STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a Session of the Public Service Commission held in the City of Albany on March 15, 2006

Commissioners Present:

William M. Flynn, Chairman
Thomas J. Dunleavy
Leonard A. Weiss
Neal N. Galvin
Patricia L. Acampora

CASE 04-E-0572 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service.

ORDER ON DEMAND MANAGEMENT ACTION PLAN

(Issued and Effective March 16, 2006)

BY THE COMMISSION:

INTRODUCTION

The public's demand for electricity is ever increasing, and while we have adequate supplies for now, most studies indicate that within about five years, we will need new generation. Both the demand for electricity and concerns about siting new generation are most acute in Consolidated Edison Company of New York, Inc.'s (Con Edison) service territory. Our approach to addressing this matter is multi-faceted. We recently approved an extension of the System Benefits Charge, which is collected from electric utility ratepayers across the State and funds programs across the State.[1] Since the need is greatest in the downstate area, we also authorized approximately $224 million in

[1] Case 05-M-0090, In the Matter of the System Benefits Charge III, Order Continuing the System Benefits Charge (SBC) and the SBC-Funded Public Benefit Programs (issued December 21, 2005).

funding for demand management initiatives within Con Edison's service territory.[2] These initiatives are to be funded by Con Edison's electric ratepayers and will fund programs exclusively within Con Edison's service territory. In the Rate Order, we set an overall target of 300 megawatts of load reductions associated with these initiatives and split the funding between Con Edison and the New York State Energy Research and Development Authority (NYSERDA).

Con Edison was directed to develop and implement a targeted demand management program with the goal of procuring at least 150 megawatts of load reductions that, in addition to offsetting the expected increase in the demand for electricity over the next several years, would allow the company to defer and/or avoid transmission and distribution infrastructure investments otherwise needed to address load growth in certain networks within its service territory.[3] NYSERDA was directed to develop and implement a service territory-wide demand management program with the goal of procuring at least 150 megawatts, and up to 300 megawatts, of load reductions throughout Con Edison's service territory. The NYSERDA-administered service territory-wide program is separate from the programs NYSERDA administers using System Benefits Charge funds, and although NYSERDA may coordinate the programs to maximize their effectiveness, the reductions to be achieved under the service territory-wide program are to be incremental to the reductions it achieves through the System Benefits Charge-funded programs.

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[2] Case 04-E-0572, Consolidated Edison Company of New York, Inc. – Electric Rates, Order Adopting A Three-Year Rate Plan (issued March 24, 2004) (Rate Order). As used in the Rate Order and in this Order, demand management initiatives comprise programs and measures to manage and reduce consumers' demand for energy during peak periods and at other times. The initiatives include energy efficiency measures that reduce consumers' demand for and use of energy at all times, load management programs that reduce consumers' demand for and use of energy during peak periods, and the use of distributed generation facilities that allow consumers to self-generate all or a portion of their energy needs, thereby reducing their demands for energy from the electric system, especially during peak periods.

[3] As described in the Rate Order, the targeted program does not include load management measures.

In addition to authorizing funding for demand management initiatives in Con Edison's service territory, we instituted a collaborative process, to be commenced by Department of Public Service Staff (Staff) and chaired by NYSERDA, in which interested parties could collectively determine how best to achieve the demand management goals discussed in the Rate Order (the Collaborative). We also directed the Collaborative to determine whether and how to, inter alia, stimulate consumer participation in the demand management initiatives, enhance the programs funded through the System Benefits Charge, and improve the coordination of the demand management efforts undertaken by various public and private entities. In total, there were 16 items on which we asked the Collaborative to provide analysis, feedback, and recommendations, as appropriate.

On August 16, 2005, NYSERDA filed an Action Plan that, for the most part, represents a consensus position among the many Collaborative members as to the procedures and approaches that should be taken by NYSERDA and Con Edison in implementing the service territory-wide and targeted demand management programs, respectively. The Action Plan also includes a discussion of the 16 items enumerated in the Rate Order. On some issues, the Collaborative members were unable to reach consensus. In this Order, we resolve the disputed issues, approve the Action Plan subject to certain modifications, and discuss some related implementation issues.

We are aware that NYSERDA and Con Edison have developed and filed implementation plans for their respective demand management programs. While we will accept the plans as filings in compliance with the Rate Order, we direct NYSERDA and Con Edison to supplement them, as appropriate, to conform them to our determinations in this Order. Inasmuch as the implementation plans do not appear to require substantial modification, NYSERDA and Con Edison may begin to implement their respective plans, in a manner consistent with the requirements of this Order, concurrently with preparing and filing the supplements.

THE ACTION PLAN

The Action Plan is designed to identify ways to promote demand management activities in Con Edison's service territory and to enhance or improve the demand management programs offered by Con Edison, NYSERDA, the New York Independent System Operator, and others. As noted above, in the Rate Order, we set forth a list of 16 topics that the Collaborative should address as part of the development of the Action Plan. Where the themes or elements of the topics overlap (e.g., marketing, program enhancements), they were consolidated and discussed collectively in the Plan.

In addition to addressing the specified topics, the Action Plan is intended to provide guidance to Con Edison and NYSERDA on two fundamental issues associated with implementing the demand management programs—the measurement of the cost-effectiveness of specific initiatives on a total resource cost basis and the allocation of program funding among energy efficiency, load management, and distributed generation. The Action Plan is attached hereto as Appendix II and is briefly summarized below.

Total Resource Cost Test

Programs administered under the Action Plan are required to be cost-effective on a total resource cost basis.[4] The Collaborative agreed that a clear delineation of the elements of the total resource cost test was essential to the implementation of both the service territory-wide and targeted programs, but they were unable to reach consensus on all of the resource benefits and costs that should be included as elements of the test. There was consensus that including the following benefits in the total resource cost would be appropriate: avoided electric energy usage, avoided capacity, avoided use of fuel (e.g., natural gas, oil, propane), and quantifiable water and maintenance savings. There was also consensus that incremental customer costs plus the costs of any incentives, as well as incurred use of fuel, should be included as resource costs. Consensus was not reached on whether the following elements should be included in the total resource cost test: energy market price effects, avoided transmission and

[4] Rate Order, p. 87.

distribution costs, distributed generation costs and benefits, load curtailment program impacts, environmental externalities, and the value of reductions in avoided variability and risk. In the Action Plan, NYSERDA recommends that energy market price effects, including those associated with reduced installed capacity payments, and avoided transmission and distribution costs (except ancillary service costs) be included in the total resource cost test. NYSERDA further recommends that unquantifiable environmental externalities and avoided variability and risk, as well as difficult to measure and monetize customer benefits associated with distributed generation projects such as improved power quality and reliability to the host customer, and the additional distributed generation costs associated with enhanced customer benefits, not be included.

Definition of Clean Distributed Generation

The Collaborative was charged with developing a definition of clean distributed generation for eligibility in the service territory-wide and targeted programs. While consensus was not reached, most parties concurred that the emission levels of distributed generation facilities eligible for incentives under the demand management programs should be more stringent than existing emission regulations. The Action Plan proposes establishing two standards for eligibility of distributed generation based on a unit's operating characteristics. For new distributed generation units that are operated to meet customers' base load requirements or to reduce peak demand on the system, the Action Plan proposes an emissions threshold of 1.6 pounds/megawatthour of nitrous oxides (NO_x). For new distributed generation units that are operated for the sole purpose of responding to emergency and reliability events specifically called by the New York Independent System Operator, New York Power Authority, or Con Edison, the Action Plan proposes an emissions threshold of 13 pounds/megawatthour of NO_x for facilities of 560 kW or less, and 18 pounds/megawatthour of NO_x for larger facilities. Certain limited exceptions to the threshold could be allowed for baseload or peaking distributed

generation that is a facility-specific hybrid, or that utilizes thermal recovery,[5] biofuels, or innovative emissions controls.

For combined heat and power distributed generation, in addition to providing exceptions to the threshold, the Action Plan proposes that NYSERDA provide additional credits or incentives to units with emissions levels that are lower than the proposed emissions threshold level of 1.6 pounds/megawatthour of NO_x. Since it is unknown how these eligibility criteria will affect the participation of distributed generation in the service territory-wide and targeted programs, the Collaborative recommends that the criteria be reviewed 18 months after the date of this Order.

Coordinated Marketing

Con Edison and NYSERDA will review and coordinate their print and other media advertising and increase and redirect their marketing efforts, as appropriate, to make them more effective. As one example of this coordination, they plan to issue targeted joint letters to inform key potential participants of their respective demand management programs. The company will provide NYSERDA with aggregated customer demographic information by network, with additional information needs and protocols for providing such information to be determined on an on-going basis.

The company and NYSERDA will also seek opportunities to increase commercial and industrial customer participation in the demand management programs by targeting the customers' chief executives and other primary decision makers, facilities engineers, energy advisors, and others (e.g., Partnership for New York City, New York Energy Consumers Council, Inc., and Consumer Power Advocates). In addition, they will meet with government officials in both New York City and Westchester County to coordinate public and private activities to promote and encourage demand management such as joint marketing strategies. In addition, they will hold regular meetings with government officials, consumer groups, and other parties to review their marketing

[5] Distributed generation with thermal recovery uses the waste heat from the production of electricity for domestic heating and/or cooling purposes and is commonly known as combined heat and power distributed generation.

efforts and program penetration and discuss ways to further maximize participation in the demand management programs.

Con Edison and NYSERDA will work together, through the company's account managers and NYSERDA's staff and contractors, to assist customers in identifying appropriate demand management programs. These customer contacts will be the primary gateway for program participants and will be educated on all demand management offerings available within Con Edison's service territory, including offerings available through the New York Independent System Operator and others.

