

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

<p>Petition of Consolidated Edison Company of New York, Inc. for Approval of a Pilot Program for Providing Shared Solar to Low Income Customers</p>	<p>CASE 16-</p>
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**PETITION OF CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. FOR
APPROVAL OF A PILOT PROGRAM FOR PROVIDING SHARED SOLAR
TO LOW-INCOME CUSTOMERS**

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I. Introduction

Consolidated Edison Company of New York, Inc. (“Con Edison” or the “Company”) hereby petitions the New York State Public Service Commission (the “Commission”) for approval of a pilot program to provide Community Distributed Generation (“CDG”), or Shared Solar, to customers participating in the Company’s established electric low-income program.¹ When the Commission established CDG in New York, it did so with the intent of opening “opportunities for participation in solar and other forms of clean distributed generation to utility

¹ Schedule for Electricity P.S.C. No. 10, Leaf 388.

customers that would otherwise be unable to access that generation directly.”² To date, the CDG program, and net metering policies in general,³ are falling short of serving those customers whose access to clean energy options has historically been the most limited—low-income customers, and particularly those living in an urban setting.⁴ This customer segment has been underserved by the marketplace for clean energy products for a variety of reasons, including the financial limitations of customers. To date, to the Company’s knowledge, no CDG offerings have been provided to the low-income customer segment in Con Edison’s service territory.⁵ Con Edison believes that a utility-based shared solar pilot program for low-income customers (the “Shared Solar Pilot Program” or the “Program”) has the unique ability to provide low-income customers with opportunities to participate in clean renewable energy offerings otherwise unavailable while at the same time demonstrating how solar assets can be beneficial to this group of customers as well as to all customers more generally. The Shared Solar Pilot Program will rely on the framework to be established by the Commission in the Value of Distributed Energy Resources Proceeding⁶ to assign value to energy exports from distributed renewable resources. The Program will provide participating low-income customers with access to solar energy, and make available solar credits that may benefit these customers. Participating customers could also receive energy benefits through energy efficiency programs offered by the Company and the

² Case 15-E-0082, *Proceeding on Motion of the Commission as to the Policies, Requirements, and Conditions for Implementing a Community Net Metering Program* (“CDG Proceeding”), Order Establishing a Community Distributed Generation Program and Making Other Findings (issued July 17, 2015) (“CDG Order”), p. 3.

³ The Company continues to work with Department of Public Service Staff and interested stakeholders within the Commission’s proceeding, Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources* for reforms that will address the challenges associated with the State’s existing Net Energy Metering policy, notably including cost-shifting from solar customers to non-solar customers. The Company supports a fair valuation of distributed energy resources that more accurately reflects utility avoided costs.

⁴ Interstate Renewable Energy Council, *Shared Renewable Energy for Low- to Moderate-Income Consumers: Policy Guidelines and Model Provisions* (released March 29, 2016). At: http://www.irecusa.org/wp-content/uploads/2016/03/IREC-LMI-Guidelines-Model-Provisions_FINAL.pdf

⁵ Ten CDG projects are active in the Con Edison interconnection queue; none have indicated a focus on serving low income customers.

⁶ Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources* (“Value of DER Proceeding”).

New York State Energy Research and Development Authority (“NYSERDA”), allowing these customers to take greater control over their energy use. The Program would combine: the lower costs of solar built under a “Universal Renewables” model;⁷ the utility’s ability to work effectively with its low-income customers, community groups, and other interested stakeholders; the development of solar generation on Company-owned roof space and other Company-owned locations for the benefit of customers; and the ability to efficiently apply solar credits to the customer’s bill.

In the initial phase of the Program, the Company will conduct a competitive procurement for a third-party to design, develop, and construct 3 MW of solar generation, enabling the Company to serve between 800 and 1,600 low-income customers. If customer response during the initial phase is favorable and benefits can be provided to participating low-income customers in this initial phase, the Company would proceed to build an additional 8 MW of solar generation for a total of 11 MW at an estimated cost of \$33 million.

