made anyway, without the program. In response to that "free ridership" problem, we directed NYSERDA to stop promoting standard CFLs through the POS Lighting Program and to redirect its efforts towards more advanced lighting technologies such as LED and specialty CFL bulbs. NYSERDA's Targets and Budgets Petition reflects the "retooling" of the POS Lighting Program that we requested.

We continue to believe that developing the market for advanced, high efficiency lighting products is an appropriate and important function for the POS Lighting Program. The comments we have received make a compelling case, however, that we should not yet abandon efforts to expand sales of standard CFLs. There remains a large, untapped market for CFLs that has the potential to produce significant additional energy usage reductions at a relatively low cost per megawatt hour of savings, if the free-ridership issue can be resolved.

The alternative "market lift" approach to the lighting program appears to have the potential to do just that. Because incentives will be paid only when CFL sales exceed a historic baseline level, the program will not be funding purchases that would have occurred without the incentive. This substantially mitigates the free ridership issue, making NYSERDA's use of a 0.9 net-to-gross ratio for purposes of projecting program targets not only appropriate, but potentially conservative. Furthermore, as urged by the Joint Utilities and New York City, placing primary emphasis on standard CFLs at this time rather than the less established LED bulbs maintains the resource acquisition character of the program rather than converting it to a market transformation function unsuited to the EEPS portfolio.

Accordingly, we approve NYSERDA's POS lighting proposal as revised by its October 2012 submission, including

the reallocation of \$3.8 million to the program that is discussed below. We note, however, that the market lift approach is fairly new to the industry, so we direct NYSERDA to work closely with Staff as it prepares the detailed program implementation plans and solicitation to retailers. In addition, as stated in the EEPS-2 Order, we direct NYSERDA to continue to work with the Implementation Advisory Group to address lighting on a broader basis with the other program administrators.

Other Target Adjustments. The targets we established in our EEPS-2 Order were based on 2011 EEPS-1 targets. The utility energy savings targets were adjusted to reflect the implementation of the Technical Manual, but we included no such adjustment in NYSERDA's targets.¹⁶ In the EEPS-2 Order, we recognized that full evaluation of actual program experience during the EEPS-1 period had not yet been completed, and that significant economic and market changes occurring in the 2008-2011 period might also have had an impact on program forecasts. Accordingly, we directed program administrators to propose any program modifications they expected to have a substantial impact on targets or budgets by March of this year.

Considering (1) the relatively low NYSERDA portfolio aggregate cost per megawatt hour of savings authorized in the EEPS-2 Order; (2) the fact that this is the first adjustment of NYSERDA's savings targets since the initiation of EEPS in 2008; and (3) the reasons cited by NYSERDA in its petition; and leaving aside the unique case of the POS Lighting Program which we have addressed above, the target adjustments proposed by NYSERDA are relatively modest. On an aggregate portfolio basis, NYSERDA's proposed target reductions would increase the cost to deliver a megawatt hour of savings from \$140/MWh to \$170/MWh.

¹⁶ EEPS-2 Order, p. 12.

Even with the inexpensive Lighting Program removed from the calculation, NYSERDA's proposed aggregate portfolio cost rises only to \$240/MWh, which still compares very favorably with the \$305/MWh estimated average program cost used as a benchmark in our initial EEPS Order.¹⁷ NYSERDA's programs and the measures they deliver remain subject to the cost effectiveness testing requirements applicable to all EEPS programs.

Costs have increased. We recognized that in our December 29, 2010, SBC IV order.¹⁸ Baselines against which efficiency savings are measured have risen. The economic downturn sharply curtailed construction activities on which many programs are dependent, and made energy efficiency measures a harder sell to potential customers. In general, NYSERDA's initial EEPS programs were extensions of its earlier SBC programs that served customers throughout the State, with little or no competition. EEPS introduced a second program administrator into all regions and most sectors, allowing customers to shop for the best incentive. This has increased NYSERDA's customer acquisition costs, as compared to the earlier SBC counterpart programs, because NYSERDA and its contractors invest time and effort in working with customers who may ultimately use another program administrator's program to implement the energy efficiency improvements.

In addition to adapting to market competition, NYSERDA programs have had to comply with more stringent and evolving cost-effectiveness testing, data collection, reporting, and evaluation requirements. An increase in costs associated with transforming NYSERDA's SBC programs to comply with EEPS program

¹⁷ Case 07-M-0548, Order Establishing Energy Efficiency Portfolio Standard and Approving Programs (issued June 23, 2008), p. 12.

¹⁸ Case 10-M-0457, Order Continuing System Benefits Charge Funded Programs (issued December 30, 2010), p.15.

requirements is not unexpected. NYSERDA could not have anticipated many of the EEPS requirements and the changes in administration and program implementation that compliance would necessitate. Despite all this, NYSERDA expects to achieve over 79% of its original EEPS-2 ordered targets. The adjustments proposed by NYSERDA are reasonable and necessary to accurately reflect current expectations, and we approve them.

Other Budget Reallocations. In addition to the reallocations required to fund the CHP program, NYSERDA proposes funding shifts of \$3.8 million of electric funds to the POS Lighting program from the Single Family Home Performance program (\$1.0 million) and the Low-Income Single Family Home Performance Program (\$2.8 million); \$4.9 million of gas funds from the Multifamily Performance Program to the Existing Facilities Program (\$4.4 million) and the High Performance New Construction Program (\$0.5 million); and \$4.8 million from the New York ENERGY STAR Homes Program to the Home Performance with ENERGY STAR Program. The reasons given for these proposed reallocations, as set forth above, are reasonable, and each of the funding shifts produces an increase in forecast efficiency savings. We will, therefore, approve them.

New York City's objections to a reduced budget for the Multifamily Performance Program are not without merit, however. We agree, for example, that maintaining expectations of program continuity is important for energy program developers and contractors and their clients. It also may well be true, as the City suggests, that past problems experienced by this program are being overcome. For now, however, we give considerable weight to NYSERDA's estimation that it will not be able to spend the full program budget effectively and that the transferred funds can be better utilized in the Existing Facilities and New Construction Programs. We will expect the status of this

program to be considered further as part of the previously-established comprehensive review of the EEPS, RPS and T&MD portfolios, which is expected to come to us in the third quarter of 2013.

Outer Year Budgets. NYSERDA's proposal to shift program budgets previously approved for years beyond 2015 into the 2012 to 2015 period is appropriate and necessary given our decision in the EEPS-2 Order to direct all program administrators to account for both spending and savings on a commitment accrual basis.¹⁹ The out-year (beyond 2015) budgets and targets contained in the EEPS-2 Order reflected the previous EEPS-1 expenditure-based budgeting approach. NYSERDA's proposed shifting of these program budgets and targets to 2015 and earlier ensures that all of NYSERDA's annual program budgets conform to the EEPS-2 commitment accrual accounting basis and the associated energy savings can be counted toward the 15-by-15 goal. We therefore approve the budget revisions as set forth in Appendix 1.

Implications of Target Reductions for the Achievement of 15-by-15 and Step 2 Incentive Awards. As the Joint Utilities point out, NYSERDA's proposed target reductions necessarily affect the ability of the Commission's EEPS programs to realize the efficiency savings necessary to achieve our jurisdictional wedge commitment to the 15-by-15 policy goal. This is, of course, true for all proposed target reductions, including those requested by the utility program administrators. At the same time, we recognize that a rigid establishment of unachievable program targets solves nothing, and may prevent better alternatives from being recognized and acted upon.

Staff analysis of the target reductions we are approving, combined with reductions proposed by the utility

¹⁹ EEPS-2 Order, p. 25.

program administrators, indicates that if all Program Administrators were to achieve 100% of their targets, 2015 committed savings would still be within 1% of the jurisdictional wedge target of 11.2 million MWh. That difference is well within the margin of forecast error, and may well be eliminated by the kinds of market transformation effects we discuss below. Our original objective, therefore, continues to appear achievable. We will, however, direct Staff to evaluate the need for revision of the target for Step 2 incentives as part of our 2013 comprehensive program review.

Total Resource Cost (TRC) Analysis. In our EEPS-2 Order we declined to consider a revision of the TRC or to re-evaluate the TRC of existing measures and programs. Based on that decision, program administrators were not required to re-submit a TRC analysis of their existing programs. For the same reasons, we will not require such an analysis at this time.

We continue to place emphasis on the importance of program continuity, and program administrators must continue to focus on program implementation and performance. Reconsideration of cost-benefit analysis testing and practices may be a considered at a later date.

Applicability of NYSERDA Target Reductions to Utility Program Administrators. Many of the factors contributing to the need to adjust NYSERDA's EEPS targets have already been addressed for utility program administrators in four previous Commission Orders. In December 2010, we combined 2009-2011 energy savings targets with 2011 energy savings targets to address utility concerns regarding targets and associated incentives.²⁰ In August 2011, we provided additional energy

²⁰ Case 07-M-0548, Order Combining Incentive Targets, Clarifying Incentive Mechanism Details and Establishing Implementation Advisory Group (issued December 21, 2010) (December 21, 2010 Order).

savings and target adjustments for certain EEPS programs, and also provided the utilities with an opportunity, in their incentive award calculation filings, to demonstrate on a program-by-program basis the need for further changes based on the 2009-2011 depressed economic situation.²¹ Most recently, in our February 17, 2012, order, we approved utility target adjustments to reflect implementation of the most recent Technical Manual.²² Through these orders, we addressed the utility target adjustments, on a priority basis, due to the implications for shareholder incentive calculations. This is the first time we are addressing target adjustments for NYSERDA's programs.

The EEPS-2 Order provided all program administrators the opportunity to submit program modifications substantially affecting EEPS-2 program budgets and targets. Eight program administrators, in addition to NYSERDA, have requested such modifications. As has been our practice in the past, we will consider and address each program modification request on its individual merits. We will not adopt NYSEG/RG&E's proposal to grant universal reductions in targets based on a generalized application of the justification provided by one program administrator.

Non-Jurisdictional Wedges. We agree with NYSERDA and the Environmental Organizations that the methodology for calculating energy efficiency savings realized by EEPS programs may overlook the fact that even programs primarily designed to realize immediate resource acquisition results can have a

²¹ Case 07-M-0548 et al., Order Granting Rehearing, Reaffirming Utility Shareholder Incentives for 2009 through 2011, and Adjusting Certain Program Targets and Budgets (issued August 22, 2011).

²² Case 07-M-0548, Order Approving Utility Target Adjustments (issued February 17, 2012).

continuing impact on energy efficiency markets. As we said in our EEPS-2 Order, "the market transformation effects of an efficiency program ... can produce widespread savings beyond the specific benefits of EEPS-funded projects."²³ These market transformation effects may well be responsible for significant efficiency savings that are not being counted towards the State's achievement of its 15 x 15 goal because they are not directly attributable to any specific project. As the Environmental Organizations suggest, however, what is important is that the savings are occurring, not who gets the credit for them.

The extent to which factors not taken into account in our original wedge analysis may be having an impact on the 15 x 15 goal is not determinable on this record, but certainly deserves further analysis. We will therefore defer consideration of this issue pending completion of our 2013 comprehensive program review. As part of that review, we will expect such factors as the transformation of markets and structural market changes resulting from the recent economic downturn to be investigated and their impacts on the 15 x 15 goal to be evaluated. The process should be an open one with full opportunity for parties interested in all of the portfolios to participate and comment. This will allow all conclusions reached to be applied consistently to all portfolios.

Combined Heat and Power Program

Funding. NYSERDA presents two alternatives for funding the CHP program we authorized in our T&MD Order. Its recommended proposal would reallocate funds from the ERMM and BOE programs, and would use \$19.4 million in uncommitted EEPS-1 funds. The second alternative would replace the uncommitted

²³ EEPS-2 Order, p. 6.

EEPS-1 funds with a reallocation of funding from the High Performance New Construction program. While either of these alternatives would ensure full funding of the CHP program without the need for increased collections from ratepayers, we are convinced that the proposal favored by NYSERDA, using currently uncommitted funds rather than cutting the budget for the New Construction Program, is preferable, and we will adopt it.

We recognize that Staff, in its July 6, 2011 EEPS White Paper, identified the New Construction Program as an "outlier" in terms of its cost per megawatt hour of savings achieved.²⁴ This, however, was primarily due to the expected long lead times of new construction projects. Recent reports indicate that the program has spent or encumbered all program funds, with nearly all targeted savings achieved or committed. This brings program costs in line with the original estimates. Furthermore, as NYSERDA points out, this program is the only EEPS program of its type offered to commercial and industrial sector customers, and significant long-term savings opportunities may be lost if the program is curtailed. As economic conditions improve the program can be expected to attract even more interest.

Our decision to authorize the reallocation of funds from the ERMM program should not be construed as reflecting any diminution in our support for efforts to convert multi-family buildings from master metering to submetering. We are simply recognizing the reality that the ERMM program has not lived up to expectations to date, for a number of reasons which NYSERDA has spelled out in its petition, and which NYSERDA and our Staff have been working to address. In the short run, we do not

²⁴ Case 07-M-0548, Energy Efficiency Portfolio Standard Program Review White Paper, July 6, 2011, p. 19.

expect ERMM to require the full budget previously authorized. It remains, however, an integral element of our energy efficiency portfolio. ERMM is the only energy efficiency program in the State that provides incentives for buildings to convert from master metering to submetering, giving tenants both the information they need and the cost reduction incentive to manage their energy usage.

We expect revised submetering regulations to be effective in the near future.²⁵ Many of the current obstacles to a successful ERMM program that NYSERDA identified are being addressed in that proceeding, including the need to streamline the regulatory review process for submetering requests and to provide protections for tenants receiving income-based housing assistance. The adoption of these regulations will provide a good opportunity to reconsider the future funding requirements for the ERMM program. We will, therefore, require that NYSERDA work with Staff to re-evaluate the ERMM program with a revised ERMM program proposal submitted to us by June 1, 2013.

Similarly, we continue to recognize the importance of the benchmarking and related technical assessment services that NYSERDA's BOE program was designed to provide to buildings and facilities throughout the State, particularly in New York City. Program activity to date, however, has been extremely light. We agree that this may be due in part to customer confusion over similar services provided by the BOE program and the closely aligned FlexTech program, as suggested by Staff in its White Paper, and we approve NYSERDA's proposal to consolidate the two.²⁶ Even with this change, however, we are not convinced that

²⁵ Case 11-M-0710, In the Matter of Reviewing and Amending the Electrical Submetering Regulations, 16 NYCRR Part 96, Notice of Proposed Rulemaking (issued January 24, 2012).

²⁶ Staff White Paper. P. 21.

additional funding for BOE needs to be included in the FlexTech budget at this time. Again, we will expect the status and future needs of the program to be re-examined as part of the 2013 comprehensive program review.

The Joint Utilities' suggestion that funding for CHP be derived from RGGI auction proceeds rather than the EEPS budget is simply not within our purview. The Commission does not determine how RGGI funds are expended. As NYSERDA explained, RGGI funding levels are the product of an extensive stakeholder process and are designed to fill gaps not covered by other state-funded and NYSERDA-administered programs. We adopted the CHP program and it is our responsibility to fund it using resources over which the Commission has jurisdiction.

In addition, we find no logic in the Joint Utilities' suggestion that because the CHP program will be paid for with funds that were previously earmarked for EEPS programs, it must meet EEPS energy efficiency resource acquisition standards. CHP will be included within the T&MD portfolio. It will not be an EEPS program. We are deliberately reducing the EEPS budget, and accepting a small reduction in projected energy efficiency savings, in order to increase the T&MD budget to accommodate a CHP program that has extremely broad and deep support among environmental, governmental and business interests.

We do, however, agree with the Joint Utilities and New York City that NYSERDA's use of generation displacement as a proxy for energy efficiency savings is inappropriate. We will, therefore, direct Staff and NYSERDA to investigate possible alternative measures for reporting purposes that will more accurately reflect end-use energy savings and other benefits produced by CHP installations. For purposes of these petitions, however, the point is irrelevant. We are not approving CHP as an energy efficiency resource acquisition program.

Project Eligibility Criteria. Most of the criteria proposed by NYSERDA for the selection of potential CHP projects did not meet with any negative comment. These include the requirements that projects be based on site-specific designs, use commercially available technology, reduce peak summer demand on the electric grid, generate a minimum of 500 kilowatts of electricity, and have at least a 60% fuel conversion efficiency. The criteria are reasonable and appropriate and we approve them.

The Joint Utilities suggest that the proposed maximum NO_x emission level be reduced. The 1.6 pounds/MWh limit proposed by NYSERDA is, however, our current standard applicable to CHP installations. It is the criterion we use to define "clean" distributed generation, and it is what we directed NYSERDA to use as a minimum level in designing this program. We find no compelling reason to modify that standard at this time and agree with NECHPI that the process of modifying the standard could unduly delay the implementation of this program, which has generated very broad support.

We also decline to adopt the Joint Utilities' suggestion that potential program participants be required to implement all energy efficiency measures which are more cost effective than CHP. First, we note that this proposal is a derivative of the Joint Utilities' view that because CHP is being funded with money previously allocated to EEPS programs, it must have the energy efficiency resource acquisition characteristics of an EEPS program. We have already rejected that argument. Second, while we would like to see program participants take advantage of all the energy efficiency program offerings that are available to them, we do not require an "all or nothing" approach in any programs we have approved. Finally, we agree with New York City that such a requirement could deter project developers by significantly increasing total project

costs. That might well mean that neither the energy efficiency measures nor the CHP project would go forward, a result that is certainly not in the public interest.

The Joint Utilities also recommend that the CHP program be targeted to areas of the utility grid that are in need of additional support, with incentives to developers increased where grid benefits are maximized. That proposal has merit. We agree that an incentive structure for the CHP program, which has not yet been fully defined by NYSERDA, should provide a price signal that will attract CHP resources to locations where they will most benefit the transmission and distribution system. It should also be designed to promote projects that achieve the highest levels of efficiency in meeting the thermal and electric load requirements of the host site. Therefore, we will require that the revised T&MD Operating Plan include an explanation of how incentives will be tailored to favor projects that offer greater potential value to the distribution system and that will operate at higher overall efficiency levels.

Con Edison Steam System Impacts. The needs of existing steam customers must be balanced with the goal of encouraging development of CHP. Given recent and projected trends in steam demand, we agree with Con Edison that the most important component in such a balance is a metric to minimize erosion of the minimum steam load, in particular to avoid the uneconomic curtailment of the East River Units. Con Edison's proposal to perform an annual review of the impact of approved CHP projects is a workable solution that will not interfere with NYSERDA's application process.

We disagree, however, with Con Edison's proposal that once a 50 Mlb/hour threshold is crossed, no further CHP projects can be approved. We adopt an approach that will minimize

potential disruptions to the CHP program, and that will allow for revisiting the 50 Mlb/hour threshold before any CHP application is denied on the grounds of steam system impact. The City argued that any process potentially leading to suspension of CHP approvals must be precisely detailed, so that prospective applicants can make well-informed decisions. The process that we adopt is intended to accomplish this goal. It places a burden of clear demonstration on Con Edison, within a schedule designed to produce decisions in a reasonable time frame.

