



Law Department

Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York NY 10003-0987
www.conEd.com

Celeste A. Smith
Associate Counsel
Room 1815-S
Tel: (212)460-6699
Fax: (212)677-5850
smithce@coned.com

February 27, 2009

VIA OVERNIGHT MAIL

Hon. Jaclyn A. Brillling
Secretary to the Commission
New York State Public Service Commission
Agency Building 3
Albany, New York 12223-1350

Re: Solar Energy Pilot Program

Dear Secretary Brillling:

Enclosed is a verified petition by Consolidated Edison Company of New York, Inc., regarding a proposed Solar Energy Pilot Program and the ratemaking treatment for that program and a Notice of Proposed Rulemaking for publication in the New York State Register pursuant to the State Administrative Procedure Act. Please contact the undersigned if you need any additional information regarding this filing.

Respectfully submitted,

Celeste Smith

Enclosures (five copies)

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

**In the Matter of Consolidated Edison Company
Of New York, Inc.'s Solar Energy Pilot Program**

**VERIFIED PETITION REGARDING RATEMAKING TREATMENT
FOR SOLAR ENERGY PILOT PROGRAM**

Recognizing the emergence of solar energy as an important energy resource and the need to better understand the feasibility of various solar applications in its service territory, Consolidated Edison Company of New York, Inc. (“Con Edison” or the “Company”) is proposing the implementation of a Solar Energy Pilot Program. This pilot program, consisting of three initiatives for developing solar resources, is designed to spur the development of approximately 12 MW of solar energy over the next 18 months.

The Company views solar energy as a potential key resource to help New York’s energy portfolio become greener, more diversified and more secure, while also creating jobs in the State. Solar energy can play an important role in allowing New York to reach its Renewable Portfolio Standard (“RPS”) goals. As stated by the Commission, “the development of additional renewable energy resources is a long-standing energy policy objective of the State. The 2002 State Energy Plan (June 2002) warned of the possible consequences of New York's fossil fuel dependency, noting that the State's primary

sources of energy are imported, to a large degree, from abroad, have significant long-term environmental effects, and ultimately face depletion.”¹

Utilities like Con Edison can appropriately play a role -- as the owner of solar resources, as a solar energy program administrator, and as a facilitator of competitive procurement of large solar resources -- that supports the development of the solar industry in its infancy. Indeed, early, policy-driven efforts to support solar could result in a self-sustaining market in the next three to five years. Through its Solar Energy Pilot Program, the Company would provide a jumpstart for solar installations to become a sustainable industry given its service area’s attractive roof potential (both on Company-owned facilities and within its large customer base). The program can also yield valuable insights into customer interest in solar. The Solar Energy Pilot Program will also provide information as to the potential impact of solar, as an intermittent resource with some peak coincidence, on system operations. Importantly, these solar resources will be able to provide both capacity and energy that will directly benefit participants as well as indirectly benefit all consumers by potentially displacing fossil-fueled resources such as oil-distillate peaking plants. The Commission has recognized that solar facilities are “among the most environmentally benign of all potential generation technologies and have the added benefit of being easily deployed in urban/heavy load areas where they have a particularly high value as an alternative to conventional resources.”²

The Company has conducted preliminary market sizing analysis and determined that the magnitude of the roof-top space in its service area provides an appropriate

¹ Case 03-E-0188, *Proceeding on Motion of the Commission Regarding a Retail Renewable Portfolio Standard, Order Regarding Retail Renewable Portfolio Standard* (issued September 24, 2004) (“RPS Order”), pp. 1-2 (footnote omitted).

² RPS Order, p. 46.

foundation for developing a long-term solar business opportunity. The Company's Solar Energy Pilot Program will complement other valuable state economic development efforts, including New York's competitive semiconductor industry and other high tech sectors like software design, research and development efforts underway at private companies and public universities. It will also provide much needed support to the financial industry which can help secure funding for solar industry start-ups.

Overall, these pilot program initiatives will provide an increased understanding of how solar energy can provide clean, renewable, distributed supply to the Company's electric system. Con Edison, along with stakeholders in and out of government, will then evaluate the program and use the evaluation to move forward with programs to encourage the increased development of solar resources in New York State.

