

**Consolidated Edison Electric Rate Case
Action Plan**

Pursuant to Case 04-E-0572

(2005-2008)

Filed: August 16, 2005

Prepared by:

NYSERDA

and the Collaborative

For the Public Service Commission of the State of New York

Consolidated Edison Electric Rate Case Action Plan

TABLE OF CONTENTS

List of Abbreviations	1
Introduction	5
Collaborative Member Organizations	6
Action Items	7
Action Plan	
I. Clean DG.....	9
II. TRC	15
Marketing	
III. Coordinated	24
IV. Company	27
V. Program Enhancements	29
VI. NYISO	31
VII. Measurement and Verification	32
VIII. NYPA	33
IX. Non-Electric Chiller Load Issues.....	33
X. ICAP Tagging Issues.....	34
XI. Legislative and Regulatory Initiatives	34
XII. EE/LM/DG Allocation Methodology.....	35
Conclusion	41
Status of NYSERDA’s System Benefits Charge Program	42

Consolidated Edison Electric Rate Case Action Plan

LIST OF ABBREVIATIONS

This document contains numerous abbreviations and acronyms. For purposes of this document, the definition of those terms, with supporting description if necessary, follows:

CHP	Combined Heat and Power is the simultaneous generation of usable heat and power (usually electricity) in a single process.
CIPP	The NYSERDA Commercial Industrial Performance Program is an open solicitation, first-come first-serve, performance –based program offering incentive payments to contractors, often called energy service companies, or ESCOs, that develop projects delivering verifiable annual electric energy savings. The program incentivizes pre-qualified equipment as well as custom measures. A comprehensive energy audit estimating potential energy savings is required. Projects typically enter into a 1-year measurement and verification plan, at the end of which, incentives can be adjusted based on actual delivered consumption reduction and the estimated amount in the energy audit.
CEM	The NYSERDA Comprehensive Energy Management Services Program is an open solicitation, first-come first-serve program offering technical, regulatory, educational, and financial incentives to applicants installing advanced metering for energy management equipment and demand load control devices in multifamily buildings. With advanced metering, a building owner can provide more detailed usage information to tenants and charge them for service on a basis that more closely tracks market prices than average commodity rates. Such pricing, if implemented, would encourage residential energy efficiency and load management. Implementation time varies among projects but averages one year from approved application to final inspection.
CO ₂	Carbon Dioxide
Collaborative	The group of interested parties, listed on page 7, participating in the development of this Action Plan.
Commission	New York State Public Service Commission
Company	Consolidated Edison Company of New York, Inc.
CPA	Consumer Power Advocates
CPB	New York State Consumer Protection Board

DADRP	The NYISO's Day-Ahead Demand Response Program allows energy users to bid their load reductions into the day-ahead energy market just as generators do. Offers that are determined to be economic are paid the market clearing price. DADRP allows flexible loads to effectively increase the amount of supply in the market and thereby moderate prices.
DG	Distributed Generation is the installation, upgrade, or utilization of electricity generating equipment that occurs at or near the site of consumption that results in reduced customer peak demand. For purposes of this Action Plan, excess installed capacity may not be exported to the grid for the TP. Excess installed capacity above the customers peak demand may participate in DR programs offered by the Company or the NYISO, in which case it may be eligible under the SWP.
DG/CHP	The NYSERDA Distributed Generation and Combined Heat and Power Program is a competitive program offered yearly that selects applications based upon a technical review by NYSERDA staff as well as external parties including the Commission. It has several categories, one of which is demonstration of DG/CHP technologies. The goal of this Program is to develop a portfolio of projects showcasing the application of various technologies across market sectors.
DOE	United States Department of Energy
DPS	New York State Department of Public Service
DR	Demand Response is demand reduction that occurs only during times of emergency when an event is called by the NYISO or utility.
DSM	Demand Side Management
EDRP	Emergency Demand Response Program is a NYISO program that pays retail electricity customers to reduce load during specific times when electric service in New York State could be jeopardized.
EE	Energy Efficiency is long term, permanent, peak demand reduction. This includes mechanical equipment installations typically in the form of retrofits, replacements, upgrades, or permanent dedicated switching to an alternate (i.e., non-electric) fuel or energy source. It is considered permanent for the lifetime of the equipment. Dual fuel or steam options may be eligible as EE provided NYSERDA or the Company, as appropriate, is assured that the alternate fuel will be utilized during peak periods.
EPA	United States Environmental Protection Agency
ESDC	Empire State Development Corporation
ETP	The NYSERDA Enabling Technology Program is a program designed to expand demand response in the NYISO wholesale electricity marketplace. NYSERDA solicits proposals for projects that emphasize the use of innovative technologies and

organizational structures to better aggregate and enable end-use participation in the DADRP, SCR/ICAP, or the EDRP.

JS	Joint Supporters
LBMP	The term LBMP means the price of energy bought or sold in the NYISO energy markets at a specific location.
LEED	Leadership in Energy and Environmental Design
LM	Load Management is short term peak demand reduction. LM is the utilization of a technological improvement to shift, curtail, respond or otherwise reduce peak demand when requested by the NYISO or utility in response to grid constraints, grid reliability or price responsiveness or to reduce electric peak demand charges. Technological improvements include, but are not limited to, energy management systems, advanced meters, communications, direct load control equipment scheduling programs, or dual fuel or alternative energy source equipment. Generators operating primarily when called for reliability based DR are considered LM but will be subject to the Clean DG threshold level being developed as part of this Action Plan.
LSE	Load Serving Entity
MW	megawatts
MWh	megawatt hours
NAESCO	National Association of Energy Service Companies
NCP	The NYSERDA New Construction Program is an open solicitation, first-come first-serve program offering technical and financial incentives to applicants to specify and install selected energy-efficiency equipment or to erect buildings that exceed the energy efficiency of standard design practice.
NRDC	Natural Resources Defense Council
NO _x	Nitrogen oxides
NYCEDC	New York City Economic Development Corporation
NYECC	New York Energy Consumers Council
NYPA	New York Power Authority
NYISO	New York Independent System Operator
NYSDEC	New York State Department of Environmental Conservation

NYSERDA	New York State Energy Research and Development Authority
Order	Order Adopting Three-Year Rate Plan, issued by the Commission in Case 04-E-0572, <u>Consolidated Edison Company of New York, Inc. – Electric Rates on March 24, 2005</u> .
Pace	Pace Law School Energy Project
Plan	This Action Plan
PLRP	NYSERDA’s Peak Load Reduction Program is an open solicitation, first-come first-serve, whose objective is to improve electric system reliability and system load factor during summer peak periods.
SBC	System Benefits Charge program administered by NYSERDA on behalf of the Commission.
SCR/ICAP	Special Case Resources/Installed Capacity is the NYSIO’s reliability based demand response program that provides monthly payments to aggregators with client loads capable of being interrupted upon demand, or distributed generators, rated 100 kW or higher, who receive payments from NYISO in return for NYISO’s ability, over a specified contract period, to interrupt their loads when needed to reduce energy consumption.
SO ₂	Sulfur Dioxide
SWP	System-Wide Program. The program that NYSERDA is responsible for as part of the Order and this Action Plan.
T&D	Transmission and distribution
TP	Targeted Program. The program that the Company is responsible for as part of the Order and this Action Plan.
TRC	Total Resource Cost

Consolidated Edison Electric Rate Case Action Plan

INTRODUCTION

On March 24, 2005, the New York State Public Service Commission adopted a rate plan for Consolidated Edison Company of New York, Inc.'s electric business. One aspect of the rate plan was the establishment of DSM goals to be obtained through DSM programs administered by NYSERDA and the Company. The objective of the DSM programs is to enable demand resources to supplant a portion of the load growth anticipated to take place over the term of the rate plan.

Pursuant to Section J (2) of the rate plan (Appendix I in the Order), an Action Plan addressing issues associated with the expansion of existing demand management programs and identification of additional DSM opportunities with the Company's service territory is to be developed through a collaborative process. Section J (2) specifies 16 Action Items to be addressed in the Plan to support the goals of the DSM program. Each of these Action Items was discussed by the Collaborative and is documented in this Plan.

The Order names NYSERDA as administrator of an SWP with a goal of achieving 150 MW of demand reductions in the Company's service territory through EE, DG, and LM initiatives. The Order also provides that the Company will administer a TP with the goal of achieving an additional 150 MW of demand reductions in targeted networks requiring T&D upgrades. Pursuant to the Order, the Company will transfer to NYSERDA any expected shortfall in obtaining 150 MW under the TP.

The Collaborative Process

All active parties to the Con Edison rate proceeding and other interested parties were invited to participate in the collaborative process. An initial Collaborative meeting was convened on April 20, 2005 in New York City. Follow-up meetings of the Collaborative were held May 10-11, June 1, June 23, and July 13, 2005. These meetings focused on development of the Action Plan. Future meetings will be convened as needed.

At the April 20th Collaborative meeting, the 16 Action Items described in Section J(2) of the rate plan were reviewed and individually assigned to subgroups comprised of interested parties from the Collaborative. Each subgroup provided a presentation and lead discussion of the assigned issue at the two-day Collaborative meeting held May 10-11, 2005.

NYSERDA and the Company are tasked with developing implementation plans for each of their intended programs. Each will utilize the Collaborative, to the extent possible, in dedicated implementation plan meetings. The Company has held meetings to discuss its TP with Collaborative members. While the Company's earlier meetings were open to the public, subsequent discussion was limited to designer-only attendees. In order to protect the integrity of the procurement process for the TP, potential bidders were excluded from the designer-only meetings.

Working Groups

As a result of the two-day Collaborative meeting in May, the Collaborative established three working groups, Clean DG, TRC Test, and Allocation. A fourth working group for Marketing was established as a result of the June 1, 2005 Collaborative meeting. The Collaborative recognized the importance of these topics and the potentially complex issues involved and determined that dedicated discussion time should be assigned to each. The working groups met outside of the Collaborative meetings and reported back with appropriate information. Each group consisted of interested parties bringing diverse interests and perspectives to the discussions. Each group's goal was to attempt to reach consensus on the issue(s) identified.

COLLABORATIVE MEMBER ORGANIZATIONS

The following list contains names of parties that attended at least one Collaborative meeting or were represented by another party at the Collaborative meeting(s).

Association for Energy Affordability
Consolidated Edison Company of New York, Inc.
ConEdison Solutions
ConsumerPowerline
CPA
CPB
Delta Pressure Generation Systems LLC
DPS
Gas Technology Institute
Hess Microgen
Itron
Joint Supporters
 The E Cubed Company, LLC
 Allied Utility Network LLC/Allied Energy LLC
 American DG, Inc.
 Capstone Turbine Corp.
 Chevron Energy Solutions, a unit of ChevronTexaco
 Climate Energy, LLC
 Coast Intelligen, Inc.
 Cummins Engine Co., Inc.,
 Energy Concepts Engineering, PC
 Energy Spectrum, Inc.
 EnerNOC, Inc.
 Equity Office Properties Trust, L.L.C.
 Fairway Operating Company, LLC
 KeySpan Energy
 NAESCO
 Northern Power Company, Inc.
 Red Hook Stores, LLC
 Redwood Power Company, Inc.
 RETX Energy Services, Inc.