The Company believes that the Shared Solar Pilot Program can provide financial and non-financial benefits to customers participating in the Shared Solar Pilot Program, and based on current construction costs and wholesale market value, Con Edison estimates that a typical individual participating low-income customer could save up to seven percent of the monthly bill. The Company proposes a Program design where participating customers would receive a solar credit on their electric bill. To meet the needs of the Company’s low income customers, the solar credits will only be positive or zero so participating customers’ electric bills will not be

⁷ Under the Universal Renewables model, Con Edison, under supervision by the Commission, would conduct competitive solicitations that would allow third-party renewable developers to develop, design, build, and potentially operate renewable energy facilities. Once in operation, a renewable energy project would be transferred to the utility under specific agreements with the third-party developer.

higher than if they did not participate in the Program. The Program does not require any upfront payment or a separate on-going payment for participation, and customers will continue to receive all of the benefits of the low-income program which includes a reduction in their customer charge.

The Company believes that the Shared Solar Pilot Program is consistent with the policies and goals set forth by the Commission in a variety of ongoing proceedings. The Program would provide low-income customers with the potential to reduce their electric bill charges, consistent with the goals set forth by the Commission in its May 20, 2016, *Order Adopting Low Income Program Modifications and Directing Utility Filings* (“Low Income Order”).⁸ While establishing a new statewide standard for traditional utility low-income programs, the Low Income Order also recognized that markets and tools are evolving, and that the Commission expects that assistance to low-income customers will evolve to more innovative approaches. The Shared Solar Pilot Program described herein is such an innovative approach that will provide additional assistance and greater opportunity for low-income customers to access the benefits of clean energy.

Additionally, the Commission’s February 26, 2015, *Order Adopting Regulatory Policy Framework and Implementation Plan* (“REV Track One Order”)⁹ specifically called for utility ownership of distributed energy resources, such as solar, where a project will enable low- or moderate-income residential customers to benefit from distributed energy resources (“DER”) and

⁸ Case 14-M-0565, *Proceeding on Motion of the Commission to Examine Programs to Address Energy Affordability for Low Income Utility Customers, Order Adopting Low Income Program Modifications and Directing Utility Filings* (issued May 20, 2016)(“ Low Income Order”).

⁹ Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* (“REV Proceeding”).

where markets are not likely to satisfy the need.¹⁰ Here, the market has not responded with CDG projects that include the low-income customer segment in Con Edison's service territory. This goal was echoed by the Commission in its August 1, 2016, *Order Adopting a Clean Energy Standard*,¹¹ where the Commission reiterated that utilities take steps to provide low-income consumers with opportunities to access clean energy alternatives that help them reduce their energy burden and support environmental goals. In the CDG Order, the Commission clearly sought to prioritize service of low-income customers by giving CDG projects serving those customers the ability to commence operation sooner than projects without a low-income component. In Con Edison's territory, however, this policy preference has not resulted in any actual projects being constructed with a focus on low-income customers.

The Company will submit a detailed implementation plan for the Shared Solar Pilot Program (the "Implementation Plan") within 120 days of Commission approval. The Implementation Plan will include information about the Company's marketing and outreach strategy, including engagement with community organizations, the procurement of the solar resources through competitive solicitation, and an evaluation framework. The evaluation framework will provide data on the overall operation of the Program, including aggregated data on participating customer outcomes such as length of participation and changes to payment status. The Program will be structured with the objective of the costs of the Shared Solar Pilot Program and the benefits provided to participating customers being funded by the value of the exported solar generation. The Implementation Plan will propose how differences between such

¹⁰*Id.*, p. 69.

¹¹ Case 15-E-0302, *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*, Order Adopting a Clean Energy Standard (issued August 1, 2016) ("CES Order").

costs and the value of exported solar generation will be recovered from or credited to customers, as applicable.