Con Edison Action Items

Con Edison's existing demand management marketing plan includes advertisements, direct marketing, internet and telephone promotion, printed materials, publicity and public relations, conferences, workshops and seminars, and partnerships and relationship building. The company will continue these initiatives and increase targeted efforts as well as cooperative marketing with NYSERDA. For smaller commercial and residential customers, the company will use its customer service representatives and its demand management personnel to market the demand management programs.

The company established a direct email address and a toll free number to provide customers, engineers, and others the ability to obtain information about the demand management programs. It will track all calls and emails it receives to assist it and the Collaborative in evaluating the success of the demand management programs (the information will be shared on a quarterly basis with Staff and the Collaborative).

NYSERDA SBC Program Enhancements

In addition to establishing the Con Edison-specific demand management programs, the Rate Order directed the Collaborative to examine ways to improve the System Benefits Charge-funded programs that are available in the downstate area. The Collaborative determined that a number of these programs can be enhanced to foster increased participation in demand management programs. Traditionally, a majority of

these programs have been focused on increasing energy efficiency without attention to the time of day when demand reductions occur. NYSERDA has tasked its program and project managers to provide suggestions and modifications to existing programs in an effort to reduce peak demand. Possible modifications include incentive restructuring, adjusting the facility cap funding level, new incentive opportunities, and focused marketing. NYSERDA will also extract information from the most recent formal evaluation of its System Benefits Charge-funded programs to offer further guidance on enhancing existing programs.

New York Independent System Operator Programs

The New York Independent System Operator offers a number of demand management programs, including the special case resources/installed capacity, emergency demand response, and day ahead demand response programs. Con Edison, NYSERDA, and other parties will continue to work with the New York Independent System Operator to enhance and increase participation in these programs. For example, the parties will collectively examine and seek ways to remove barriers to distributed generation participating in the special case resources/installed capacity program, which may 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. The parties will also work together to develop a pilot program for aggregating demand resources for participation in the day ahead demand response program.

Measurement and Verification

Measurement and verification requirements differ from program to program and between Con Edison and NYSERDA. The requirements generally include on-site verification and/or verification of enrollment and review of metering data to confirm the claimed demand reductions have been achieved. Con Edison and NYSERDA will coordinate their measurement and verification protocols as much as practicable to facilitate participation in the demand management programs.

New York Power Authority Programs

New York Power Authority also provides a number of demand management programs. Since the New York Power Authority's customers do not pay the Monthly Adjustment Clause as part of their electric bills, they are not eligible to participate in the demand management programs. However, NYSERDA will coordinate with the New York Power Authority on marketing efforts to increase the understanding and effectiveness of their respective programs.

Non-Electric Chiller Load Issues

The capital and operating costs of an electric chiller are less than those of a steam chiller. This concern affects Con Edison's ability to retain existing and attract new steam cooling customers,[6] and it also affects both Con Edison's and NYSERDA's demand management programs. The Collaborative recommends that to enhance steam cooling technology as a fuel choice for cooling, Con Edison and NYSERDA strive to ensure that the incentives awarded under their respective programs do not conflict with the goal of encouraging steam cooling. In addition, both programs should consider incentives to encourage the installation of non-electric or hybrid chillers to reduce peak demands on the electric system.

Installed Capacity Tagging Issues

The methodology Con Edison uses to calculate capacity requirements for all but its largest customers relies on a combination of load shapes by consumption range and billing cycle data. The company has agreed to consider ways to allow such customers who have interval meters to identify their specific contributions to peak loads and have this information used in the assignment of their capacity requirements. Since this issue is more of a retail access matter, the Collaborative recommends that it be segregated and addressed in its own forum.

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[6] See Case 03-S-1672, Consolidated Edison Company of New York, Inc. – Steam Rates, Order On Consolidated Edison Company Of New York, Inc.'s Steam Business Development Plan (issued December 5, 2005).

Legislative and Regulatory Initiatives

Building and energy codes and appliance standards are effective in promoting energy efficiency. The Collaborative identified three areas in which interested parties, including Con Edison, could participate to achieve greater load reductions in the company's service territory: (i) implementation and rulemaking activities that will result from New York's new appliance standards legislation;[7] (ii) ongoing rulemakings for revised federal appliance standards; and (iii) periodic reviews of New York State's energy codes.

Energy Efficiency/Load Management/Distributed Generation Allocation Methodology

NYSERDA will allocate funding among energy efficiency, load management, and distributed generation based on the following criteria: cost-effectiveness on a total resource cost basis; NYSERDA's internal review of existing programs; past experience and feedback from the marketplace, service providers, and interested stakeholders; demographics of the various sectors of the service territory; emissions criteria and other environmental attributes (particularly for distributed generation); improvements to grid reliability; limitations of Con Edison's network infrastructure related to the interconnection of distributed generation; and, accessibility by customers and contractors. The Collaborative reached consensus that NYSERDA should monitor program funding on an on-going basis and reallocate funds among its demand management programs as appropriate to maximize its ability to achieve its 150 megawatts load reduction goal. Before it reallocates any funds, though, NYSERDA will review incentive levels, costs, megawatts achieved, program rules, and other factors that may be contributing to low participation, and it will alert the Collaborative as to its plans and the rationale for any proposed changes.

[7] Chapter 431 of the Laws of 2005.

Action Plan Appendix

The Action Plan contains a letter from NYSERDA's measurement and verification consultant on the success of the System Benefits Charge-funded programs. The consultant attests to the fact that the programs have resulted in more than 250 megawatts of permanent and callable load reductions within Con Edison's service territory during the period June 30, 2001 to December 31, 2004.

PUBLIC NOTICE

Notice of this matter was published in the State Register on August 31, 2005. Comments were received from Con Edison, the New York City Economic Development Corporation, Natural Resources Defense Council and Pace Law Energy Project (Pace), and The E Cubed Company, LLC, on behalf of the Joint Supporters (Joint Supporters).[8]

On January 25, 2006, as part of our environmental quality review of this matter, we issued a Draft Conditioned Negative Declaration of Significance for public comment.[9] Notice of that action was published in the Environmental Notice Bulletin on February 8, 2006. Comments were received from the New York City Economic Development Corporation and Energy Spectrum.

[8] Joint Supporters' members include customers, developers, energy service providers, and distributed generation and other generating equipment manufacturers.

[9] Case 04-E-0572, supra, Order Approving Issuance Of Draft Conditioned Negative Declaration Of Significance For Public Comment (issued January 25, 2006) (January 25 Order).

SUMMARY OF COMMENTS[10]

Con Edison

Con Edison offers comments on three discrete issues—steam chiller incentives, one element of the total resource cost test, and the definition of clean distributed generation. The company urges us to direct NYSERDA to increase the incentives associated with replacing and constructing new steam chillers. In doing so, it relies primarily on the analysis contained in its Steam Business Development Plan that the steam system is important to New York City and that greater incentives are needed to make steam chillers competitive to electric chillers and induce customers to either replace or add steam chillers. The company also requests parity in the incentives provided to steam chillers and distributed generation.[11]

On the total resource cost test, Con Edison limits its comments to the element of avoided transmission and distribution costs. The company explains that it will include such costs in its total resource cost test because the purpose of its targeted demand management program is specifically to avoid transmission and distribution investments. In contrast, it contends that because NYSERDA's service territory-wide demand management programs will encompass Con Edison's entire service territory, it will not be possible to tie any megawatt reductions to particular transmission and distribution projects that can be avoided. For this reason, the company continues, any avoided transmission and distribution cost estimates used by NYSERDA would be speculative. Alternatively, the company argues, there could be a double counting of the avoided costs because Con Edison will also have included them in its total resource cost test. The company also opposes their inclusion by NYSERDA on the basis that they are "lumpy" but does not explain why this should cause their exclusion. Finally, the company requests that it not be required to modify its total resource cost analysis in the

[10] In addition to the comments provided in response to the public notice, a number of the Collaborative members offered comments on the topics in the Action Plan during its development. Those comments are summarized in the Action Plan and will not be repeated here.

[11] Con Edison did not explain what it means by parity or why such parity is needed.

event we decide to generally include avoided transmission and distribution costs in the total resource cost test.

Con Edison reiterates its recommendation that we adopt 0.6 pounds/megawatthour of NO_x as the standard for defining clean distributed generation. It explains that the emissions rate from new combined-cycle generating facilities is approximately 0.07 pounds/megawatthour and that its recently completed East River Repowering Project was required to meet a more stringent emissions rate. It asserts that distributed generation facilities should not be allowed to obtain incentives under either its or NYSERDA's demand management programs if they emit NO_x at rates significantly in excess of those applicable to central generating facilities. For the same environmental reasons, the company supports the Action Plan's recommendation that there be enhanced review of distributed generation projects that are intended to supplant steam provided by Con Edison and states its willingness to provide information to NYSERDA on the impact of any such projects on the steam system.

New York City Economic Development Corporation

The New York City Economic Development Corporation initially notes that the increasing demand for electricity in New York City requires a multi-faceted approach, including the expansion of demand management measures and, in particular distributed generation. It then focuses its comments on three areas—the total resource cost test, marketing and utility coordination, and clean distributed generation.

The New York City Economic Development Corporation urges us to include three of the disputed elements in the total resource cost test—market price effects, avoided transmission and distribution costs, and environmental externalities. On the first element, it cites to a number of sources in support of its request that they be included. These include Opinion No. 88-20,[12] the New York State Energy Plan, the

[12] Case 29409, Plans for Meeting Future Electricity Needs, Opinion No. 88-20 (issued July 26, 1988).