The Company's overall goals upon launching the Solar Energy Pilot Program are to understand the network impact of solar resources, to test market mechanisms, and to engage customers and stakeholders. Related to the electric network, the Company plans to evaluate the capability of solar resources to enhance the reliability of the system, and understand the operational impacts of solar. As a result of the Solar Energy Pilot Program, the Company will enhance its ability to plan its system to incorporate larger amounts of future solar resources and potentially can understand how Smart Grid/AMI efforts can be used to better integrate solar into the state's energy portfolio. The Company is an important stakeholder of the New York Independent System Operator ("NYISO"), and will use the pilots to assess the appropriateness of developing NYISO wholesale market rules that will accommodate solar resources into the NYISO's capacity market. By procuring the installment of solar energy from third parties, the Company will better understand how to incent the market to provide solar resources at competitive prices, and will gain critical

insight into how solar can be made attractive to both a broad range of customers as well as specialized contractors who are necessary for the market to mature. Finally, the Company has a goal to engage in dialogue with a broad audience of stakeholders who are interested in promoting solar energy.

Con Edison is planning to seek funding for the incremental costs of the Solar Energy Pilot Program from various sources, including Federal Investment Tax Credits, funds made available directly or indirectly via the recently-enacted American Recovery and Reinvestment Act of 2009, Public Law 111-5, to encourage the development of solar resources, and the Regional Greenhouse Gas Initiative (“RGGI”), as well as other funding available from NYSEERDA. The Company further proposes that, to the extent these sources do not provide funding for all of the incremental costs of the pilot program, to recover any remaining unrecovered incremental costs from the RPS fund established in the RPS Order as part of implementing New York’s 2002 Energy Plan. The Commission has recognized that “RPS programs generally require that renewable resources deemed eligible for participation are awarded a certain level of financial incentives to support their development. Currently, renewable resources are generally more expensive than non-renewable resources, such as fossil fuels. Therefore, without access to financial incentives to cover all or some of these above-market costs, renewable resources struggle to compete with resources using fossil fuels.”³ The Commission added that these resources “provide ancillary benefits such as increased fuel diversity and energy security, the potential for economic development as a result of growing industries that typically tap into indigenous resources and invest in local and regional economies, and reduced environmental impacts.

³ RPS Order, pp. 2-3.

Accordingly, they warrant a certain level of support to facilitate their growth.”⁴ And, indeed, the Commission has determined that RPS funding is particularly appropriate for solar facilities:

Certainly, customer-sited and Company-sited solar installations should be eligible for RPS funding. Among the criteria for funding eligibility identified by the Commission are ... the potential for specific projects to create or sustain jobs in New York State, the ability of the resources to support load pockets throughout the state by reducing demand from the grid during peak demand periods, support for greater fuel diversity, opportunity for residential and small business customers to participate, and environmental benefits.⁵

To the extent the incremental costs of the Company’s program are not eligible for such funding, the Company plans to recover the unfunded incremental costs through the Company’s MSC/MAC mechanism.

The Company will consult periodically with the Commission’s Staff on the various activities associated with each of the three initiatives.

Overview of the Solar Energy Pilot Program:

The Company’s proposed Solar Energy Pilot Program consists of the following initiatives:

- *Customer Sited Distribution System Solar* – Smaller-sized solar installations at customer premises in selected load areas where solar installations may relieve short-term or long-term reliability needs;
- *Company Property Solar Installations* - Installations of solar resources on Company-owned property, focusing on networks that could benefit from such resources or areas that can particularly benefit from reduced use of fossil-fueled generation; and
- *Solar RFP* - Competitively-selected larger-scale solar resources in the Con Edison service territory.

⁴ RPS Order, p. 3.

⁵ RPS Order, p. 47.

As more fully explained in connection with each of these solar initiatives, the Company believes that the Solar Energy Pilot Program will provide the opportunity for gathering necessary information regarding the potential impact of solar facilities on the Company's operations, including the potential for demand reduction during peak periods, as well as providing the opportunity for the Company to evaluate the market response for solar facilities, the funding necessary and available for the integration of these facilities into the Company's system, and the cost-effectiveness of the solar installations. The Company is aware of approximately 2 MW of existing solar resources in its system, and will endeavor to include these resources in any studies it undertakes to maximize the knowledge creation from the program.