Siemens Building Technologies, Inc.
Tecogen, Inc.
UTC Power (Division of United Technologies)
Levco Energy
NRDC
NYSDEC
NYS Assembly
NYCEDC
NYECC
NYISO
NYPA
NYSERDA
Pace
Plug Power
Port Authority of NY and NJ
Public Utility Law Project
Resource Insight, Inc.
SAIC
Select Energy Services, Inc.
Small Customer Marketer Coalition
Sterling Planet
Utility Workers Union of America, Local 1-2
Wedgemere Group
Westchester County

ACTION ITEMS

The Rate Plan contains a list of specific items on which the Collaborative should focus in developing the Action Plan, as follows:

- a. identifying and analyzing methods to increase participation in EE/DG/LM programs;
- b. reviewing Con Edison's process for promoting existing EE/DG/LM to determine if and how further enhancements can be made;
- c. offering recommendations to NYSERDA and NYISO for new initiatives designed to further stimulate participation in their EE/DG/LM programs;
- d. reviewing general DG and EE/DG/LM programs for possible coordination of those efforts with a targeted EE/DG program;
- e. developing a strategy for cooperation among relevant parties (*e.g.*, Con Edison, NYSERDA, NYISO) on a regular basis to maximize the effectiveness and avoid duplication of existing and future EE/DG/LM programs;
- f. assessing the Company's EE-related outreach and education efforts to determine if further enhancements can be made;

- g. reviewing and, if necessary, enhancing the skills of the Company's account executives with regards to EE/DG/LM issues;
- h. tracking the number of customer calls related to EE/DG/LM at a designated toll free number for demand management;
- i. developing potential marketing and sales plans to support program goals;
- j. reviewing existing measurement and verification protocols for use in tracking programs;
- k. coordinating with NYPA's EE/DG/LM initiatives;
- l. identifying the means and impediments to shifting load away from electric chillers to non-electric chillers and other technologies;
- m. developing a definition of clean DG for the purposes of the programs discussed in this Proposal, based on existing applicable regulations;
- n. examining the opportunity for ESCOs to adjust their installed capacity ("ICAP") buying requirements for any service classifications based on Company-approved, objective metrics and for offering customers the right to measure use at system peak for purposes of setting ICAP responsibility through an approved Meter Data Service Provider, taking into account the potential revenue impacts on customers and the Company;
- o. considering legislative and regulatory opportunities, such as improvements in energy building codes and establishing state and federal EE standards for residential and commercial products, that would achieve EE load reductions in Con Edison's service territory;
- p. maximizing the effectiveness of SBC II programs and seeking ways to expand them for use in the system-wide programs.

Consolidated Edison Electric Rate Case Action Plan

ACTION PLAN

The following section reports on the Collaborative results in the four working groups and in discussions of the 16 Action Items. Several issues overlapped among the working groups and action items so their results have been grouped for simplicity and clarity.

I. Clean DG Definition

Action Item m. Developing a definition of clean DG for the purposes of the programs discussed in this Proposal, based on existing applicable regulations;

The Clean DG working group was assigned responsibility of addressing Action Item m. The definition set forth in this Action Plan proposes to address issues affecting NYSERDA's and the Company's individual Implementation Plans. Members of this working group are:

- NYSERDA
- The Company
- CPB
- CPA
- JS
 - Northern Power
 - Energy Spectrum
- Pace
- NYCEDC
- NYSDEC
- NYECC
- NRDC
- NYPA

The Clean DG working group agreed that such a definition is intended only to establish standards for project funding eligibility as part of this Plan and is not to be considered a statewide rule or regulation. The regulatory authority for establishing statewide DG emissions standards resides with the NYSDEC and the Collaborative took into consideration the pending DEC DG emission rulemaking. Currently, the NYSDEC regulations are cap-by-rule with annual limits on NO_x emissions. Proposed regulations are performance based limits on lbs/MWh. The Commission has adopted, as an interim (*i.e.*, until the NYSDEC implements performance based limits) the following eligibility criterion for an exemption from electric standby service rates: an emission rate of no more than 4.4 lbs/MWh of NO_x coupled with a minimum 60% efficiency requirement. This temporary tariff exemption will not be available to customers commencing service after May 31, 2006.

There is consensus to conduct a technology review and a status review of any new NYSDEC rules that may impact the definition at 18 months from the date of the Order. There is consensus that the implementation plans should take a technology neutral approach with stepped incentives for

improved emissions and energy performance. Consensus was not achieved on defining the categories of DG, emissions threshold levels, and thermal recovery credit.

Categories of DG

Discussion occurred on the categorization of clean DG based on whether its purpose is for participating in a DR program(s). Two options are presented to the Commission for consideration.

1. The first option is to subject all DG to the same NO_x emissions threshold without accounting for the mode of operation of the system.
2. The second option is to establish two NO_x emissions thresholds, with DG used for DR purposes set at a less stringent NO_x emissions threshold than other types of DG (*e.g.*, baseloaded DG that runs on a continuous basis when a facility is in operation and peaker DG that runs part of the time based on owner needs).

All parties, with the exception of Pace and NRDC, recommend the second option.

The majority of the working group members (NYECC, NYCEDC, JS, NYSERDA, CPB, the Company) support a DR generation category as a critically important resource to maintaining grid reliability and avoiding grid disruptions. Most concur that use of DR generators should be limited to emergency and reliability events specifically called by the NYISO, NYPA or the Company.

- JS maintains that any limits on DR generators should be based on run time, not lbs/MWh. Specifically, the units should be limited to the total run time that would occur in any one year under these three conditions:
 1. Manufacturer specified operation and maintenance requirements
 2. Testing requirements of a state agency, (for example, testing requirements placed on health care facilities by the state)
 3. Emergency event requests made by the Company, NYPA or the NYISO

JS believe that using a run time limitation ensures that these units are used no more than is absolutely necessary to meet genuine emergency needs. They also state that this helps minimize emissions levels since in years when there are no "events", run times will be reduced to what is needed only for testing and maintenance.

However, JS also feel that if it should be decided that a lb/MWh type limit must be put in place the emissions levels set should not be so low as to eliminate the majority of new units from participating. To that end, JS suggest that these units meet current EPA Tier I standards for non-road equipment. They note that after-treatment or further reductions of emissions is not recommended as it would affect the performance of the units. They also point out that no state, not even California, requires after-treatment on emergency generator sets.

Finally, and most important, if standards need to be put in place JS feel they should only apply to new equipment in new installations so that older units can still participate when needed. JS would not support the use of such standards for existing units.

- Pace and NRDC are concerned that including a less stringent emissions threshold for DR generators would result in emissions significantly in excess of those anticipated under the

NYSERDA SWP because most DR generators burn diesel fuel. DR generation is not a category or mode of operation recognized by existing and anticipated NYSDEC regulations and NYSDEC permits would allow units to operate hundreds of hours more than is being considered under the NYSERDA SWP absent a legally enforceable permit limiting operations to the hours of emergency and reliability events. Pace and NRDC argue that it will be impossible for NYSERDA to police this category during these programs, let alone after the programs end. They argue that this could result in emissions in excess of anticipated emission levels for many years during the times of year when the Company's territory--a severe non-attainment area for ozone--can least afford excess emissions. Moreover, Pace and NRDC do not agree that DR generation is a critically important resource to maintaining grid reliability and avoiding grid disruptions. They contend that while DR is critically important, most DR under existing NYISO programs has not required backup generation. They note that there is a large, untapped potential for pre-cooling and post-cooling DR that does not require DR generators.

- NYECC recommends that NYSERDA work with the NYSDEC and NYISO in developing appropriate monitoring and tracking systems to alleviate the concern that DR generators would operate in excess of the permitted hours of operation.
- NYCEDC is concerned about DR generators running for additional hours beyond the minimum required to respond to calls and for routine maintenance. However, NYCEDC believes that this potential problem could be eliminated through the creation of an automated electronic reporting protocol and system that tracks the interval meters on the DR generators and reports run time data to NYSERDA and NYSDEC.
- The Company has suggested that concerns about the run-time of DR generators could be addressed by requiring the owner of a generator seeking an incentive as "clean DG" to enter into a voluntary (and enforceable) NYSDEC permit condition that would limit tons of NO_x emitted in a year (based on running hours and the generator's NO_x emission rate). Alternatively, the permit condition could specify the circumstances during which the generator would be allowed to operate, but NYSDEC has indicated that a tonnage limit would be more feasible for the agency to enforce. Either condition would apply in addition to the emission rate standard being discussed for DR DG.

Recommendation: NYSERDA recommends the second option. This promotes the installation of cleaner baseload and peaker DG while maximizing the potential of new DR generators to provide additional grid reliability during emergency situations. This recommendation also helps to achieve a balance of clean DG and critical DR generation when required.

Emissions Thresholds

There is consensus that it is appropriate to establish output-based emissions thresholds for NO_x (lbs/MWh) for baseload and peaker DG no greater than the level of the average fossil central station performance in the Company territory. Based on an analysis of recent data, NYSERDA provided information showing the average fossil-fueled central station generators in New York City, including baseload and peaker generators, performance at approximately 1.6 lbs/MWh NO_x and average peaker generation performance at higher emissions levels. Consensus was not reached over whether the emission threshold established in this Plan should be at or below the 1.6 lbs/MWh NO_x, or how

far below. Working group members expressed a range of positions for NO_x emission levels from 0.6-1.6 lbs/MWh.

- NYSERDA, NYCEDC, NYECC, CPA, CPB, and JS (except as noted below) recommend 1.6 lbs/MWh as the allowable limit based upon NYSERDA's analysis and commercially available DG technologies. They contend that this level would be sustainable over the intended hours of operation. According to NYECC, a level more stringent than 1.6 lbs/MWh NO_x may not be practical given available and commercially viable technologies. This proposed level is also more stringent than the Commission-adopted interim emissions level for DG of 4.4 lbs/MWh.
 - JS supports 1.6 lbs/MWh for the same reasons, provided a stepped incentive level is developed that includes higher incentives to cleaner or more efficient systems. There is consensus on this stepped incentive approach, and it is listed under the following section as guidance to the implementation plans. With respect to DR DG, JS prefer the use of a run time based limit in place of a lbs/MWh limit for DR DG. However if lbs/MWh is ultimately selected, then JS recommends that such a limit be based on EPA Tier 1 standards to allow for the greatest possible manufacturer participation and therefore the greatest possible customer choice. NYSERDA, NYECC, and NYCEDC recommend 13-18 lbs/MWh for new DR DG.
- Pace recommends 1.4 lbs/MWh, a level that is attainable by commercially available DG and that will ensure that ratepayer funds are used to improve the environment and to force technology improvement by incentivizing cleaner than legally required DG, as opposed to helping to fund projects that only comply with minimum emissions requirements.
- The Company and NRDC recommend 0.6 lbs/MWh. They cite New York City's status as severe non-attainment for ozone and suggest that incentives should be paid only to DG facilities that perform substantially better than permitting requirements. The Company claims that New York General City Law 25-s(v), implementing the New York Energy Cost Savings Program, defines clean DG for purposes of its CHP credit incentive as emitting no more the 0.3 lbs/MWh including a thermal credit. The Company also notes that California currently has a standard of 0.14 lbs/MWh for a DG that is eligible for an incentive.
- JS states that the Company's reference to a 0.14 lbs/MWh standard is a qualification requirement under the California Self Generation Incentive Program and not an air emissions standard.
- The Company also recommends 1.6 lbs/MWh for DR DG, provided the second option discussed in the previous Categories of DG section is developed. The Company notes that it used ultra-low sulfur fuel and installed selective catalytic reduction on the stationary generators it installed in the Chelsea neighborhood in Manhattan in 2003, which resulted in an emissions rate of 1.6 lbs/MWh NO_x.