Recommended Decision in Case 99-F-1191,[13] and the New York City Energy Policy Task Force Report issued in January 2004. The New York City Economic Development Corporation refutes the recommendation in the Action Plan not to include market price effects by pointing to the New York State electricity market restructuring, which the New York City Economic Development Corporation claims based customer costs on market prices of energy and capacity rather than on costs of generation resources. In addition, it contends that its representatives in the Collaborative presented multiple methods of calculating market price effects, these methods were accepted by most of the Collaborative members who worked on the group that initially developed the proposed total resource cost test parameters (the total resource cost working group), and most of the total resource cost working group members agreed that market price effects could be quantified for two to four years. For these reasons, the New York City Economic Development Corporation requests that we approve the use of market price effects in the total resource cost test and direct NYSERDA to continue to work with the Collaborative on the mechanics of doing so.

The New York City Economic Development Corporation also urges inclusion of avoided transmission and distribution costs in the total resource cost test. It refutes Con Edison's claim that load reductions from the service territory-wide demand management program probably will not result in transmission and distribution deferrals by pointing to Con Edison's ten-year network upgrade plan. The network plan adjusts upgrade schedules primarily on summer peak loads. It contends that, based on Con Edison's own method of adjustment, if summer peak loads are reduced by 5 megawatts due to demand management measures, upgrades could be deferred for a year. It therefore requests that we include avoided transmission and distribution costs in the total resource cost test and that NYSERDA continue to work with the Collaborative to develop a method for quantifying the avoided costs.

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[13] Case 99-F-1191, Application of Astoria Energy LLC, for a Certificate of Environmental Compatibility and Public Need to Construct and Operate an Approximately 1000 Megawatt Generating Facility in the Astoria Section of Queens County, Recommended Decision (issued September 6, 2001).

On the issue of environmental externalities, the New York City Economic Development Corporation points to the State Energy Plan, Governor Pataki's support of the Regional Greenhouse Gas Initiative, and the practice in New York in the early 1990s of including an environmental adder to the total resource cost test as support for their inclusion for purposes of both the service territory-wide and targeted programs. It argues that the current cap and trade programs do not place a value on the health impacts associated with the emissions, such as juvenile asthma rates. Also, there are currently no cap and trade programs for mercury, carbon dioxide (CO_2), and particulate matter, and greenhouse gas will remain unaccounted for in market prices until a cap and trade program for CO_2 is adopted. The New York City Economic Development Corporation asks us to direct NYSERDA to work with the Collaborative and to determine a method for valuing environmental externalities for purposes of the total resource cost test.

The New York City Economic Development Corporation contends that Con Edison must be actively involved in the administration of both its and NYSERDA's demand management programs, and, therefore, advocates for a partnership between NYSERDA and Con Edison to promote the demand management programs. Since Con Edison frequently interacts with customers and customer decision-makers, it continues, the company can play an important role in helping to develop market analysis, tailoring program design and development, assisting with the completion and submission of customer applications, and providing advice to customers on a variety of issues. It encourages us to continue to use our authority to motivate Con Edison to remain highly involved throughout the marketing and implementation stages of the demand management programs.

With respect to clean distributed generation, the New York City Economic Development Corporation supports NYSERDA's recommended definition and eligibility criteria. It states that for baseload and peaker distributed generation facilities, the 1.6 pounds/megawatthour emissions level is well below our previous standard of 4.4 pounds/megawatthour and represents a reduction from a comparable average peaker plant in Con Edison's service territory. For demand response distributed generation facilities, the New York City Economic Development Corporation claims that a NO_x emission

threshold level of 13 pounds/megawatthour is below average emissions levels for standby generators and that these units are critical to grid reliability. It endorses the proposal in the Action Plan that the Collaborative review the threshold levels halfway through the term of the Rate Plan and encourages NYSERDA to seek only the cleanest commercially available generating technologies.

As noted above, the New York City Economic Development Corporation offered additional comments on our environmental assessment of this matter. It contends that the proposed requirements that exhaust stacks for distributed generation facilities be placed on the highest structures on their host sites could exclude some, perhaps many, developers of distributed generation facilities from participating in the demand management programs because of the costs associated with meeting such a requirement. According to the New York City Economic Development Corporation, due to the pedestal and tower construction of many buildings in New York City, many clean distributed generation facilities are located on the pedestal roofs rather than on the tower roofs. It claims that the cost to increase the stacks to above the tower roofs could make the facilities uneconomic. While it supports taking reasonable steps to protect air quality, it suggests that the proposed requirement could adversely effect the success of the demand management programs and reduce the expected benefits from the programs.

Natural Resources Defense Council and Pace

The Natural Resources Defense Council and Pace submitted joint comments on two issues–the definition of clean distributed generation and the total resource cost test. The Natural Resources Defense Council and Pace recommend that we establish more stringent standards than NYSERDA's recommendations for the NO_x emissions limits for baseload, peaker, and demand response distributed generation facilities. Pace recommends a NO_x limit of 1.4 pounds/megawatthour and the Natural Resources Defense Council suggests a limit of 0.6 pounds/megawatthour for all three types of distributed generation facilities. They reason that since the New York State Department of Environmental Conversation’s draft distributed generation emissions regulations set NO_x limits at 1.6 pounds/megawatthour, the threshold for providing

incentives under the demand management programs should be stricter than the potential legal limit. Since their respective thresholds are achievable using commercially available technologies, the Natural Resources Defense Council and Pace assert that their recommendations are not unduly burdensome. They contend that demand response distributed generation facilities should not be given special treatment because NYSERDA's proposed NO_x emissions limits, which are higher than for other applications of distributed generation, could have adverse environmental and public health impacts. Technologies exist that could significantly reduce NO_x emissions from demand response distributed generation facilities; also, they continue, there are other, more environmentally friendly forms of demand response facilities that could be relied upon to maintain grid reliability, such as pre- and post-cooling demand response facilities.

On the total resource cost test, they focus on two areas of disagreement– market price effects and environmental externalities. Relying on our statements in Opinion No. 88-20, they recommend that we incorporate market price effects of both energy and capacity into the total resource cost test. In addition, they would like to see the inclusion of market price effects beyond the three-year period suggested by NYSERDA. The Natural Resources Defense Council and Pace would also like environmental externalities included in the total resource cost test. They disagree with the Action Plan's assertion that current cap and trade programs account for NO_x and sulfur dioxide (SO_2) reduction benefits. According to the Natural Resources Defense Council and Pace, benefits, such as ease of lowering the cap in the future, are externalities that should be incorporated into the total resource cost test.

In support of this argument, they rely on two administrative decisions, Opinion No. 88-20 and a decision by the California Public Utility Commission to require the use of a "greenhouse gas adder" to long-term planning and procurement.[14] They further argue that the latter decision refutes the Action Plan's assertion that it would be speculative to develop adders for particulate matter and carbon. Finally, they suggest that

[14] R. 04-04-025, Order Instituting Rulemaking to Promote Consistency in Methodology and Input Assumptions in Commission Applications of Short-Run and Long-run Avoided Costs, Including Pricing for Qualifying Facilities, Interim Opinion On E3 Avoided Cost Methodology, Decision 05-04-024 (issued April 7, 2005).

we adopt the approach advocated by the New York City Economic Development Corporation and direct the parties to work together to develop a methodology for including such externalities in the total resource cost test.

Joint Supporters

Joint Supporters endorse the Action Plan as being consistent with our goal of offsetting expected load growth with demand management measures. They emphasize the need for a multi-faceted demand management plan for Con Edison's service territory. Within this context, they disagree with two issues—the clean distributed generation definition and the elements of the total resource cost test.

As to the definition of clean distributed generation, Joint Supporters argue that the threshold emissions limit for demand response distributed generation facilities should be based on total yearly run time, not pounds/megawatthour. Run times should be based on: (a) operation and maintenance requirements; (b) testing requirements of a state agency; and (c) Con Edison, New York Power Authority, or New York Independent System Operator emergency event requests. Joint Supporters believe that limits based on run time would restrict emissions by ensuring use of the distributed generation facilities only during genuine emergencies or testing and maintenance. They note that these relaxed emissions limitations were adopted by Connecticut and Massachusetts. If this recommendation is rejected and pounds/megawatthour emissions limits are adopted, Joint Supporters alternatively propose that the demand response distributed generation facilities be required to meet Environmental Protection Agency Tier I standards for non-road equipment and that after-treatment not be adopted due to its effects on performance. This would ensure that new demand response distributed generation facilities would still be able to participate in the program.

Joint Supporters endorse NYSERDA's recommended 1.6 pounds/megawatthour emissions limit for baseload and peaker distributed generation, with stepped incentives for cleaner distributed generation facilities.[15] This limit is

[15] Joint Supporters also provided letters to NYSERDA written by some of their members that specifically endorse this threshold limit.

reasonable, they contend, because of space constraints in New York City, the fixed installation costs for any size distributed generation system, and noise and odor considerations for tenants. Joint Supporters maintain that there is no commercially-available distributed generation equipment with a capacity greater than 1 megawatt on the market that does not require installation of a selective catalytic reduction system. A selective catalytic reduction system produces an odor and presents a perceived risk related to its ammonia catalyst, and no building owner in New York City has allowed its installation. Therefore, any emissions limit of less than 1.6 pounds/megawatthour would be unduly burdensome.