Solar Energy Pilot Program Initiatives:

Customer Sited Distribution System Solar

Under the Customer Sited Distribution System Solar initiative, Con Edison will identify two day-peaking networks and three to five individual network feeders characterized by a day peaking profile (though their respective networks may not experience day time peaks), for incenting the construction of customer-sited and customer-owned solar resources. The Company will select the networks and feeders based upon whether they are day peaking, the size of the available rooftop real estate in the prescribed system vicinity, and the longer term growth forecasts for the network. In choosing the specific networks and feeders, the Company will also consider areas that can benefit from reduced use of fossil-fueled generation. The concept of the Customer Sited Distribution System solar initiative is that infrastructure that experiences peak utilization during the daytime hours, when solar PV is most likely to be producing energy, will reap the most benefit from solar energy production which displaces electric demand in the network. In

doing so, benefits to the electric system in that network may occur through providing operational benefits and potentially improving short-term or long-term reliability in load pockets within those networks. With larger amounts of solar, the potential for deferral of load relief capital improvements may also exist.

However, because solar is an intermittent resource that fluctuates with sunlight, the performance of the solar resource in the New York metropolitan area and the way the resources can be controlled are both not yet sufficiently understood. The correlation of the output of numerous distributed solar PV resources co-located on a specific network or feeder will provide valuable insights into the ability to rely upon solar for system planning purposes. At a minimum, either one of the networks or feeders selected for the Customer Sited Distribution System Solar program will be coordinated with the Smart Grid demonstration planned in Long Island City.

Con Edison proposes that these solar facilities would be installed and owned by customers at residential, multi-family, or commercial locations. The Company anticipates that most solar systems in the Customer Sited Distribution System Solar program will be sized between 6 kW to 200 kW, but larger systems can be accommodated after appropriate technical analysis by the Company to ensure there are no potential detrimental effects on the distribution system. The goal for solar resources targeted to the two selected networks is 300 kW to 1 MW within each network for a total of 600 kW to 2 MW. The goal for solar resources targeted to the selected feeders will be 150 kW to 1 MW per feeder, for a total of 750 kW to 5 MW. The total goal for solar resources of the Customer Sited Distribution System Solar program will be capped at 5 MW.

This solar initiative will be marketed directly to consumers and solar installation contractors by a third-party program implementation administrator(s) selected by

competitive bidding. The program implementation administrator(s) will facilitate customer applications for Federal, state and local incentives, which can be important for making solar systems affordable for the customer. Con Edison will provide a subsidy for the remaining balance of the project cost after all incentives (including the value created by accelerated depreciation and property tax abatements) are netted from the total project cost, which will be determined based on an independent cost estimate obtained by the Company. The customer will own the resource, but assign the value of other benefits, such as the RPS Attributes⁶ and, if applicable, the right to wholesale capacity market payments, to Con Edison for a period of up to 15 years to offset the costs of these initiatives. Savings will accrue to the customer via reduced electric bills and, where applicable, via net-metering as an ongoing benefit of the resource.⁷

The Company anticipates that the Customer Sited Distribution System Solar initiative will provide important information regarding the impact of smaller-sized solar facilities on load pockets and specifically identified distribution equipment, providing the opportunity for the Company to determine the operational impacts of these facilities on the Company's system, as well as their effectiveness in reducing demand. In addition, the Customer Sited Distribution System Solar initiatives will provide the Company with the opportunity to investigate coupling solar resources with Smart Grid efforts.

The Customer Sited Distribution System Solar initiative will also enable the Company to evaluate the cost effectiveness of solar installations and provide the Company with experience in testing customer interest in customer-owned solar facilities as well as

⁶ An RPS Attribute is defined as one megawatt-hour of energy generated by the solar resource.

⁷ If customers are not eligible for net metering or choose not to net meter, then the Company will install a second meter to provide a direct credit to the customer for the energy output of the solar panel.

provide the Company with the experience necessary if the network and feeder program were to be expanded in the future.

Company Property Solar Installations

Con Edison is also planning to install solar panels at several Company facilities for a total peak capacity of up to 1.8 MW. The Company will own, operate and maintain these solar resources. Based on a preliminary review of facility roofs in the Con Edison system it is clear that there is potential for solar photovoltaic generation at Con Edison facilities. While a final determination has not been made for the location of solar panel installations under the pilot program, the Company is considering several facilities, including its West 49th Street transmission substation and its headquarters building at 4 Irving Place, both located in Manhattan, at the Mott Haven substation in the Bronx, and at Astoria Building 136 located in the Astoria Complex in Queens. These Company-owned locations are all in day-time peaking networks and, therefore, solar resources will generally provide benefits to these networks that may mitigate reliability concerns associated with peak conditions.

The West 49th Street transmission substation, located in a network that has been identified as requiring load relief before 2018 under Con Edison's current ten-year load relief plan has the potential for a 116 kW solar energy installation based upon preliminary studies.