The approach we adopt is as follows: Con Edison will provide NYSERDA, upon request, minimum steam load data specific to any CHP applicant that is a steam customer.²⁷ NYSERDA will notify Con Edison of each approval of a project involving an applicant that is a current steam system customer, with information sufficient to support a steam displacement analysis. Con Edison will perform an annual review of the impact of approved CHP projects on its minimum steam load at the same time that it completes its annual official steam sales forecast, and will file the results of its annual review with the Secretary. If Con Edison determines that the net aggregate impact of approved projects would be a reduction in minimum steam system load of 50 Mlb/hour or more, it will notify NYSERDA that this threshold has been reached. NYSERDA will thereafter give Con Edison an opportunity to review the potential impacts of any additional projects prior to approving any specific applications. Con Edison will have up to 30 days after being notified of an application to inform NYSERDA that the proposed project would have a substantial impact on minimum load and would contribute substantially to a risk of curtailment of the

²⁷ NYSERDA and Con Edison may need to enter an agreement to ensure confidentiality of such customer information.

East River Units. Con Edison's notification to NYSERDA must be accompanied by a detailed analysis. If such a notification is not provided within 30 days, NYSERDA may proceed with the approval of the application. If Con Edison does provide a notification to NYSERDA, Con Edison will have 60 days within which to reach an agreement with NYSERDA and the applicant or in the alternative to petition the Commission for relief related to that particular application. Such a petition must include both a project-specific analysis and a system-wide analysis of current and projected minimum steam loads sufficient for the Commission to determine the continued usefulness and adequacy of the minimum load threshold. If Con Edison has not filed such a petition within 60 days of notifying NYSERDA of its concern, NYSERDA may proceed with approval of the application.

Because minimum load protection is the most important criterion, we find it reasonable to adopt a higher limit on impacts on total annual sales volume than the limit initially proposed by NYSERDA; we adopt a limit of 1000 MMB/year, as proposed by CPA. NYSERDA has demonstrated that it is unlikely the total amount of approved CHP projects will approach this limit. We also find that no further requirements related to standby rates are needed. Existing standby rates and the protections included in the Customer Sited Steam pilot program are adequate. Finally, we agree with Con Edison that the utility should be notified of any applicant within 250 feet of a steam main. This increases the options available to customers, and increases the likelihood that the approval of CHP projects can be done in a way that shapes the steam load to the benefit of all customers.

Revised Operating Plan. As is always the case when significant changes have been authorized for SBC-funded programs, we will require NYSERDA to submit a revised operating

plan within 60 days following the issuance of this order. In this case, that revision to the T&MD operating plan should reflect, to the extent relevant, the recommendations of the commissions established by Governor Cuomo to investigate major storm recovery and preparedness issues in the wake of Hurricane Sandy.

EmPower

Funding. As we stated in our EEPS-2 Order, energy costs disproportionately burden low-income customers, and programs like EmPower are particularly valuable in alleviating this financial burden by providing the kinds of weatherization measures that permanently reduce heating costs. Accordingly, in that order, we authorized an \$18.6 million increase in annual funding for the program. We added only \$7.7 million in SBC collections to the EmPower budget, however, because mid-2011 reports suggested that unencumbered funds remaining at the end of the year would likely be sufficient to carry the program at least through 2012, "depending on how quickly expenditures ... are accelerated."²⁸ Ultimately, that acceleration left only about \$3.3 million in EEPS-1 funds to be carried over, creating the funding gap in 2012 and future years that NYSERDA seeks to partially address with a reallocation of uncommitted EEPS-1 funds from other EEPS programs.

We remain committed to providing equitable levels of funding for programs designed to assist low income customers. The EmPower program (base and supplemental), NYSERDA projects, will provide gas efficiency services to 5,196 households per year, resulting in savings of over 212,600 dekatherms of gas per year. The use of uncommitted EEPS-1 funds for this purpose is entirely appropriate.

²⁸ EEPS-2 Order, p. 16.

We will, therefore, approve the reallocation of \$13,767,918 as requested by NYSERDA. This sum will ensure full funding for the EmPower program for 2012, but will still leave a shortfall for 2013 and subsequent years. Therefore, we will again direct NYSERDA, as we did in the EEPS-2 Order, to provide our Staff at least six months' notice of any date on which it estimates that total expenditures for the EmPower program will have exhausted all funding provided for the program in the EEPS-2 Order and this order.

Targeted Savings. NYSERDA also requests a reduction in the efficiency savings targets for the EmPower program due to an increase in the projected cost of savings achieved. Among the factors contributing to that cost increase, NYSERDA states, is a shortfall in utility referrals to the program, which has made it necessary for NYSERDA to expend additional program funds on outreach, education and marketing (OEM) to attract customers. According to NYSERDA, during EEPS-1, referral levels varied widely among participating utilities, and for planning purposes, it now assumes only 25% of EmPower customers will come through referrals. As a consequence, in the operating plan for EEPS-2 it filed in December 2012, NYSERDA included a \$1.2 million increase in the use of EmPower program funds for OEM.

NYSERDA's compensation for the referral problem is reasonable, but is, at best, a workaround. We would prefer to address the root causes. We have consistently recognized the important role in the success of EmPower that utilities can, and should, play, as the primary source of referrals of eligible low-income residential customers to NYSERDA. In 2010, we provided further incentive for that role by allowing each utility to claim 15% of the energy saved from measures installed under the EmPower program toward the utility's EEPS energy

savings goal when the EmPower customer being served was referred to NYSERDA by the utility.²⁹

EmPower was originally designed based on the assumption that utility referrals would supply 90% of the households served by the program. For a number of reasons, however, the expected level of referrals has not materialized. Utilities complain of inadequate feedback that prevents them from learning whether referrals have resulted in completed EmPower applications and projects and makes it difficult for them to determine whether their 15% credit has been accurately calculated. They also say that they sometimes refer customers only to learn that the same customers were previously referred by another entity, thereby depriving them of the opportunity to earn the 15% incentive for their effort.

These problems are soluble and cannot be allowed to inhibit the level of utility cooperation that is essential to the success of this important program for low-income customers. Several utilities do make referrals and provide the information needed by NYSERDA to offer the EmPower program to customers. Nonetheless, to make the obligation uniformly clear, we will direct that Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., National Fuel Gas Distribution Corporation, New York State Electric and Gas Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., Rochester Gas & Electric Corporation, The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid shall make referrals to EmPower. The utilities will be required to provide 24 months of usage data to NYSERDA along with each referral and

²⁹ Cases 07-M-0548 et al., Order Approving Certain Commercial and Industrial; Residential; and Low-Income Residential Customer Energy Efficiency Programs with Modifications (issued January 4, 2010).

referrals should be made regularly as the utilities identify candidates for the Empower program, rather than in batches, so that projects can be initiated in a timely fashion. NYSERDA, Staff, and the utilities will meet within 30 days of this order to establish utility-specific referral targets, and referral protocols to ensure that all utilities are making referrals within 90 days of this Order. We will require each utility to file a quarterly report to the Secretary identifying the number of referrals sent to NYSERDA.

We will also address the utilities' concerns. First, we conclude that the current system unfairly deprives a utility of any credit for a referral when it turns out that the customer was already referred to NYSERDA by an outside agency, even though the utility made its referral in good faith and provided all of the data required by NYSERDA. Therefore, effective with this order, utilities will be permitted to claim 7.5% of the energy saved from measures installed under the EmPower NY Program toward the utility's EEPS energy savings goal, when a customer is referred by an entity other than the utility and the utility provides required data to NYSERDA on behalf of the customer.

Next, we agree that utilities deserve adequate feedback concerning the referrals they make, both because it is the utilities that are likely to be contacted by customers for follow-up and because the utilities should know the status of their referrals in order to verify their entitlement to incentives. We understand that NYSERDA recently released a Request for Proposals for an EmPower vendor which specifies that the winning bidder must have the capabilities to provide utilities with this information. We expect that the new EmPower contractor will provide adequate, timely feedback to permit utilities to accurately track their referrals and that NYSERDA

will make this information system available to the utilities within 90 days of this Order.

With these changes, we expect utility referrals to approach our original expectations. NYSERDA is directed to closely monitor the anticipated increase in utility referrals and the need to conduct outreach, education and marketing (OEM) for the EmPower program. Beginning no later than December 15, 2012, NYSERDA is directed to meet with Office of Consumer Policy (OCP) and Office of Energy Efficiency and the Environment (OEEE) Staff quarterly to assess whether utility referrals are adequate to permit all or some OEM efforts to be discontinued. These meetings are to be continued on a quarterly basis until the utility referral system is functioning as expected. In the meantime, all OEM efforts are to be closely coordinated with OCP. Once the Director of OCP, in consultation with NYSERDA, has determined that the utility referral system is functioning as expected, NYSERDA is expected to transfer remaining uncommitted OEM funds, as agreed upon with OCP Staff, to program budget to support the installation of additional efficiency measures. At that time, NYSERDA is directed to submit a revised operating plan for the EmPower program incorporating the transfer of funds from the OEM budget to the program budget, including a commensurate increase in the electric and gas energy savings targets.

Future Uncommitted EEPS-1 Funds. NYSERDA requests the authority to retain additional EEPS-1 funds that become uncommitted in the future (such as through project terminations) and to use them in the same program from which they came to fund other projects that were committed as of December 31, 2011. If no such projects remain, NYSERDA would reallocate the funds to projects in the most closely aligned EEPS-2 program.

We recognize that cost estimates made at the time of project acceptance rarely prove to be exact, and it makes sense for NYSERDA to reallocate funds within a program as necessary to ensure that all committed projects are fully funded. Accordingly, we authorize NYSERDA, as requested, to use EEPS-1 funds that have or will become uncommitted after December 31, 2011, for other previously committed projects within the same program. We decline, however, to approve NYSERDA's request for authorization in advance to re-allocate such funds to EEPS-2 programs. As we stated in our order issued September 13, 2012, we have a continuing obligation to ratepayers to determine whether unused funds should be reallocated to other programs or returned to the customers who provided them.³⁰ Consequently, we will require that any proposals for the reallocation of future uncommitted EEPS-1 funds to programs other than those for which they were originally authorized be submitted for Commission review and approval.

Administration, Evaluation and Cost Recovery Fee Expenses
Associated with Reallocated Uncommitted Funds

Budget authorizations for NYSERDA-administered EEPS and T&MD programs include allowances for administration and evaluation expenses, and for the New York State Cost Recovery Fee. The allowances are calculated as a percentage of total authorized program funding. NYSERDA states, however, that funding supplied through the use of uncommitted funds from previous budgets does not require additional allowances for administration and evaluation and the cost recovery fee. Instead, these expenses will be met by using funding that was

³⁰ Case 10-M-0457, Order Authorizing the Reallocation of Uncommitted System Benefits Charge III Funds (issued September 13, 2012), pp. 14-15.

previously authorized in association with the uncommitted funds in budgets for SBC3, EEPS-1 and T&MD program portfolios. Our authorization for the reallocation of funds that were uncommitted as of December 31, 2011, is made with that understanding, and that understanding is reflected in the budgets set forth in Appendices 1 and 2.

Workforce Development

In approving a workforce development initiative in 2009, we concluded, in agreement with a working group study, that investment in workforce development would contribute toward achieving the goals of EEPS and minimize the inefficient use of public resources applied to energy efficiency measures. We noted that reliance solely on market forces was unlikely to be sufficient to meet the need for workforce training and development in light of the very rapid expansion of energy efficiency initiatives at both the State and federal level. Those conclusions remain as valid today as they were three years ago.

In addition, the numerous comments we received that addressed this proposal indicate that workforce development funds administered by NYSERDA are being put to good use and are providing much needed assistance to existing and aspiring energy tradespeople and professionals throughout the State. No commenter expressed opposition to the initiative specifically. Multiple Intervenors did, however, state its strong preference that uncommitted EEPS-1 funds be returned to ratepayers rather than applied to new or existing programs.

As we stated in our September 13, 2012, order, we share MI's desire to constrain the cost of energy in New York.³¹ Our recent orders have declined to increase the level of

³¹ Id., p. 11.

collections from customers and this order continues that restraint. Nevertheless, we continue to view the pursuit of energy efficiency as a critical component of any plan to ensure that the State's energy demands can be met reliably at a reasonable cost, and a trained energy workforce is essential to that effort. The long-term benefits of workforce training supported today will be substantial.

Accordingly, we approve NYSERDA's workforce development proposal. The initiative will be incorporated in the T&MD portfolio and its implementation should be fully defined in NYSERDA's revised operating plan for the portfolio. As part of that plan, we specifically direct NYSERDA to investigate and report on the potential for leveraging state money with funds from federally sponsored programs such as, for example, those supporting the retraining of veterans.

In addition, in light of the increase in both the duration and funding of this program, we believe that it would be useful for the metrics used in reporting program results to provide broader information than simply a headcount of trainees. Consequently, we direct NYSERDA to work with Staff to develop a revised reporting scheme and to include it in the operating plan.

EEPS Program Advisory Board.

We agree with the Joint Utilities that an additional advisory board as proposed by the Environmental Organizations is unwarranted. There are currently two EEPS advisory boards: the Evaluation Advisory Group (EAG), which has been in place since 2008, and the Implementation Advisory Group (IAG), which was added by our December 21, 2010 Order. The EAG comprises program administrators, stakeholders and other state entities, and advises Staff in developing evaluation protocols and reporting issues. The IAG includes all program administrators and Staff.

It addresses program implementation issues and assists in program coordination. We encourage and support the continued EAG and IAG activities that identify beneficial changes and improvements that may reduce undue burdens on program administrators while ensuring the effective use of ratepayer dollars.

CONCLUSION

With the modifications discussed above, the Budgets and Targets Petition, CHP Funding Petition, CHP/EmPower Petition and Workforce Development Petition filed by NYSERDA on March 30, 2012, are approved.

The Commission orders:

1. The annual budgets and energy saving goals for the Energy Efficiency Portfolio Standard (EEPS) programs administered by the New York State Energy Research and Development Authority (NYSERDA) shall be as set forth in Appendix 1 to this order. Funding may not be reallocated among programs without further approval by the Commission.

2. The annual budgets for the Technology and Market Development Portfolio programs administered by the New York State Energy Research and Development Authority (NYSERDA) shall be as set forth in Appendix 2 to this order.

3. NYSERDA is authorized to modify its Statewide Residential Lighting program as described in its revised filing of October 10, 2012. NYSERDA shall consult with Staff of OEEE in the development of a detailed implementation plan for the revised Residential Lighting Program.

4. Within 60 days of issuance of this order, NYSERDA shall submit to the Secretary a supplemental revision to its EEPS Operating Plan. The supplemental revision shall incorporate changes to NYSERDA's approved EEPS programs made in this order,

and shall comply with guidelines previously provided by the Director of the Office of Energy Efficiency and Environment (OEEE) and prior directives from the Commission.

5. NYSERDA is authorized to fund the Combined Heat and Power Performance Program using \$35,915,578 made available by the reductions to the budgets for the Energy Reduction in Master-Metered Buildings (ERMM) program and the Benchmarking and Operations Efficiency (BOE) program that are reflected in Appendix 1, and \$22,701,069 in EEPS funds that were uncommitted as of December 31, 2011. These amounts include all administration, evaluation and New York State Cost Recovery Fee costs allocable to the Combined Heat and Power Performance Program.

6. NYSERDA is authorized to use \$24 million in EEPS program funds that were uncommitted as of December 31, 2011, to fund a Workforce Development initiative within the Technology and Market Development (T&MD) Portfolio. All administration, evaluation and New York State Cost Recovery Fee costs allocable to the Workforce Development initiative will be provided by program administration and evaluation funding that was previously authorized in association with those funds.

7. Within 60 days of issuance of this order, NYSERDA shall submit to the Secretary a supplemental revision to its T&MD Operating Plan. The supplemental revision shall incorporate the Workforce Development initiative and the modifications to the Combined Heat and Power Performance program described in this order related to project eligibility criteria, Consolidated Edison of New York, Inc. steam system considerations, and project incentives. The revision shall also include revised reporting requirements for the Workforce Development program and the CHP programs, which NYSERDA is directed to develop in consultation with Staff.

8. On not less than six months' notice, NYSERDA shall file with the Secretary a notice regarding any anticipated shortfall in funding for its supplemental gas-funded EmPower program. For purposes of this clause, a shortfall in funding is defined as a point at which available funds will become insufficient to operate the program at the budget level identified in Appendix 1 to this order. Included in this filing will be monthly program level expenditures and commitments, and the number of applications received and accepted, for the previous 12 months and projected for the following 12 months.

10. By June 1, 2013, NYSERDA shall file a revised proposal for its ERMM program.

11. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric and Gas Corporation, National Fuel Gas Distribution Corporation, Niagara Mohawk Power Corporation, Orange and Rockland Utilities, Inc., Rochester Gas & Electric Corporation, The Brooklyn Union Gas Company d/b/a National Grid NY and KeySpan Gas East Corporation d/b/a National Grid shall make timely and regular referrals to the EmPower program and shall meet utility-specific referral targets. All referrals shall include 24 months of usage data for the customer being referred. Within 90 days of the issuance of this order, NYSERDA, Staff, and the utilities shall agree upon referral targets and schedules for each utility. Beginning with the quarter ending March 31, 2013, and quarterly thereafter, each utility shall submit a report to the Secretary showing the number of referrals made to NYSERDA during the preceding quarter. Reports will be due within 15 days after the end of the quarter.

12. When EEPS funds that were committed as of December 31, 2011, have or will become uncommitted after December 31, 2011, NYSERDA is authorized to apply such funds to

projects within the same EEPS program that were committed before December 31, 2011. If no such projects remain, NYSERDA shall obtain Commission authorization before reallocating such funds.

13. Not later than June 30 of each year from 2013 through 2015, NYSERDA shall submit a forecast of estimated end-of-year cash balances, expenditures, and commitments, through 2018.

14. NYSERDA shall manage the SBC funds prudently and within the budgets authorized by the Commission.

15. Not later than March 31 of each year 2013 through 2016, NYSERDA shall file with the Secretary an accounting of uncommitted balances at the end of the previous calendar year.