Joint Supporters urge us to reject NYSERDA's recommendation for an additional review of proposed distributed generation projects that would displace or offset a customer's use of Con Edison's steam system. They claim that the Con Edison Steam Business Development Plan did not study the impact of clean distributed generation on the overall steam system nor did it identify a distributed generation system that negatively impacts Con Edison's steam business. Joint Supporters contend that distributed generation provides benefits to the steam system by shaving winter peak demand, freeing up steam capacity for new customers by reducing winter steam consumption, and supporting areas that have steam distribution constraints. Joint Supporters believe it is premature to impose additional rules until we have reviewed the Steam Business Development Plan's recommendations. Joint Supporters also contends that further review of distributed generation projects in the area served by the steam system is discriminatory towards Con Edison customers that purchase steam because it discourages their participation in the demand management programs. This additional review would, according to Joint Supporters, increase steam customers' uncertainty about completing a distributed generation project and would require additional time and resources, resulting in higher costs.

On the total resource cost test, they assert that the Collaborative focused too much on the screening guidelines rather than the primary objective—enhancing New York customer and supplier competitiveness. Joint Supporters recommend the inclusion of market price effects in the total resource cost test because demand reductions can

decrease market prices by: (a) reducing output from generating units with high marginal production costs; (b) mitigating capacity shortages, which helps reduce above-marginal-cost markup needed to balance system demand and supply; and (c) diminishing the market power of energy sellers. For the same reasons, Joint Supporters assert that market price effects should be applied for longer than three years.

Joint Supporters also support inclusion of avoided transmission and distribution costs for purposes of the service territory-wide program but encourage a more specific evaluation. In support of this position, they point to Chairman Flynn's September 28, 2005 speech before the Northeast Power Coordinating Council, where he stated that avoiding transmission and distribution investments is a valuable benefit of demand management efforts. Arguing that ancillary cost information from the period 2003 to 2005 demonstrates that they are load-dependent and avoidable, Joint Supporters claim they too should be included in the total resource cost test. They also request that we include the benefits of avoided variability and volatility because they can be moderated by demand management measures.[16]

Energy Spectrum

Energy Spectrum expresses concern that the requirements regarding the location of the stacks for distributed generation facilities could result in no facilities qualifying for the incentives under the demand management programs. It claims that for some buildings, it would be impractical or impossible to make the stacks higher than the tallest structures on the buildings' roofs. As examples, it points to radio antennae on some buildings' roofs and restrictions on modifying the exterior of historically significant buildings. Energy Spectrum recommends that we apply New York City Building Code requirements to the location of the stacks, in conjunction with the distance requirements set forth in our proposed conditioned negative declaration.

[16] Joint Supporters attached a copy of their comments in Case 05-M-0090, supra, to their comments in this matter. Those comments have been addressed in that proceeding and are not considered here.

ENVIRONMENTAL ASSESSMENT

Under the State Environmental Quality Review Act (Article 8 of the Environmental Conservation Law), and its implementing regulations (6 NYCRR Part 617 and 16 NYCRR Part 7), we must determine whether the proposed action may have a significant adverse impact on the environment.[17] The proposed action, which is classified as an Unlisted Action pursuant to 6 NYCRR §617.2, is our approval of the Action Plan and our determination of the issues discussed herein that relate to NYSERDA's and Con Edison's implementation of their respective service territory-wide and targeted demand management programs.

The purpose of the State Environmental Quality Review Act is to incorporate consideration of environmental factors into the planning, review, and decision-making processes of state, regional, and local government agencies. As early as possible in an agency's formulation of an action it proposes to undertake, it determines whether the action is subject to the State Environmental Quality Review Act.[18] Then, in determining whether a proposed action may have a significant adverse impact on the environment, a lead agency considers the action, reviews the environmental assessment form and other supporting documentation and information to identify the relevant areas of environmental concern, and thoroughly analyzes the identified areas of concern.

To perform the environmental assessment in this matter, we reviewed the Action Plan and an Environmental Assessment Form. Based on these documents, in the January 25 Order we determined that the energy efficiency and load management aspects of the Action Plan will not have any significant adverse impact on the environment. We also determined that the use of distributed generation could have some noise and localized air quality impacts. The environmental assessment prepared for this matter

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[17] In establishing lead agency for purposes of the environmental review of this matter, we coordinated with NYSERDA, as required by 6 NYCRR §671.6(b). By letter dated January 20, 2006, NYSERDA consented to our declaration as lead agency. Therefore, in our January 25 Order, we declared ourselves lead agency.

[18] 6 NYCRR §617.6(a)(1)(i).

indicates that these impacts can be suitably mitigated so as to prevent the possibility of significant adverse impacts from arising.

While the comments submitted on this matter suggest that the proposed requirements for siting the stacks for distributed generation facilities go too far, they offer little substantive analysis to support their positions.[19] Nevertheless, Energy Spectrum raises a valid point that for certain buildings, placing stacks above all other structures is not reasonable. Moreover, the technical analysis upon which our environmental assessment was based indicates that we may relax some of the restrictions on stack location without causing any adverse impacts.

Accordingly, we eliminate the requirements that exhaust stacks for distributed generation facilities must be placed on the top of the tallest structure on the property and be taller than any surrounding buildings. Instead, we adopt the requirements that the location of the stacks must generally comply with applicable National Fire Protection Association standards for stationary combustion engines and gas turbines, or equivalent local code requirements. Facilities located within New York City must also comply with the New York City Building Code and the regulations for chimney heights and locations; facilities located in Westchester County must also comply with the New York State Fuel Gas Code. The requirements in the January 25 Order regarding the minimum distance between the location of the stacks and nearby sensitive receptors and noise were not disputed by either commentor. Therefore, we adopt these requirements without change.[20]

Our approval of the Action Plan is consistent with our long-standing policy of promoting demand management initiatives as an alternative to new transmission and distribution infrastructure and new generation and to improve the environment in which

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[19] To the extent the New York City Economic Development Corporation's comments raise economic considerations, we will not consider them because economic issues are not appropriate in evaluating environmental impacts.

[20] The distance requirements are set forth in Appendix I to this Order.

we live.[21] The programs contemplated by the Action Plan are generally beneficial to the environment in that they either involve reducing electric load, and thus the need for new electric generation and/or transmission and distribution infrastructure improvements, or installing new, efficient, clean distributed generation facilities that may supplant older, dirtier generation facilities or obviate the need for new central generating facilities. With the conditions set forth in our January 25 Order, as modified herein, we have mitigated all potential adverse environmental impacts associated with this matter. For these reasons, we adopt a conditioned negative declaration of significance pursuant to the State Environmental Quality Review Act and direct that the attached Notice of Conditioned Determination of Non-Significance for this unlisted action be issued. The completed Environmental Assessment Form will be retained in agency files.

DISCUSSION

As we explained above, we are addressing the increasing demand for electricity using a multi-faceted approach. This Order deals with one facet of this approach—the expansion of the use of demand management measures within Con Edison's service territory. The Action Plan provides a good roadmap and framework for Con Edison and NYSERDA to use both in implementing their respective demand management programs and in coordinating their efforts to ensure the greatest likelihood of success of the programs.

Areas of Consensus

We concur with the analysis in the Action Plan and in the New York City Economic Development Corporation's comments that coordination among all interested parties, and in particular the sponsors of the various demand management programs

[21] Cases 94-E-0952, et al., In the Matter of Competitive Opportunities Regarding Electric Service, Opinion No. 96-12 (issued May 20, 1996); Opinion No. 98-3 (issued January 30, 1998); Order Continuing and Expanding the System Benefits Charge for Public Benefit Programs (issued January 26, 2001); Case 05-M-0090, supra, Order Continuing the System Benefits Charge (SBC) and the SBC-Funded Public Benefit Programs (issued December 21, 2005).

(including the New York Independent System Operator and the New York Power Authority), is crucial to the success of the programs. For example, the creation of central points of contact for customers, developers, advisors, and others should facilitate the ability of those persons to favorably consider demand management initiatives and take advantage of the incentives offered under the programs. Also, coordination of marketing programs should ensure that customers receive consistent and non-contradictory messages about demand management, outreach and education efforts are not unnecessarily duplicated, and the ability of the demand management providers to reach and educate customers about available options is maximized. This coordination should result in more comprehensive marketing campaigns.

Measurement and verification measures are very important procedures to ensure that program funds are not wasted. It appears from the Action Plan that the Collaborative did not see any need to make recommendations on significant changes in the manner in which Con Edison and NYSERDA perform such measures. We will not, therefore, require any specific changes at this time. As with the marketing efforts, though, Con Edison and NYSERDA should coordinate their procedures, to the extent possible, to increase the ability of contractors to install demand management measures and to ease the impacts on customers associated with the verification effort.

Installed capacity tagging is important for accurately assigning a customer's capacity requirements and load profiles to the provider of its commodity. It will, in part, assist in ensuring customers pay the proper amount for the demands they place on the electric system. That is, a customer should be charged or credited for the amount of peak demand that it places on or removes from the system based on its actual measured demand, as available. While decreasing the demands each customer imposes on the system is at the heart of the demand management programs, the issue of installed capacity tagging is, as the Action Plan suggests, more of a retail access issue. Therefore, we remove it from consideration by the Collaborative and from implementation as part of the demand management programs. Nevertheless, this issue should not be abandoned. We direct Staff to continue to work with Con Edison and interested parties to address this issue.

The Action Plan identifies a number of initiatives parties may take individually and independently to further promote energy efficiency. We encourage the parties to proceed as they deem appropriate. Inasmuch as we function as an independent body, however, we do not adopt the recommendations on legislative and regulatory initiatives to the extent they may relate to us or the Department of Public Service.