Recommendation: NYSERDA recommends a NO_x emission threshold level of 1.6 lbs/MWh for baseloaded and peaker DG. NYSERDA further recommends a NO_x emission threshold level of 13

lbs/MWh for new DR generation less than or equal to 560 kW and 18 lbs/MWh for new DR generation greater than 560 kW.

Thermal Recovery

There is consensus that thermal recovery should be considered as a credit for individual projects. However, there is some disagreement as to the threshold emissions level above which thermal recovery credits should not apply. The method for crediting thermal recovery was not discussed in detail; instead, NYSERDA will work with interested parties in the fall of 2005 to develop a method for doing so.

Pace recommends a credit for thermal recovery that is combined with DG emissions performance at or below a threshold level of 1.4 lbs/MWh NO_x. It also recommends that the full economic benefits and environmental benefits of CHPs more efficient use of fuel should be recognized.

JS, NYSERDA, NYECC, and NYCEDC recommend a credit for thermal recovery that is combined with DG emissions performance at or below a threshold level of 1.6 lbs/MWh NO_x. JS and NYSERDA believe this will provide a performance incentive for some CHP to do better than 1.6 lbs/MWh NO_x and thus possibly qualify for a stepped incentive. Furthermore, it allows for technology diversity. Such diversity should result in additional data on the reliability and performance capabilities of diverse systems, which will be useful in developing future programs, standards, and incentives.

The Company reports that it is willing to consider a credit for thermal recovery for individual projects, and that it will discuss this issue in its implementation plan filing.

Recommendation: NYSERDA recommends accounting for thermal recovery combined with DG emissions performance at or below a threshold level of 1.6 lbs/MWh NO_x. This will assist in the promotion of CHP and possibly allow for more diverse technologies to participate in the implementation programs. CHP systems that have lower NO_x emissions than the 1.6 lbs/MWh should be eligible for a potential stepped incentive.

Guidance for the Implementation Plans

The following represent working group topics that were discussed and identified as guidance for the Implementation Plans.

1. A portfolio target, at a level more stringent than the NO_x emission threshold for individual projects, to promote a balanced portfolio of DG and CHP applications, is supported by all parties except the Company and NRDC.
 - The Company believes a portfolio target is unnecessary if the emission threshold is set at a low enough NO_x level.
 - NRDC proposes that either a portfolio target should be established or an emission threshold level for NO_x, but not both. NRDC supports a portfolio target as long as compliance with the target is based on permitted emission rates and allowed hours of operation as opposed to estimated rates and operation.

2. All working group members and CPB, except the Company, support limited exceptions to generator emissions thresholds for baseloaded and peaker DG for a) facility specific hybrid, b) facility specific emissions reductions through thermal recovery, c) biofuels, and d) demonstrations of innovative emissions control technology.
 - The Company's opinion is that such exceptions should apply to SBC programs and not the SWP. It asserts that the SWP is intended to be a procurement program and not a research and development program for DG. To the extent it would be appropriate to fund such exceptions, funds should come from SBC funds, not SWP funds.
 - NRDC argues that site specific thermal credits should be based on legally enforceable emissions reductions.

3. The Company, NYECC, NYCEDC, and NYSERDA support an additional review imposed on DG projects within the Company's steam system where thermal recovery would displace or offset Con Edison steam.
 - NYECC and NYCEDC seek to discourage programs that would support migration of loads from the steam system. The Company agrees with this position and reinforces the view that the continued viability of the steam system represents a critical element for electrical reliability. The Company proposes to review projects to ensure that they do not have a detrimental impact on the steam system.
 - NYCEDC makes the point that adjustments in funding levels may be a more effective means of correcting inequities, or conflicts, between different programs/offering.
 - JS and CPA do not support this concept. They believe that concerns regarding the steam system belong in steam, not electric, proceedings. JS also indicate that the threat of CHP to the steam system is unproven and that existing steam system customers should not be discriminated against. Imposing additional regulations and requirements on existing customers that have been loyal to the steam system is counter-productive. All electric-only customers are being incentivized to install DG or CHP systems, thereby increasing the value of their properties, reducing their operating costs, and providing their tenants and the City, as a whole, additional energy security. Existing steam customers should be given the same opportunity.
 - CPB takes no position on this issue at this time.

4. Working group members, except JS and NYCEDC, concur that emissions regulations for DG systems should be more stringent than existing emissions regulations.
 - NYECC clarifies that existing regulations will be exceeded by supporting a NO_x emission threshold of 1.6 lbs/MWh.
 - JS indicates that reliable and proven systems are equally important to newer and cleaner systems. JS proposes that the guidance be "as stringent as or more stringent than" the minimum existing emissions regulations. CPB supports this viewpoint as well.
 - NYCEDC states that in cases where emissions regulations are "technology forcing" a more stringent emission level may not be appropriate, or achievable. Instead, the definition of Clean DG should seek to be more stringent than emissions regulations and should be reviewed on a regular basis to reflect advances in DG emission reduction technologies in addition to the costs of those technologies.

Recommendation: NYSERDA recommends that the above guidance should be incorporated in the development of the SWP and TP implementation plans, subject to Commission’s review.

II. Total Resource Cost Test

The TRC working group was established in response to the requirement that programs administered in the SWP and TP be cost-effective on a total resource cost basis.¹ The TRC working group did not reach consensus on the resource benefits and costs to be included in the TRC test. More detail on how these benefits and costs will be calculated will be detailed in NYSERDA and the Company’s respective Implementation Plans. Members of this working group are:

- AEA
- CPA
- CPB
- NYSERDA
- The Company
- JS
- NYCEDC
- NYECC
- DPS Staff
- NRDC

The Collaborative has given considerable time to discussing the TRC issue and the outcome may have significant impact on program offerings under the SWP and TP. The three classes of programs that may be at risk of failing a restrictive definition of the TRC are residential programs (particularly low-income components if screened individually), some DR programs, and DG programs. The parties have not reached any consensus regarding which existing or new programs would fail in a particular definition of the TRC.

There is consensus on a number of TRC-related issues, including that each distinct program pass the TRC test, but that not every measure or application within a program needs to do so. There is also consensus that including the following elements in the TRC would be appropriate:

Benefits:

- Avoided electric energy usage (including losses) at the appropriate wholesale price
- Avoided generation capacity (including losses) at the appropriate wholesale price
- Natural gas, steam, oil, propane use or avoidance
- Quantifiable water and maintenance savings

Costs:

- Incremental customer costs net of incentives
- Incentives plus administration and evaluation

¹ Order, pg. 87.

Consensus was not reached on the following issues regarding the TRC test:

- Energy market price effect
- Avoided T&D costs
- DG project cost and benefits
- Load curtailment program impact
- Environmental externalities
- Avoided variability and risk

The following summarizes the parties' positions and NYSERDA's recommendations on each issue.

Market Price Effect

The TRC test, as defined on page 28 of Opinion No. 88-20, states that a DSM program should be evaluated with respect to other factors as well, including "the ability of a DSM program to enhance competitiveness of local industry by reducing its energy costs." The Opinion further states, when referring to the TRC test on page 30, that DSM savings include "operating and capital costs avoided by the utility by reason of the reduced demand."

NYSERDA, NYCEDC, NYECC, NRDC, Pace, and JS support the inclusion of market price effects with the following clarifications:

- NYSERDA believes that, given the wholesale electricity market in New York, when utilities or load serving entities are purchasing less electricity to meet load, due to the availability of DSM resources, wholesale market prices –LBMP – clearly, would be lower. The reductions in load from DSM resources create a situation in which available supplies bidding into the wholesale market exceed demand. The imbalance results in a "market price effect" that can be quantified as lower energy and capacity prices for all customers. To not include this effect is to assume it is zero. If competitive markets are believed to lead to more efficient pricing, then when supply exceeds demand, prices will be lower than they might otherwise have been. This effect will be realized until such time that supply and demand balance is restored to the market.
- NYCEDC supports the inclusion of market-price effects in the TRC for several reasons. First, Opinion No. 88-20 clearly includes changes in market prices as benefits, and specifically avoided costs, under the TRC. The Opinion describes the TRC test as asking "whether the lifetime savings produced by a DSM program will exceed the total cost to both the utility and the participating customers." NYCEDC observes that the market-price effects of load reductions are savings to Con Edison and to customers. Opinion No. 88-20 states on page 30 that the benefits of the TRC test include "Operating and capital costs avoided by the utility by reason of the reduced demand." The Opinion also states that the impact of DSM on the total amount paid for energy services by utility customers must be included in screening DSM.

NYCEDC notes that the dominant generators in New York City are able to maximize revenues from all their generation, reflecting the effect of additions, improvements, and bidding decisions at one generator on prices for all their generators. Ignoring the effects of

load reductions on prices paid by other consumers denies customers a level playing ground with the generators.

NYCEDC also notes that reductions in energy market prices as a result of increased generation have been quantified and accepted in other proceedings, including the State Energy Plan (p. 3-136) and Siting Board Case No. 99-F-1191 (recommended decision, pp. 34 and 35).

Finally, NYCEDC notes that the advocacy for the load-reduction programs in the rate plan originated with the New York City Energy Policy Task Force report in January 2004, which emphasized the need for load reductions to moderate market prices in Zone J. That same concern was repeated in the City's position in the steam and electric rate cases, where the City advocated greater Con Edison efforts to reduce loads to reduce market prices. Ignoring market-price effects would be inconsistent with the impetus for so much of the interest in the load-reduction programs.

- The Company believes that including market price effects is consistent with past Commission practice regarding avoided cost estimation, citing the method selected by the Commission for computing avoided energy costs in Opinion No. 86-8 (pp. 9-19). However, market price effects should be included in the TRC test only to the extent that they can actually be realized and be properly estimated. The Company believes that market effects for capacity are appropriate based on the NYISO demand curve methodology, but should not be considered beyond the time when capacity needs to be added to meet the 80% in-city locational requirement. Given the uncertainties as to how the market would respond to changes in load, the Company would support a three-year window for including capacity market effects. For energy, the Company believes that including market price effects is not appropriate, because such effects are more speculative absent an administrative mechanism to set prices. The Company believes that any energy market price effects observed in MAPS modeling are likely the result of the model's assumptions of fixed supplies at predetermined incremental costs. CPA agrees with the Company.
- JS state that the market price effects should be included but caution that these benefits are highly variable from year-to-year, reflecting dynamic market conditions and whether or not demand response calls are made in a particular year.
- NRDC/Pace believe that market price effects of both energy and capacity should be included in the TRC test and there is not reason to limit inclusion of these effects to three years. The market price effects scenario that NYSERDA has used to evaluate ht SBC programs is not limited in this way. NYSERDA notes that inclusion of market price effects in the TRC test is consistent with Opinion 88-20.
- DPS Staff contends that the TRC test, by definition, should not include market price effects. DPS Staff argues that energy market price effects do not represent an avoided resource, and including them would be speculative and very difficult to quantify. DPS Staff further argues that any such effect on the market prices would be short lived.