16. Annual accounting for programs subject to this order shall be performed on an accrual and commitment basis.

17. The Secretary is authorized to extend the deadlines set forth herein.

18. These proceedings are continued.

By the Commission,

(SIGNED)

JEFFREY C. COHEN
Acting Secretary

APPENDIX 1

All NYSERDA Electric Programs

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	782,252	1,115,809	1,260,493	1,281,105	510,775	168,839	20,611	5,139,884
Program & Administrative Costs	\$159,178,238	\$159,240,238	\$164,251,395	\$167,331,837	\$8,153,601	\$8,091,600	\$3,080,443	\$669,327,352
Evaluation/M&V Costs	8,530,447	8,533,769	8,802,320	8,967,403	436,955	433,633	165,082	35,869,609
NYS Cost Recovery Fee	2,900,349	2,901,479	2,992,786	3,048,914	148,564	147,435	56,128	12,195,655
Total	\$170,609,034	\$170,675,486	\$176,046,501	\$179,348,154	\$8,739,120	\$8,672,668	\$3,301,653	\$717,392,616

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	151,286	(33,284)	(240,703)	(220,548)	(510,775)	(168,839)	(20,611)	(1,043,474)
Program & Administrative Costs	(\$14,890,646)	\$3,213,964	\$1,339,962	(\$3,846,883)	-	-	-	(\$14,183,603)
Evaluation/M&V Costs	(797,997.0)	59,421.0	71,811.0	(93,339.0)	-	-	-	(\$760,104)
NYS Cost Recovery Fee	(271,319.0)	20,204.5	24,416.5	(31,732.0)	-	-	-	(\$258,430)
Total	(\$15,959,962)	\$3,293,590	\$1,436,190	(\$3,971,954)	\$0	\$0	\$0	(\$15,202,137)

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	933,538	1,082,525	1,019,790	1,060,557	-	-	-	4,096,410
Program & Administrative Costs	\$144,287,592	\$162,454,202	\$165,591,357	\$163,484,954	-	-	-	\$635,818,105
Evaluation/M&V Costs	7,732,450	8,593,190	8,874,131	8,874,064	-	-	-	34,073,835
NYS Cost Recovery Fee	2,629,030	2,921,684	3,017,203	3,017,182	-	-	-	11,585,098
Total	\$154,649,072	\$173,969,076	\$177,482,691	\$175,376,200	\$0	\$0	\$0	\$681,477,038

Statewide Residential Point-of-Sale Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	276,587	368,782	368,782	368,782	92,196	-	-	1,475,129
Program & Administrative Costs	\$4,965,399	\$4,965,399	\$4,965,399	\$4,965,399	-	-	-	\$19,861,596
Evaluation/M&V Costs	266,098	266,098	266,098	266,098	-	-	-	1,064,392
NYS Cost Recovery Fee	90,473	90,473	90,473	90,473	-	-	-	361,892
Total	\$5,321,970	\$5,321,970	\$5,321,970	\$5,321,970	\$0	\$0	\$0	\$21,287,880

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	22,467	6,511	(63,977)	(23,808)	(92,196)	-	-	(151,003)
Program & Administrative Costs	\$895,582	\$3,000,747	\$895,583	(\$1,209,581)	-	-	-	\$3,582,331
Evaluation/M&V Costs	47,995.0	47,995.0	47,995.0	47,995.0	-	-	-	\$191,980
NYS Cost Recovery Fee	16,318.0	16,319.0	16,319.0	16,319.0	-	-	-	\$65,275
Total	\$959,895	\$3,065,061	\$959,897	(\$1,145,267)	\$0	\$0	\$0	\$3,839,586

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	299,054	375,293	304,805	344,974	-	-	-	1,324,126
Program & Administrative Costs	\$5,860,981	\$7,966,146	\$5,860,982	\$3,755,818	-	-	-	\$23,443,927
Evaluation/M&V Costs	314,093	314,093	314,093	314,093	-	-	-	1,256,372
NYS Cost Recovery Fee	106,791	106,792	106,792	106,792	-	-	-	427,167
Total	\$6,281,865	\$8,387,031	\$6,281,867	\$4,176,703	\$0	\$0	\$0	\$25,127,466

High Performance New Construction - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	62,246	87,505	129,601	138,021	75,775	50,517	8,419	552,084
Program & Administrative Costs	\$33,418,671	\$33,418,671	\$33,418,671	\$33,418,671	-	-	-	\$133,674,684
Evaluation/M&V Costs	1,790,925	1,790,925	1,790,925	1,790,925	-	-	-	7,163,700
NYS Cost Recovery Fee	608,914	608,914	608,914	608,914	-	-	-	2,435,656
Total	\$35,818,510	\$35,818,510	\$35,818,510	\$35,818,510	\$0	\$0	\$0	\$143,274,040

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	25,254	(5)	(42,101)	(50,521)	(75,775)	(50,517)	(8,419)	(202,084)
Program & Administrative Costs	-	-	-	-	-	-	-	-
Evaluation/M&V Costs	-	-	-	-	-	-	-	-
NYS Cost Recovery Fee	-	-	-	-	-	-	-	-
Total	\$0							

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	87,500	87,500	87,500	87,500	-	-	-	350,000
Program & Administrative Costs	\$33,418,671	\$33,418,671	\$33,418,671	\$33,418,671	-	-	-	\$133,674,684
Evaluation/M&V Costs	1,790,925	1,790,925	1,790,925	1,790,925	-	-	-	7,163,700
NYS Cost Recovery Fee	608,914	608,914	608,914	608,914	-	-	-	2,435,656
Total	\$35,818,510	\$35,818,510	\$35,818,510	\$35,818,510	\$0	\$0	\$0	\$143,274,040

Industrial and Process Efficiency Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	38,148	197,099	244,785	244,785	206,637	47,686	-	979,140
Program & Administrative Costs	\$33,096,726	\$33,096,726	\$33,096,726	\$33,096,726	-	-	-	\$132,386,904
Evaluation/M&V Costs	1,773,672	1,773,672	1,773,672	1,773,672	-	-	-	7,094,688
NYS Cost Recovery Fee	603,048	603,048	603,048	603,048	-	-	-	2,412,192
Total	\$35,473,446	\$35,473,446	\$35,473,446	\$35,473,446	\$0	\$0	\$0	\$141,893,784

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	161,852	2,901	(44,785)	(44,785)	(206,637)	(47,686)	-	(179,140)
Program & Administrative Costs	-	-	-	-	-	-	-	-
Evaluation/M&V Costs	-	-	-	-	-	-	-	-
NYS Cost Recovery Fee	-	-	-	-	-	-	-	-
Total	\$0							

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	200,000	200,000	200,000	200,000	-	-	-	800,000
Program & Administrative Costs	\$33,096,726	\$33,096,726	\$33,096,726	\$33,096,726	-	-	-	\$132,386,904
Evaluation/M&V Costs	1,773,672	1,773,672	1,773,672	1,773,672	-	-	-	7,094,688
NYS Cost Recovery Fee	603,048	603,048	603,048	603,048	-	-	-	2,412,192
Total	\$35,473,446	\$35,473,446	\$35,473,446	\$35,473,446	\$0	\$0	\$0	\$141,893,784

FlexTech Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	116,838	170,755	186,930	186,930	70,091	16,175	-	747,719
Program & Administrative Costs	\$12,126,597	\$12,126,597	\$12,126,597	\$12,126,597	-	-	-	\$48,506,388
Evaluation/M&V Costs	649,871	649,871	649,871	649,871	-	-	-	2,599,484
NYS Cost Recovery Fee	220,956	220,956	220,956	220,956	-	-	-	883,824
Total	\$12,997,424	\$12,997,424	\$12,997,424	\$12,997,424	\$0	\$0	\$0	\$51,989,696

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(5,588)	(59,505)	(75,680)	(75,680)	(70,091)	(16,175)	-	(302,719)
Program & Administrative Costs	-	-	-	-	-	-	-	-
Evaluation/M&V Costs	-	-	-	-	-	-	-	-
NYS Cost Recovery Fee	-	-	-	-	-	-	-	-
Total	\$0							

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	111,250	111,250	111,250	111,250	-	-	-	445,000
Program & Administrative Costs	\$12,126,597	\$12,126,597	\$12,126,597	\$12,126,597	-	-	-	\$48,506,388
Evaluation/M&V Costs	649,871	649,871	649,871	649,871	-	-	-	2,599,484
NYS Cost Recovery Fee	220,956	220,956	220,956	220,956	-	-	-	883,824
Total	\$12,997,424	\$12,997,424	\$12,997,424	\$12,997,424	\$0	\$0	\$0	\$51,989,696

Existing Facilities Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	151,194	151,194	187,770	199,962	48,768	48,768	12,192	799,848
Program & Administrative Costs	\$26,248,974	\$26,248,974	\$30,784,071	\$33,864,513	\$7,615,539	\$7,615,539	\$3,080,443	\$135,458,053
Evaluation/M&V Costs	1,406,697	1,406,697	1,649,735	1,814,818	408,121	408,121	165,082	7,259,271
NYS Cost Recovery Fee	478,277	478,277	560,910	617,038	138,761	138,761	56,128	2,468,152
Total	\$28,133,948	\$28,133,948	\$32,994,716	\$36,296,369	\$8,162,421	\$8,162,421	\$3,301,653	\$145,185,476

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	-	65,024	28,448	16,256	(48,768)	(48,768)	(12,192)	-
Program & Administrative Costs	\$0	\$10,154,052	\$5,618,955	\$2,538,513	(\$7,615,539)	(\$7,615,539)	(\$3,080,443)	-
Evaluation/M&V Costs	\$0	\$544,161	\$301,123	\$136,040	(\$408,121)	(\$408,121)	(\$165,082)	-
NYS Cost Recovery Fee	\$0	\$185,015	\$102,382	\$46,254	(\$138,761)	(\$138,761)	(\$56,128)	-
Total	\$0	\$10,883,228	\$6,022,460	\$2,720,807	(\$8,162,421)	(\$8,162,421)	(\$3,301,653)	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	151,194	216,218	216,218	216,218	-	-	-	799,848
Program & Administrative Costs	\$26,248,974	\$36,403,026	\$36,403,026	\$36,403,026	-	-	-	\$135,458,052
Evaluation/M&V Costs	1,406,697	1,950,858	1,950,858	1,950,858	-	-	-	7,259,271
NYS Cost Recovery Fee	478,277	663,292	663,292	663,292	-	-	-	2,468,152
Total	\$28,133,948	\$39,017,176	\$39,017,176	\$39,017,176	\$0	\$0	\$0	\$145,185,475

EmPower NY Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	18,220	20,595	20,595	20,595	2,375	-	-	82,380
Program & Administrative Costs	\$17,197,995	\$17,197,995	\$17,197,995	\$17,197,995	-	-	-	\$68,791,980
Evaluation/M&V Costs	921,650	921,650	921,650	921,650	-	-	-	3,686,600
NYS Cost Recovery Fee	313,361	313,361	313,361	313,361	-	-	-	1,253,444
Total	\$18,433,006	\$18,433,006	\$18,433,006	\$18,433,006	\$0	\$0	\$0	\$73,732,024

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(9,422)	(5,725)	(892)	(2,007)	(2,375)	-	-	(20,421)
Program & Administrative Costs	(\$5,523,030)	(\$511,392)	\$3,477,462	\$2,556,958	-	-	-	\$0
Evaluation/M&V Costs	(\$295,982)	(\$27,405)	\$186,360	\$137,029	-	-	-	\$0
NYS Cost Recovery Fee	(\$100,634)	(\$9,318)	\$63,362	\$46,590	-	-	-	\$0
Total	(\$5,919,646)	(\$548,115)	\$3,727,184	\$2,740,577	\$0	\$0	\$0	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	8,798	14,870	19,703	18,588	-	-	-	61,959
Program & Administrative Costs	\$11,674,965	\$16,686,603	\$20,675,457	\$19,754,953	-	-	-	\$68,791,978
Evaluation/M&V Costs	625,668	894,245	1,108,010	1,058,679	-	-	-	3,686,602
NYS Cost Recovery Fee	212,727	304,043	376,723	359,951	-	-	-	1,253,444
Total	\$12,513,360	\$17,884,891	\$22,160,190	\$21,173,583	\$0	\$0	\$0	\$73,732,024

Single Family Home Performance Program - Electric**Previously Commission Approved Target and Budget**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	21,463	21,463	21,463	21,463	-	-	-	85,852
Program & Administrative Costs	\$6,562,244	\$6,562,244	\$6,562,244	\$6,562,244	-	-	-	\$26,248,976
Evaluation/M&V Costs	351,674	351,674	351,674	351,674	-	-	-	1,406,696
NYS Cost Recovery Fee	119,569	119,569	119,569	119,569	-	-	-	478,276
Total	\$7,033,487	\$7,033,487	\$7,033,487	\$7,033,487	\$0	\$0	\$0	\$28,133,948

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(11,133)	(9,896)	(7,627)	(6,295)	-	-	-	(34,951)
Program & Administrative Costs	(\$1,276,761)	(\$699,854)	\$191,889	\$828,138	-	-	-	(\$956,588)
Evaluation/M&V Costs	(68,422)	(37,506)	10,284	44,380	-	-	-	(\$51,264)
NYS Cost Recovery Fee	(23,264)	(12,752)	3,497	15,090	-	-	-	(\$17,429)
Total	(\$1,368,447)	(\$750,112)	\$205,670	\$887,608	\$0	\$0	\$0	(\$1,025,281)

New Approved Modification Target and Budget**Home Performance with Energy Star Program**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	6,576	7,187	7,788	8,494	-	-	-	30,045
Program & Administrative Costs	\$4,127,219	\$4,511,082	\$4,888,041	\$5,331,246	-	-	-	\$18,857,588
Evaluation/M&V Costs	221,180	241,751	261,953	285,704	-	-	-	1,010,588
NYS Cost Recovery Fee	75,201	82,195	89,064	97,140	-	-	-	343,600
Total	\$4,423,600	\$4,835,028	\$5,239,058	\$5,714,090	\$0	\$0	\$0	\$20,211,776

New York Energy Star Homes Program

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	3,754	4,380	6,048	6,674	-	-	-	20,856
Program & Administrative Costs	\$1,158,264	\$1,351,308	\$1,866,092	\$2,059,136	-	-	-	\$6,434,800
Evaluation/M&V Costs	62,072	72,417	100,005	110,350	-	-	-	344,844
NYS Cost Recovery Fee	21,104	24,622	34,002	37,519	-	-	-	117,247
Total	\$1,241,440	\$1,448,347	\$2,000,099	\$2,207,005	\$0	\$0	\$0	\$6,896,891

Low Income Single Family Home Performance Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	4,706	4,706	4,706	4,706	-	-	-	18,824
Program & Administrative Costs	\$3,281,122	\$3,281,122	\$3,281,122	\$3,281,122	-	-	-	\$13,124,488
Evaluation/M&V Costs	175,837	175,837	175,837	175,837	-	-	-	703,348
NYS Cost Recovery Fee	59,784	59,784	59,784	59,784	-	-	-	239,136
Total	\$3,516,743	\$3,516,743	\$3,516,743	\$3,516,743	\$0	\$0	\$0	\$14,066,972

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(2,012)	(1,597)	(946)	(565)	-	-	-	(5,120)
Program & Administrative Costs	(\$1,147,188)	(\$828,340)	(\$466,618)	(\$183,602)	-	-	-	(\$2,625,748)
Evaluation/M&V Costs	(61,479)	(44,393)	(25,007)	(9,839)	-	-	-	(140,718)
NYS Cost Recovery Fee	(20,902)	(15,092)	(8,502)	(3,344)	-	-	-	(47,840)
Total	(\$1,229,569)	(\$887,825)	(\$500,127)	(\$196,785)	\$0	\$0	\$0	(\$2,814,306)

New Approved Modification Target and Budget

Assisted Home Performance with Energy Star

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	1,658	1,900	2,090	2,299	-	-	-	7,947
Program & Administrative Costs	\$1,779,760	\$2,039,579	\$2,243,891	\$2,467,878	-	-	-	\$8,531,108
Evaluation/M&V Costs	95,378	109,300	120,251	132,255	-	-	-	457,184
NYS Cost Recovery Fee	32,429	37,163	40,885	44,967	-	-	-	155,444
Total	\$1,907,567	\$2,186,042	\$2,405,027	\$2,645,100	\$0	\$0	\$0	\$9,143,736

Assisted New York Energy Star Homes

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	1,036	1,209	1,670	1,842	-	-	-	5,757
Program & Administrative Costs	\$354,174	\$413,203	\$570,613	\$629,642	-	-	-	\$1,967,632
Evaluation/M&V Costs	18,980	22,144	30,579	33,743	-	-	-	105,446
NYS Cost Recovery Fee	6,453	7,529	10,397	11,473	-	-	-	35,852
Total	\$379,607	\$442,876	\$611,589	\$674,858	\$0	\$0	\$0	\$2,108,930

MultiFamily Performance Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	28,428	28,428	28,428	28,428	-	-	-	113,712
Program & Administrative Costs	\$4,578,917	\$4,578,917	\$4,578,917	\$4,578,917	-	-	-	\$18,315,668
Evaluation/M&V Costs	245,386	245,386	245,386	245,386	-	-	-	981,544
NYS Cost Recovery Fee	83,431	83,431	83,431	83,431	-	-	-	333,724
Total	\$4,907,734	\$4,907,734	\$4,907,734	\$4,907,734	\$0	\$0	\$0	\$19,630,936

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(1,397)	(1,397)	(1,397)	(1,397)	-	-	-	(5,588)
Program & Administrative Costs	-	-	-	-	-	-	-	-
Evaluation/M&V Costs	-	-	-	-	-	-	-	-
NYS Cost Recovery Fee	-	-	-	-	-	-	-	-
Total	\$0							

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	27,031	27,031	27,031	27,031	-	-	-	108,124
Program & Administrative Costs	\$4,578,917	\$4,578,917	\$4,578,917	\$4,578,917	-	-	-	\$18,315,668
Evaluation/M&V Costs	245,386	245,386	245,386	245,386	-	-	-	981,544
NYS Cost Recovery Fee	83,431	83,431	83,431	83,431	-	-	-	333,724
Total	\$4,907,734	\$4,907,734	\$4,907,734	\$4,907,734	\$0	\$0	\$0	\$19,630,936

Low Income MultiFamily Performance Program - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	34,157	34,157	34,157	34,157	-	-	-	136,628
Program & Administrative Costs	\$8,387,179	\$8,387,179	\$8,387,179	\$8,387,179	-	-	-	\$33,548,716
Evaluation/M&V Costs	449,473	449,473	449,473	449,473	-	-	-	1,797,892
NYS Cost Recovery Fee	152,821	152,821	152,821	152,821	-	-	-	611,284
Total	\$8,989,473	\$8,989,473	\$8,989,473	\$8,989,473	\$0	\$0	\$0	\$35,957,892

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(1,615)	(1,615)	(1,615)	(1,615)	-	-	-	(6,460)
Program & Administrative Costs	-	-	-	-	-	-	-	-
Evaluation/M&V Costs	-	-	-	-	-	-	-	-
NYS Cost Recovery Fee	-	-	-	-	-	-	-	-
Total	\$0							

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	32,542	32,542	32,542	32,542	-	-	-	130,168
Program & Administrative Costs	\$8,387,179	\$8,387,179	\$8,387,179	\$8,387,179	-	-	-	\$33,548,716
Evaluation/M&V Costs	449,473	449,473	449,473	449,473	-	-	-	1,797,892
NYS Cost Recovery Fee	152,821	152,821	152,821	152,821	-	-	-	611,284
Total	\$8,989,473	\$8,989,473	\$8,989,473	\$8,989,473	\$0	\$0	\$0	\$35,957,892