The Astoria location is in an area that has experienced growth in energy demand during the past few years. In addition, the Astoria area currently hosts a significant amount of power generation. Preliminary studies indicate the potential for producing over 1.65 MW of solar energy production at this site. This larger potential, compared to the other Company locations being considered for solar installation, will also help the Company understand the operational impact of larger solar resources on the electric distribution

system. In addition to traditional crystalline photovoltaic solar panels, the Company may investigate the use of thin-film solar technology on some of the available area at this location.

The Mott Haven location is also in an area that has energy-related facilities, and preliminary studies indicate the potential for 56 kW of solar power production at this site.

The 4 Irving Place location has a potential of generating 50 kW of solar energy based on preliminary analyses. A solar installation at Con Edison's headquarters would not only reduce the Company's carbon footprint but demonstrate Con Edison's commitment to renewable energy resources.

Based on further studies and analyses, the Company will select some or all of the above-identified location for installations and the value of all benefits produced by the Company Property Solar Installations, including Federal and state incentives, RGGI, RPS or other NYSERDA funding, and the value of the energy and electric capacity produced, will be used to offset the cost of the initiative.

The Company Property Solar Installation initiative will provide the Company with the opportunity to study the cost effectiveness of solar installations, evaluate the impact that solar facilities would have on the Company's operations, and determine the extent to which these facilities may be integrated into the NYISO demand reduction programs and wholesale capacity markets. In addition, the increased visibility of these solar facilities on the Company's property may well spur customer interest in solar facilities and attract new solar industry entrants.

Solar RFP

Con Edison plans to issue an RFP for 5 MW of solar facilities to be located in its service territory.⁸ The Solar RFP will focus on larger solar installations, *i.e.*, sized at 200 kW or larger. In developing the RFP the Company may consider geography-specific targets for energy production within its service area. The Solar RFP will request bidders to supply distribution side or transmission side resources, including “central station” solar and large rooftop solar installations. The selected vendor(s) will own and operate the solar resource and will be responsible for any associated interconnection and O&M costs. The contract between the vendor and Con Edison will compensate the vendor through the purchase of RPS Attributes by Con Edison. The Company anticipates that the Federal Investment Tax Credit, New York City property tax abatements and any other tax-related benefits will be pursued by the vendor, and the vendor will estimate the value of these tax benefits, as well as the value of the energy and capacity associated with the solar resource, and reflect these values in its bid. The contract will obligate the vendor to provide RPS Attributes to the Company at a fixed price over the term of the contract.

Program Evaluation:

In evaluating the program to see if the Company’s goals have been achieved, the Company believes the following outcomes will be indicative of success:

- New solar MW constructed as a direct result of the program;
- Company understanding of network operational impacts;
- The availability of more precise cost data associated with solar installations and the funds available from other sources to support such installations;

⁸Though the preference is for service-area-specific resources, Con Edison will also evaluate additional available MWs identified through the LIPA RFP.

- The assessment of cost avoidance and other financial benefits of solar installations;
- Increased numbers of contractors active in the solar installation industry;
- Improved customer awareness of solar, and public support for increased implementation of solar energy;
- Development of NYISO market rules specifically to allow solar resources to participate in NYISO's demand reduction programs and wholesale capacity markets;
- Company understanding of how solar resources can be integrated with Smart Grid technology (such as communications protocols and smart meters) that will result in including solar specific features in any wider implementation of Smart Grid technology by the Company; and
- Potential to offset emissions of fossil-fueled resources, particularly those that may be needed during peak periods.

Program Costs:

Assuming full subscription in the Customer Sited Distribution System Solar (5 MW), installation on all four above-identified properties being considered under the Company Property Solar Installation initiatives (1.8 MW), and an award for the full amount of solar requested under the Solar RFP (5 MW), the Company estimates the costs of all three initiatives to be in the range of \$20-25 million, for direct installation costs, customer subsidies, and first-year administrative costs.

Proposed Rate Recovery of Solar Energy Pilot Program Costs:

Con Edison is planning to seek funding for the incremental costs of the Solar Energy Pilot Program from various sources, including Federal Investment Tax Credits,

direct and indirect funding available through the American Recovery and Reinvestment Act of 2009, and RGGI, as well as other funds available from NYSERDA. The Company further proposes that, to the extent these sources do not provide funding for all the incremental costs of the pilot program, to recover any unrecovered incremental costs from the RPS fund. As mentioned above, the Commission has determined that RPS funding is particularly appropriate for solar facilities. Moreover, the essential information regarding the role of solar energy facilities on the Company's system that will be provided by its Solar Energy Pilot Program, as well as the potential for the growth of solar facilities in the downstate area of New York as a result of the program, makes RPS funding for this program especially appropriate.