- The County of Westchester agrees with DPS staff. The market effects of a particular increment of capacity on the price of capacity and energy should not be ascribed as a benefit attached to any particular increment. If a new source comes on line it will affect the market of both capacity and energy. It does not matter what type of generation is added. A new distributed generator of 1 KW in size would have the same impact on the market as a demand side management project of equal size and equal operating characteristics.

Ascribing the price reduction as a benefit to the distributed generator is simply a way of expressing a preference for that particular generation. In other words it tilts the competition in favor of the distributed generator. If one wishes to be equally open to other types of generation then either all generation should be discounted by such price reduction or none of them should be.

Ascribing market effects to a particular generator places a penalty on all other competitive sources and contravenes the notion of open competition among potential suppliers. The market will be most fair when all potential sources compete on an equal basis.

- In general, CPB also agrees with DPS Staff that the TRC test should not include market price effects. CPB would support including market price effects, however, for a limited number of years, if one or more program offerings that are desired by the Collaborative would not pass the TRC test without including them.

Recommendation: NYSERDA recommends that the market price effects for both energy and capacity be included in the TRC test. If market price effects are not included in the TRC test, then it is possible that some low income and DG programs that have non-energy benefits (health, safety, comfort, environmental, etc.) may be excluded from the portfolio of offerings because these programs would not pass the test. NYSERDA proposes to work with the Collaborative in the Fall of 2005 to review the methodology for calculating market price effects and make revisions to the methodology as necessary. Due to the uncertainty of energy prices in the long-term and the skepticism regarding the value of the market price effect, NYSERDA proposes including the market price effect for both energy and capacity for a limited period of time (*e.g.*, three years). This will account for the fact that the market price effect is real and greater than zero, and will limit the value of this benefit in the cost-effectiveness analysis, recognizing that competitive markets will reach a point of equilibrium and that the effect might decrease over time.

Avoided T&D Costs

- DPS Staff, NRDC/Pace, CPB, CPA, NYCEDC, and JS assert that avoided T&D costs should be included in the TRC test and they support an update of the studies that would determine the appropriate value. NYCEDC argues that reduced rates of load growth will tend to reduce T&D costs; it points out that the Company has previously estimated and used estimates of avoided T&D costs in the TRC test.
- The Company believes that avoided T&D costs should not be included as part of the TRC test because the Company claims that the SWP is designed to avoid generation-related costs and not specific T&D costs, as is the case with its TP. The Company states that T&D investments tend to be “lumpy” and location specific, and the TP is designed to avoid these investments. The Company believes that a system-wide avoided cost would not reflect real-

world spending by the company for T&D reinforcements. In addition, the Company questions whether any generic avoided T&D amount should be included in the TRC test for the TP because the TP will already include a specific avoided T&D cost for the network in which the TP initiative will be located.

Recommendation: NYSERDA recommends including avoided generic T&D costs in the TRC test. If approved by the Commission for both the SWP and TP, NYSERDA and the Company will each work with the Collaborative as appropriate to calculate a generic avoided T&D cost for its respective implementation plan.

Avoided Ancillary Costs

- NYSERDA has included an avoided ancillary services benefit of \$3.61/MWh and \$3.07/MWh for summer and winter periods, respectively, in its previous cost-effectiveness analyses. These costs were obtained from the December 2004 NYISO Monthly Report, which provides a table of NYISO Average Cost/MWh (Energy and Ancillary Services), from the LBMP customer point-of-view.
- The Company believes that ancillary costs are fixed and do not vary by load, and as a result, cannot be avoided and should not be included in the TRC test. DPS Staff, NYECC, and CPA concur with the Company.
- JS believe that ancillary costs are avoidable and should be recognized as such in the TRC test. The formulation provided by NYSERDA is appropriate for the purposes of Action Plan design. The development of operating reserves pilot(s) with the NYISO is a priority identified by JS for the NYISO measures section (Action Item C). NRDC/Pace believe that variable ancillary costs should be included in the TRC test.
- NYCEDC believes that some ancillary-service costs vary with load level and that more analysis is needed to quantify avoidable ancillary-service costs.

Recommendation: NYSERDA recommends that ancillary services not be included as an avoided cost in the TRC test.

Distributed Generation

- JS express concern that it is difficult for some types of DG to pass the TRC test. JS assert that behind-the-meter DG provides additional benefits to the host customer, and that the TRC test neglects those benefits. Such benefits include uninterrupted power supply and greater reliability. JS state that where the benefits can be quantified, they should be included in order to accurately compare the cost of the DG system to the benefits.
- NYCEDC, JS, and NRDC/Pace believe that prospective DG system owners should not be penalized if they choose to upgrade from a basic DG configuration to a more elaborate or sophisticated configuration, so long as the energy and capacity benefits are at least as great as those in the basic configuration, and the participant is willing to pay for the additional costs associated with greater sophistication. NYCEDC sees allowing customers to select more

advanced technology for DG as being very similar to allowing customers to apply an incentive designed for a basic appliance toward the cost of a more efficient, attractive, or otherwise sophisticated appliance. For example, customers have complete freedom to purchase any efficient lighting fixtures they like, with any aesthetic and work-quality effects, so long as the customers pay the incremental cost.

- DPS Staff and CPB believe that the TRC test should not include customer benefits and that the test should not be modified to accommodate different programs.
- The Company acknowledges that some customers may wish to install higher cost DG because of perceived additional value, but believes that including intangible (i.e., unquantified) customer benefits is contrary to the letter and spirit of the TRC test. In Opinion No. 88-20 (p. 30) the Commission stated that the TRC test reflects “the net cost (after any incentive) to the participating customer.” The Company believes that customer benefits can be counted to determine net customer costs only if, and the extent to which, they represent savings as compared to the customer’s normal operation (e.g., avoided cost of standard energy efficiency equipment or reduced power supply costs), but that it would not be proper to deduct the cost of another DG technology. The Company believes that each measure needs to pass the TRC test, and incentives should not be paid for measures that do not pass the test. Awarding an incentive that is based on a passable measure to a similar but non-passable measure should not be allowed.

Recommendation: NYSERDA recommends that difficult to measure and monetize customer benefits such as improved power quality and reliability, and the additional costs associated with enhanced customer benefits should not be included in a TRC test.

While all programs implemented must be cost-effective on a TRC basis, individual projects should not be required to pass this test. NYSERDA and the Company should be authorized to implement programs that can reasonably be designed with standard and readily available technologies that can predictably achieve demand reduction that is cost-effective on a TRC basis. If a customer elects to invest additional assets to satisfy internal and/or societal goals, the failure of that individual project to satisfy the TRC test should not be construed as an impediment to program implementation. When ongoing evaluation of a program suggests that it is not meeting the TRC test, such programs shall be modified to bring them into compliance or discontinued.

Residential/Low Income Programs

The Collaborative acknowledges that DSM programs targeting both privately-owned and publicly-assisted low-income multifamily housing, as well as residential properties in the mass market, may contribute a substantial amount of demand reduction. However, concern was expressed that low-income programs should not be categorically excluded solely because programs for this building sector are less likely to pass the TRC test required under this Plan.

As a historically underserved market segment in the competitive electricity market, some Collaborative members assert that residential, particularly low income, EE and LM projects should be included in the SWP, but that such programs be exempt from the requirement to meet the TRC test. Given that the residential and low income sectors are contributors to electric load, and that demand reduction is achievable in low income residential buildings, including both mass market and

low income properties, there is consensus among NYEDC, AEA, NRDC, and Pace that a portion of the SWP funds be allocated to such programs, regardless of whether they pass the TRC test. Also, NYSERDA should track the achieved cost-effectiveness of such programs and ensure that funding is primarily allocated to the most cost-effective programs.

The County of Westchester believes the amount of funding allocated to residential/low income programs should be limited and given to a few select projects throughout the Con Edison service territory. Limiting the amount of funding and the number of projects will enable Con Edison, NYSERDA and the rest of the members of the collaborative to get a better sense of the true cost and impact of the programs so as to better design Residential/Low Income Programs in the future.

Load Management Programs

There is an issue whether LM programs provide additional market price benefits beyond those captured by the TRC test.

In its current form, NYSERDA's TRC model assigns values to load curtailment programs based on the reliability benefits provided. The reliability benefits are assumed to be \$1,500 per MWh delivered by EDRP and SCR/ICAP participants during emergency events. This value was calculated by Neenan Associates in conjunction with prior work conducted for the NYISO and NYSERDA. Future benefits were valued assuming an average of 22 hours per year of emergency events and a given rate of delivery during emergency events, which was determined by NYSERDA to be approximately 57% for EDRP participants. The response rate for SCR/ICAP program participants was assigned 100% because of the financial penalty provisions for non-compliance.

NYSERDA, the Company, JS, CPA, NRDC, and Pace believe that deferred capacity represents a benefit that should be reflected in the market price effects.

- For the SCR/ICAP program, NYSERDA believes that there are additional benefits that remain to be captured in the form of lower ICAP market prices resulting from reduced ICAP demand. Initial analysis by NYSERDA of expected capacity price movements along the NYISO demand curve due to LM programs indicates that for every additional 100 MW of ICAP in New York City, ICAP payments are reduced by approximately \$60 million per year.
- The Company would support a three-year window for including capacity market price effects for the SCR/ICAP projects in the TRC test, consistent with its position on market price effects discussed above.
- NRDC/Pace support including capacity market price effects to the extent that they occur, but they should not be limited to the suggested three years.
- JS and CPA believe that deferred capacity represents a benefit that should be reflected in the market price effects. JS also state that there is a benefit for using LM as insurance or a hedge against price spikes, citing the work of William Marcus in PJM and California. In addition, they refer to the half yearly report of ISO New England which they say shows benefits.

- DPS Staff, Westchester, and CPB state that the effect of lower capacity payments should not be included, given the strict definition of the TRC test cited in the Order.

Recommendation: NYSERDA recommends the market price effects of reduced ICAP payments should be included in the TRC test.