II. Background

A. Low-Income Customer Participation in CDG

As a general matter, low-income customers are at a disadvantage when it comes to accessing renewable energy options for their homes. In the first instance, low-income customers are more likely than others to rent their homes or live in multi-family housing, which limits their ability to install on-site solar.¹² Furthermore barriers such as lack of access to capital or insufficient credit scores can disqualify these customers from participating in community solar leasing programs. Nationally, low-income customers have a median FICO credit score of 664,¹³ well below the minimum score of 700 required by many solar developers, who rely on the underlying credit ratings of their customers to obtain favorable project financing.¹⁴ This challenge is evident in the statistics for customers accessing renewable energy via conventional net metering in Con Edison's service territory. While approximately 12.5 percent of Con Edison's total population of residential customers receives low-income bill assistance, only 2 percent of Con Edison's residential customers participating in solar net metering today are also participating in the Company's low-income program.

¹² U.S. Census Bureau, Residential Vacancies and Homeownership in the Third Quarter 2015, at 10 (Issued October 27, 2015, available at: www.census.gov/housing/hvs/files/current/hvpress.pdf (In 2014, only 49 percent of families earning less than the median family income owned their homes, compared with 79 percent of households earning the median family income or more.)

¹³ ValuePenguin. Average Credit Score in America: 2016 Breakdown. At: <https://www.valuepenguin.com/average-credit-score> (Viewed October 20, 2016).

¹⁴ The Cadmus Group. Progress, but Community Solar Still Isn't Shared. At: <http://www.cadmusgroup.com/articles/community-solar-still-isnt-shared/> (Viewed October 20, 2016)

The Commission approved CDG in its July 17, 2015, *Order Establishing a Community Distributed Generation Program and Making Other Findings* (“CDG Order”).¹⁵ As stated in the CDG Order, CDG was intended to “open opportunities for participation in solar and other forms of clean distributed generation to utility customers that would not otherwise be able to access that generation directly.”¹⁶ Specifically, CDG was seen as a pathway to provide for customers who do not have a roof suitable for solar installation, do not own their home, or otherwise do not want to or cannot install solar panels on their premises to participate in a renewable solar program. In fact, the Commission began CDG in New York in a phased approach, with the first phases restricting CDG to certain areas, or to projects with at least 20 percent low income customer participation. This effectively allowed CDG projects proposing to serve low-income customers to get a six-month “head start” in beginning operations compared to projects that did not seek to serve low-income customers.

B. Commission Collaborative

In conjunction with its support for low-income customer participation in CDG, the Commission established a collaborative process managed by the Department of Public Service Staff (“Staff”) to consider ways to remove obstacles to low-income participation in CDG, and to develop means for encouraging low-income customer participation. Between September 2015 and August 2016, this collaborative worked to identify barriers to low-income customer participation in CDG, and discussed ways these barriers could be eliminated. Staff’s report¹⁷ (the “Collaborative Report”) found that two prominent financial barriers for low-income customers were related to the typical business models used to sell community solar to customers:

¹⁵ CDG Proceeding, CDG Order.

¹⁶ *Id.*, p. 3.

¹⁷ CDG Proceeding, *Staff Report on the Collaborative Regarding Community Distributed Generation for Low-Income Residential Customers* (issued August 15, 2016) (“Collaborative Report”).

Pay-as-you-go Under this model, a participating customer executes a long-term agreement to pay a monthly subscription fee to the community solar host. In exchange for the subscription fee, the customer receives community net metering credits on the customer's utility bill for the percentage of the output of the community solar array the customer is funding. However, in order for the community solar host to secure financing for their project, the lenders usually require that the participating customers have a robust credit score and/or a low debt-to-income ratio.

Upfront Payment Under this model, a customer provides the community solar host with capital in exchange for which the customer has a right to receive community net metering credits on the customer's utility bill for the portion of the community solar array the customer is funding. This upfront payment business model is a barrier to participation and not viable for most low income customers.

Other barriers or challenges to low-income participation in CDG identified in the Collaborative Report include:

- Limiting credit, as discussed above;
- Transmitting data between the local utility and CDG hosts;
- Protecting the privacy of low-income customers while working to establish their low-income eligibility status for the purposes of enrollment;
- Furnishing regulatory oversight to community DG products, including consumer protections for low-income customers participating in CDG projects;
- Marketing, outreach and communications with low-income customers; and
- Providing bill savings to low-income CDG customers.

Staff ultimately concluded in the Collaborative Report there were no workable solutions to overcome the most critical barriers to low-income customer participation in community solar.