However, to the extent it is determined that some or all of the incremental costs of these initiatives are not eligible for RPS funding, the Company proposes that any unrecovered costs be recovered through the MSC/MAC mechanism.⁹ The Commission has recognized the appropriateness of recovery of DSM pilot costs from all delivery-service customers,¹⁰ and the same rate treatment would be appropriate for any unrecovered incremental costs of the Solar Energy Pilot Program.¹¹

⁹ The MSC/MAC mechanism is already used for recovery of the costs associated with the Company's retained generation.

¹⁰ Case 03-E-1332, *In the Matter of Consolidated Edison Company of New York, Inc.'s Petition Regarding Ratemaking Treatment Applicable to Procurement of Electric Load Reduction, Order on Cost Recovery of Demand Management Program* (April 21, 2006).

¹¹ As with the RPS, the costs of the pilot program would be applicable to all of the Company's delivery-service customers other than NYPA.

Conclusion:

For all of the foregoing reasons, Con Edison requests that the Commission grant the Petition and issue an order establishing, in the manner set forth herein, the ratemaking treatment applicable to Company's Solar Energy Pilot Program.

Dated: New York, New York
February 27, 2009

Respectfully submitted,

Gurudatta D. Nadkarni
Gurudatta Nadkarni
Vice President
Strategic Planning

Consolidated Edison Company of
New York, Inc.
4 Irving Place, Room 700
New York, New York 10003
(212) 460-3145

VERIFICATION

STATE OF NEW YORK)
)
COUNTY OF NEW YORK)

GURUDATTA NADKARNI, being duly sworn, deposes and says that he is a Vice President of Consolidated Edison Company of New York, Inc.; that he has read the foregoing Petition and knows the contents thereof; and that the same is true to the best of his knowledge, information and belief.

Gurudatta D. Nadkarni
GURUDATTA NADKARNI

Sworn to before me this
27th day of February 2009

Stephen Ianello
Notary Public

STEPHEN IANELLO
NOTARY PUBLIC, STATE OF NEW YORK
NO. 31-4837907
QUALIFIED IN NEW YORK COUNTY
COMMISSION EXPIRES AUGUST 31, 2009

**PROPOSED RULEMAKING
NO HEARING(S) SCHEDULED**

Consolidated Edison Company Of New York, Inc. Solar Energy Pilot Program

LD. No. PSC-

PURSUANT TO THE PROVISIONS of the State Administrative Procedure Act, NOTICE is hereby given of the following proposed rule:

Proposed action: The Public Service Commission is considering whether to approve or reject, in whole or in part, a petition filed by Consolidated Edison Company of New York, Inc. requesting authorization for the ratemaking treatment of certain costs related to the implementation of a solar energy pilot program.

Statutory authority: Public Service Law, Section 66.

Subject: Petition for authorization of ratemaking treatment.

Purpose: To consider the Petition for authorization for the ratemaking treatment of certain costs related to the implementation of a solar energy pilot program by Consolidated Edison Company of New York, Inc.

Substance of the proposed rule: The Commission is considering a request by Consolidated Edison Company of New York, Inc. for authority to recover the incremental costs and payments from the RPS fund and other available sources and, to the extent such funding is unavailable, through the Company's MAC/MSC mechanism. The Commission may approve, reject or modify, in whole or in part, the Company's request.

Text of proposed rule and any required statements and analyses may be obtained by filing a Document Request Form (F-96) located on our website <http://www.dps.state.ny.us/f96dir.htm>. For questions, contact: Central Operations, Public Service Commission, Bldg. 3, Empire State Plaza, Albany, NY 12223-1350, (518) 474-2500.

Data views or arguments may be submitted to: Jaclyn A. Brillling, Public Service Commission, Bldg. 3, Empire State Plaza, Albany, NY 12223-1350, (518) 474-6530.

Public Comment will be received until: 45 days after the publication of this notice.

Regulatory Impact Statement, Regulatory Flexibility Analysis, Rural Area Flexibility Analysis and Job Impact Statement

Statements and analysis are not submitted with this notice because the proposed rule is within the definition contained in section 102(2)(a)(ii) of the State Administrative Procedure Act.