Environmental Externalities

The issues are (1) whether, as a matter of definition, environmental externalities belong in the TRC test (2) if externalities are included in either fashion, what are the most appropriate mechanisms for valuing and incorporating them. There is considerable disagreement over (1) and (2). The parties do agree that no specific values have been developed and reviewed for inclusion in any manner at this time

- NYSERDA, DPS Staff, NYECC, CPB, and the Company share the position that the TRC test, by definition, should not include environmental externalities. Due to the existence of cap-and-trade markets for NO_x and SO₂ emissions, NYSERDA does not claim benefits from reducing these emissions in its definition of the TRC test. They are, in fact, not externalities; rather, they are included in market clearing prices for energy. With regard to CO₂ and particulate matter, neither of which is controlled or regulated under a cap-and-trade system, the avoided costs associated with these emissions are speculative and difficult to quantify. As a result, NYSERDA has not attempted to assign a value to them.
- JS, CPA, NRDC, Pace, and NYCEDC support the inclusion of environmental externalities.
 - JS and CPA believe that environmental externalities should be included in the TRC test. JS contends that air emission reductions have value and that there are land and water benefits associated with not building generation systems. JS did not provide a methodology for monetizing the environmental externalities for the TRC test.
 - CPA and JS also believe that there should be consideration of the security benefits of distributed cogeneration for the city as a whole. This is a key reliability benefit for New York City as a whole. Reliability and the ability to withstand a terrorist attack with the New York City healthcare institutions operating at capacity are essential.
 - NRDC/Pace state that environmental externalities should be included in the TRC test in some way, citing the Order, wherein the Commission recognized that the “numerous public benefits” provided by DSM include “reduced air pollution” and “avoidance of environmental impacts associated with construction of electric generation, transmission, and distribution facilities”. NRDC/Pace make reference to a California Public Utility Commission policy requiring use of a “greenhouse gas adder” for long-term planning and procurement. Avoided costs ranging from \$8.00/ton of CO₂ now to \$17.50/ton in 2013 are used to evaluate energy efficiency programs.
 - NYCEDC believe that environmental and health benefits should be included as an adder to the TRC test, as has been the practice of the Commission for DSM programs, including the Company’s programs. Environmental quality and health are public resources, the protection or diminution of which is a cost to the Company’s

customers, among others. In addition, within the life of the measures installed by the SWP and TP, cap-and-trade systems are likely to apply to emissions of greenhouse gases (initially through the Regional Greenhouse Gas Initiative, in which New York is a participant) and mercury (through Federal legislation). NYCEDC believe that, whether they are thought of as environmental externalities (added to the TRC test) or predictions of future output-related control requirements (which would be part of TRC avoided energy costs), the effects of emissions and other environmental effects of electricity production should be recognized in the screening of resource alternatives. Following a commitment, in principle, to including environmental costs in the TRC test, NYSERDA proposes that NYSERDA work with the parties to develop specific values per ton of emissions and emission rates for carbon, mercury and fine particulates; for NO_x and SO₂, to the extent that these gases have greater effects at the locations at which they are emitted to serve the Company electric load than at the locations to which the allowances are likely to be traded; and any other environmental and health effects of electricity production is significant enough to warrant quantifying.

Recommendation: NYSERDA recommends the TRC test should not include environmental externalities. However, to the extent future methodologies/algorithms are developed for quantifying environmental externalities, NYSERDA will review these for possible inclusion in future TRC tests.

Avoided Variability and Risk

Some parties (notably JS and NYCEDC) have asserted that (1) the average costs avoided by EE, DG and LM in the real world of uncertain and variable loads, resources and prices tend to be greater than the costs avoided in a modeled world of predictable loads, typical weather, and base-case fuel prices and (2) EE, DG and LM reduce cost variability and risk, and that has an additional value.

NYCEDC points out that the “Independent Study to Establish Parameters of the ICAP Demand Curves for the New York Independent System Operator,” (August 16, 2004, Levitan and Associates) demonstrates that load variability from year to year has a substantial effect on economics of peak-related resources. In that study, the energy value of the NYC peakers was twice as high with uncertain loads as they were with conventionally-modeled typical loads.

NYSERDA’s use of historical market energy prices in projecting avoided energy costs incorporates whatever variability occurred in the historical period. No party has proposed a mechanism for adjusting the NYSERDA approach to reflect additional variability, and no party has suggested a monetized value of risk reduction (or a specific method for computing such value) applicable to the Company and NYSERDA programs. Several research projects are currently grappling with these issues in various settings.

The Collaborative does not believe that any adjustments to avoided costs or the TRC test are appropriate at this time to reflect reductions in variability and risk. The parties expect to continue monitoring results of work done elsewhere and discussing the applicability of those results to EE, DG and LM planning for the Company’s territory. The parties welcome any direction on these issues from the Commission.

Recommendation: NYSERDA recommends that the TRC analyses exclude any explicit recognition of potential benefits for avoided variability and risk associated with energy efficiency and DSM programs, at this time.

III. Coordinated Marketing

The Marketing working group was formed to begin to develop a more coordinated approach to addressing the program development, outreach, and delivery issues specifically mentioned in several of the Action Issues. Members of this working group are:

- NYSERDA
- The Company
- DPS Staff
- JS
- NYCEDC
- NYECC
- NYPA
- Westchester County
- NAESCO

- Action Item a. Identifying and analyzing methods to increase participation in EE/DG/LM program.**
- Action Item d. Reviewing general DG and EE/DG/LM programs for possible coordination of those efforts with a Targeted EE/DG program.**
- Action Item e. Developing a strategy for cooperation among relevant parties (e.g., The Company, NYSERDA, NYISO) on a regular basis to maximize the effectiveness and avoid duplication of existing and future DG/LM programs.**
- Action Item i. Developing potential marketing and sales plans to support program goals.**

The Collaborative established a Marketing working group at the June 1, 2005 meeting to focus on discussion of the four Action Items listed above. The Collaborative suggested joint marketing of materials, brochures, and presentations, web-site links, and coordination among the Company's Account Executives and contractors, NYSERDA staff and contractors, Westchester County, NYCEDC, NYECC, CPA, ESD, and other interested parties.

NYCEDC provided a sample marketing plan to utilize in the Implementation Plans. This will be used to assist in preparing the marketing outline in the SWP and TP. The marketing plans will address marketing tasks, flow of customers through marketing channels, and resources required to perform the tasks, and identify a lead organization for key tasks.

Coordination

A coordinated effort on behalf of all of the Collaborative members will be a key to the success of the SWP and TP. Leveraging the business contacts and project exposure of all of the participants will maximize program participation and success. Joint letters, presentations, and joint press events with NYSERDA, NYCEDC, NYECC, CPA, the Company, and other associations and/or trade groups

will be considered to assist in marketing the SWP and TP. The Company and NYSERDA will review and coordinate print and other media advertising for the DSM programs.

The Company and NYSERDA will also increase and redirect current marketing efforts. As has been done successfully in the past, the Company and NYSERDA plan to issue targeted joint letter(s) to inform key potential participants of the SWP and TP. Avenues for obtaining customer data will be examined as well, such as working together with Collaborative member organizations.

The Company will provide NYSERDA with aggregated customer demographic information by network in similar detail to that it provided in its first targeted DSM request for proposals (issued in 2003). This information does not require customer approval and will be provided in a timely manner, when it becomes available. Additional information that would be beneficial to share will be determined on an on-going basis and a procedure for the Company to provide this data in a timely manner will be established between NYSERDA and the Company, subject to confidentiality concerns. If the TP MW target, or a portion of the TP MW target, is transferred to NYSERDA, additional data sharing by the Company may be required. This information sharing and coordination will occur through regularly scheduled meetings with the Company to report on programs and recent efforts.

Collaborative members have offered assistance in marketing the DSM programs. In cooperation with several Collaborative members, NYSERDA and the Company plan to hold informational meetings and educational seminars. For example, NYECC, UTC Power, JS, NAESCO, and CPA have offered to provide marketing materials to their members and customers and gather participants to attend information sessions.

NYSERDA and the Company will continue to work with NYCEDC, ESD, the New York City Department of Small Business Services, and other agencies to educate their client services representatives on the SWP and TP. It is hoped that DSM information becomes a permanent part of their presentations to new and existing clients/businesses. This could be particularly helpful to companies that are either relocating to New York City or Westchester County or are making substantial investments in their businesses. NYCEDC will be engaged to provide support at meetings with key potential SWP and TP participants.

Specific New York City websites may be used to advertise programs, such as NYCEDC's Energy page and the main New York City page. Officials at the Department of Buildings, Department of City Planning, and Department of Small Business Services will be approached and asked to provide links to the DSM programs.

Representatives from NYSERDA, the Company, JS, and other Collaborative members attend the NYISO Price Responsive Load Working Group and the ICAP Working Group meetings. During these meetings, these Collaborative members will offer suggestions and ideas to deal with various issues with respect to DR programs at the NYISO that directly impact the SWP and TP. This transparent process provides interested parties opportunities to provide input into programs and policies at the NYISO, and perhaps to coordinate the NYISO's efforts with those of the Company and NYSERDA.

In support of direct program outreach and marketing support for all DSM programs, NYECC has offered to regularly invite representatives from the Company and NYSERDA to make presentations

on these programs to its membership and to prospective members at its quarterly seminars and through its newsletter, *Power Moves!*. NYECC will use its own website to publish program summary information and web links to NYSERDA's and the Company's on-line marketing materials.

In addition, NYECC and CPA will routinely forward marketing and marketing support materials to their memberships, as well as to others listed in their distribution databases. NYECC and CPA will also brief their memberships on the new opportunities represented by the SWP and TP and on continuing and new opportunities in the SBC programs.

NYSERDA and the Company will ensure joint completion of marketing plans and submit them under their respective Implementation Plans. NYSERDA and the Company will also meet and discuss particular offerings in their respective programs. Regardless of the specific offerings, there is a need for both organizations to direct potential customers to the program(s) most appropriate for a particular project. In addition, NYSERDA, the Company, NYCEDC, and other interested parties will hold regular meetings to review marketing efforts, program penetration, and look for ways to further maximize participation in the SWP and TP.

Targeting

NYSERDA markets and promotes **New York Energy \$martSM** through mass mailings and programmatic presentations to associations and trade groups identified through existing relationships. NYSERDA also provides tailored presentations upon request for specific audiences. These marketing efforts generally focused on engineers, consultants, and facility personnel have been conducted in cooperation with the NYISO, the Company, and other organizations and will continue to be a useful marketing tool.

The Collaborative suggested increased emphasis on marketing to decision makers. Reaching out to both facilities engineers and business leaders was suggested as way to increase participation in DSM programs in general. The Collaborative acknowledged that previous marketing efforts have achieved success in targeting facilities engineers, and will seek opportunities by targeting CEOs and CFOs. NYSERDA and the Company will continue to work with organizations, like Partnership for New York City, Real Estate Board of New York, New York Association of Energy Engineers, NYECC, and CPA to more effectively reach this important audience.

In addition, NYSERDA and the Company will meet with Westchester County officials to examine possibilities of marketing strategies different from those employed in New York City. Marketing and sales efforts in Westchester County may need to be altered somewhat to effectively target its customer base.

Customer Assistance

The Collaborative has raised concern about potential customer confusion and emphasized the need for customer assistance in locating the appropriate program within the SWP and TP for a particular project.

While some customer confusion will likely exist, it will be minimized through the use and education of the Company's Account Executives and NYSERDA staff and contractors. These customer

contacts will be the primary gateway for program participants and will be educated on the SWP, TP, and other DSM offerings. The role of these project expeditors will be to guide customers to the appropriate contact at NYSERDA, one of its contractors, the Company, or one of its vendors.