As to the allocation of the demand management funding, the flexibility recommended by the parties is appropriate. The allocation approach set forth in the Action Plan appears to be reasonable and is approved with one modification. In selecting among eligible programs and projects, NYSERDA and Con Edison, as appropriate, should give priority to those that provide load reductions in the near-term.

Although we are allowing flexibility in the allocation, we must still ensure that the funds are appropriately spent and that Con Edison's ratepayers are receiving fair value for their expenditures. Therefore, in addition to the formal reporting requirements set forth in the Rate Order, we direct Staff to closely monitor both the service territory-wide and targeted demand management programs. NYSERDA and Con Edison shall cooperate with Staff and timely provide all information and documentation Staff requests as part of its monitoring activities. To facilitate Staff's monitoring, NYSERDA and Con Edison shall each submit bimonthly reports to Staff that, at a minimum, address program achievements, the financial status of the program, projections and plans for the utilization of the remaining funds through the end of the term of the Rate Plan, marketing efforts, demand and energy savings, and the cost effectiveness of the programs and initiatives instituted. We recognize that there is likely to be some overlap in the demand management initiatives undertaken by NYSERDA as part of the service territory-wide program with initiatives it undertakes using System Benefits Charge funds. Inasmuch as the reductions procured under the former are to be incremental to those incurred under the latter, NYSERDA's reports shall delineate the expenditures from the two funds and the corresponding savings achieved under each set of initiatives and discuss the interplay of the expenditures from the funds. Staff should work with NYSERDA and Con Edison to more fully develop the report specifications and format.

When NYSERDA convenes technical evaluation panels to review and/or select proposals submitted in response to any solicitation made under the service territory-wide program, a Staff representative shall be a member of the panel. Further, before either NYSERDA or Con Edison reallocates any funds or materially changes any program, it shall consult with Staff. Any disagreements between Staff and either NYSERDA or Con Edison regarding any aspect of the demand management programs that cannot be resolved informally are to be brought to us for resolution.

Distributed Generation

To achieve the 300 megawatt goals we have established for NYSERDA and Con Edison, all types of demand management initiatives should be employed. Distributed generation has long been considered a demand management program because it reduces customers' demand for electricity from the integrated electric system. While it is true that a customer using distributed generation may not reduce its overall load, by reducing both the demands it places on the electric system and its demand for electricity produced by central generating facilities, it helps to reduce the price of electricity, especially during peak periods. Distributed generation also assists in preserving the reliability of the electric system because it reduces the loads transmitted and distributed across the system. Finally, to the extent customers produce their own electricity, Con Edison may avoid or delay the need to invest in costly expansions of its transmission and distribution facilities, thereby reducing upward pressure on electric rates.

There appears to be consensus among the members of the Collaborative on the principle that system demand reductions achieved under both the service territory-wide and targeted demand management programs should not occur in an environmentally detrimental manner. This principle is reasonable and appropriate. In deciding a number of the disputed issues, we therefore harmonize the operation of the demand management programs with the goal of improving the environment. Accordingly, of the two options presented in the Action Plan regarding eligibility for demand management incentives, we adopt the option that sets one emissions threshold level for all distributed generation regardless of the mode of operation of the distributed generation facility. This eligibility

requirement will apply to both NYSERDA's service territory-wide and Con Edison's targeted demand management programs.

While NYSERDA may be correct that two separate threshold levels would promote the installation of cleaner baseload and peaker distributed generation while maximizing the potential of new demand response distributed generation to provide additional grid reliability during emergency situations, Con Edison's customers should not pay added incentives to developers to install distributed generation facilities that do not meet strict emissions thresholds

The Action Plan states that some parties objected to the two-tiered approach recommended by NYSERDA because of concerns regarding reporting and the potential for demand response distributed generation to be operated during periods other than when an emergency event is called. Our decision to set the eligibility of all types of distributed generation under both the service territory-wide and targeted programs at the same level addresses these concerns to some extent. With respect to the reporting concerns, we will not impose any specific requirements at this time. Rather, NYSERDA and Con Edison should work with Staff, distributed generation developers, the New York Independent System Operator, and other interested parties to develop and implement a standardized protocol for monitoring and tracking the operation of the distributed generation facilities. If problems arise in the future, and if necessary, we will revisit this issue.

It is also possible that when the Department of Environmental Conservation issues formal regulations regarding the operation of distributed generation facilities, those regulations will address and obviate the concerns raised. Potential Department of Environmental Conservation action also ties into the next issue we must address—the appropriate emissions threshold level. During the rate case phase of this proceeding, the Department of Environmental Conservation had not yet promulgated new regulations

defining the term "clean distributed generation."[22] Therefore, as described above, one topic assigned to the Collaborative was to develop a definition of clean distributed generation for purposes of the demand management programs.

The Collaborative reached consensus that it is appropriate to establish output-based emissions thresholds for NO_x on a pounds/megawatthour basis at a level no greater than that for average fossil-fueled central generating facility in the company's service territory, or approximately 1.6 pounds/megawatthour NO_x. Consensus was not reached over whether the emission threshold level for purposes of the demand management programs should be at or below the 1.6 pounds/megawatthour level.[23]

Many Collaborative members, including NYSERDA, recommend that we set the threshold at 1.6 pounds/megawatthour. They assert that this level is based on commercially available distributed generation technologies and is sustainable for extended periods of operation. Pace recommends that we set the threshold at 1.4 pounds/megawatthour, which it claims is also based on commercially available technologies. Pace contends that this level should contribute to improving the environment by limiting the incentives to projects that are cleaner than required by minimum requirements. Con Edison and the Natural Resources Defense Council recommend that we set it at 0.6 pounds/megawatthour based on New York City's status as a severe non-attainment area for ozone and on the goal of providing incentives only for projects that improve the environment and perform substantially better than minimum requirements. In further support of this level, Con Edison points us to the 0.3 pounds/megawatthour threshold applicable to incentives under General City Law §25-s(v) and to the 0.14 pounds/megawatthour threshold for distributed generation that is

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[22] Department of Environmental Conservation regulations are cap-by-rule with annual limits on NO_x emissions; however, the Department of Environmental Conservation has proposed, but not yet adopted, regulations that contain performance-based emissions limits expressed on a pounds/megawatthour basis.

[23] We interpret Joint Supporters' comments as expressing a preference for a run time-based threshold but not opposing a pounds/megawatthour threshold. Given the consensus developed on the latter and that the Department of Environmental Conservation's proposed regulations are expressed on a pounds/megawatthour basis, we decline to adopt the former.

eligible for an incentive. Joint Supporters propose that the threshold be based on Environmental Protection Agency Tier 1 standards to allow for the greatest possible manufacturer participation and therefore the greatest possible customer choice.

We understand that the standard for clean distributed generation set forth in the Department of Environmental Conservation's proposed regulations is 1.6 pounds/megawatthour for NO_x. While the arguments presented for a lower threshold level have some merit, they do not persuade us that we should deviate from what we expect to be the Department of Environmental Conservation's regulation. Therefore, we adopt 1.6 pounds/megawatthour for NO_x as the standard for clean distributed generation for purposes of the service territory-wide and targeted programs. Since we do not know what standard(s) the final Department of Environmental Conservation regulation will include, we will reexamine the issue, if necessary, once that regulation is adopted.[24] In rejecting a lower standard, we have balanced the potential for developers to commit to installing distributed generation facilities with the environmental benefits to be gained from the facilities once they are installed. That is, if the threshold is set too low, developers could be dissuaded from installing distributed generation, thereby frustrating the goals for which we adopt the demand management programs.

As noted above, there was general consensus that thermal recovery should be considered as a credit for individual projects. The method for crediting thermal recovery was not discussed in any detail in the Action Plan; instead, NYSERDA should work with the Collaborative to develop a method for doing so.

Many Collaborative members recommend the same threshold level for combined heat and power distributed generation emissions performance as they did for clean distributed generation—1.6 pounds/megawatthour NO_x. They believe this threshold will allow for technological diversity and provide added incentives for combined heat and power distributed generation facilities to exceed the threshold. Pace recommends the same threshold level as it did for other types of distributed generation—1.4 pounds/megawatthour NO_x. It also recommends that the full economic benefits and

[24] Accordingly, we do not see any need for a further reexamination in 18 months and reject the Collaborative's corresponding recommendation on this matter.

environmental benefits of combined heat and power distributed generation facilities' more efficient use of fuel should be recognized. Con Edison states that it is willing to consider a credit for thermal recovery for individual projects. For the reasons discussed above, we accept the majority's recommendation and will not adopt a separate threshold for combined heat and power distributed generation.

Finally, Joint Supporters propose stepped incentives that increase for cleaner or more efficient systems. The Action Plan indicates that there is consensus on this approach. While we adopt 1.6 pounds/megawatthour as the minimum threshold for incentives under both the service territory-wide and targeted programs, it is consistent with the overall goal discussed above to use the demand management funds to encourage cleaner, more efficient distributed generation. Therefore, the recommendation is adopted and NYSERDA and Con Edison may award, as they deem appropriate, stepped incentives for distributed generation facilities that achieve lower emissions than the threshold.

Total Resource Cost Test

The total resource cost test is a screening tool that compares the cost of an energy measure, including the incremental participant costs, net of incentives provided by a utility, government agency or other entity, to the total resource benefits obtained over the life of the measure. The test quantifies and values the costs and savings of physical items such as fuel, hours of labor, and equipment installation and operation (e.g., energy efficient lighting). Each item included in the test must reflect real resources that are saved or incurred by society. For an energy program to be cost-effective on a total resource cost basis, its resource benefits to society should outweigh the resource costs of the program to society.