Electric Reduction in Master-Metered Buildings - Electric

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	10,482	10,482	10,482	10,482	-	-	-	41,928
Program & Administrative Costs	\$4,917,215	\$4,917,215	\$4,917,215	\$4,917,215	-	-	-	\$19,668,860
Evaluation/M&V Costs	263,516	263,516	263,516	263,516	-	-	-	1,054,064
NYS Cost Recovery Fee	89,595	89,595	89,595	89,595	-	-	-	358,380
Total	\$5,270,326	\$5,270,326	\$5,270,326	\$5,270,326	\$0	\$0	\$0	\$21,081,304

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	(7,337)	(7,337)	(7,337)	(7,337)	-	-	-	(29,348)
Program & Administrative Costs	(\$3,442,050)	(\$3,442,050)	(\$3,442,050)	(\$3,442,050)	-	-	-	(\$13,768,200)
Evaluation/M&V Costs	(184,461)	(184,461)	(184,461)	(184,461)	-	-	-	(737,844)
NYS Cost Recovery Fee	(62,717)	(62,717)	(62,717)	(62,717)	-	-	-	(250,868)
Total	(\$3,689,228)	(\$3,689,228)	(\$3,689,228)	(\$3,689,228)	\$0	\$0	\$0	(\$14,756,912)

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (MWh)	3,145	3,145	3,145	3,145	-	-	-	12,580
Program & Administrative Costs	\$1,475,165	\$1,475,165	\$1,475,165	\$1,475,165	-	-	-	\$5,900,660
Evaluation/M&V Costs	79,055	79,055	79,055	79,055	-	-	-	316,220
NYS Cost Recovery Fee	26,878	26,878	26,878	26,878	-	-	-	107,512
Total	\$1,581,098	\$1,581,098	\$1,581,098	\$1,581,098	\$0	\$0	\$0	\$6,324,392

All NYSERDA Gas Programs**Previously Commission Approved Target and Budget**

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	2,221,781	2,257,359	2,292,935	2,328,512	106,733	71,155	35,578	9,314,053
Program & Administrative Costs	\$87,880,487	\$88,170,008	\$88,266,515	\$88,266,515	386,028	96,508	-	\$353,066,061
Evaluation/M&V Costs	4,709,561	4,725,076	4,730,248	4,730,248	20,687	5,171	-	18,920,991
NYS Cost Recovery Fee	1,601,246	1,606,521	1,608,280	1,608,280	7,033	1,758	-	6,433,118
Total	\$94,191,294	\$94,501,605	\$94,605,043	\$94,605,043	\$413,748	\$103,437	\$0	\$378,420,170

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	252,980	(363,639)	(259,598)	(995,789)	(106,733)	(71,155)	(35,578)	(1,579,512)
Program & Administrative Costs	(\$5,386,662)	(\$3,337,970)	\$7,951,929	\$1,255,217	-	-	-	\$482,515
Evaluation/M&V Costs	132,356	(139,898)	161,058	(127,652)	-	-	-	25,864
NYS Cost Recovery Fee	45,003	(47,562)	54,763	(43,399)	-	-	-	8,805
Total	(\$5,209,303)	(\$3,525,430)	\$8,167,750	\$1,084,167	\$0	\$0	\$0	\$517,184

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	2,474,761	1,893,720	2,033,337	1,332,723	-	-	-	7,734,541
Program & Administrative Costs	\$82,493,825	\$84,832,038	\$96,218,444	\$89,521,732	-	-	-	\$353,066,040
Evaluation/M&V Costs	4,841,917	4,585,178	4,891,306	4,602,597	-	-	-	18,920,997
NYS Cost Recovery Fee	1,646,249	1,558,959	1,663,043	1,564,881	-	-	-	6,433,132
Total	\$88,981,991	\$90,976,175	\$102,772,793	\$95,689,210	\$0	\$0	\$0	\$378,420,169

High Performance New Construction - Gas

Previously Commission Approved¹ Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	82,772	82,772	82,771	82,771	-	-	-	331,086
Program & Administrative Costs	\$1,148,027	\$1,148,027	\$1,148,027	\$1,148,027	-	-	-	\$4,592,108
Evaluation/M&V Costs	61,523	61,523	61,523	61,523	-	-	-	246,092
NYS Cost Recovery Fee	20,917	20,917	20,917	20,917	-	-	-	83,668
Total	\$1,230,467	\$1,230,467	\$1,230,467	\$1,230,467	\$0	\$0	\$0	\$4,921,868

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(25,031)	(25,031)	(25,030)	(25,030)	-	-	-	(100,122)
Program & Administrative Costs	\$114,623	\$114,623	\$114,623	\$114,623	-	-	-	\$458,492
Evaluation/M&V Costs	6,143	6,143	6,143	6,143	-	-	-	\$24,572
NYS Cost Recovery Fee	2,089	2,089	2,089	2,089	-	-	-	\$8,356
Total	\$122,855	\$122,855	\$122,855	\$122,855	\$0	\$0	\$0	\$491,420

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	57,741	57,741	57,741	57,741	-	-	-	230,964
Program & Administrative Costs	\$1,262,650	\$1,262,650	\$1,262,650	\$1,262,650	-	-	-	\$5,050,600
Evaluation/M&V Costs	67,666	67,666	67,666	67,666	-	-	-	270,664
NYS Cost Recovery Fee	23,006	23,006	23,006	23,006	-	-	-	92,024
Total	\$1,353,322	\$1,353,322	\$1,353,322	\$1,353,322	\$0	\$0	\$0	\$5,413,288

¹Revised per May 3, 2012 Letter from Floyd Barwig

Industrial and Process Efficiency Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	912,740	912,740	912,740	912,740	-	-	-	3,650,960
Program & Administrative Costs	\$8,839,468	\$8,839,468	\$8,839,468	\$8,839,468	-	-	-	\$35,357,872
Evaluation/M&V Costs	473,712	473,712	473,712	473,712	-	-	-	1,894,848
NYS Cost Recovery Fee	161,062	161,062	161,062	161,062	-	-	-	644,248
Total	\$9,474,242	\$9,474,242	\$9,474,242	\$9,474,242	\$0	\$0	\$0	\$37,896,968

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	557,260	(177,740)	(177,740)	(912,740)	-	-	-	(710,960)
Program & Administrative Costs	\$8,839,468	-	-	(\$8,839,468)	-	-	-	-
Evaluation/M&V Costs	\$473,712	-	-	(\$473,712)	-	-	-	-
NYS Cost Recovery Fee	\$161,062	-	-	(\$161,062)	-	-	-	-
Total	\$9,474,242	\$0	\$0	(\$9,474,242)	\$0	\$0	\$0	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	1,470,000	735,000	735,000	-	-	-	-	2,940,000
Program & Administrative Costs	\$17,678,936	\$8,839,468	\$8,839,468	-	-	-	-	\$35,357,872
Evaluation/M&V Costs	947,424	473,712	473,712	-	-	-	-	1,894,848
NYS Cost Recovery Fee	322,124	161,062	161,062	-	-	-	-	644,248
Total	\$18,948,484	\$9,474,242	\$9,474,242	\$0	\$0	\$0	\$0	\$37,896,968

FlexTech Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	71,155	106,733	142,311	177,888	106,733	71,155	35,578	711,553
Program & Administrative Costs	\$415,206	\$704,727	\$801,234	\$801,234	386,028	96,508	-	\$3,204,937
Evaluation/M&V Costs	22,251	37,766	42,938	42,938	20,687	5,171	-	171,751
NYS Cost Recovery Fee	7,565	12,840	14,599	14,599	7,033	1,758	-	58,394
Total	\$445,022	\$755,333	\$858,771	\$858,771	\$413,748	\$103,437	\$0	\$3,435,082

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	28,845	(6,733)	(42,311)	(77,888)	(106,733)	(71,155)	(35,578)	(311,553)
Program & Administrative Costs	\$386,028	\$96,507	-	-	(\$386,028)	(96,507)	-	-
Evaluation/M&V Costs	\$20,687	\$5,172	-	-	(\$20,687)	(5,172)	-	-
NYS Cost Recovery Fee	\$7,034	\$1,759	-	-	(7,034)	(1,759)	-	-
Total	\$413,749	\$103,438	\$0	\$0	(\$413,749)	(\$103,438)	\$0	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	100,000	100,000	100,000	100,000	-	-	-	400,000
Program & Administrative Costs	\$801,234	\$801,234	\$801,234	\$801,234	-	-	-	\$3,204,936
Evaluation/M&V Costs	\$42,938	\$42,938	\$42,938	\$42,938	-	-	-	\$171,752
NYS Cost Recovery Fee	\$14,599	\$14,599	\$14,599	\$14,599	-	-	-	\$58,396
Total	\$858,771	\$858,771	\$858,771	\$858,771	\$0	\$0	\$0	\$3,435,084

Existing Facilities Program - Gas

Previously Commission Approved¹ Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	77,964	77,964	77,963	77,963	-	-	-	311,854
Program & Administrative Costs	\$1,884,646	\$1,884,646	\$1,884,646	\$1,884,646	-	-	-	\$7,538,584
Evaluation/M&V Costs	100,999	100,999	100,999	100,999	-	-	-	403,996
NYS Cost Recovery Fee	34,339	34,339	34,339	34,339	-	-	-	137,356
Total	\$2,019,984	\$2,019,984	\$2,019,984	\$2,019,984	\$0	\$0	\$0	\$8,079,936

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	9,745	47,155	56,901	56,901	-	-	-	170,702
Program & Administrative Costs	\$235,580	\$1,139,910	\$1,375,489	\$1,375,489	-	-	-	\$4,126,469
Evaluation/M&V Costs	\$12,625	\$61,088	\$73,713	\$73,713	-	-	-	\$221,138
NYS Cost Recovery Fee	\$4,292	\$20,770	\$25,062	\$25,062	-	-	-	\$75,186
Total	\$252,497	\$1,221,768	\$1,474,264	\$1,474,264	\$0	\$0	\$0	\$4,422,793

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	87,709	125,119	134,864	134,864	-	-	-	482,556
Program & Administrative Costs	\$2,120,226	\$3,024,556	\$3,260,135	\$3,260,135	-	-	-	\$11,665,053
Evaluation/M&V Costs	113,624	162,087	174,712	174,712	-	-	-	625,134
NYS Cost Recovery Fee	38,631	55,109	59,401	59,401	-	-	-	212,542
Total	\$2,272,481	\$3,241,752	\$3,494,248	\$3,494,248	\$0	\$0	\$0	\$12,502,729

¹Revised per May 3, 2012 Letter from Floyd Barwig

EmPower Program (Combined Base and Supplemental) - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	212,603	212,603	212,603	212,603	-	-	-	850,412
Program & Administrative Costs	\$22,824,783	\$22,824,783	\$22,824,783	\$22,824,783	-	-	-	\$91,299,132
Evaluation/M&V Costs	1,223,193	1,223,193	1,223,193	1,223,193	-	-	-	4,892,772
NYS Cost Recovery Fee	415,885	415,885	415,885	415,885	-	-	-	1,663,540
Total	\$24,463,861	\$24,463,861	\$24,463,861	\$24,463,861	\$0	\$0	\$0	\$97,855,444

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(106,531)	(33,326)	24,939	11,493	-	-	-	(103,425)
Program & Administrative Costs	(\$7,856,417)	(\$727,446)	\$4,946,633	\$3,637,230	-	-	-	\$0
Evaluation/M&V Costs	0	0	0	0	-	-	-	\$0
NYS Cost Recovery Fee	0	0	0	0	-	-	-	\$0
Total	(\$7,856,417)	(\$727,446)	\$4,946,633	\$3,637,230	\$0	\$0	\$0	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	106,072	179,277	237,542	224,096	-	-	-	746,987
Program & Administrative Costs	\$14,968,366	\$22,097,337	\$27,771,416	\$26,462,013	-	-	-	\$91,299,132
Evaluation/M&V Costs	1,223,193	1,223,193	1,223,193	1,223,193	-	-	-	4,892,772
NYS Cost Recovery Fee	415,885	415,885	415,885	415,885	-	-	-	1,663,540
Total	\$16,607,444	\$23,736,415	\$29,410,494	\$28,101,091	\$0	\$0	\$0	\$97,855,444

Home Performance with Energy Star Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	229,608	229,608	229,608	229,608	-	-	-	918,432
Program & Administrative Costs	\$13,170,228	\$13,170,228	\$13,170,228	\$13,170,228	-	-	-	\$52,680,912
Evaluation/M&V Costs	705,799	705,799	705,799	705,799	-	-	-	2,823,196
NYS Cost Recovery Fee	239,971	239,971	239,971	239,971	-	-	-	959,884
Total	\$14,115,998	\$14,115,998	\$14,115,998	\$14,115,998	\$0	\$0	\$0	\$56,463,992

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(951)	20,763	42,477	67,689	-	-	-	129,978
Program & Administrative Costs	(\$701,723)	\$482,326	\$1,666,376	\$3,039,405	-	-	-	\$4,486,384
Evaluation/M&V Costs	(37,605)	25,849	89,303	162,884	-	-	-	\$240,431
NYS Cost Recovery Fee	(12,785)	8,789	30,364	55,381	-	-	-	\$81,749
Total	(\$752,113)	\$516,964	\$1,786,043	\$3,257,670	\$0	\$0	\$0	\$4,808,564

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	228,657	250,371	272,085	297,297	-	-	-	1,048,410
Program & Administrative Costs	\$12,468,505	\$13,652,554	\$14,836,604	\$16,209,633	-	-	-	\$57,167,296
Evaluation/M&V Costs	668,194	731,648	795,102	868,683	-	-	-	3,063,627
NYS Cost Recovery Fee	227,186	248,760	270,335	295,352	-	-	-	1,041,633
Total	\$13,363,885	\$14,632,962	\$15,902,041	\$17,373,668	\$0	\$0	\$0	\$61,272,556

New York Energy Star Homes Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	245,010	245,010	245,010	245,010	-	-	-	980,040
Program & Administrative Costs	\$9,704,378	\$9,704,378	\$9,704,378	\$9,704,378	-	-	-	\$38,817,512
Evaluation/M&V Costs	520,063	520,063	520,063	520,063	-	-	-	2,080,252
NYS Cost Recovery Fee	176,821	176,821	176,821	176,821	-	-	-	707,284
Total	\$10,401,262	\$10,401,262	\$10,401,262	\$10,401,262	\$0	\$0	\$0	\$41,605,048

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(166,254)	(153,128)	(118,125)	(104,999)	-	-	-	(542,506)
Program & Administrative Costs	(\$3,524,777)	(\$2,494,843)	\$251,646	\$1,281,580	-	-	-	(\$4,486,394)
Evaluation/M&V Costs	(188,895)	(133,700)	13,486	68,681	-	-	-	(\$240,428)
NYS Cost Recovery Fee	(64,224)	(45,458)	4,586	23,352	-	-	-	(\$81,744)
Total	(\$3,777,896)	(\$2,674,001)	\$269,718	\$1,373,613	\$0	\$0	\$0	(\$4,808,566)

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	78,756	91,882	126,885	140,011	-	-	-	437,534
Program & Administrative Costs	\$6,179,601	\$7,209,535	\$9,956,024	\$10,985,958	-	-	-	\$34,331,118
Evaluation/M&V Costs	331,168	386,363	533,549	588,744	-	-	-	1,839,824
NYS Cost Recovery Fee	112,597	131,363	181,407	200,173	-	-	-	625,540
Total	\$6,623,366	\$7,727,261	\$10,670,980	\$11,774,875	\$0	\$0	\$0	\$36,796,482

Assisted Home Performance with Energy Star Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	26,543	26,543	26,543	26,543	-	-	-	106,172
Program & Administrative Costs	\$3,856,055	\$3,856,055	\$3,856,055	\$3,856,055	-	-	-	\$15,424,220
Evaluation/M&V Costs	206,648	206,648	206,648	206,648	-	-	-	826,592
NYS Cost Recovery Fee	70,260	70,260	70,260	70,260	-	-	-	281,040
Total	\$4,132,963	\$4,132,963	\$4,132,963	\$4,132,963	\$0	\$0	\$0	\$16,531,852

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	22,627	27,577	32,989	38,929	-	-	-	122,122
Program & Administrative Costs	\$2,046,166	\$2,640,350	\$3,289,990	\$4,002,973	-	-	-	\$11,979,479
Evaluation/M&V Costs	109,655	141,498	176,313	214,522	-	-	-	\$641,988
NYS Cost Recovery Fee	37,283	48,110	59,947	72,938	-	-	-	\$218,278
Total	\$2,193,104	\$2,829,958	\$3,526,250	\$4,290,433	\$0	\$0	\$0	\$12,839,745

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	49,170	54,120	59,532	65,472	-	-	-	228,294
Program & Administrative Costs	\$5,902,221	\$6,496,405	\$7,146,045	\$7,859,028	-	-	-	\$27,403,699
Evaluation/M&V Costs	316,303	348,146	382,961	421,170	-	-	-	1,468,580
NYS Cost Recovery Fee	107,543	118,370	130,207	143,198	-	-	-	499,318
Total	\$6,326,067	\$6,962,921	\$7,659,213	\$8,423,396	\$0	\$0	\$0	\$29,371,597

Assisted New York Energy Star Homes Program¹ - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	38,679	38,679	38,679	38,679	-	-	-	154,716
Program & Administrative Costs	\$5,796,649	\$5,796,649	\$5,796,649	\$5,796,649	-	-	-	\$23,186,596
Evaluation/M&V Costs	310,645	310,645	310,645	310,645	-	-	-	1,242,580
NYS Cost Recovery Fee	105,619	105,619	105,619	105,619	-	-	-	422,476
Total	\$6,212,913	\$6,212,913	\$6,212,913	\$6,212,913	\$0	\$0	\$0	\$24,851,652

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(17,354)	(13,800)	(4,322)	(768)	-	-	-	(36,244)
Program & Administrative Costs	(\$3,779,369)	(\$3,443,156)	(\$2,546,587)	(\$2,210,374)	-	-	-	(\$11,979,486)
Evaluation/M&V Costs	(202,538)	(184,520)	(136,472)	(118,454)	-	-	-	(\$641,984)
NYS Cost Recovery Fee	(68,863)	(62,736)	(46,400)	(40,274)	-	-	-	(\$218,273)
Total	(\$4,050,770)	(\$3,690,412)	(\$2,729,459)	(\$2,369,102)	\$0	\$0	\$0	(\$12,839,743)

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	21,325	24,879	34,357	37,911	-	-	-	118,472
Program & Administrative Costs	\$2,017,280	\$2,353,493	\$3,250,062	\$3,586,275	-	-	-	\$11,207,110
Evaluation/M&V Costs	108,107	126,125	174,173	192,191	-	-	-	600,596
NYS Cost Recovery Fee	36,756	42,883	59,219	65,345	-	-	-	204,203
Total	\$2,162,143	\$2,522,501	\$3,483,454	\$3,843,811	\$0	\$0	\$0	\$12,011,909