Staff suspended the collaborative and is expected to issue a whitepaper in the future.¹⁸

¹⁸ CDG Proceeding, Collaborative Report, p. 12.

C. Current Status of the CDG Market in Con Edison's Service Territory

Based on the activities observed in the marketplace over the past year, the opportunity to participate in CDG has not been available to many of Con Edison's customers, and especially has not been available to low-income customers. Within five months of accepting CDG applications, New York State utilities reported 1,314 MW of CDG in the interconnection queues. While this inrush of projects has resulted in questions about the net metering program itself, and the need to reform it to a more sustainable approach, this increase demonstrates that there has been significant interest by developers in CDG.¹⁹ For Con Edison's service territory, scarcity, cost of land (for ground-mount systems), and high rooftop rental rates and competing rooftop uses pose many challenges for CDG development, and resulting in fewer CDG projects than in other parts of the State. As of September 30, 2016, there are ten active CDG interconnection applications at Con Edison, associated with 3.0 MW of total capacity. No CDG projects are in service and nine projects, associated with 5.2 MW of total capacity, have cancelled their applications. Moreover, despite the Commission's priority given CDG for low-income customer participation, low-income customers will likely continue to face significant barriers to participating in CDG projects in the Company's service territory. Of the CDG project applications currently in the queue or cancelled, no applicant has sought the 20 percent low-income subscription "head start," and none have indicated an interest in soliciting low-income customers as participants. Finally, as discussed above, low-income participants are likely to increase any CDG project's subscriber credit risk, making it even less likely that low-income customers will be included in a market-based program. This lack of CDG offerings for low-

¹⁹ Value of DER Proceeding, [Joint Utility Comments in Response to Questions on the Value of Distributed Energy Resources and Options Relating to Establishing an Interim Methodology](#), (April 18, 2016) p. 4.

income customers is not restricted to New York State. As noted in a recent article about the community shared solar product across the nation: “While discussion continues on [shared solar] models to better serve the lower economic segments of the population, no clear solution currently exists.”²⁰ Con Edison’s Shared Solar Pilot Program is an innovative attempt to provide a solution to a problem that has not yet been solved.

III. Con Edison Proposal for a Low-Income Shared Solar Pilot Program

A. Overview

Con Edison requests that the Commission approve the development of a utility-based Shared Solar Pilot Program for low-income customers, a market segment which as noted above is not being served by third-party entities and which faces substantial barriers that make market-based responses unlikely. The Program will facilitate the development of renewable power within the Company’s service territory, provide financial and environmental benefits to low-income customers and address barriers to participation identified in the Collaborative Report. The Program is consistent with guidance provided by the Commission in the Rev Track One Order and the Clean Energy Standard Order.

B. Pilot Program Intention

The Shared Solar Pilot Program is intended to be a size-limited pilot to understand how low-income customers respond to various program design features, what the potential benefits of the Program are for both the participating customers and the electric system, and to investigate the most effective roles for the utility, third-parties, and community organizations in similar efforts. Con Edison would seek to learn from the experience of the Shared Solar Pilot Program and determine if this is a viable model to provide access to DERs for low-income customers, and

²⁰ Paul Augustine and Emily McGavisk *The Next Big Thing in Renewable Energy: Shared Solar*, The Electricity Journal, May 2016.

if so, to guide the development of a more established program. Alternatively, knowledge gained from the Program may provide information that will support a market-based model for providing shared solar and other DERs to customers, including low-income customers.

C. Product Offering Details

i. Product Design

The Shared Solar Pilot Program is not an “upfront payment”-type program (and therefore does not require any contribution of capital from potential customers). The Program design is similar to the “pay-as-you-go” community solar business model where a participant makes regular payments in exchange for receiving credits on their electric bill, but the Company will not require any separate payments from participating customers as a subscription fee. Instead, the Company will calculate a solar credit on a participating customer’s bill that nets the Company’s costs for providing the solar generation from the value of the associated bill credits. As noted below, participating customers will never pay more than they would have if they were not a program participant.

ii. Customer Eligibility

Customer eligibility to participate in Con Edison’s proposed Shared Solar Pilot Program will be based on the following criteria:

- The customer is a direct-metered Con Edison electric customer;
- The customer is enrolled in the Con Edison electric low income program;
- The Customer has applied to participate in a no-cost energy efficiency (“EE”) program, offered either by Con Edison or by NYSERDA;²¹ and

²¹ In order to meet the EE criteria, customers may apply to participate in a direct install program for energy efficiency measures in the customer’s premises, or apply to participate in an energy efficiency audit of the customer’s premises. In neither instance will a customer be required to pay to participate in an energy efficiency program. If the customer is not eligible to participate in a “no-customer-cost” program, and the customer resides in a

- The customer has been invited to submit an application to participate in the Shared Solar Pilot Program by the Company or a representative of the Company.

For this pilot program, Con Edison will require potential participating customers to be direct-metered so that the Company can provide the appropriate credits directly to the low-income customer.

The Shared Solar Pilot Program will rely on the eligibility criteria and external income verification process of the Company's electric low-income program to identify eligible low-income customers.²²

As of this filing, the Company has 373,415 customers in its electric low-income program. Approximately 95 percent of these customers live in New York City; the other 5 percent live in Westchester County. As of January 1, 2017, when Medicaid recipients become eligible for the low-income program, the Company expects to have approximately 460,000 customers participating in its electric program. If the Shared Solar Pilot Program can serve 6,000 customers, this will provide renewable energy access to approximately 1.4 percent of the total eligible population. While a small initial segment, this is a pilot, and if successful, ways to expand the program would be considered.

multi-family building, the customer must agree to provide access to their premises if in the future the building owner participates in an EE program. The EE requirement will be waived for a customer if (1) the customer has recently participated in a Company or NYSEERDA EE program, or (2) if the Company determines that the potential customer is not eligible to participate in a Company or NYSEERDA EE program that does not require any financial payment from the customer.

²² Under Con Edison's electric low-income-program, customers are considered eligible if they participate in a qualifying public assistance program. Qualifying programs include the Home Energy Assistance Program ("HEAP") (including for non-utility benefits), Safety Net Assistance, Supplemental Nutrition Assistance Program ("SNAP"), Supplemental Security Income ("SSI"), and the Temporary Assistance to Needy Persons/Families ("TANP") program. Effective January 1, 2017, electric customers will also be eligible for discounts if they receive Medicaid benefits. The Company receives data from the New York City Human Resources Agency ("HRA") and the Westchester County Department of Social Services ("DSS") twice annually indicating which of its customers are participating in these programs, and uses the information to automatically enroll or de-enroll customers in its electric low-income program. Discounts are also provided to customers receiving assistance for the payment of utility bills under Direct Vendor ("DV") or Utility Guarantee programs ("UG").

Encouraging customer participation in an energy efficiency program provides two benefits: (1) it further reduces participating customers' long-term energy costs and (2) extends the amount of solar energy available to more low-income customers, because participating customers who have lowered their total energy consumption will require less solar to supply their usage.

Customers with pre-existing arrears will be eligible to participate in the Shared Solar Pilot Program; however, they must have an active payment agreement at the time of enrollment.

iii. Participation Limits and Size of Individual Customer Participation

Prospective customers will be allowed to participate in the Program under terms consistent with the existing CDG rules (*e.g.*, for a minimum 1,000 kWh of solar energy annually and a maximum of their full annual energy usage via the Shared Solar Pilot Program).²³ Con Edison will calculate an amount of solar array generation capacity that could be used to supply the customer's maximum participation based on the customer's prior 12 months usage, and reserve that kW capacity for each prospective customer that applies to participate in the Program and meets the Program's eligibility criteria. Each prospective customer will be offered participation in a Company-owned solar generation array located in the same NYISO load zone as the participating customer's premise.

iv. Financial Benefits to Participants: Solar Credit on the Electric Bill

The primary direct benefit to participating customers is the credits available to a participating customer in the Shared Solar Pilot Program. Con Edison will provide participating customers with a solar credit on their electric bill based on the amount of solar generation from

²³ See CDG Proceeding, CDG Order for a more detailed description of CDG rules.