The toll free DSM hotline, discussed below, will be one central point of contact for potential participants.²

Duplication

NYSERDA and the Company are committed to ensuring that customers are not participating in both the SWP and TP for the same measure. While the same measure cannot receive incentives from both the TP and SWP, a project that contains multiple measures can receive incentives from both programs, as long as there is no duplication of incentives for an individual measure. A process will be developed to review projects for potential duplication.

IV. The Company Action Items

- b. Reviewing the Company's process for promoting existing DG/LM to determine if and how further enhancements can be made;**
- f. Assessing the Company's EE-related outreach and education efforts to determine if further enhancements can be made;**
- g. Reviewing and, if necessary, enhancing the skills of the company's account executives with regards to EE/DG/LM issues; and**
- h. Tracking the number of customer calls related to DG/LM at a designated toll free number for DSM.**

The Company's marketing of DSM encompasses various methods to reach the general public, as well as select energy customers. The multi-faceted marketing plan ensures that energy consumers are made aware of the many opportunities to use energy efficiently and help the Company to manage energy demand. The messages speak to diverse audiences across all customer service classifications; school age children to older adult consumers; and an income, ethnic, and racial mix as varied as the Company's service territory.

The components of the Company's DSM marketing plan listed below are ongoing. Specific methods or activities may change depending on the scope of the marketing objectives. In addition to these efforts, the Company will designate a DSM coordinator who will have knowledge of all DSM programs offered in NYC and Westchester County.

- Advertisements
 - Multi-media outreach campaigns, including ad placements in daily, community and ethnic newspapers, radio spots, and New York City subways
- Direct Marketing
 - Energy savings and program promotional messages on customer bills

² NYSERDA also has a toll-free hotline dedicated to answering questions on its programs. NYSERDA will track its call and provide tracking information to the Company, and the Collaborative, as appropriate.

- Bill inserts
- Articles in Con Edison's customer newsletter
- Direct mail campaigns, including DSM program promotional letters and direct to home printed advertisements
- Telemarketing
- Internet Promotion
 - coned.com offerings include interactive learning activities, energy saving tips, printable documents, DSM program applications, and direct links to NYSERDA programs
 - Residential direct load control program web site at coned.com/cool
 - DSM email address at coned.com
- Telephone Promotion
 - Con Edison EnergyLine promoting energy saving programs (1-800-609-4488)
 - On-hold messages at Con Edison's toll free customer service number promoting energy saving programs (1-800-752-6633)
 - Dedicated toll free number for DR inquires (1-800-643-1289)
 - Dedicated toll free number for the residential direct load control program (1-866-521-8600)
- Printed Materials
 - Brochures, including energy saving tips, appliance guide and comics
 - Metropolitan Transportation Authority initiatives, such as maps with NYSERDA, NYPA and the Long Island Power Authority
 - DR program fact sheets
 - Flyers
- Public Relations/Publicity
 - News releases
- Conferences/Workshops/Seminars
 - Annual NYSERDA/DPS Demand Response Workshop
 - Annual Energy Conference with NYSERDA and Neighborhood Housing Services of New York
 - Customer Seminars with NYSERDA
 - Training of Con Edison representatives
- Partnerships/Relationship Building
 - NYSERDA/Real Estate Board of New York/New York City partnership
 - Account Executives' customer presentations

The Collaborative recommends that the Company continue with its existing promotional and marketing programs. Additional targeted efforts and increased cooperative marketing with NYSERDA is recommended in order to more effectively and efficiently meet the demand reduction goals of the SWP and TP.

Account Executive Skills

The Company's Account Executive group, formed in 1994, provides large industrial and commercial customers in several growth industry segments with a single point of contact. Account Executives are prepared to respond to a range of issues including incentive programs, power quality, emergencies, billing and rate questions, and service-related inquiries.

In addition, the Account Executives promote programs and services that may be of value to their customers. These programs include retail choice, direct current elimination, energy conservation programs offered through NYSERDA, and DR programs offered by or in conjunction with the NYISO.

The Account Executives have successfully partnered with representatives of NYSERDA in marketing SBC programs to customers and will work with NYSERDA in marketing the SWP and TP. Their marketing expertise will be supplemented with further training in preparation for these DSM programs. Additionally, they should strive to involve NYSERDA or its contractors as soon as possible when a potential project is best suited for the SWP. Account Executives should notify NYSERDA when joint marketing opportunities are available, such as presentations to large groups or customer meetings. Furthermore, NYSERDA should meet with the Account Executives prior to NYSERDA issuing the SWP, and on a regular basis to review offerings, experiences, and lessons learned.

For smaller commercial and residential customers, the Company will use its customer service representatives and its DSM personnel to market the SWP and TP, as appropriate.

Customer Call Tracking

The Company established a direct email address (dsm@coned.com) and toll free number (1-800-643-1289) to respond to inquiries concerning programs offered by the Company, NYSERDA, NYPA, and the NYISO. Personnel staffing this number will be trained on the specific features of each organization's initiatives. Customers will be asked a number of questions to determine which program(s) would be the most beneficial to their needs. The Company will meet with NYSERDA, NYPA, and the NYISO to determine the appropriate contact within those organizations should a customer seek more specific information.

The Company will track all calls handled by this toll free number. In addition, the number of calls referred to NYSERDA, NYPA, and NYISO. The results of this tracking will be shared on a quarterly basis with the DPS Staff and the Collaborative. Details of the tracking report will be detailed in the Implementation Plan.

V. Program Enhancements

Action Item a. Identifying and analyzing methods to increase participation in EE/DG/LM programs.

Action Item b. Maximizing the effectiveness of SBC II programs and seeking ways to expand them for use in the system-wide programs.

A number of the **New York Energy SmartSM** programs under the SBC are available in the Company's service territory and can be enhanced to foster increased DSM. Traditionally a majority of these programs have been focused on reduced consumption in the area of EE without attention to time differentiation when demand reductions occur. Exceptions to this are the PLRP and the ETP, both of which were designed to provide technological solutions to assist in maintaining grid reliability and foster participation in NYISO demand response programs.

The PLRP has focused on LM and EE technology incentives with a time sensitivity, which provides reductions to the grid during periods of peak electric demand. The ETP supports innovative technologies that enhance the capabilities of LSEs, Curtailment Service Providers, and others to reduce electricity load in response to demand response events called by the NYISO or to price signals.

An opportunity to further sponsor DSM activity is already occurring in the summer 2005 PLRP where NYSERDA is piloting an offering for small, packaged DG projects. Similar initiatives will be examined for implementation through other existing NYSERDA programs.

NYSERDA has tasked its Program and Project Managers to provide suggestions and modifications to existing programs in an effort to reduce demand. The outcome of this task will be documented in the SWP Implementation Plan. Possible modifications include incentive restructuring, adjusting the facility cap funding level, addition of new incentive opportunities such as DG, and focused marketing. The PLRP, NCP, CIPP, and FlexTech Program are examples of programs that will be examined for enhancements.

The Collaborative provided feedback on existing programs and ways to enhance them. The Collaborative's recommendations include:

- Open solicitations should be considered since they may be more effective at capturing demand reduction in a timely manner because participants do not have to wait for due dates;
- Alternative methods of procurement should be examined for trade-offs and goals;
- Programs should be designed such that they do not conflict with, and detract from, other key initiatives underway including Con Edison Steam's business development programs and efforts;
- The energy efficiency aspects of LEED certification should be examined as a possible method for reaching potential customers;
- Incremental incentives for the energy efficiency aspects associated with LEED certified buildings should be increased in the **New York Energy SmartSM** New Construction Program;
- Facility funding caps in existing programs should be raised to levels previously offered under SBC II programs to stimulate the market and attract new players;
- Measurement and verification requirements should take into account the program incentive and cost of fulfilling the measurement and verification such that the more reliable the measure the less stringent the requirements and vice versa;
- NYSERDA incentives should be paid on a timelier basis; similarly, methods to shorten the time between NYSERDA approval and incentive payment should be examined; and

- Residential markets have particular issues which may make it less likely for residential customers to be able to participate in the SWP—NYSERDA should explore ways to tap into both the multi-family and single-family segments of that market.

NYSERDA will extract information from the most recent formal evaluation of the **New York Energy \$martSM** programs to offer further guidance on enhancing existing programs.

VI. New York Independent System Operator Programs

Action Item c. Offering recommendations to NYSERDA and NYISO for new initiatives designed to further stimulate participation in their EE/DG/LM programs.

The Collaborative received a presentation from the NYISO during which suggestions to stimulate participation were discussed. The NYISO is interested in increasing enrollment in the SCR/ICAP and EDRP programs. One method to increase enrollment is to examine the barriers to DG participating in the SCR/ICAP program. These barriers include: incentive levels and structure, education, institutional reluctance, uncertainty in the complication and potential time delay associated with air permitting requirements, and market energy rates.

Upfront investigation costs, feasibility studies, program application requirements, installation costs, and administrative costs amount to large resource expenditures. These costs are not captured by the current incentive offerings from NYSERDA. The Collaborative recommends increasing incentive levels for DG and CHP installations. Facilities perceive an impact on operations when participating in load curtailment through the use of DG. Education through the use of case studies or presentations could be useful in overcoming this barrier. Rate impacts, standby tariffs, interconnection, and integration into building systems create additional issues for facilities wishing to install DG or CHP.

Streamlined approaches and best practices should be developed in response to these concerns. NYSERDA, the Company, and the NYISO should consider incentive levels sufficient enough to attract first time participants who are then likely to commit to other DR programs in the future. Continued explorations of sustainable measures to facilitate DG and CHP generators participating in the SCR/ICAP program are necessary.

The NYISO is also interested in seeing the DADRP become more viable and robust in the portfolio of DR programs. In order to make this happen, bid aggregation for DADRP needs to be simplified like the process for SCR/ICAP and EDRP. Smaller load resources will help improve participation, simplify standing bids, and facilitate DG participation in the economic markets through aggregation and matching with price-capped load bids. Collaborative members have expressed support toward development of a pilot for aggregating demand resources to participate in the NYISO real time pricing/DADRP energy markets. To further improve participation, previously untapped market segments, such as the residential market, should be addressed.

Another concept that the NYISO is interested in is a demonstration/pilot for DR providing reserves. This will require participants to work with the NYISO to demonstrate that fast-response DR can technically provide 10 and 30 minute non-synchronous reserves and possibly synchronous reserves.

These concepts will require overcoming various regulatory limitations and may create other regional concerns. Collaborative members have expressed support for the development of such a pilot in the Company's service territory, especially Zone J. ISO-New England has a model under way that could provide useful information.

NYSERDA has supported the DADRP through a program to educate customers on the DADRP. This effort could possibly be expanded with a specific focus in the Company's service territory. NYSERDA may offer support for pilots and/or demonstrations to test the NYISO's enhancement to DR programs. Options to explore and promote real time metering and verification systems to provide data for demand resources may also be investigated.

Close coordination with the NYISO will continue through working groups in place before this collaborative process began. The NYISO is a member of the Collaborative, as well, providing an additional option to present program enhancements. The Collaborative supports the renewal of existing SCR/ICAP and EDRP programs to the fullest extent because LM programs are a relatively low cost method for procuring demand reductions.