¹Identified as "Low-Income Single Family Home Performance" program in Table 8 of Appendix 1 in the October 25, 2011 Order

Multifamily Performance Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	150,913	150,913	150,913	150,913	-	-	-	603,652
Program & Administrative Costs	\$7,539,267	\$7,539,267	\$7,539,267	\$7,539,267	-	-	-	\$30,157,068
Evaluation/M&V Costs	404,033	404,033	404,033	404,033	-	-	-	1,616,132
NYS Cost Recovery Fee	137,371	137,371	137,371	137,371	-	-	-	549,484
Total	\$8,080,671	\$8,080,671	\$8,080,671	\$8,080,671	\$0	\$0	\$0	\$32,322,684

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(28,687)	(28,687)	(28,687)	(28,687)	-	-	-	(114,748)
Program & Administrative Costs	(\$1,146,241)	(\$1,146,241)	(\$1,146,241)	(\$1,146,241)	-	-	-	(\$4,584,964)
Evaluation/M&V Costs	(61,428)	(61,428)	(61,428)	(61,428)	-	-	-	(\$245,712)
NYS Cost Recovery Fee	(20,885)	(20,885)	(20,885)	(20,885)	-	-	-	(\$83,540)
Total	(\$1,228,554)	(\$1,228,554)	(\$1,228,554)	(\$1,228,554)	\$0	\$0	\$0	(\$4,914,216)

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	122,226	122,226	122,226	122,226	-	-	-	488,904
Program & Administrative Costs	\$6,393,026	\$6,393,026	\$6,393,026	\$6,393,026	-	-	-	\$25,572,104
Evaluation/M&V Costs	342,605	342,605	342,605	342,605	-	-	-	1,370,420
NYS Cost Recovery Fee	116,486	116,486	116,486	116,486	-	-	-	465,944
Total	\$6,852,117	\$6,852,117	\$6,852,117	\$6,852,117	\$0	\$0	\$0	\$27,408,468

Low Income Multifamily Performance Program - Gas

Previously Commission Approved Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	173,794	173,794	173,794	173,794	-	-	-	695,176
Program & Administrative Costs	\$12,701,780	\$12,701,780	\$12,701,780	\$12,701,780	-	-	-	\$50,807,120
Evaluation/M&V Costs	680,695	680,695	680,695	680,695	-	-	-	2,722,780
NYS Cost Recovery Fee	231,436	231,436	231,436	231,436	-	-	-	925,744
Total	\$13,613,911	\$13,613,911	\$13,613,911	\$13,613,911	\$0	\$0	\$0	\$54,455,644

Approved Modification

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	(20,689)	(20,689)	(20,689)	(20,689)	-	-	-	(82,756)
Program & Administrative Costs	\$0	\$0	\$0	\$0	-	-	-	\$0
Evaluation/M&V Costs	0	0	0	0	-	-	-	\$0
NYS Cost Recovery Fee	0	0	0	0	-	-	-	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

New Approved Modification Target and Budget

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Total</u>
Savings (Dekatherms)	153,105	153,105	153,105	153,105	-	-	-	612,420
Program & Administrative Costs	\$12,701,780	\$12,701,780	\$12,701,780	\$12,701,780	-	-	-	\$50,807,120
Evaluation/M&V Costs	680,695	680,695	680,695	680,695	-	-	-	2,722,780
NYS Cost Recovery Fee	231,436	231,436	231,436	231,436	-	-	-	925,744
Total	\$13,613,911	\$13,613,911	\$13,613,911	\$13,613,911	\$0	\$0	\$0	\$54,455,644

APPENDIX 2

APPROVED SBC IV PROGRAM BUDGETS

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>	<u>Average</u>
POWER SUPPLY AND DELIVERY							
Smart Grid and Electric Vehicle Infrastructure	3,694,889	3,694,889	8,352,052	8,352,052	27,187,500	51,281,382	
Advanced Clean Power	6,927,918	6,927,918	10,208,063	10,208,063	7,500,000	41,771,962	
BUILDING SYSTEMS							
Advanced Buildings	14,871,930	14,871,930	14,337,689	14,337,689	11,156,250	69,575,488	
Advance Energy Codes and Standards	4,156,751	4,156,751	3,480,022	3,480,022	1,406,250	16,679,794	
CLEAN ENERGY INFRASTRUCTURE							
Market Development	17,920,214	17,920,214	16,379,302	16,379,302	16,781,250	85,380,280	
Clean Energy Business Development	8,821,548	8,821,548	7,980,850	7,980,850	8,156,250	41,761,046	
Environmental Monitoring, Evaluation and Protection	4,156,751	4,156,751	3,712,023	3,712,023	2,812,500	18,550,047	
TOTAL PROGRAM COSTS	60,550,000	60,550,000	64,450,000	64,450,000	75,000,000	325,000,000	65,000,000
Administration (8 %)	5,678,781	5,678,781	6,044,549	6,044,549	7,033,998	30,480,658	
Evaluation (5%)	3,549,238	3,549,238	3,777,843	3,777,843	4,396,249	19,050,411	
NYS Cost Recovery Fee (1.7%)	1,206,741	1,206,741	1,284,467	1,284,467	1,494,725	6,477,141	
TOTAL ADMIN COSTS	10,434,760	10,434,760	11,106,858	11,106,858	12,924,971	56,008,206	11,201,641
TOTAL ALL COSTS (Except CHP)	70,984,760	70,984,760	75,556,858	75,556,858	87,924,971	381,008,206	76,201,641
COMBINED HEAT and POWER (CHP)	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000	5,000,000
Administration (8 %)	468,933	468,933	468,933	468,933	468,933	2,344,666	
Evaluation (5%)	293,083	293,083	293,083	293,083	293,083	1,465,416	
NYS Cost Recovery Fee (1.7%)	99,648	99,648	99,648	99,648	99,648	498,242	
TOTAL ADMIN COSTS (CHP)	861,665	861,665	861,665	861,665	861,665	4,308,324	861,665
TOTAL ALL CHP COSTS	5,861,665	5,861,665	5,861,665	5,861,665	5,861,665	29,308,324	5,861,665
TOTAL ALL SBC-FUNDED COSTS	76,846,425	76,846,425	81,418,523	81,418,523	93,786,635	410,316,530	82,063,306
INCREMENTAL CHP	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	50,000,000	10,000,000
Administration (8 %)	937,866	937,866	937,866	937,866	937,866	4,689,330	
Evaluation (5%)	586,166	586,166	586,166	586,166	586,166	2,930,830	
NYS Cost Recovery Fee (1.7%)	199,297	199,297	199,297	199,297	199,297	996,485	
TOTAL ADMIN COSTS (NON-SBC CHP)	1,723,329	1,723,329	1,723,329	1,723,329	1,723,329	8,616,645	1,723,329
TOTAL INCREMENTAL CHP	11,723,329	11,723,329	11,723,329	11,723,329	11,723,329	58,616,645	11,723,329
WORKFORCE DEVELOPMENT	6,000,000	6,000,000	6,000,000	6,000,000	-	24,000,000	
Administrative Costs	562,720	562,720	562,720	562,720	-	2,250,879	
Evaluation/M&V Costs	351,700	351,700	351,700	351,700	-	1,406,800	
NYS Cost Recovery Fee	119,578	119,578	119,578	119,578	-	478,312	
TOTAL ADMIN COSTS (WORKFORCE DEVELOPMENT)	1,033,998	1,033,998	1,033,998	1,033,998	-	4,135,991	1,033,998
TOTAL WORKFORCE DEVELOPMENT	7,033,998	7,033,998	7,033,998	7,033,998	-	28,135,991	7,033,998
ADVANCED CLEAN POWER	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000	2,000,000
Administration (8 %)	187,573	187,573	187,573	187,573	187,573	937,866	
Evaluation (5%)	117,233	117,233	117,233	117,233	117,233	586,166	
NYS Cost Recovery Fee (1.7%)	39,859	39,859	39,859	39,859	39,859	199,297	
TOTAL ADMIN COSTS (ADVANCED CLEAN POWER)	344,666	344,666	344,666	344,666	344,666	1,723,329	344,666
TOTAL ADVANCED CLEAN POWER	2,344,666	2,344,666	2,344,666	2,344,666	2,344,666	11,723,329	2,344,666
SMART GRID PROGRAM	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000	2,000,000
Administration (8 %)	187,573	187,573	187,573	187,573	187,573	937,866	
Evaluation (5%)	117,233	117,233	117,233	117,233	117,233	586,166	
NYS Cost Recovery Fee (1.7%)	39,859	39,859	39,859	39,859	39,859	199,297	
TOTAL ADMIN COSTS (SMART GRID PROGRAM)	344,666	344,666	344,666	344,666	344,666	1,723,329	344,666
TOTAL SMART GRID PROGRAM	2,344,666	2,344,666	2,344,666	2,344,666	2,344,666	11,723,329	2,344,666
ADVANCE BUILDING CONSORTIUM	600,000	600,000	600,000	600,000	600,000	3,000,000	600,000
Administration (8 %)	56,272	56,272	56,272	56,272	56,272	281,360	
Evaluation (5%)	35,170	35,170	35,170	35,170	35,170	175,850	
NYS Cost Recovery Fee (1.7%)	11,958	11,958	11,958	11,958	11,958	59,789	
TOTAL ADMIN COSTS (ADVANCE BUILDING CONSORTIUM)	103,400	103,400	103,400	103,400	103,400	516,999	103,400
TOTAL ADVANCE BUILDING CONSORTIUM	703,400	703,400	703,400	703,400	703,400	3,516,999	703,400
EMERGING TECHNOLOGY/ACCELERATED COMMERCIALIZATION	552,134	552,134	552,134	552,134	552,134	2,760,672	552,134
Administration (8 %)	51,783	51,783	51,783	51,783	51,783	258,914	
Evaluation (5%)	32,364	32,364	32,364	32,364	32,364	161,821	
NYS Cost Recovery Fee (1.7%)	11,004	11,004	11,004	11,004	11,004	55,019	
TOTAL ADMIN COSTS (ADVANCE BUILDING CONSORTIUM)	95,151	95,151	95,151	95,151	95,151	475,755	95,151
TOTAL ADVANCE BUILDING CONSORTIUM	647,285	647,285	647,285	647,285	647,285	3,236,427	647,285
GRAND TOTAL ALL COSTS	101,643,769	101,643,769	106,215,867	106,215,867	111,549,981	527,269,251	105,453,850

* With this approval, the Commission is not authorizing additional Administrative Costs, Evaluation, Measurement and Verification Costs or NYS Cost Recovery Fees. Instead, these items are listed here to show the level of funds, previously authorized in EEPs-1, that are to be transferred to the T&M Program.

APPENDIX 3
SUMMARY OF COMMENTS
PART 1 - SUMMARY BY TOPIC

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TOPICAL SUMMARY OF COMMENTS

Advanced Buildings

The Joint Utilities¹ generally support the Advanced Buildings Program described in NYSERDA's Strategic Initiatives petition, but propose that NYSERDA be required to work with the utilities on the planning of the program so that utilities and their customers can share in the benefits when utilities propose their own advanced buildings programs.

The Environmental Organizations² applaud the proposed stronger emphasis on deep energy savings pilots. They say that with aggressive savings goals and the plan to harness the power of efficiency to help meet customer energy demand far into the future, it is vital that programs drive for deeper and more holistic approaches to saving energy. The research, pilots and freedom for trial and error to determine the procedures and technologies that will bring down the cost of deep energy programs are the essence of NYSERDA's market transformation charge.

Combined Heat and Power (CHP) Funding

Use of EEPS Funds Generally

The Joint Utilities acknowledge that CHP is an efficient means of producing electricity and heat that reduces the demand for grid-supplied generation, but argue that it does not reduce electric usage and, therefore, should not be

¹ Comments filed jointly by Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, KeySpan Gas East Corporation d/b/a National Grid, and Central Hudson Gas and Electric Corporation.

² Comments filed jointly by PACE Energy and Climate Center, Natural Resources Defense Council, Northeast Energy Efficiency Partnerships and Sierra Club.

supported by EEPS funds. The Commission has consistently required that EEPS programs produce natural gas and electricity usage reductions. It applied this principle in rejecting EEPS funding for NYSERDA's CHP program in its original EEPS order. It is perplexing, the Joint Utilities say, that the Commission opened the door to possibly using EEPS funding for CHP in its October 24, 2012, T&MD order. There is no substantive difference between using EEPS funds directly for CHP and diverting funds from EEPS programs to be used for CHP. In either case, this would be a clear change in Commission policy which should not occur without a Commission analysis of the relative benefits of using EEPS for supply-side rather than end-use energy efficiency. The Commission should reject NYSERDA's assumption that the energy output of a CHP resource is comparable to saved energy that can be counted toward the EEPS electric goal. CHP makes more efficient use of the primary energy source, but does not typically reduce a customer's electric usage at the site. The Commission should not reverse its policy without notice, collaborative discussions and hearings if no consensus can be reached.

End-use energy efficiency, the Joint Utilities say, is the most cost-effective means of achieving the State's 15 x 15 goal. NYSERDA's average cost per MWh for the programs that achieved 98% of reported savings was less than half the cost claimed for efficiency savings derived from CHP. Energy efficiency is also a more effective means of reducing carbon emissions. The widely cited McKinsey study, Pathways to a Low-Carbon Economy, concluded that after available efficiency measures are applied, there is little additional carbon abatement from CHP or district heating. End-use energy efficiency is also likely a more cost-effective means of producing job growth and of reducing energy and environmental

cost burdens for low-income customers, and it is a more reliable means of reducing network load.

If CHP is paid for with funds diverted from EEPS, the Joint Utilities argue, the program should be required to pass the Total Resource Cost (TRC) test. For purposes of the test, the cost of obtaining the CHP benefits should be divided by avoided electric T&D line losses rather than the much larger number of MWh produced.

The Joint Utilities recognize that the CHP Performance Program may provide some amount of end-use gas energy efficiency savings. Therefore, they would support the use of gas EEPS funds to pay for gas end-use energy efficiency, but only to the extent NYSERDA has quantified the costs and benefits of doing so. The Commission should authorize supplemental comments and reply comments after such benefits have been quantified.

The Joint Utilities also recognize that the CHP Performance Program may produce certain benefits that could be counted toward achieving the EEPS electric goal and therefore justify funding from electric EEPS programs. If any credit is to be taken toward achieving the EEPS electric goal, such credit should be limited to the incremental improvement resulting from the CHP resource's energy production rather than the totality of that production. Total CHP production cannot be counted as electric usage savings because the output is still used by the host. Some savings may be achieved in the production through, for example, reduced line losses. If NYSERDA recalculates the cost of MWh savings achieved based on such incremental savings, the Commission should authorize supplemental comments and reply comments.

Endurant Energy and Energy Spectrum, Inc. each express concern with the Joint Utilities' comments. They say CHP is an initiative that has been thoroughly scrutinized and has been

more effective than any other in attracting private capital and reducing peak electric loads. Use of EEPS funds for CHP is reasonable, they argue, because the end result of CHP and energy efficiency programs is the same – a reduction of source energy usage and improvement in overall energy delivery efficiency. They see the utilities' filing as a self-serving attempt to commandeer EEPS funding for their own budgetary relief. The utilities have rarely been supportive of distributed generation, they argue. The Joint Utilities' call for evidentiary hearings on the CHP proposal ignores 18 months' of robust public comment and would needlessly delay funding for the initiative. Each month's delay potentially deprives the New York economy of \$5 million in private investment.

Dresser-Rand notes that the Joint Utilities object to the use of EEPS funds for CHP because the projects do not reduce electric usage, and it agrees that CHP replaces electricity from the grid. It says, however, that the CHP thermal component replaces thermal energy that would otherwise be generated by electricity, and that, in most cases, the percentage reduction in electric usage through thermal energy displacement would be more than what is derived from traditional energy efficiency improvements. The use of EEPS funds for CHP support, it argues, is within the definition of energy efficiency and electric usage reduction and should be approved without delay.

NYSERDA responds that the Joint Utilities are correct in asserting that there are energy resource differences between CHP generation and end-use efficiency savings, and that the Commission has previously rejected the use of EEPS funds to support CHP. Since 2001, however, the Commission has authorized the use of SBC funds to support CHP and has counted the energy savings in the SBC III wedge in calculating the jurisdictional

gap. There is no legal obstacle to the Commission's moving funds from the EEPS portfolio to the T&MD portfolio.

New York City argues that the Joint Utilities incorrectly characterize the proposed reallocation of funds to support CHP as requiring a change in Commission policy. Using funds formerly designated for EEPS programs would not make CHP an EEPS program and would not change the Commission's policy of excluding CHP facilities from EEPS. Furthermore, ample notice of the proposed funding was provided in notices published in the State Register and issued by the Secretary. The Joint Utilities' call for collaborative discussions, possibly followed by litigation would be an unduly protracted and unnecessary process.

New York City says the Joint Utilities' argument that CHP projects should be subject to the TRC test, if the proposed reallocation of funds is approved, is unwarranted. The CHP Performance Program is not an EEPS program. If, however, the Commission does decide to apply the TRC test to CHP projects, it should consider all of the benefits of the project, not merely the reduction in line losses as suggested by the Joint Utilities.

The Northeast Clean Heat and Power Institute (NECHPI) criticizes the Joint Utility comments as an effort to take back funding for the utilities' own purposes. It says the NYSERDA proposals are consistent with the policy developed through the SBC IV process. The Commission should not allow selection criteria to be modified in order to replace utility spending and to protect other activities of utilities through the use of funds managed by NYSERDA.

CHP development, NECHPI says, contributes to each of the five energy strategies laid out in the State Energy Plan of 2009. New York is in a leading position nationally with CHP

development, due in no small measure to NYSERDA programs. Approximately 90% of projects in the Con Edison territory from 2005-2010 were stimulated by NYSERDA programs leveraging substantial incremental investment.

NECHPI agrees with New York City that the total resource cost test applied at the individual measure level may foreclose some genuinely beneficial efficiency measures from being pursued. It notes that other states apply the test at the program level which facilitates CHP development.

The Joint Utilities' objection that NYSERDA has not justified or measured the "grid-supply benefits" of its CHP Performance Program in order to support the use of EEPS funds is based on an undefined and unexplained concept. Their call for further proceedings to address such benefits is unjustified at present. The Commission should reject the utilities' proposals for additional rounds of comments or even evidentiary hearings which could delay CHP funding for years further, resulting in job losses and lost business activity.

NECHPI disagrees with the Joint Utilities' argument that the only incremental benefit of CHP is the avoidance of line losses. It supports NYSERDA's position. Furthermore, the standby rate structure encourages operation of CHP during peak hours, reducing peak period line losses, which should be recognized as being of higher value than average line losses across all hours.

A strong impetus to expansion of CHP funding from these sources should be the mandate in New York City to convert 8,000-10,000 facilities from fuel oil to alternative sources, especially natural gas where it can be made accessible. This is an excellent opportunity to justify using gas EEPS funding as a source of support for CHP systems, such as those proposed for

eligibility by the NYSERDA CHP Performance Program Funding Plan petition.