The elements upon which the Collaborative reached consensus—avoided energy usage and capacity, avoided or incurred fuel and water, implementation costs, and financial incentives—are properly classified as resources. Accordingly, those elements are appropriately included in the test. The disputed elements are discussed separately below.

Market Price Effects

NYSERDA states that reductions in load from demand management resources can be quantified as lower energy and capacity prices for all customers. The New York City Economic Development Corporation supports the inclusion of market-price effects in the total resource cost test for several reasons, based on the presumption that load reductions reduce market price. Con Edison asserts that including market price effects is consistent with past Commission practice, citing Opinion No. 86-8,[25] but only to the extent that the effects can actually be realized and be properly estimated. The Natural Resources Defense Council and Pace support the inclusion of market price effects of both energy and capacity. As reported in the Action Plan, Staff and Westchester County do not consider market price effects to be resource savings and would not include them in the total resource cost test. The Action Plan also indicates that the Consumer Protection Board agrees that the total resource cost test does not include market price effects, but would include them for a few years for a desired program offering that would otherwise not pass the test.

While demand management programs may lead to reductions in the price of electricity, those price effects are not resource savings. If the market clearing price falls due to the effects of a demand management program, consumers of electricity could obtain a benefit in terms of lower payments to generators. This benefit equates to a monetary gain to consumers, but it is offset by a monetary loss to generators. Thus, the reduction in price represents only a redistribution of money from one group to another, it does not result in any societal resource savings. Accordingly, market price effects are not properly included in the total resource cost test.

This perspective does not constitute a departure from our prior decisions; rather, it is simply a restatement of our long-standing position on this issue. For example, we explained in Opinion No. 88-20 that in estimating avoided energy and capacity costs, expected demand management load reductions should be evaluated in the same manner as expected generation additions. We included a factor to account for the effect of

[25] Cases 28962, et al., Long-Run Avoided Cost Estimates, Opinion No. 86-8 (issued March 27, 1986).

conservation causing peak generation not to be called. If expected demand management reductions were ignored, annual avoided energy and capacity costs would be overstated. The factor of adjustment to avoided costs only impacted demand management program achievements, and its cumulative value was both negative (i.e., it decreased the value of future avoided costs) and relatively small (i.e., it applied only to the energy and capacity consumption avoided as a result of demand management measures). This contrasts sharply with the approach recommended by the supporters of including market price effects, who would apply the factor of adjustment as a benefit, across all spot-market sales in Con Edison's service territory, for varying future periods.

Furthermore, Opinion No. 88-20 was issued prior to the commencement of electric restructuring and the competitive generation marketplace, and correspondingly, prior to the period in which utilities purchased most of their power rather than producing it themselves. Excepting Canadian imports (generally priced on the basis of New York Power Pool avoided cost) and a few bilateral transactions, there was no market for energy or capacity, and generation plant production was compensated on a cost-of-service basis, subject to economic dispatch. Thus, Opinion No. 88-20 should not be construed as requiring the inclusion of any secondary effects on the modern wholesale electric market price that may be caused by a demand management program.

Nevertheless, in Opinion No. 88-20, we found it appropriate to take note of factors other than those that are captured by the total resource cost test in deciding which programs should go forward. In the Rate Order, we departed from this broad perspective and required that all of the demand management programs must be cost-effective on a total resource cost basis. Since that Order was issued, however, circumstances have changed. Global economic forces, such as growing demand and increasing exploration and extraction costs for fuel, and natural disasters, such as the hurricanes that decimated the Gulf Coast, have caused uncertainty over the adequacy of energy supply and placed upward pressure on petroleum and natural gas prices. The increase in fuel prices has contributed to substantial increases in electricity prices. These increases have placed heavy burdens on many consumers, and it has become one of our paramount objectives for the present and into the future to take steps both to reduce market prices and to assist

consumers in confronting high utility bills. The service territory-wide and targeted programs provide prime opportunities to achieve both objectives. As discussed above, the demand management programs reduce demand and, therefore, can assist in reducing energy prices. Further, expanding the reach of demand management programs can allow more consumers to obtain the usage and corresponding utility bill reductions attendant to installing demand management measures.

For these reasons, it is appropriate to broaden the eligibility requirements for the demand management programs and adopt a more expansive analysis similar to that set forth in Opinion No. 88-20. In the first instance, NYSERDA and Con Edison shall still apply the total resource cost test, as described herein. If a demand management program is cost-effective under that test, it may be implemented. If the program is determined not to be cost-effective under the total resource cost test, NYSERDA and Con Edison may then add consideration of the effect of the program on energy market prices (energy and capacity) to their analyses. If the program will aid in reducing energy market prices and the addition of this benefit to the resource benefits under the total resource cost test makes the program cost-effective, it may then be pursued. Additionally, in deciding among a number of eligible programs, NYSERDA and Con Edison shall, as appropriate, evaluate the programs' market price effects and select those programs that provide the largest decremental impacts (i.e., are the most cost-effective when the market price effects are included).

For purposes of this analysis, the market price effects shall be considered only for the first three years after a demand management program's implementation. Over time, the market will naturally adjust to reflect the reduced load resulting from the program. Also, other measures (both supply and demand), which are continually added and removed, affect market prices to varying degrees. Therefore, measuring market effects from a single measure for more than a short period would be unduly speculative. To determine the market price effect, NYSERDA and Con Edison should work together, and with Staff, to develop consistent methods and assumptions. Since the demand management programs are focused on Con Edison's service territory, the market price

effects used in the respective analyses shall also be limited to those within the company's service territory.

Avoided Transmission and Distribution Costs

Con Edison claims that avoided transmission and distribution costs are being addressed by its targeted demand management program, and that the demand reduction achievements of the service territory-wide program are too broad and diffuse to avoid transmission and distribution costs. Many Collaborative members, in contrast, support inclusion of these avoided costs.

Avoided transmission and distribution costs may be large or negligible, depending on load growth and distribution carrying capacity, but they are a resource benefit. Con Edison's load growth is appreciable, and the company has little excess carrying capacity in its territory. Its service territory-wide transmission and distribution costs are therefore non-trivial. To the extent NYSERDA can reasonably estimate the transmission and distribution investments that would be avoided by any of its service territory-wide programs, it may include the associated avoided transmission and distribution costs in the total resource cost test for that program. Care must be taken, however, as Con Edison notes in its comments, to avoid double counting the same avoided transmission and distribution investment for purposes of the service territory-wide and targeted programs.[26] Con Edison and NYSERDA should maintain a continuing dialogue on this issue and work together and with Staff to address this concern.

For NYSERDA to make reasonable estimates of avoided transmission and distribution costs, it must have good information from the company. Some Collaborative members observed that the estimates available are not satisfactory because they are based on territory-wide data and on somewhat dated information. Such data should not be used in the total resource cost test, and because the company's infrastructure needs tend to change constantly, updated information is required.

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[26] We recognize that there may be some overlap between the service territory-wide and targeted programs in that Con Edison's and NYSERDA's contractors may seek load reductions within the same networks. Con Edison and NYSERDA should work together to avoid competition between their respective contractors for the same customers.

During the course of the demand management programs, Con Edison shall annually develop updated estimates of its transmission and distribution costs. For service territory-wide avoided transmission and distribution costs, Con Edison should base its estimates on its existing plans to rebuild or expand its transmission and distribution infrastructure. An estimate for net service territory-wide transmission and distribution investments can be calculated by subtracting all of the investment estimates it uses to calculate the avoided transmission and distribution costs for purposes of the total resource cost test for the targeted program from the total transmission and distribution infrastructure budget. NYSERDA will then be able to use the targeted and service territory-wide transmission and distribution infrastructure estimates, as appropriate, to calculate the potential avoided transmission and distribution costs resulting from the service territory-wide programs. In developing this information, Con Edison shall work with NYSERDA and Staff to ensure that the estimates are expressed in a manner that is readily usable by NYSERDA.

Avoided Ancillary Service Costs

NYSERDA has included a modest estimate of avoided ancillary service costs in the past, but recommends that they be considered zero at this time. Joint Supporters argue that ancillary costs are avoidable and should be included in the total resource cost test. The New York City Economic Development Corporation notes that some ancillary service costs vary with load level and should be included. According to the Action Plan, Con Edison, Staff, New York Energy Consumers Council, Inc., and Consumer Power Advocates assert that ancillary costs do not vary by load and, as a result, cannot be avoided by the demand management programs.

The bulk of ancillary service costs are for operating reserves. Their amount is fixed, without regard to load variations, and their cost is nearly constant. While some elements of ancillary service may vary with load, their costs are relatively small and can be ignored. Therefore, avoided ancillary service costs shall be excluded from the total resource cost test for both the service territory-wide and targeted programs.

Load Management Programs

For load management programs, the Action Plan indicates that there was a significant difference of opinion. NYSERDA, Con Edison, Joint Supporters, Consumer Power Advocates, Natural Resources Defense Council, and Pace recommend that the market price effect of deferred capacity should be included. Staff, Westchester, and the Consumer Protection Board oppose this recommendation and argue that they should not be included.

As we explained above, market price effects are not a resource cost and shall not be included in the total resource cost test. However, in evaluating the cost-effectiveness of load management programs, NYSERDA may follow the procedure outlined above for considering market price effects.

In applying the total resource cost test to load management measures, NYSERDA must ensure that it is properly capturing the resource costs and benefits of the measures. For example, demand response programs, which comprise one category of load management, operate primarily during extreme peak load conditions.[27] Since the calculation of the avoided capacity and energy costs of such programs using seasonal peak period averages would understate their value, a methodology that more accurately reflects the costs otherwise incurred at extreme peak load conditions must be used. There are different ways to perform this calculation, and we will not prescribe any particular approach. Instead, NYSERDA, in coordination with Staff, should consider the alternative methodologies and select the one that is most appropriate for use in this matter.