NYCEDC supports giving consideration to the potential impact of emissions regulations on the enrollment of DR generators in NYISO reliability-based DR programs, and the resulting effects on the market.

VII. Measurement and Verification

Action Item j. Reviewing existing measurement and verification protocols for use in tracking programs.

NYSERDA and the Company follow the guidelines of the International Performance Measurement and Verification Protocol.

Measurement and verification requirements should differ among long term and short term EE, DG, and LM projects. Historically, NYSERDA has collected several years worth of operating data for CHP projects to assure efficiency and emissions are being met and to publicize information on project performance. Short term projects can be checked through verification of enrollment in a load curtailment program. Permanent measures are checked either through on-site verification of installation or short term spot monitoring. The level of effort and staff needed to verify demand reduction varies. Short term DR projects also have to account for diversity, time of use that permanent reduction projects do not.

Measurement and verification will differ from program to program and specific requirements will be detailed in each of the SWP and TP Implementation Plans. In general, where applicable, projects will undergo selective on-site verification and/or verification of enrollment in a load curtailment program, and/or will provide metering data to document demand reductions. Technical assessments documenting an engineering estimate of potential MW reductions will be required and a review of this analysis will be conducted prior to issuing incentive payments. Measurement and verification protocols will be coordinated between the SWP and TP to the greatest extent possible. Measurement and verification requirements will also be commensurate with the value (savings) of the measure to be implemented as well as the incentive offered.

VIII. New York Power Authority Programs

Action Item k. Coordinating with NYPA's EE/DG/LM initiatives.

NYPA has offered energy services since the mid-1980s. NYPA provides the following services through various program offerings: comprehensive facility surveys and feasibility studies, engineering design, life cycle cost analysis, equipment procurement, labor contracting and installation services, hazardous material disposal and management, project and construction management, full program financing, and project commissioning. NYPA utilizes its funding to cover up-front costs for its customers; it then recovers its payments through the energy savings achieved, similar to a performance contract arrangement.

The SWP incentives are only available to customers in the Company's service territory that pay for the cost of these programs through the Monthly Adjustment Clause. The TP may offer programs to the Company's customers in defined constrained T&D areas. NYSERDA plans on coordinating with NYPA on marketing efforts, when applicable, including presentations to interested groups or customers.

IX. Non-Electric Chiller Load Issues

Action Item l. Identifying the means and impediments to shifting load away from electric chillers to non-electric chillers and other technologies.

The Collaborative members focused discussion of this topic on impediments to installing steam cooling rather than electric cooling. The existing steam cooling on the Con Edison steam system (located in Manhattan below 96th Street) is equivalent to approximately 375 MW of electric demand. It would accordingly increase electric demand if this steam cooling migrated to electric cooling. This issue also arises in new buildings in New York City, most of which are choosing electric cooling systems in lieu of steam cooling systems, adding new electric cooling load to the system. The reason for this migration to electric chilling from steam is cost. Capital cost and maintenance cost of an electric chiller is less than that of a steam chiller. Issues pertaining to the Company's steam system and how to encourage customers to utilize it for cooling are being handled in a separate Task Force.

The Collaborative recommends that in order to enhance steam cooling technology as a fuel choice for cooling, NYSERDA and the Company should strive to ensure that the incentives awarded under their SWP and TP do not conflict with the goal of encouraging steam cooling. Some, in the Collaborative, recommend increasing incentive levels for steam installations.

Similarly, incentives to encourage the installation and design of gas-fired direct drives, thermal storage, steam and hybrid chiller systems, or other technologies are recommended. Regardless of the fuel type, switching from electric chilling to non-electric chilling will reduce demand on the grid during peak times and therefore be a benefit toward reaching the goal of the SWP and TP programs.

X. ICAP Tagging Issues

Action Item n. Examining the opportunity for ESCOs to adjust their ICAP buying requirements for any service classifications based on Company-approved, objective metrics and for offering customers the right to measure use at system peak for purposes of setting ICAP responsibility through an approved Meter Data Service Provider, taking into account the potential revenue impacts on customers and the Company.

This issue falls under parameters to demand response programs at the NYISO and indirectly with the appropriate LSE. Each year, the Company and other LSEs must perform capacity assessment for the NYISO. For the Company, the methodology to calculate capacity requirements for customers served under the Company's service classifications 1, 2 and 7, (*i.e.*, mass market customers), relies on a combination of load shapes by consumption range and billing cycle data.

Collaborative members raised two issues for discussion in the Action Plan that would allow mass market customers with interval metering that can precisely identify coincident contribution to peak load to have this information utilized in the assignment of their capacity requirements. One position assumes that a mass market customer has an interval meter that captures peak load usage. The second position assumes the placement of a single interval meter at the feeder or head of service for a building or building complex serving mass market customers. In this case, an average mass market tag would be developed from the recorded coincident peak information and assigned to all mass market customers served at the metered location.

The Company has agreed to identify the software, data collection and storage and other implementation issues that would have to be addressed in order to effectuate these mass market positions and will speak to these issues as part of this larger competitive market policy process. The Company will not implement any changes to its capacity assignment procedures until the competitive market policy considerations of this issue have been fully resolved with DPS Staff and other interested parties.

After discussing this issue in some depth, it was determined that it is more properly considered a retail access matter than a DSM opportunity. Accordingly, it is recommended that this issue be segregated and addressed in its own forum rather than as part of either NYSERDA's or the Company's Implementation Plans.

XI. Legislative and Regulatory Initiatives

Action Item o. Considering legislative and regulatory opportunities, such as improvements in energy building codes and establishing state and federal standards for residential and commercial products, that would achieve load reductions in the Company's service territory.

In addition to reducing electric load by directly affecting the behavior of individual end users through financial and technical incentives, various legislative and regulatory approaches can affect

the purchasing behavior of entire populations. Building and energy codes and appliance and point-of-sale standards are proven approaches that can have significant widespread benefits.

Codes and standards can be implemented at all levels of government – federal, State, and local – and benefit all economic sectors. In addition to reducing energy use, proper application of codes and standards will reduce harmful environmental emissions, increase consumers’ spending power, create jobs, and boost economic growth. By encouraging the development and commercialization of new technologies and building practices through the enforcement of codes and standards, American industrial and commercial competitiveness will be strengthened.

National standards were introduced through the National Appliance Energy Conservation Act of 1987 that called for consensus agreements by manufacturers for a variety of appliances. Manufacturers were given five years to meet the standards, and the law directed the DOE to revise the standards every five years. Federal standards take precedence over state standards for the same products and equipment. In 1988 and 1992, additional products and equipment were added, and additional products are included in the Domenici-Barton Energy Policy Act of 2005. The President signed into law the Energy Policy Act of 2005 in August of 2005.

New York is currently developing procurement standards for state agencies and authorities for a number of products. Legislation enacted in New York this year directs New York to establish minimum energy efficiency performance standards for a number of residential and commercial products (Chapter 431 of the Laws of 2005). The Company supported this legislation, as did other Collaborative members.

In addition to purchasing standards, stringent energy codes will provide the energy efficiency, environmental, and economic benefits described above. New York State’s Energy Code is administered by the New York State Department of State and has received six energy code grants since 1997 from the DOE for updates, training, and evaluation. Federal funding for energy code development and administration is passed through NYSERDA as the State agency eligible to receive DOE funds. In 2002, New York adopted the International Energy Code Platform, specially adapted for New York State. New York’s energy code is on a three-year code update cycle and is being updated in 2005.

Further opportunities for achieving load reductions in the Company’s service territory through improvements in energy building codes and state and federal appliance standards include participation in:

1. the implementation and rulemaking activities that will result from New York’s new appliance standards legislation
2. ongoing rulemaking for revised federal appliance standards
3. the periodic reviews of New York State’s Energy Codes

XII. EE/LM/DG Allocation Methodology

The Allocation working group defined the terms EE, DG, and LM for the purposes of this Plan. The working group established a list of criteria to utilize in determining the allocation of funds and anticipated MW reduction goals within EE, DG, and LM. Members of this working group are:

- NYSERDA

- The Company
- JS
 - ENERNOC, Inc.
 - NAESCO
 - RETX
- NYCEDC
- NYECC
- DPS Staff
- NRDC

NYSERDA articulated a necessity for flexibility in the allocation of funds among EE, DG, and LM so that funds could be easily reallocated based on program successes or short-falls. There is consensus on this issue. In order to arrive at allocations for EE, LM, and DG, working definitions had to be established for use in the discussions and in this Plan. These definitions are provided in the abbreviations section at the beginning of this document. The SWP will contain a combination of EE, LM, and DG offerings. Incentive levels for the areas will be decided on a program by program basis in the respective Implementation Plans.

Based on the definitions, the 150 MW reduction goal of the SWP and the timeframe of delivery, a methodology for determining the allocation of funds was developed. Acknowledging that the customer groups, service providers, other key market factors, and the incentive amounts will ultimately determine the consumption of resources, flexibility in the allocation is essential. For instance, if EE is experiencing high application activity, monies may be transferred to that category and away from DG or LM. This process will be developed in the Implementation Plan. A discussion of the proposed allocation methodology follows.

NYSERDA Internal Review

NYSERDA will conduct an internal review of existing programs and develop ideas for enhancements across programs and departments. Offerings through NYSERDA's Energy Efficiency Services (Commercial and Industrial), Research and Development, and Residential divisions will be considered.

NYSERDA reviewed The **New York Energy \$martSM** Quarterly Evaluation and Status Report and the most recent New York Energy \$mart Program and Evaluation Report for program MW results achieved, incentives paid, and program costs. In some instances, NYSERDA estimated the Company's service territory results from statewide numbers. NYSERDA states that its evaluation results from SBC II thus far show over 250 MW of reductions installed and operational in the Company's service territory, nearly half of which are permanent.

Examples of three current business/institutional incentive programs contributing to MW results in the Company's service territory include the PLRP (which has EE, LM, and DG results), the CIPP (which has EE results), and the NCP (which has EE results). Two residential programs contributing to MW results in the Company's service territory include the Keep Cool Program (which has EE and LM results) and the CEM (which has LM results).

NYSERDA will examine results from these programs and evaluation reports to aid in the determination of appropriate allocations. A deciding factor in utilizing existing programs or making enhancements is the requirement that each program under the SWP and TP be cost-effective on a TRC basis. Action Items A and P also relate to current program enhancements, so further discussion on this topic is presented under those items.

As noted above, NYSERDA's Residential programs, including its low-income multifamily and small homes program components, shall be designed to contribute substantively to the demand reduction goals of programs offered in response to this Plan and will be tracked accordingly.

Past Experience

Feedback from the marketplace, service providers, and interested stake-holders, including the Collaborative, based on past experience, will be sought and considered. Feedback was received on past programs' incentive levels and offerings and on the mechanisms employed to achieve past MW reductions.

Facility caps and incentive levels have been decreased in programs as a result of reduced funding availability due to oversubscription, and market and technological advances. NYSERDA will reexamine the potential to increase facility caps and incentive levels in the Company's service territory.