Reallocation of Funds from the BOE and ERMM Programs

New York City continues to support full funding for the CHP initiative, but says that funding should not come at the expense of the Benchmarking and Operations Efficiency (BOE) and Electric Reduction in Master Metered (ERMM) buildings programs. Benchmarking and submetering are key components of the City's energy policies. Benchmarking is required for certain U.S. EPA programs, and the City's own initiatives will create demand for both benchmarking and submetering incentives. There are thousands of buildings in New York City that could benefit from the BOE program, suggesting that widespread opportunities remain for the program to achieve its full potential. Given that the BOE program was only launched in April of 2011 and is still in the ramp-up phase, termination based on low energy savings to date would be unfair.

New York City says NYSERDA takes the "defeatist position" that the target audience for the ERMM program is limited and that undertaking submetering is a challenging proposition. The assertion that the target audience for ERMM is limited is difficult to credit as there are over 15,000 buildings encompassed within the City's Greener, Greater Buildings Plan.

The contention that the ERMM and BOE programs are more costly than CHP on a dollars per MWh basis is irrelevant, the City argues. The energy savings that NYSERDA claims for the CHP initiative do not reflect reduced energy consumption, which is the primary thrust of the EEPS initiative. Accordingly, the City urges the Commission to direct NYSERDA to find an alternate revenue stream to fully fund its CHP initiative.

The Joint Utilities add that diverting EEPS funds to CHP also raises sector equity issues. The ERMM and BOE programs benefit a broad cross-section of customers including the owners and residents of multi-family buildings, while only a very small group of customers can take advantage of incentives to invest in CHP. They say the Commission should reject NYSERDA's proposed 70% reduction to the budget and energy savings target for the ERMM program. The Joint Utilities agree with New York City that NYSERDA is taking a "defeatist attitude" in assuming it cannot do a better job in reaching its target audience. Individual metering of dwelling units furthers the utilities' goal of encouraging and promoting the efficient use of electricity, which provides the utilities with the opportunity to mitigate investments in costly infrastructure projects that are borne by all customers.

NYSERDA responds that it did consider sector equity in proposing to re-allocate funds for the CHP program from programs in the multifamily and commercial-industrial sectors. It notes that the multifamily sector will likely benefit from CHP installations. Furthermore, the Commission considered sector equity in terms of the allocation of funds, not on the basis of energy savings achieved.

The Environmental Organizations support NYSERDA's recommended proposal for funding CHP, but only if funds for benchmarking are not decreased, but rather are, at a minimum, maintained as the BOE program is transferred to the FlexTech program. They say it is also important that NYSERDA ensures that it has an adequate budget to fulfill the objectives of the ERMM program, as programs to reduce electricity use in multi-family buildings, where residents currently do not pay directly for their electricity usage, are critical.

UTC Power also supports NYSERDA's recommended funding for CHP. It says CHP is the most effective and least costly path to reducing MWh demand and fostering the development of more clean technology projects, such as fuel cells utilized for CHP applications.

Other Funding Sources for CHP

The Joint Utilities would not object to funding CHP from sources other than EEPS. They recommend using the proceeds of RGGI auctions of carbon emission allowances or funds from the T&MD portfolio. The Joint Utilities particularly question whether the \$18 million allocated annually to the T&MD Market Development initiative remains warranted given that changing codes and standards are making certain energy efficiency investments that once were voluntary effectively mandatory. CPA says the Joint Utility Group proposal that funds for CHP be found from sources other than EEPS (such as RGGI) would simply delay the initiative with a time-consuming additional process. Contrary to the utilities' contention, the NYSERDA proposal is fully consistent with Commission policy, which CPA supports.

As to the suggested use of RGGI funds for CHP, NYSERDA responds that the RGGI portfolio of programs has been developed through an extensive stakeholder process. It is designed to fill gaps not covered by other state-funded and NYSERDA-administered programs and is not intended to supplant existing funded activities. As CHP was identified for funding in previous SBC portfolios and authorized for funding by the Commission, it does not meet the RGGI portfolio criteria.

CHP Project Selection Criteria

Con Edison Steam Sales

Consumer Power Advocates (CPA) expresses concern that NYSERDA's proposal to limit displacement of Con Edison steam

sales by CHP projects to 3% of Con Edison's annual sales is too low. It says the level should be set at 5% of annual sales, about one-half the displacement found in a CPA study of CHP potential.

The Joint Utilities argue that the annual sales approach taken by both NYSERDA and CPA ignores the more important issue of impact on minimum load. Con Edison must maintain a minimum load in order to run efficiently. To avoid negative impacts on the Con Edison steam system, the criterion for suspension of the CHP program should be based on impact on minimum load rather than on annual steam sales, and should be set at 50 Mlb/hour. A lower steam system minimum load has the potential to lower the overall environmental performance of the steam system; lower the overall efficiency of East River Units 1 and 2 and the BNYP units and the steam system as a whole; increase start-up fuel costs; result in incremental conversion costs to be paid to BNYP and force operation of the BNYP units in ways that are not covered by the existing contract or do not conform with the existing contract. If an annual sales measure is to be used, the Joint Utilities say, it should be set at 500 MMLb, which more closely corresponds to the utilities' recommended maximum allowable reduction in minimum load of 50 Mlb/hour.

CPA agrees that NYSERDA's annual steam sales loss metric does not adequately address minimum load conditions on the Con Edison steam system, but says the 50 Mlb/hour standard suggested by the utilities is unsupported. It urges that an annual criterion as proposed by NYSERDA be used until Con Edison provides data and analysis to support an hourly minimum. NYSERDA responds that minimum load information is not readily available to customers, developers or NYSERDA. This lack of

access to information would likely impede project development if a minimum load criterion were established.

Stand-by Steam Service

The Joint Utilities argue that NYSERDA's proposed 110 MMlb/year threshold for requiring CHP customers to take standby steam service from Con Edison should be reduced to the 14 MMlb/year level at which steam customers are required to be demand billed. CPA responds that the Joint Utilities provide no basis for extending standby tariffs to all CHP projects in demand metered buildings.

CPA argues that the addition of a requirement that customers displacing more than 110 MMlb/year of steam take SC4 standby service is unnecessary, as the Con Edison tariff already defines under what conditions standby service must be taken by any customer, not just CHP plants. Further conditions are not necessary. The Customer Sited Supply Program defined in Rider G to the Con Edison tariff was developed over two years and carefully balances the interests of the utility, ratepayers and consumers seeking energy alternatives such as CHP. It urges rejection of the even lower threshold proposed by the Joint Utilities.

NYSERDA argues that its proposal reasonably balances the opportunity for CHP development with concerns for impacts on the Con Edison system.

NO_x Emission Standards

The Joint Utilities urge that the NO_x emission standards for CHP installations supported by customer funds be made more stringent. The reasoning underlying NYSERDA's proposed 1.6 pounds per MWh, they say, is outdated. Average emissions from fossil fuel powered central generating stations in the Con Edison service territory have declined from 1.6 pounds to 1.2 pounds per MWh since the Commission approved the 1.6 pound per

MWh rate in 2006. Distributed generation resources, particularly those incented by customer-provided SBC funds, should be held to stringent environmental standards. California has implemented a NO_x emissions standard of .07 pounds/MWh that reflects current technology. The Commission should no longer wait for NYSDEC action and ignore the effect of CHP units on local ambient air quality.

NYSERDA responds that the proposed NO_x standard for CHP installations was established by Commission order supported by SEQRA analysis. It is an equipment-based standard that supplements the DEC's facility-based permitting by setting an upper limit for CHP units. It does not need to be tightened as suggested by the Joint Utilities.

NECHPI says that the Commission should not "expand its jurisdiction" to lower the NO_x emissions rate for CHP. The level was set in 2005 and has been used for a number of other purposes. Changing it goes well beyond consideration of CHP funding and could delay the program for years.

Notice

The Joint Utilities recommend that the Commission require NYSERDA to consult with Con Edison on the impact of displaced sales and report to the Commission when minimum load is in jeopardy. They also argue that NYSERDA be required to notify Con Edison when applications for CHP systems are received from customers located within 250 feet of a steam main to ensure that customers accurately understand their options. CPA argues that these requirements are unnecessary as the long process for CHP projects includes notification to the utility of changes in load.

Additional Requirements

The Joint Utilities argue that NYSERDA should modify its proposed criteria for the CHP program to require that

potential recipients of CHP funding first implement all end-use energy efficiency measures shown by a facility audit to be more cost-effective than the proposed CHP installation. In addition, the CHP Performance Program should be targeted to areas of the utility grid that are in need of additional support, with incentives increased where grid benefits are maximized.

NYSERDA's open enrollment approach provides no price signal as to where CHP resources would most benefit the T&D system. Such targeting is already being used in the RPS Regional Program.

New York City argues that the amendments to NYSERDA's project selection criteria recommended by the Joint Utilities should be rejected. While each, individually, has some merit, they are overbroad and would impede CHP development. For example, while the adoption of energy efficiency measures is a desirable objective, mandating that potential CHP customers first implement all cost-effective measures recommended by an energy audit could increase total project costs unnecessarily, and discourage CHP development.

EEPS Targets

Targets Generally

The Joint Utilities say that the Commission should recognize that the target reductions proposed by NYSERDA jeopardize achievement of 15 x 15. NYSERDA, they say, should be required to supply more data to support requested target reductions. NYSERDA lists reasons, but does not quantify how those reasons produced the reductions. NYSERDA should be required to provide more support for the lack of symmetry between goal reductions and budget changes.

The proposed target reductions also impair the ability of other program administrators to obtain Step 2 awards under the Commission's utility financial incentives mechanism. If

NYSERDA's goals are reduced, the goals for calculating Step 2 awards should be as well.

Similarly, the net-to-gross factors used by NYSERDA should not be different from those used by other program administrators. All EEPS program administrators currently use the Commission-mandated .90 ratio. NYSERDA uses several different NTG conventions in its petition, producing inconsistent results. NYSERDA should be required to convert all program net savings in its proposal using the .90 factor. NYSEG/RG&E also support the use of the same net-to-gross factors for all program administrators when comparing savings achievements.

NYSERDA responds that it supports the premise that evaluation adjustment factors should be applied in a consistent manner across all program administrators. It disagrees with the Joint Utilities' assertion that NYSERDA has applied factors inconsistently. Its choice of factors is based on Commission guidance calling for the use of a .90 net-to-gross factor until a more accurate factor is established through evaluation. Where programs have been significantly modified, NYSERDA has used the .90 factor, believing that past evaluation-based factors are no longer relevant.

Multiple Intervenors (MI) is very concerned with the relief sought in the petitions. It says NYSERDA proposes substantial reductions in the projected level of energy savings for programs approved previously by the Commission, and in some cases also proposes to increase spending on programs that are now projected to result in the same or fewer savings than had been targeted. It appears that the Commission's prior decisions to approve implementation of these programs were based on faulty information and/or overly-optimistic savings projections. If the Commission approves the program modifications set forth in

the NYSERDA and/or utility petitions, then it also should provide a discussion of why such changes are necessary now, a discussion of how the process of establishing reasonable program budgets and targets will be improved on a prospective basis, and a reevaluation of the threshold TRC score necessary for an efficiency program to be deemed "cost-effective." If program targets must be reduced because prior savings projections were excessive, this supports MI's contention that programs should be implemented only when the benefit-cost ratio provides a "cushion" of at least 1.5 or 1.25.

Proposals to reduce targets with little or no reduction in budgets, MI argues, suggest that programs are much less cost-effective than anticipated. If the Commission authorizes NYSERDA and/or the Utilities to modify program budgets and/or savings targets, then it should ensure that program savings targets are adjusted in reasonable proportion to program budget adjustments. It should not authorize program administrators to increase or maintain program budgets while reducing program savings targets, particularly when such reductions are substantial.

If the large number of existing programs is leading to less cost-effective programs, the solution may be to implement fewer programs, rather than continuing to pay more to save less. The Commission should reexamine whether it makes sense, in the current economic environment, to increase or continue existing customer collections levels if savings levels are declining materially.

If the Commission determines that NYSERDA and/or the utilities may adjust efficiency program costs or savings targets, then it should, at a minimum, re-evaluate the TRC "score" for each program, as modified. Where the proposed modification would adjust either a program budget or savings

target by a material amount or adjust the budget and savings target in a disproportionate manner, an updated TRC analysis should be a compulsory prerequisite to Commission approval. The Commission should decline to approve any modified EEPS program that "fails" the TRC test.

NYSEG/RG&E state that the conditions leading NYSERDA to request significant target reductions have constrained the ability of all EEPS program administrators to achieve targets modeled prior to those conditions. Therefore, any reductions provided to NYSERDA should be considered for all program administrators. In addition, the Commission's policy of transparency in evaluating program savings and benefits should be continued.

Point-of-Sale Lighting Program

New York City urges the Commission not to approve NYSERDA's proposal to convert its highly successful EEPS Point-of-Sale (POS) Lighting Program into a market transformation program better suited for implementation under the T&MD portfolio. The program should be focused on established and cost-effective lighting technologies with a greater emphasis on obtaining higher penetration rates in New York City. If NYSERDA seeks to implement a market transformation program to increase the acceptance and use of LED bulbs - which may well be a worthy goal given the rapid technological progress now being made in the LED lighting sector - it should do so under the auspices of the SBC rather than by compromising one of the most successful existing EEPS programs.

In addition, New York City argues, higher priority should be given to lighting, generally, in New York City, where a large number of readily accessible opportunities exist for cost-effective, efficient lighting measures. It says the Commission should direct NYSERDA to coordinate with Green Light

New York in order to reduce interference and confusion among similar but disconnected programs.

The Environmental Organizations assert that the 2011 Commission decision to end programs for standard CFLs was premature and out of step with other states in the region. That decision leaves significant cost-effective savings potential untapped given that recent data indicate only 36% of sockets in the Northeast region are supplied with high efficiency lighting. A better approach would be to include LEDs and specialty CFLs as well as continuing to support spiral CFLs. The Environmental Organizations recommend that the Commission invite NYSERDA to propose a program that better reflects the current status of this market.

The Joint Utilities also urge the Commission to reject NYSERDA's proposal to convert the Residential POS Lighting Program from a resource acquisition program into a market transformation program with a larger budget but a reduction in the energy savings target of over 85%. The Joint Utilities agree with New York City that if a market transformation program for LED lighting is pursued, it should be funded under the T&MD portfolio rather than compromising the successful EEPS program. NYSERDA should continue to support resource acquisition with, perhaps, a more diverse universe of lighting measures that could include CFLs and LEDs.

Furthermore, the Joint Utilities say, NYSERDA's request for its proposed target reduction is not adequately supported. Neither the Petition nor NYSERDA's June 25, 2012, letter explain why the \$18.03 average EEPS I cost per MWh is a better indicator of likely EEPS II costs than the \$13.98 estimate based on the calendar 2011 budget and goals. Since 2011 data is the most recent and presumably most accurate,

NYSERDA's proposed targets should be adjusted based on that information.

EEPS Program Coordination

The Environmental Organizations contend that multiple program administrators competing in the same market space is not working. A program delivery structure in which many different parties are responsible for similar program offerings creates customer confusion, results in program overlap, and, in the end, undermines the ability to reach full savings potential. Efforts of program administrators should be much more fully integrated and coordinated than they are at present. The Environmental Organizations believe that it would be an enormous improvement for New York to create a formal and permanent structure akin to the stakeholder advisory boards that operate in neighboring states.

The Environmental Organizations believe that the data collection and reporting burdens for program administrators have been far greater in New York than in other high-achieving efficiency states. Commission efforts to ensure public understanding of the progress being made are commendable, but need to be balanced with an effort not to hinder program administrators with excessive reporting requirements. Program administrators should be able to move reasonable volumes of funding between program budgets and be able to propose and have quickly reviewed any mid-term program modifications. A well-functioning stakeholder board could facilitate such changes and reduce undue burdens while ensuring the wise use of ratepayer dollars.

NYSEG and RG&E agree that the current program reporting and technical requirements should be streamlined. The Implementation Advisory Group (IAG) membership, they say, is best positioned to suggest incremental modifications to EEPS

requirements, and to identify and implement positive changes in reporting and other data requirements.

The Joint Utilities do not support the creation of another EEPS advisory group as suggested by the Environmental Organizations. Broad stakeholder input, they say, can be obtained through the regulatory process and the EEPS Evaluation Advisory Committee; current coordination efforts are not falling short of what is needed. More work needs to be done, but the Implementation Advisory Group is the appropriate body to identify and to implement incremental modifications to EEPS requirements. Creation of another advisory board to govern EEPS would result in duplicate and potentially confusing efforts and is unlikely to improve the EEPS process.

Energy Storage Initiative

The Joint Utilities support NYSERDA's proposed use of SBC funding as seed money for a New York State energy storage technology hub. The Joint Utilities believe that energy storage, once costs and durability have been improved, will play a leading role in demand response solutions, which can help avoid or defer the need for capital investment in their electric systems. Brookhaven National Laboratory's focus on addressing fundamental materials science issues is what is needed to dramatically enhance battery lifetimes.

The Environmental Organizations also support the proposal.

Multifamily Performance Program

New York City says the Commission should direct NYSERDA to maintain consistent funding for, and implementation of, its multifamily performance program (MPP). The failings of the MPP are in large part attributable to many program changes, a lengthy period of complete suspension of the program, and the imposition of less desirable incentives. The City agrees with

NYSERDA that the policy decision to require that each and every energy savings measure meet the strict TRC cost-benefit test has had the perverse result of foreclosing the pursuit of some genuinely beneficial efficiency measures. New York City continues to believe that the better public policy would be to adopt an aggregate building approach that would allow lighting and other such measures with a positive TRC ratio to subsidize the use of other beneficial, but less cost-effective, energy efficiency measures. Energy program developers and contractors, and the residential building owners and managers whom they serve, must be offered consistent, predictable program options in order to realize the full energy savings potential from each building that participates in the MPP.

Non-Jurisdictional Wedges

The Environmental Organizations agree with NYSERDA that some energy efficiency savings that can no longer be counted toward EEPS targets are not actually lost. They support the suggestion that the Commission consider establishing a new non-jurisdictional wedge that could account for savings achieved as result of market transformation. While such an exercise may require some time and resources to achieve, they say, it is worth pursuing. In addition, the Environmental Organizations call on the Commission to revisit the non-jurisdictional wedges of its original 15 x 15 order. They argue that these wedges can and must be better integrated into the process and the Commission should provide stakeholders and the public at large with regular updates on where things stand with those other important initiatives.

Refunds to Ratepayers

MI argues that surplus SBC and EEPS customer collections should be returned to customers. Very high surcharges imposed on customers are extremely detrimental to

economic development efforts. Difficult economic conditions continue to make this a sensitive time for energy-intensive businesses. MI urges the Commission to reduce the overall cost to customers of the EEPS and SBC initiatives.