Environmental Externalities

On this issue as well, the Action Plan indicates that there were two predominant positions. Joint Supporters, Consumer Power Advocates, Natural Resources Defense Council, Pace, and the New York City Economic Development Corporation support the estimation and inclusion of environmental impacts in the total resource cost

[27] Extreme peak load conditions occur over a short period of time (typically two to six hours per day over a one to five day period) when electric usage is at or near its highest level for the year.

test. NYSERDA, Staff, New York Energy Consumers Council, Inc., Consumer Protection Board, and Con Edison oppose their inclusion.

There are now active markets involved in the trading of emissions allowances for NO_x and SO_2. The impacts of these environmental factors are therefore quantifiable and have been incorporated into avoided energy costs. No other environmental costs are included in the traditional total resource cost test. As the Regional Greenhouse Gas Initiative and mercury emissions allowance trading programs are implemented, however, the cost impacts of these resources should be quantifiable. Once those quantifications are possible, Con Edison and NYSERDA may include the allowances in the calculation of avoided energy costs.

As to the reference to a decision by the California Public Utilities Commission to include environmental externalities, we do not find that decision persuasive. First, it does not appear from the decision that the California Commission is using the total resource cost test to determine the cost-effectiveness of its energy efficiency measures. Second, the matter under consideration there is not as narrowly focused as the service territory-wide and targeted programs—the California proceeding appears to relate to state-wide energy efficiency policies and efforts and is more akin to our Case 05-M-0090 than this matter. Third, it appears that particulate matter emissions allowances are traded in California, but there is no similar market here. Finally, the California Commission acknowledges, as we do, that there is no market for CO_2 emissions.

Avoided Variability and Risk

Joint Supporters and the New York City Economic Development Corporation assert that the real world costs of uncertain and variable loads, resources, and prices tend to be greater than predicted, and that demand management programs offer insurance against this risk. NYSERDA and the majority of the Collaborative members recommend that the total resource cost test exclude explicit recognition of any such insurance value.

Large variations in electric loads can occur from one year to the next, due mainly to weather, and there are uncertainties in generation availability. Demand

management programs may be able to reduce the variations to some extent but likely will not have any effect on the availability of any particular generating facility. Quantifying and valuing the reductions in variation is subjective and more a theoretical exercise at this time. While we encourage parties to continue to develop their analysis of this issue, it is premature to include it as a resource cost or benefit in the total resource cost test for either the service territory-wide or targeted programs.

Market Power Mitigation

Joint Supporters describe an additional benefit of demand management programs that is not captured in the proposed total resource cost test—the market power mitigation that occurs during peak hours via price-responsive resources (supply or demand). The greater the demand and supply elasticity, the lesser the ability of a larger participant in the marketplace to exercise market power, all else being equal. While the resource savings provided by such mitigation are difficult to estimate, in the event they can be, they may be included by NYSERDA and Con Edison as resource cost savings. Should NYSERDA or Con Edison seek to include these savings, it shall coordinate with the other and with Staff to establish agreement on the methodology employed and ensure similar treatment of this resource benefit among the service territory-wide and targeted programs.

Exceptions to the Total Resource Cost Test

The Action Plan and analyses performed by NYSERDA in preparing its implementation plan indicate that some categories of programs are less likely or unlikely to be considered cost-effective under the total resource cost test. These categories include load management programs, distributed generation, and initiatives directed generally to residential customers and specifically to low-income customers. Different proposals have been advanced by Collaborative members regarding these programs, and there is not unanimity of opinion as to whether they should be funded in the event they are not cost-effective on a total resource cost basis.

While in the aggregate, residential customers could contribute a significant amount of load reductions, individual contributions tend to be low. Some Collaborative

members desire to dedicate a portion of the demand management funding to general residential and low-income programs regardless of whether they pass the total resource cost test. Westchester proposes a variant on this recommendation, limiting the funding to a few select projects and allowing future expansion of the programs/funding only after evaluating the costs and success of those projects.

Although load management activities typically have short durations, such programs provide essential contributions during peak periods, when resources are tight and prices rapidly escalate. Thus, load management programs can provide both reliability and financial benefits that inure to the public in general. The use of distributed generation can provide public benefits as well, especially during peak periods. That is, when customers use distributed generation in lieu of obtaining electricity from the system during peak periods, they help to reduce the load on the electric system during those periods and assist in ensuring the reliability of the system.

Our primary goal in this endeavor is to promote and expand demand management initiatives to cost effectively reduce load growth in Con Edison's service territory. At the same time, we must ensure that costs imposed on Con Edison's customers to fund this effort are sufficiently offset by the benefits obtained. Therefore, Con Edison and NYSERDA must evaluate each potential demand management measure or program using the procedures described above. If a proposed measure or program is determined to be cost-effective, Con Edison and NYSERDA may proceed with its funding and implementation.

The question, then, is whether a load management, distributed generation, general residential, low-income, or other program that is not cost-effective, even with inclusion of market price effects, should be funded by Con Edison's customers. As a general rule, it should not go forward. If, however, either NYSERDA or Con Edison determines that a program (be it load management, distributed generation, general residential, low-income, or otherwise) has significant societal benefits that warrant its further consideration, NYSERDA or Con Edison may seek special authorization from us for funding the program. In any filing seeking such authorization, the proponent(s) of the program must provide detailed descriptions of the proposed program and its costs and

benefits, the results of the total resource cost test performed for the program, modifications or alternatives to the program that were considered and the reasons why they were rejected, the justification for implementing the program, and an explanation as to why it should be funded by Con Edison's ratepayers under either the service territory-wide or targeted program. Based on this information, we will determine whether public policy or other reasons dictate that it should be funded.

Competition between Electric and Steam Use

The issue of balancing electric and steam issues is difficult. Con Edison's Steam Business Development Plan identifies increased steam usage as one way to reduce peak electric loads. It also explains that the variance in the cost of steam and electric chillers cause some customers to replace the former with the latter or to select the latter over the former for new installations. As the Action Plan and the comments indicate, there are competing perspectives associated with this issue.

While one purpose of the service territory-wide and targeted programs is to encourage more efficient electric usage, in adopting the programs in the Rate Order, we did not intend as a corollary to this purpose that customers or developers would take advantage of the incentives available under these programs to reduce their usage of steam or to select electric chillers over steam chillers because of the incentives available. To prevent this unintended consequence from occurring, the demand management incentives for installing electric chillers under either program shall not be available to customers served by or otherwise located on Con Edison's steam system. As discussed in the Steam Business Development Plan, though, Con Edison and NYSERDA may design the targeted and service territory-wide programs, respectively, to include incentives to encourage the replacement of or conversion to steam or hybrid chiller systems.

We disagree with Joint Supporters' view that so limiting the availability of the incentives would be discriminatory to some customers. The limitations we are adopting do not prevent any customer from participating in any demand management program. To the contrary, all customers have the opportunity to participate in the programs. We are only preventing customers from improperly taking advantage of

demand management incentives to increase their electric loads where other energy options are available. Put another way, we will not exacerbate the problems confronting Con Edison's steam business by subsidizing developers or individual customers who decide to choose electricity over steam as their energy source for cooling purposes.

As to the issue of the level of the incentives available for replacing or installing steam or hybrid chillers, we agree that more effort and inducements are needed to promote the use of the steam system and thereby reduce both electric load growth and the need for transmission and distribution reinforcements or expansions. It is appropriate to use demand management program funds for steam incentives because the alternative would be increased costs imposed on electric ratepayers. We do not have sufficient information before us to set a specific level for steam incentives; even if we did, this is an implementation detail more appropriately left to Con Edison and NYSERDA. Instead, we direct NYSERDA to consult with Con Edison, the Steam Business Development Task Force, and other appropriate parties and entities regarding the appropriate level of steam incentives. Based on these consultations, NYSERDA should revise, and Con Edison should set, their respective incentive levels for steam and hybrid chillers, as they deem appropriate. In the periodic reports they are required to file regarding their demand management programs, they shall discuss the results of the consultations, their decisions on the steam incentives, and the rationale supporting the levels they set.

Avoidance of Multiple Incentives

From the descriptions of the service territory-wide and targeted programs, it appears that there is a potential for overlap among these programs. Given the similarities between aspects of these programs and programs funded by the System Benefits Charge, there is also a potential for overlap between these programs and the System Benefits Charge programs. The overlaps may cause a contractor or customer to qualify for multiple incentives for the same demand management measure.

While we want to encourage customers to employ demand management measures to the maximum extent possible, it is not appropriate for the general body of ratepayers to pay a contractor or customer more than once for employing a specific

demand management measure or participating in a demand management program or initiative. To ensure that this does not occur, Con Edison and NYSERDA are directed to develop and implement screens and/or eligibility requirements in their respective targeted and service territory-wide programs. For example, contractors and customers may receive separate incentives for different measures under multiple programs (e.g., installing energy efficient lighting under a service territory-wide program and new hybrid chillers under a System Benefits Charge program); they may not receive multiple incentives for the same measure under different programs (e.g., participating in a System Benefits Charge program to centrally control window air conditioners and in a companion service territory-wide program, or executing a contract under the targeted program to secure load reductions, then seeking funding under the service territory-wide or System Benefits Charge programs for installing energy efficient lighting to satisfy the requirements under the contract).