Customers are looking for streamlined processes and programs that allow for comprehensive projects instead of separating parts of projects to submit to several programs. The Collaborative recommends programs that would incentivize all categories with applicable criteria rather than creating separate program offerings. This falls in line with the desire to identify and develop DSM projects expeditiously. Having to apply to more than one program could lead to confusion and increase effort and time. NYSERDA plans on utilizing current program offerings to the extent possible and creating new offerings where there is need. PLRP was focusing on DSM and offers incentives for EE, LM and DG. Other NYSERDA programs focus on EE and will be modified to fund LM or DG.

Some Collaborative members recommend that some programs (*e.g.*, the DG/CHP Program) operate on a first-come first-serve basis rather than via competitive solicitations involving a technical evaluation panel due to timeframes and ease of use. PLRP, CIPP, and NCP all operate in this mode.

Examining previous or current awarded projects for additional opportunities is recommended. Customers already working with NYSERDA for an incentive should be reviewed for additional energy measures that could further reduce demand, thereby procuring an additional incentive under the SWP or TP.

Demographics

Programs and effort directed at reducing demand in the areas of EE, LM, and DG within the Company's service territory will be affected by the sector make up. Commercial office space involving intricate landlord/tenant relationships, institutional, and multi-family residential represent the larger sectors. The industrial sector, as compared to those, is smaller. Demographics in Westchester County and the boroughs differ significantly. SWP implementation activity will be

reviewed on an ongoing basis to provide, to the extent possible, parity of expenditures within the Company territory without jeopardizing the demand reduction goal.

Environmental Attributes

Emissions criteria and impacts and other environmental factors play a role in the allocation of resources amongst EE, LM, and DG. NYSERDA incentives are structured to support technologies that meet and often exceed existing codes and regulations. NYSERDA will consider the environmental impacts of each category to help in its allocation decision. Since EE is a permanent installation and is often undertaken to replace aged or inefficient equipment, the new piece of equipment will have less of an environmental impact and last for the lifetime of the measure. LM, being short term, helps increase grid reliability and thus reduces the need to run emergency diesel powered generation with higher emissions. It should be understood that the emissions threshold level(s) set for DG will have a direct impact on the number of DG applications received under the SWP and TP.

Grid Reliability

There are project reliability concerns and LM reliability concerns. Measures or projects with permanent long term demand reductions help assure reliability on a more secure basis than LM activities. However, programs such as EDRP or SCR/ICAP can provide greater assurance that loads can be reduced when needed on a short term basis because payments received or appropriate penalties could be born by the customer. A balance among these activities is needed since the cost to achieve permanent reduction is often higher than the cost of short term curtailment enabling. Both play a critical role in securing overall grid reliability.

Network Infrastructure

Currently, certain Company networks will not permit interconnection of synchronous DG or DG/CHP systems absent fault current mitigation.³ Pursuant to the Order, the Company has established a website for DG that shows the potential availability of networks for interconnected synchronous DG without fault current mitigation. This information will have to be taken into account in designing any program that would provide incentives for synchronous DG.

Accessibility

Accessibility by customers and contractors is also considered. Program development and solicitation type impact the percent of applications received in the three categories. Open solicitations that are first-come first-serve may potentially receive more projects than yearly competitive solicitations. Also, DG and CHP installations are historically harder to implement due to interconnection requirements, operation and maintenance concerns, high hardware costs, and installation times. There are more hurdles to overcome than in EE or LM projects initially, and programs will be structured to assure unessential additional hurdles are not created. Stringent requirements may reduce activity in an area.

³ It should be noted that the cleanest DG, such as photovoltaics and fuel cells are not synchronous and do not require fault current mitigation

Summary

The initial funding allocations among EE, DG, and LM will be provided in the SWP Implementation Plan and will be based on the criteria listed above. Program funding will be monitored on an on-going basis and evaluated as needed to determine if reallocation is necessary. Before reallocation will occur, NYSERDA will review program results to date including incentive levels, costs, MW achieved, program rules and other factors that may be contributing to low participation.

NYSERDA recommends using the above criteria to help establish ranges of funding allocations amongst EE, LM, and DG in the Implementation Plan. As previously stated, reallocations, if necessary, will occur following program assessment. To the extent possible, NYSERDA will alert the Collaborative to a potential reallocation along with an explanation.

CONCLUSION

The Collaborative has worked to discuss issues pertaining to stimulating and expanding DSM programs and initiatives in the Company's service territory. Substantial input was received on the 16 enumerated action items. The Collaborative recommends that the Commission decide the unresolved issues discussed herein and otherwise accept or approve this Plan, as appropriate, and allow NYSERDA and the Company to move forward with implementing the SWP and TP and achieving the goals set forth in the Order.

Robert Callender
V.P. of Programs
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, New York 11203-6399

August 4, 2005

RE: Installed MW Reduction from NYSERDA programs in Consolidated Edison territory through December 31, 2004

Dear Mr. Callender,

This letter is a follow-up to NYSERDA's request for verification that the New York Energy \$martSM Program, during the period June 30, 2001 to December 31, 2004, has installed at least 250 MW of demand reduction projects within the Consolidated Edison utility territory. We previously wrote to you on this subject on June 15, 2005 and July 12, 2005.

As the Measurement and Verification Evaluation (M&V) Contractor to the New York Energy \$martSM Program, Nexant uses random sampling to select and examine representative completed projects for a given program, and then extrapolates the results to all projects in the same program. Through a combination of site inspections and engineering reviews Nexant verifies the impact for each project in our sample, and we then compare our results to those reported by NYSERDA. These comparisons are combined into program realization rates, the ratio of Nexant-verified to NYSERDA-reported for both MWh and MW. To report the program wide verified savings, we multiply each program's reported savings by its realization rate.

To report the demand reduction impact for this Con Edison specific inquiry, we used zip code and utility service territory fields to filter NYSERDA's databases of completed projects to select only those that were constructed in Con Edison service territory. We then multiplied the NYSERDA-reported MW for those filtered projects by the Nexant realization rate. Additional details of the M&V methodology, including the sampling procedure and site visit activities, can be found in Nexant's 2003 and 2004 evaluation reports for all NYSERDA programs included in this analysis. For a detailed explanation, please see http://www.nyserda.org/Energy_Information/05sbcreport.asp.

Subsequent to our July 12 letter, NYSERDA requested that we re-assess our MW reduction estimate for the Peak Load Reduction Program (PLRP) to reflect the delivered demand reduction rather than enabled demand reduction. Enabled demand reduction is based on the estimated demand reduction potential of each facility after they have received technical support and incentives from NYSERDA to purchase and install demand response equipment and enabling technologies. Delivered demand reduction is a historical measurement of participants' performance in past emergency events called by the New York Independent System Operator (NYISO). Given that PLRP implementers only track enabled demand reduction, Nexant's M&V reviews in 2003 and 2004 focused exclusively on NYSERDA's reported enabled MW. To estimate the delivered demand reduction, we have applied pledge-to-perform ratios developed by Neenan Associates as part of the annual NYISO Price-Responsive Load Program Evaluation conducted for NYISO and NYSERDA since 2002.

In order to apply Neenan Associates' pledge-to-perform ratio to the 177 curtailable MW attributed to the PLRP in our July 12 letter, we first needed to obtain a breakdown of the total curtailable MW by NYISO program type: Emergency Demand Response Program (EDRP) or Special Case Resources (SCR). However, it was not until the beginning of the 2004 program year, after the window of this analysis, that PLRP implementers began to track each project's participation in a specific NYISO demand response program. Therefore, we are unable to determine the exact breakdown of pledged MW by NYISO program type. NYSERDA has stated that approximately 75% of the PLRP projects in Con Edison's service territory are enrolled in SCR and 25% in EDRP. For the broader universe of all NYISO demand response customers, including those who did not participate in PLRP, Neenan's analysis shows that the breakdown of SCR and EDRP resources in Con Edison service territory is 67% and 33% respectively. For the purposes of this review, we have assumed a conservative breakdown of 55% SCR and 45% EDRP in estimating the PLRP delivered demand response.

Our original conclusion that the New York Energy \$martSM Program had delivered at least 250 MW of demand reduction in Con Edison service territory was based on data obtained from NYSERDA for only three of its programs: the Commercial/Industrial Performance Program (CIPP), Keep Cool Program and Peak Load Reduction Program (PLRP) during Nexant's M&V evaluations of the New York Energy \$martSM Program in 2003 and 2004. However, there are at least eighteen NYSERDA programs that have resulted in demand reduction in the Con Edison service territory. After adjusting our PLRP estimate downward to reflect only delivered demand response, we are now including additional MW impacts from four more programs to demonstrate that the 250 MW threshold has been met. The additional programs are:

- Technical Assistance (TA) Program
- Distributed Generation/Combined Heat and Power Program (DG/CHP)
- New Construction Program (NCP)
- Smart Equipment Choices (SEC) Program

Based on our analysis, projects completed through these seven programs have achieved at least 116 MW of permanent demand reduction and 138 MW of curtailable demand for a total of 254 MW in Consolidated Edison's territory, through December 31, 2004. The results are summarized in Table 1.

Table 1: Nexant-verified MW reduction in Con Edison territory between 6/30/01 and 12/31/04

Program	Permanent MW	Curtaillable MW	Source
CIPP	43	-	Nexant's 2004 M&V savings calculations for CIPP
Keep Cool	34	-	Nexant's 2004 M&V savings calculations for Keep Cool. We assume that 50% of the bounties paid in 2001 were for projects completed after 6/30/01
TA	23	-	Nexant's 2004 M&V savings calculations for TA
PLRP	10	138	Nexant's M&V savings calculations for PLRP (2003 and 2004). The 177 enabled MW estimated in our July 12 letter is broken down into 80 MW EDRP (45%) and 97 MW ICAP (55%), a conservative assumption. A pledge-to-perform ratio of 51% is then applied to the EDRP estimate, based on data provided in the Neenan Associates 2002 NYISO Program Evaluation ⁴ . Note that the EDRP is a voluntary program, but SCR is not. For SCR, we assume that all the pledged MW are delivered, as required by NYISO program guidelines, which include penalties for non-performance.
NCP	7	-	Nexant's 2004 M&V savings calculations for the NCP
DG/CHP	5	-	Nexant's 2004 M&V savings calculations for the DG/CHP
SEC	3	-	Nexant's 2004 M&V savings calculations for the SEC, based on estimated measure savings from the Deemed Savings Database
Sub-total	125	138	
Overlap Adjustment	(9)	-	Based on Nexant's 2004 analysis of overlap that results when TA projects go on to enroll in other NYSERDA implementation programs (CIPP, DG/CHP and Loan Fund)
Total	116	138	

Nexant is the independent Measurement and Verification Evaluation contractor for the New York Energy \$martSM Program. In this role we assess the impacts of the program's operations on electric energy consumption and demand within New York. The MW reduction totals in Table 1 include adjustments, based on our investigations, that we have applied to the values recorded by NYSERDA in the individual program implementation tracking databases.

If you have any questions about this review, please contact me at 914-609-0333 or dgowans@nexant.com.

Sincerely,

Dakers Gowans

⁴ Neenan Associates, *A Study of NYISO and NYSERDA 2002 PRL Program Performance*, p.7-32, 2003