Solar Photovoltaic Initiative

The proposal by NYSERDA to apply \$10 million in uncommitted SBC III funds to support programs aimed at reducing the "balance of system" costs for photovoltaic (PV) installations is strongly supported by the Joint Utilities. They contend that financing and the overall complexity of the process of installing solar PV in New York City are prime reasons for the relatively low level of installations there as compared to neighboring regions.

Solar One says the program will support continued development of the solar PV industry in the State. The Environmental Organizations also support the proposal.

Workforce Development

The proposal to use \$24 million in uncommitted EEPS-1 funds to support a workforce development initiative is strongly supported by the users and providers of workforce training. Six local International Brotherhood of Electrical Workers/National Electric Contractors Association Joint Apprenticeship and Training Committees from across the State report that NYSERDA programs have enabled their members to be trained in the most current technologies, and that such training might not have been available without NYSERDA funding. The Altamont Program, Workforce Development Institute, New Buffalo Impact, Northeast Parent and Child Society, Solar One, Urban League of Rochester and YouthBuild Coalition all cite the benefits of the program in overcoming barriers for disadvantaged workers to obtain skills relevant to the growing field of clean energy. The Building Performance Contractors Association notes that smaller companies

have difficulty growing because of the amount of training needed to meet advanced building performance standards, and says NYSERDA support has been critical to overcoming these barriers.

New York City also supports the initiative saying that the need for workforce development opportunities in the City exceeds the City's capacity to provide them.

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SUMMARY BY COMMENTER

Initial Comments

The Altamont Program, Inc.

The Altamont Program provides basic green skills training, academic preparation and a career ladder to clients and participants. Altamont urges approval of the workforce development initiative which it says will provide needed technical skills to the workforce, overcome barriers to training experienced by many individuals, and will expand the existing energy efficient training infrastructure.

Building Performance Contractors Association (BPCA)

BPCA is a not-for-profit statewide trade association of more than 200 building performance contractors, energy auditors, home energy raters, building scientists, engineers, architects and consultants. It supports the workforce development initiative. Smaller companies have difficulty growing because of the amount of training needed to reach the standards of the Building Performance Institute and the Residential Energy Services Network. NYSERDA's support has been critical, sometimes making the difference between success and failure. Proper training can also be a safety issue as homes are tightened.

City of New York

The Commission should not approve NYSERDA's proposal to convert its highly successful EEPS Point-of-Sale (POS) Lighting Program into a market transformation program better suited for implementation under the T&MD portfolio. The program should be focused on established and cost-effective lighting technologies with a greater emphasis on obtaining higher penetration rates in New York City. If NYSERDA seeks to implement a market transformation program to increase the

acceptance and use of LED bulbs - which may well be a worthy goal given the rapid technological progress now being made in the LED lighting sector - it should do so under the auspices of the SBC rather than by compromising one of the most successful existing EEPS programs.

In addition, New York City is concerned that NYSERDA's lighting efforts in New York City, generally, and its interaction with Green Light New York, specifically, may not receive the priority treatment they deserve. There remain a large number of readily-accessible projects to target in New York City with cost-effective, efficient lighting measures; lighting accounts for a very substantial proportion of New York City's total energy consumption; and thousands of buildings have yet to install lighting upgrades. The Commission should direct NYSERDA to coordinate its efforts with Green Light New York in order to achieve existing program savings targets because, absent such collaboration, interference and confusion resulting from implementation of similar but disconnected programs may impede the success of all parties' efforts.

Previously, the City advocated for the Combined Heat and Power (CHP) Initiative to be approved by the Commission at the funding level proposed by NYSERDA, and continues to support the implementation of this program at the same funding level. That funding should not, however, come at the expense of the Benchmarking and Operations Efficiency (BOE) and Electric Reduction in Master Metered (ERMM) buildings programs. Benchmarking and submetering are key components of the City's energy policies, and benchmarking is required for certain U.S. EPA programs. The City's Greener, Greater Buildings Plan (GGBP) will create demand for incentives provided by the BOE and ERMM programs. NYSERDA has not provided any analysis, substantive discussion, or justification for its proposal, and given that

the BOE program was only launched in April of 2011 and is still in the ramp-up phase, termination based on low energy savings to date would be unfair. There are thousands of buildings in New York City that could benefit from the BOE program, suggesting that there remain widespread opportunities for it to achieve its full potential.

With respect to ERMM, NYSERDA takes the "defeatist position" that the target audience for this program is limited, and undertaking submetering is a challenging proposition. One possible reason for low performance of the program may be that NYSERDA removed information about it from its website, eliminating a major channel for disseminating information about it. The assertion that the target audience for ERMM is limited is difficult to credit as there are over 15,000 buildings in the City encompassed within the GGBP.

The contention that the ERMM and BOE programs are more costly than CHP on a dollars per MWh basis is irrelevant. The energy savings that NYSERDA claims for the CHP initiative do not reflect reduced energy consumption, which is the primary thrust of the EEPS initiative. Accordingly, the Commission should direct NYSERDA to find an alternate revenue stream to fully fund its CHP initiative.

The Commission should approve NYSERDA's workforce development initiative. Continued funding for the initiative remains necessary to address the market demand for training programs. The need for workforce development opportunities in New York City exceeds the City's current capacity to provide such training. NYSERDA's initiative can address this need.

The Commission should direct NYSERDA to maintain consistent funding for, and implementation of, its multi-family performance program (MPP). The failings of the MPP are in large part attributable to many program changes, a lengthy period of

complete suspension of the program, and the imposition of less desirable incentives. The City agrees with NYSERDA that the policy decision to require that each and every energy savings measure meet the strict TRC cost-benefit test has had the perverse result of foreclosing genuinely beneficial efficiency measures from being pursued. It continues to believe that the better public policy would be to adopt an aggregate building approach that would allow lighting and other such measures with a positive TRC ratio to subsidize the use of other beneficial, but less cost-effective, energy efficiency measures. Energy program developers and contractors, and the residential building owners and managers whom they serve, must be offered consistent, predictable program options in order to realize the full energy savings potential from each building that participates in the MPP.

CUNY Institute for Urban Systems Building Performance Lab (CIUS BPL)

CIUS BPL, a training provider, supports the workforce development initiative. Over 20 years of research has shown that operational measures can produce building energy savings of 10% to 30%, and operator training is essential for these results to be realized. Properly trained staff is essential to long-term efficiency savings as equipment acquired through incentives will decline in performance without proper maintenance and monitoring.

Training changes behavior toward energy efficiency. Without state support, CIUS BPL offerings would be significantly curtailed. Training in energy efficiency has been shown repeatedly to meet and exceed tests for public or regulated utility expenditure. It is a public good deserving of public support.

Training saves energy both directly through the actions taken by trained individuals and indirectly by affecting

decisions and actions that lead to energy projects and investments. This second tier of impacts has not been quantitatively assessed but should be considered.

Consumer Power Advocates (CPA)

CPA is an association of large, non-profit universities and medical institutions in New York City. Its members buy gas, electricity and steam from Con Edison, and some are actively considering CHP projects.

CPA is concerned with NYSERDA's proposals to reduce the impact of the CHP program on Con Edison steam sales. The proposed limit on displacement of Con Edison steam sales of 660 MMB/year is too low. It should be set at 5% of annual sales, about one-half the displacement found in a CPA study of CHP potential. The addition of a requirement that customers displacing more than 110 MMB/year of steam take SC4 standby service is unnecessary as the Con Edison tariff already defines under what conditions standby service must be taken by any customer, not just CHP plants. Further conditions are not necessary. The Customer Sited Supply Program defined in Rider G to the Con Edison tariff was developed over two years and carefully balances the interests of the utility, ratepayers and consumers seeking energy alternatives such as CHP.

Electrical Joint Apprenticeship and Training Committees of Watertown, Rochester, the Hudson Valley, Central New York, Tri-Cities and Nassau and Suffolk Counties

These training committees supported by both the National Electric Contractors Association and IBEW local unions all express the view in separate comments that NYSERDA training programs have enabled their members to be trained in the most current technologies, and that such training might not have been available without NYSERDA funding. They urge support for the workforce development initiative.

Environmental Organizations

In joint comments, the Pace Energy and Climate Center, Natural Resources Defense Council, Northeast Energy Efficiency Partnerships and Sierra Club focus on the issues they see as being most important in determining whether New York is able to meet its EEPS goals and the broader 15 x 15 initiative. They say that the current approach of having multiple program administrators competing in the same market space is not working. A program delivery structure in which many different parties are responsible for similar program offerings creates customer confusion, results in program overlap, and, in the end, undermines the ability to reach full savings potential. Efforts of program administrators should be much more fully integrated and coordinated than they are at present. The Environmental Organizations believe that it would be an enormous improvement for New York to create a formal and permanent structure akin to the stakeholder advisory boards that operate in neighboring states.

The 2011 decision to end programs for standard CFLs was premature and out of step with other states in the region. It leaves significant cost-effective savings potential untapped, given that recent data indicate only 36% of sockets in the Northeast region are supplied with high efficiency lighting. A better approach would be to include LEDs and specialty CFLs as well as continuing to support spiral CFLs. The Environmental Organizations recommend that the Commission invite NYSERDA to propose a program that better reflects the current status of this market.

The Environmental Organizations believe that the data collection and reporting burdens for program administrators have been far greater in New York than in other high-achieving efficiency states. Commission efforts to ensure public

understanding of the progress being made are commendable, but need to be balanced with an effort to avoid hindering program administrators with excessive reporting requirements. Program administrators should be able to move reasonable volumes of funding between program budgets and be able to propose and have quickly reviewed any mid-term program modifications. A well-functioning stakeholder board could facilitate such changes and reduce undue burdens while ensuring the wise use of ratepayer dollars.

The Environmental Organizations agree with NYSERDA that some energy efficiency savings that can no longer be counted toward EEPS targets are not actually lost. They support the suggestion that the Commission consider establishing a new non-jurisdictional wedge that could account for savings achieved as result of market transformation. While such an exercise may require some time and resources to achieve, it is worth pursuing. In addition, the Environmental Organizations call on the Commission to revisit the non-jurisdictional wedges of its original 15 x 15 order. These wedges can and must be better integrated into the process and the Commission should provide stakeholders and the public at large with regular updates on where things stand with those other important initiatives.

The Environmental Organizations support NYSERDA's requested reallocation of uncommitted SBC funds for CHP and strategic initiatives including Advanced Clean Power, Smart Grid and Advanced Building. They applaud the proposed stronger emphasis on deep energy savings pilots. They say that with aggressive savings goals and the plan to harness the power of efficiency to help meet customer energy demand far into the future, it is vital that programs drive for deeper and more holistic approaches to saving energy. The research, pilots and freedom for trial and error to determine the procedures and

technologies that will bring down the cost of deep energy programs are the essence of NYSERDA's market transformation charge.

The Environmental Organizations also support NYSERDA's recommended proposal for funding CHP, but only if funds for benchmarking are not decreased, but rather are, at a minimum, maintained as the BOE program is transferred to the FlexTech program. It is also important that NYSERDA ensures that it has an adequate budget to fulfill the objectives of its ERMM program, as programs to reduce electricity use in multi-family buildings where residents currently do not pay directly for their electricity usage are critical.

Joint Utilities

The Joint Utilities consist of Consolidated Edison Company of New York, Inc. (Con Edison), Orange and Rockland Utilities, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, and KeySpan Gas East Corporation d/b/a National Grid, and Central Hudson Gas and Electric Corporation. They continue to support the CHP Performance Program but oppose diverting electric EEPS funds to pay for it. Funds could be more suitably obtained from RGGI or T&MD programs, or NYSERDA might make an argument for use of a small amount of EEPS funds based on and limited to the value of avoided transmission and distribution line losses.

CHP is an efficient means of producing electricity and heat that reduces the demand for grid supplied generation, but it does not reduce electric usage. The Commission has consistently required that EEPS programs produce natural gas and electricity usage reductions. It applied this principle in rejecting EEPS funding for NYSERDA's CHP program in its original EEPS order. It is perplexing that the Commission opened the door to possibly using EEPS funding for CHP in its October 24,

2011, T&MD order. There is no substantive difference between using EEPS funds directly for CHP and diverting funds from EEPS programs to be used for CHP. In either case, this would be a clear change in Commission policy which should not occur without a Commission analysis of the relative benefits of using EEPS for supply-side rather than end-use energy efficiency. The Commission should reject NYSERDA's assumption that the energy output of a CHP resource is comparable to saved energy that can be counted toward the EEPS electric goal. CHP makes more efficient use of the primary energy source, but does not typically reduce a customer's electric usage at the site. The Commission should not reverse its policy without notice; collaborative discussions should be conducted and hearings should be held if no consensus can be reached.

End-use energy efficiency is the most cost-effective means of achieving the State's 15 x 15 goal. NYSERDA's average cost per MWh for the programs that achieved 98% of reported savings was less than half the cost claimed for efficiency savings derived from CHP. Energy efficiency is also a more effective means of reducing carbon emissions. The widely cited McKinsey study, Pathways to a Low-Carbon Economy, concluded that after available efficiency measures are applied, there is little additional carbon abatement from CHP or district heating. End-use energy efficiency is also likely a more cost-effective means of producing job growth and of reducing energy and environmental cost burdens for low-income customers, and it is a more reliable means of reducing network load.

If CHP is paid for with funds diverted from EEPS, it should be required to pass the TRC test. For purposes of the test, the cost of obtaining the CHP benefits should be divided by avoided electric T&D line losses rather than the much larger number of MWh produced.

Diverting EEPS funds to CHP raises sector equity issues. The ERMM and BOE programs benefit a broad cross-section of customers including the owners and residents of multi-family buildings, while only a very small group of customers can take advantage of incentives to invest in CHP.

The Joint Utilities recognize that the CHP Performance Program may provide some amount of end-use gas energy efficiency savings. Therefore, they would support the use of gas EEPS funds to pay for gas end-use energy efficiency, but only to the extent NYSERDA has quantified the costs and benefits of doing so. The Commission should authorize supplemental comments and reply comments after such benefits have been quantified.

The Joint Utilities recognize that the CHP Performance Program may produce certain benefits that could be counted toward achieving the EEPS electric goal and therefore justify funding from electric EEPS programs. If any credit is to be taken toward achieving the EEPS electric goal, such credit should be limited to the incremental improvement resulting from the CHP resource's energy production rather than the totality of that production. Total CHP production cannot be counted as electric usage savings because the output is still used by the host. Some savings may be achieved in the production through, for example, reduced line losses. If NYSERDA recalculates the cost of MWh savings achieved based on such incremental savings, the Commission should authorize supplemental comments and reply comments.

The Joint Utilities would not object to funding CHP from sources other than EEPS. They recommend using the proceeds of RGGI auctions of carbon emission allowances, or SBC T&MD funding. The Joint Utilities particularly question whether the \$18 million allocated annually to the T&MD Market Development initiative remains warranted given that changing codes and

standards are making certain energy efficiency investments that once were voluntary effectively mandatory.

NO_x emission standards for CHP installations supported by customer funds should be made more stringent. The reasoning underlying NYSERDA's proposed 1.6 pounds per MWh is outdated. Average emissions from fossil fuel powered central generating stations in the Con Edison service territory have declined from 1.6 pounds to 1.2 pounds per MWh since the Commission approved the 1.6 pound per MWh rate in 2006. Distributed generation resources, particularly those incented by customer-provided SBC funds, should be held to stringent environmental standards. California has implemented a NO_x emissions standard of .07 pounds/MWh that reflects current technology. The Commission should no longer wait for NYSDEC action while ignoring the effect of CHP units on local ambient air quality.

The Commission should recognize that the target reductions proposed by NYSERDA jeopardize achievement of 15 x 15 and the ability of other program administrators to obtain Step 2 awards under the Commission's utility financial incentives mechanism. If NYSERDA's goals are reduced, the goals for calculating Step 2 awards should be, as well.

NYSERDA should be required to supply more data to support requested target reductions. It lists reasons, but does not quantify how those reasons produced the reductions. NYSERDA should be required to provide more support for the lack of symmetry between goal reductions and budget changes.

The net-to-gross (NTG) factors used by NYSERDA should not be different from those used by other program administrators. All EEPs program administrators currently use the Commission-mandated .90 ratio. NYSERDA uses several different NTG conventions in its petition, producing

inconsistent results. NYSERDA should be required to convert all program net savings in its proposal using the .90 factor.

NYSERDA should modify its proposed criteria for the CHP program. Potential recipients of CHP funding should be required to implement all end-use energy efficiency measures shown by a facility audit to be more cost-effective than the proposed CHP installation. The CHP Performance Program should be targeted to areas of the utility grid that are in need of additional support, with incentives increased where grid benefits are maximized. NYSERDA's open enrollment approach provides no price signal as to where CHP resources would most benefit the T&D system. Such targeting is already being used in the RPS Regional Program.

To avoid negative impacts on the Con Edison steam system, the criterion for suspension of the CHP program should be based on impact on minimum load rather than on annual steam sales, and should be set at 50 Mlb/hour. Con Edison must maintain a minimum load in order to run efficiently. A lower steam system minimum load has the potential to lower the overall environmental performance of the steam system; lower the overall efficiency of East River Units 1 and 2 and the BNYP units and the steam system as a whole; increase start-up fuel costs; result in incremental conversion costs to be paid to BNYP and force operation of the BNYP units in ways that are not covered by the existing contract or do not conform with the existing contract. If an annual sales measure is to be used, the Joint Utilities say, it should be set at 500 MMLb, which more closely corresponds to the utilities' recommended maximum allowable reduction in minimum load of 50 Mlb/hour.

In addition, NYSERDA's proposed 110 MMLb/year threshold for requiring CHP customers to take standby steam service from Con Edison should be reduced to the 14 MMLb/year

level at which steam customers are required to be demand billed. NYSERDA should also be required to notify Con Edison when applications for CHP systems are received from customers located within 250 feet of a steam main to ensure that customers accurately understand their options.

The Joint Utilities generally support the Advanced Building Program described in NYSERDA's Strategic Initiatives petition, but propose that NYSERDA be required to work with the utilities on the planning of the program so that utilities and their customers can share in the benefits when utilities propose their own advanced buildings programs.

The Joint Utilities strongly support the focus of NYSERDA on reducing balance of system costs (which includes the cost of permitting and interconnection) for the installation of solar photovoltaics. Financing and the overall complexity of the process of installing solar PV in New York City are prime reasons for the relatively low level of installations in New York City as compared to neighboring regions.

The Joint Utilities support NYSERDA's proposed use of SBC funding as seed money for a New York State energy storage technology hub. The Joint Utilities believe that energy storage, once costs and durability have been improved, will play a leading role in demand response solutions, which can help avoid or defer the need for capital investment in their electric systems. Brookhaven National Laboratory's focus on addressing fundamental materials science issues is what is needed to dramatically enhance battery lifetimes.