CONCLUSION

For the reasons set forth and subject to the modifications and clarifications discussed herein, we approve the Action Plan and authorize NYSERDA and Con Edison to proceed with implementation of their respective service territory-wide and targeted demand management programs. Successful implementation of those programs should help ameliorate the need for new central generating facilities and major transmission and distribution investments over the next few years, as well as improve the environment in Con Edison's service territory and the State in general. By reducing the demand for electricity, the programs should also assist in controlling the cost of electricity within Con Edison's service territory.

The Commission orders:

1. The Demand Management Action Plan filed by the New York State Energy Research and Development Authority is approved, subject to the modifications and clarifications set forth in the body of this Order.

2. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall require that all distributed generation projects receiving funding under the service territory-wide or targeted demand management programs comply with the minimum distance requirements between the projects' exhaust stacks and nearby receptors, as set forth in Appendix I.

3. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall require that all distributed generation projects receiving funding under the service territory-wide or targeted demand management programs comply with the National Fire Protection Association standards for stationary combustion engines and gas turbines or equivalent local code requirements.

4. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall require that all distributed generation facilities located within New York City comply with the New York City Building Code and the regulations for chimney heights and locations.

5. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall require that all distributed generation facilities located in Westchester County comply with the New York State Fuel Gas Code.

6. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall require that all distributed generation projects located in New York City that receive funding under the service territory-wide or targeted demand management programs comply with the New York City Noise Code.

7. The New York State Energy Research and Development Authority and Consolidated Edison Company of New York, Inc. shall ensure that all distributed generation projects located in Westchester County that receive funding under the service

territory-wide or targeted demand management programs comply with local noise codes, or, where no such codes exist, the same standards contained in the New York City Noise Code.

8. The New York State Energy Research and Development Authority shall submit bimonthly reports on its efforts to implement, and the results of implementing, the Action Plan to the Director of the Office of Electricity and Environment. These reports are in addition to those specified in the Electric Rate Order issued March 24, 2005 in this proceeding.

9. Consolidated Edison Company of New York, Inc. shall submit bimonthly reports on its efforts to implement, and the results of implementing, the Action Plan to the Director of the Office of Electricity and Environment. These reports are in addition to those specified in the Electric Rate Order issued March 24, 2005 in this proceeding.

10. This proceeding is continued.

By the Commission,

(SIGNED) JACLYN A. BRILLING
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 04-E-0572 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service.

NOTICE OF DETERMINATION OF CONDITIONED NEGATIVE DECLARATION OF SIGNIFICANCE

(Issued)

Notice is hereby given that an Environmental Impact Statement will not be prepared in connection with a proposed action by the Public Service Commission (Commission) to approve an Action Plan related to demand management measures to be implemented within Consolidated Edison Company of New York, Inc.'s (Con Edison) service territory. This is based on the Commission's determination, pursuant to Article 8 of the Environmental Conservation Law and its implementing regulations, 6 NYCRR Part 617 and 16 NYCRR Part 7, that with the establishment of certain mitigation measures, such action will not have a significant adverse effect on the environment. The action contemplated is an Unlisted Action as defined in 6 NYCRR §617.2. The action involves the expansion, coordination, and addition of programs designed to reduce electric load growth in Con Edison's service territory. The programs are all beneficial to the environment and serve to mitigate potential adverse impacts that may otherwise be associated with increasing electric load in the downstate area.

One aspect of the Action Plan involves the use of distributed generation to assist in achieving the 300 megawatt load reduction target adopted by the Commission. Distributed generation facilities produce noise and air quality emissions that may pose environmental impacts. The Commission determined that such impacts could be mitigated by adherence to local noise codes and by setting minimum distance requirements between the facilities and nearby receptors. With these measures, the impacts identified are not considered to be significant.

Documentation supporting this determination includes the Action Plan filed on August 16, 2005, the New York State Energy Research and Development Authority's

Energy Smart[SM] Program Evaluation Reports, dated May 2004 and May 2005, and an Environmental Assessment Form prepared in conjunction with this matter. All of this documentation is available for public review at the Commission's office in Albany, New York.

The address of the Public Service Commission, the lead agency for purposes of the environmental review of this action, is Three Empire State Plaza, Albany, New York 12223-1350. Requests for further information may be directed to Richard H. Powell at (518) 486-2885 or at the address above.

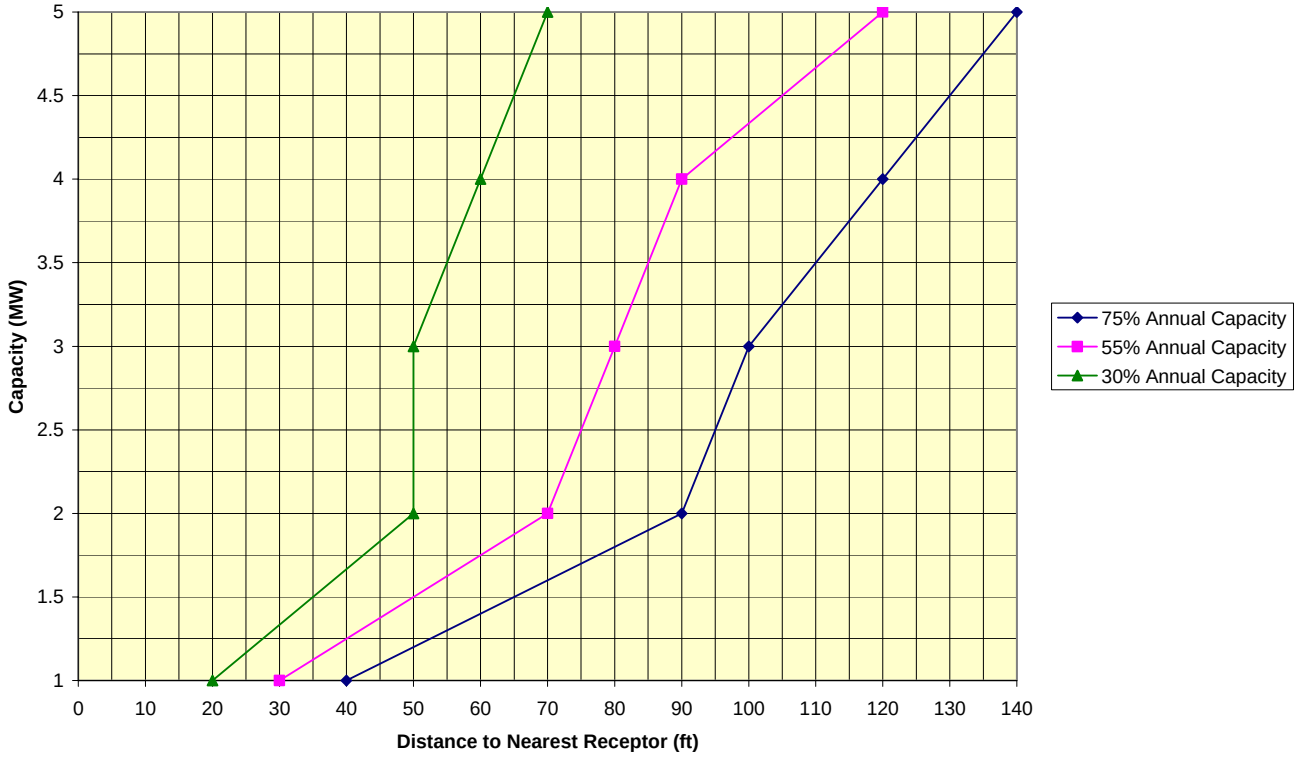
(SIGNED) JACLYN A. BRILLING
Secretary

APPENDIX I

DISTANCE REQUIREMENTS FOR DISTRIBUTED GENERATION FACILITIES

To avoid significant air quality impacts at nearby receptors, NYSERDA and Con Edison shall require that all distributed generation projects receiving funding under the service territory-wide or targeted demand management programs comply with the following minimum distances between the projects' stacks and the receptors, with the distances based on the size of the projects, as shown on Figure 1, below.

Figure 1
Capacity vs. Distance to Avoid Significant Adverse Air Quality Impacts



For example, for a facility with a generating capacity of 0.5 megawatts or less, no significant impacts are predicted at or beyond 30 feet from the exhaust stack to a sensitive receptor; for a facility with a generating capacity of 0.5 megawatts to 1 megawatt, no significant impacts are predicted at or beyond 40 feet from the exhaust stack to a sensitive receptor.

APPENDIX II

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

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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, Consolidated Edison Company of New York, Inc. – Electric Rates on March 24, 2005.
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 NOx 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 DISTRIBUTED GENERATION

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 NOx 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 be will 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 NOx 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 NOx emission threshold level of 1.6 lbs/MWh for baseloaded and peaker DG. NYSERDA further recommends a NOx 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 NOx. 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 NOx. JS and NYSERDA believe this will provide a performance incentive for some CHP to do better than 1.6 lbs/MWh NOx 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 NOx. 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 NOx 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/offerings.
   - 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.[28] 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.

[28] Order, pg. 87.

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

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 associates 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, Westschester, 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 NOx and SO_2 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 CO_2 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 CO_2 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, NYCEDC 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 NOx and SO_2, 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 $mart**[SM] 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 though 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 expediters 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.[29]

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

[29] 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.

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
  - 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 $mart**[SM] 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 $mart**[SM] 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 $mart**[SM] 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 thorough 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 $mart^{SM}** 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.[30] 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,

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

and programs will be structured to assure unessential additional hurdles are not created. Stringent requirements may reduce activity in an area.

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 $mart^{SM} 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 $mart^{SM} 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 particpate 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 $mart^{SM} 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 $mart^{SM} 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	Curtailable 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[31]. 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 $mart^{SM} 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 distributed generationowans@nexant.com.

Sincerely,

Dakers Gowans

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