Multiple Intervenors (MI)

MI is very concerned with the relief sought in the petitions, many of which propose substantial reductions in the projected level of energy savings for programs approved previously by the Commission, and a number of which also propose

to increase spending on programs projected to result in the same or fewer savings than had been targeted. It appears that the Commission's prior decisions to approve implementation of these programs were based on faulty information and/or overly-optimistic savings projections. If the Commission approves the program modifications set forth in the NYSERDA petitions, then it also should provide a discussion of why such changes are necessary now, a discussion of how the process of establishing reasonable program budgets and targets will be improved on a prospective basis, and a reevaluation of the threshold TRC score necessary for an efficiency program to be deemed cost-effective. If program targets must be reduced because prior savings projections were excessive, this reduction supports MI's contention that programs be implemented only when the benefit-cost ratio provides a "cushion" of at least 1.5 or 1.25.

Proposals to reduce targets with little or no reduction in budgets suggest that programs are much less cost-effective than anticipated. If the Commission authorizes NYSERDA and/or the utilities to modify program budgets and/or savings targets, then it should ensure that program savings targets are adjusted in reasonable proportion to program budget adjustments. It should not authorize program administrators to increase or maintain program budgets while reducing program savings targets, particularly when such reductions are substantial.

If the large number of existing programs is leading to less cost-effective programs, the solution may be to implement fewer programs, rather than continuing to pay more to save less. The Commission should reexamine whether it makes sense, in the current economic environment, to increase or continue existing customer collections levels if savings levels are declining materially.

If the Commission determines that NYSERDA and/or the utilities may adjust efficiency program costs or savings targets, then it should, at a minimum, re-evaluate the TRC "score" for each program, as modified. Where the proposed modification would adjust either a program budget or savings target by a material amount, or adjust the budget and savings target in a disproportionate manner, an updated TRC analysis should be a compulsory prerequisite to Commission approval. The Commission should decline to approve any modified EEPS program that "fails" the TRC test.

Surplus SBC and EEPS customer collections should be returned to customers. Very high surcharges imposed on customers are extremely detrimental to economic development efforts. Difficult economic conditions continue to make this a sensitive time for energy-intensive businesses. MI urges the Commission to reduce the overall cost to customers of the EEPS and SBC initiatives.

Northeast Clean Heat and Power Initiative (NECHPI)

NECHPI strongly encourages the Commission to approve budgets and action items that continue to foster the growth of combined heat and power technology, deployment and market creation. NYSERDA should also be required to work with utilities on the planning of the Deep Energy Savings Initiative.

New Buffalo Impact (NBI)

NBI is a nonprofit residential building performance contractor and weatherization assistance provider in western New York. NYSERDA's workforce development support has been vital to expanding career opportunities for disadvantaged workers in green jobs. It is essential that the rollout of programs to generate demand for energy efficiency measures be accompanied by continued skills development programming of the type that would be supported by NYSERDA's workforce development initiative.

Northeast Parent and Child Society

Northeast Parent and Child has made a significant investment in providing weatherization and energy efficiency services in the City and County of Schenectady. It urges approval of funding for NYSERDA's workforce development initiative. NYSERDA support has allowed Northeast Parent and Child to train disadvantaged workers in skills leading to BPI certification, and has assisted it in expanding its energy efficiency workforce training capabilities. The result has been more energy efficiency assistance for underserved, low-income local residents, but much work remains to be done.

NYSEG/RG&E

The conditions leading NYSERDA to request significant target reductions have constrained the ability of all EEPS program administrators to achieve targets modeled prior to those conditions. Therefore, any reductions provided to NYSERDA should be considered for all program administrators. In addition, the Commission's policy of transparency in evaluating program savings and benefits should be continued.

NYS YouthBuild Coalition

The Coalition represents a group of programs that work with out-of-school youth providing hands-on construction skills training and GED preparation. With limited resources, the YouthBuild programs have been very fortunate to have support from the NYSERDA workforce development initiative. The Coalition strongly supports approval of NYSERDA's request to reallocate funds to workforce development as a means of providing the future workforce with skills to serve the energy needs of New York communities.

Solar One

Solar One is a BPI-approved testing center, is EPA Renovation, Repair and Painting rule accredited, and is an Urban Green U.S. Green Building Council GPRO instructional provider offering training and testing for the Building Performance Institute's Building Analyst and Energy Efficient Building Operator certificates. It supports the allocation of uncommitted EEPS funds for workforce development which will expand the skills of existing workers and to address the needs of workers with "barriers to employment." Solar One also supports NYSERDA's proposal for the use of uncommitted SBC III funds and agrees that addressing balance-of-system costs will help support continued development of the solar industry in New York. Solar One also supports the use of uncommitted EEPS funds for CHP to help bring advanced clean energy technologies to scale, and for the EmPower program for which federal funding sources have been substantially reduced.

Urban League of Rochester

The Urban League supports funding of the workforce development initiative which will assist programs like the League's YouthBuild program to provide a successful pathway out of poverty for participants. It urges the Commission to approve the requested reallocation of uncommitted funds to help provide the workforce with the technical skills required to serve the needs of programs funded through EEPS.

UTC Power

NYSERDA's first alternative for funding the CHP program should be approved. It is the most effective and least costly path to reducing MWh demand and fostering the development of more clean technology projects, such as fuel cells utilized for CHP applications.

Workforce Development Institute

The Workforce Development Institute's mission is to help working families throughout New York find and maintain meaningful employment with living wages. Education and training is a major factor in assuring a pathway to prosperity for all New Yorkers. The implementation of on-bill financing for energy efficiency improvements and programs such as Green Jobs Green New York will increase demand for a trained workforce. NYSERDA's proposal to fund workforce development will help meet it.

Reply Comments

City of New York

The Joint Utilities incorrectly characterize the proposed reallocation of funds to support CHP as requiring a change in Commission policy. Using funds formerly designated for EEPS programs would not make CHP an EEPS program and would not change the Commission's policy of excluding CHP facilities from EEPS. Furthermore, ample notice of the proposed funding was provided in notices published in the State Register and issued by the Secretary. The Joint Utilities' call for collaborative discussions, possibly followed by litigation, would be an unduly protracted and unnecessary process.

The Joint Utilities' argument that if the proposed reallocation of funds for CHP is approved, then CHP projects should be subject to the TRC test is unwarranted. The CHP Performance Program is not an EEPS program. If, however, the Commission decides to apply the TRC test to CHP projects, it should consider all of the benefits of the project, not merely the reduction in line losses as suggested by the Joint Utilities.

Amendments to NYSERDA's project selection criteria recommended by the Joint Utilities should be rejected. While

each, individually, has some merit, they are overbroad and would impede CHP development. For example, while the adoption of energy efficiency measures is a desirable objective, mandating that potential CHP customers first implement all cost-effective measures recommended by an energy audit could increase total project costs unnecessarily, and discourage CHP development.

Consumer Power Advocates

CPA says the Joint Utilities proposal that funds for CHP be found from sources other than EEPS (such as RGGI) would simply delay the initiative with a time-consuming additional process. Contrary to the utilities' contention, the NYSERDA proposal is fully consistent with Commission policy, which CPA supports.

CPA agrees that NYSERDA's annual steam sales loss metric does not adequately address minimum load conditions on the Con Edison steam system, but says the 50 Mlb/hour standard suggested by the utilities is unsupported. CPA advocates use of NYSERDA's annual criteria until Con Edison provides data and analysis to support an hourly minimum. The Joint Utilities provide no basis for extending standby tariffs to all CHP projects in demand metered buildings. Their proposal that Con Edison be notified of all CHP funding application is unnecessary as the long process for CHP projects includes notification to the utility of changes in load.

Dresser-Rand

Dresser-Rand is a New York State manufacturer of CHP systems. Dresser-Rand recognizes that CHP electric generation replaces electricity from the grid, but points out that the thermal component of CHP replaces thermal energy that would otherwise be generated by electricity. In most cases, the percentage reduction in electric usage through thermal energy displacement would be more than what is derived from traditional

energy efficiency improvements. The use of EEPS funds for CHP support is within the definition of energy efficiency and electric usage reduction and should be approved without delay.

Endurant Energy

Energy Spectrum, Inc.

Endurant Energy and Energy Spectrum, in separate comments, each state that it has been "a champion" of CHP in New York City. With NYSERDA support, Endurant has leveraged \$5.5 million in ratepayer funds with over \$38 million in private investment for CHP, removing over 10 MW of peak demand; Energy Spectrum has leveraged \$2 million into over \$10 million in private investment, removing over 3 MW of peak demand. Both companies are concerned with the Joint Utilities' filing challenging funding for CHP, an initiative that has been thoroughly scrutinized and has been more effective than any other in attracting private capital and reducing peak electric loads. Use of EEPS funds for CHP is reasonable because the end result of CHP and energy efficiency programs is the same – a reduction of source energy usage and improvement in overall energy delivery efficiency. The utilities' filing is a self-serving attempt to commandeer EEPS funding for their own budgetary relief. They have rarely been supportive of distributed generation. The Joint Utilities' call for evidentiary hearings on the CHP proposal ignores 18 months of robust public comment and would needlessly delay funding for the initiative. Each month's delay potentially deprives the New York economy of \$5 million in private in private investment.

Joint Utilities

The Commission should reject NYSERDA's proposal to convert its POS Lighting Program from a resource acquisition program into a market transformation program with a larger

budget but a greater than 85% reduction in the energy savings target. The Joint Utilities agree with New York City that if a market transformation program for LED lighting is pursued, it should be funded under the SBC rather than compromising the successful EEPS program. NYSERDA should continue to support resource acquisition, perhaps with a more diverse universe of lighting measures that could include CFLs and LEDs.

NYSERDA's request for its proposed target reduction for the Residential POS program is not adequately supported. Neither the Petition nor NYSERDA's June 25, 2012, letter explains why the \$18.03 average EEPS I cost per MWh is a better indicator of likely EEPS II costs than the \$13.98 estimate based on the calendar 2011 budget and goals. Since 2011 data is the most recent and presumably most accurate, NYSERDA's proposed targets should be adjusted based on that information.

The Commission should reject NYSERDA's proposed 70% reduction to the budget and energy savings target of its ERMM Program. The Joint Utilities agree with New York City that NYSERDA is taking a "defeatist attitude" in assuming it cannot do a better job in reaching its target audience. Individual metering of dwelling units furthers the utilities' goal of encouraging and promoting the efficient use of electricity, which provides the utilities with the opportunity to mitigate investments in costly infrastructure projects that are borne by all customers.

The Commission should reject the CPA proposal to increase NYSERDA's proposed limitation on displacement of Con Edison steam sales from 3% of annual sales to 5%. The total steam sales displacement approach advocated by NYSERDA and CPA ignores the more important issue of the impact on minimum load. If the Commission uses the displaced sales approach, the limit for the five-year CHP Performance Program should be 500

Mmlb/year, which more closely correlates with the 50 Mlb/hour minimum load reduction recommended by the Joint Utilities. In addition, the Commission should require NYSERDA to consult with Con Edison on the impact of displaced sales and report to the Commission when minimum load is in jeopardy.

Northeast Clean Heat and Power Initiative

NECHPI continues to strongly support NYSERDA's CHP initiative and urges the Commission not to be deterred from approving NYSERDA's funding proposals by the Joint Utility comments which appear to be an effort to take back funding for their own purposes. The proposals are consistent with the policy developed through the SBC IV process.

CHP development contributes to each of the five energy strategies laid out in the State Energy Plan of 2009. New York is in a leading position nationally with CHP development, due in no small measure to NYSERDA programs. Approximately 90% of projects in the Con Edison territory from 2005-2010 were stimulated by NYSERDA programs leveraging substantial incremental investment.

NECHPI strongly supports measures to reduce balance of system installation and interconnection costs for all forms of distributed generation technology, not just photovoltaics. It also encourages greater access to energy storage funding for deployment behind the meter.

NECHPI agrees with New York City that the total resource cost test applied at the individual measure level may foreclose some genuinely beneficial efficiency measures from being pursued. It notes that other states apply the test at the program level which facilitates CHP development.

The Joint Utilities' objection that NYSERDA has not justified or measured the "grid-supply benefits" of its CHP Performance Program in order to support the use of EEPS funds is

based on an undefined and unexplained concept. Their call for further proceedings to address such benefits is unjustified at present. The Commission should reject the utilities' proposals for additional rounds of comments or even evidentiary hearings which could delay CHP funding for years further, resulting in job losses and lost business activity.

NECHPI disagrees with the Joint Utilities' argument that the only incremental benefit of CHP is the avoidance of line losses. It supports NYSERDA's position. Furthermore, the standby rate structure encourages operation of CHP during peak hours, reducing peak period line losses, which should be recognized as being of higher value than average line losses across all hours.

A strong impetus to expansion of CHP funding from these sources should be the mandate in New York City to convert 8,000-10,000 facilities from fuel oil to alternative sources, especially natural gas where it can be made accessible. This is an excellent opportunity to justify using gas EEPS funding as a source of support for CHP systems, such as those proposed for eligibility by the NYSERDA CHP Performance Petition.

The Commission should not "expand its jurisdiction" to lower the NO_x emissions rate for CHP. The level was set in 2005 and has been used for a number of other purposes. Changing it goes well beyond consideration of CHP funding and could delay the program for years.

The Commission should not allow selection criteria to be modified in order to replace utility spending and protect other activities of utilities through the use of funds managed by NYSERDA. This proposition speaks for itself.

NYSEG/RG&E

NYSEG/RG&E support the use of the same net-to-gross factors for all program administrators when comparing savings

achievements. They agree with the Environmental Organizations' comments that the current program reporting and technical requirements should be streamlined. The Implementation Advisory Group (IAG) membership is best positioned to suggest incremental modifications to EEPS requirements, and to identify and implement positive changes in reporting and other data requirements.

The Companies do not support the creation of another EEPS advisory group as suggested by the Environmental Organizations. Broad stakeholder input can be obtained through the regulatory process and the EEPS Evaluation Advisory Committee; current coordination efforts are not falling short of what is needed. More work needs to be done, but the Implementation Advisory Group is the appropriate body to identify and to implement incremental modifications to EEPS requirements. Creation of another advisory board to govern EEPS would result in duplicate and potentially confusing efforts and is unlikely to improve the EEPS process.

NYSERDA

The Joint Utilities are correct in asserting that there are energy resource differences between CHP generation and end-use efficiency savings, and that the Commission has previously rejected the use of EEPS funds to support CHP. However, the Commission has, since 2001, authorized the use of SBC funds to support CHP and has counted the energy savings in the SBC III wedge in calculating the jurisdictional gap. There is no legal obstacle to the Commission's moving funds from the EEPS portfolio to the T&MD portfolio.

The proposed NO_x standard for CHP installations was established by Commission order supported by SEQRA analysis. It is an equipment-based standard that supplements the DEC's facility-based permitting by setting an upper limit for CHP

units. It does not need to be tightened as suggested by the Joint Utilities.

CPA argues that the 3% limit for annual Con Edison steam sales displaced over the five-year term of the CHP Performance Program would limit development potential and should be increased to 5%. CPA also advocates rejection of the proposed requirement that projects displacing more than 110 MMLb/year be required to take standby service from Con Edison. Con Edison contends that the 110 MMLb/year threshold should be lowered to 14 MMLb. As to both criteria, NYSERDA believes that its proposal reasonably balances the opportunity for CHP development with concerns for impacts on the Con Edison system.

Con Edison contends that protection of its steam system requires that the impact of CHP installations be assessed in terms of impact on minimum load rather than on annual sales. Minimum load information is not readily available to customers, developers or NYSERDA. This lack of access to information would likely impede project development if a minimum load criterion were established.

The Joint Utilities argue that the net-to-gross factors used by NYSERDA should not be different from those established for use by other EEPS program administrators, and they suggest that NYSERDA has applied factors inconsistently. NYSERDA supports the premise that evaluation adjustment factors should be applied in a consistent manner across all program administrators. Its choice of factors is based on Commission guidance calling for the use of a .90 net-to-gross factor until a more accurate factor is established through evaluation. Where programs have been significantly modified, NYSERDA has used the .90 factor, believing that past evaluation-based factors are no longer relevant.

The Joint Utilities suggest that the CHP Performance Program could be paid for with RGGI funds. NYSERDA responds that the RGGI portfolio of programs has been developed through an extensive stakeholder process. It is designed to fill gaps not covered by other state-funded and NYSERDA-administered programs and is not intended to supplant existing funded activities. As CHP was identified for funding in previous SBC portfolios and authorized for funding by the Commission, it does not meet the RGGI portfolio criteria.

The Joint Utilities argue that the proposed reduction in targets for EEPS-2 programs raise "sector equity" issues because a larger share of the reductions will come from the residential sector. NYSERDA says that it did consider sector equity in proposing to re-allocate funds for the CHP program from programs in the multifamily and commercial-industrial sectors. It notes that the multifamily sector will likely benefit from CHP installations. Furthermore, the Commission assessed sector equity on a funding basis, not an energy savings basis.

The Joint Utilities statement that "the four programs making up over 98% of NYSERDA's reported savings [have] an average cost per MWH of \$104.38" is misleading. The table relied on showed only programs for which NYSERDA was requesting target changes and is not an exhaustive list of EEPS-1 programs. Furthermore, the number is distorted by inclusion of the large, low-cost CFL Expansion Program, which is not being carried forward in the same form into EEPS-2.

PART 3 - LIST OF COMMENTERS

Commenter	<u>Initial Comments</u>	<u>Reply Comments</u>
Altamont Program, Inc.	X	
Building Performance Contractors Association	X	
City of New York (Reply)	X	X
Consumer Power Advocates (Reply)	X	X
CUNY Institute for Urban Systems Building Performance Lab	X	
Dresser-Rand		X
Endurant Energy		X
Energy Spectrum		X
Joint Apprentice and Training Committee, Rochester (IBEW Local Union 86)	X	
Joint Apprenticeship and Training Committee for the Electrical Industry of Nassau and Suffolk counties	X	
Joint Apprenticeship and Training Committee, Central New York	X	
Joint Apprenticeship and Training Committee, Hudson Valley (IBEW Local Union 363)	X	
Joint Apprenticeship and Training Committee, Tri-City (IBEW Local Union 236)	X	
Joint Apprenticeship and Training Committee, Watertown (IBEW Local Union 910)	X	
Joint Utilities (Consolidated Edison Company of New York, Inc., Orange and Rockland Utilities, Inc., Niagara Mohawk Power Corporation d/b/a National Grid, The Brooklyn Union Gas Company d/b/a National Grid NY, KeySpan Gas East Corporation d/b/a National Grid, and Central Hudson Gas and Electric Corporation) (Reply)	X	X
Multiple Intervenors	X	
New Buffalo Impact	X	
Northeast Clean Heat and Power Initiative (Reply)	X	X
Northeast Parent and Child Society	X	
New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation (Reply)	X	X
New York State Energy Research and Development Authority		X
PACE Energy and Climate Center, Natural Resources Defense Council, Northeast Energy Efficiency Partnerships and Sierra Club	X	
Solar One	X	
Urban League of Rochester	X	
UTC Power	X	
Workforce Development Institute	X	
YouthBuild Coalition	X	