the kW capacity reserved for that customer. The size of the solar credit will be driven by (1) the percentage of the total solar generation array's kW capacity reserved for that individual customer, (2) the electricity production from the Company's solar generation, (3) the value of the exported energy from the solar generation array, and (4) Con Edison's costs to build, maintain and operate the solar generation. A specific design for the low-income customer's solar credit will be proposed in the Implementation Plan. Participating customers will continue to receive the benefits of the Company's low-income program as long as they are eligible, and participation in this Program will not impact the level of the low-income program assistance provided to a participating customer.

v. Additional Benefits to Customers and the Electric System

The Shared Solar Pilot Program will provide additional benefits to all customers - both participating and non-participating. These benefits include the environmental benefits of additional solar generation, as recognized by the Renewable Energy Credit, or "E" payment, currently being contemplated in the *Value of DER Proceeding* and facilitated by the obligation of all Load Serving Entities to procure Renewable Energy Credits, established in the *Clean Energy Standard Order*. These solar generation resources may also provide benefits to the distribution system, as recognized by the "D" portion of the LMP+D+E framework. While the participating customers will receive financial benefits (in the form of solar credits) for both the "E" and "D" aspects of the exported solar energy, other customers also benefit due to cleaner air and the reduced need for traditional infrastructure investments. Regarding the potential for a "D" benefit as a result of solar arrays built as a result of the Shared Solar Pilot Program, the Company believes there may be future opportunities for installing solar within load areas that could benefit from additional resources. In such circumstances, the Company will seek to prioritize installing solar in those locations before installing solar in locations where there is no need for additional

system resources, resulting in a higher “D” value in the solar credit received by customers participating in the Shared Solar Pilot Program.

As part of the Program, the Company may also seek opportunities to work with local career development organizations to provide training opportunities in the growing solar industry, allowing individuals to learn how to develop and construct the solar generation equipment and to maintain the solar generation equipment in good working order.

vi. Terms for Continued Participation

In cases where a customer enrolls in the Shared Solar Pilot Program and subsequently is de-enrolled from the Company’s electric low-income program, the Company will notify customers that their Program eligibility has changed. After a 12-month grace period during which the customer will continue to receive Shared Solar Pilot Program benefits, the customer will be de-enrolled from the Shared Solar Pilot Program. Exiting the Program will not require any additional action by the customer, nor will it have any financial implications beyond the customer losing access to the benefits provided in the Shared Solar Pilot Program. The grace period provides these customers an opportunity to adjust their household budgeting, and will reduce Program “churn” if a participating customer loses eligibility for receiving low-income benefits for only a brief period of time.

Participating customers will be able to retain the benefits of the Program if they move from one location in Con Edison’s service territory to another location in the Company’s service territory, as long as the customer remains in the same NYISO load zone (for New York City participants, all of New York City is in the same NYISO load zone). For participating low-income customers that move from one NYISO load zone to a different NYISO load zone within the Company’s service territory, the Company will make efforts to enroll the customer in a Con Edison Shared Solar generation array in the NYISO load zone applicable to their new premises.

Customers can choose to de-enroll from the Shared Solar Pilot Program at any time, at no cost. Low-income customers that no longer receive electric service from the Company will no longer be able to participate in the Program.

The kW capacity that had been reserved for a participating customer that is de-enrolling from the Shared Solar Pilot Program will be made available by the Company to other eligible low-income customers.

Additional information on the terms of continued participation in the Shared Solar Pilot Program for customers de-enrolled from the electric low-income program will be included in the Implementation Plan.

vii. Partnership with Community Organizations

Con Edison proposes to partner with community organizations with experience working with and administering programs for local low-income communities, initially near the CDG installation location. These community organizations will assist in the marketing and outreach of the Shared Solar Pilot Program as well as the application processing of potential customers, using uniform criteria for selecting prospective participants in the Shared Solar Pilot Program. Con Edison will develop marketing and messaging materials which can be used by community organization partners in describing the benefits of the Shared Solar Pilot Program.

The Program will protect the privacy of customer-specific information, including certain cyber security and privacy provisions designed to protect against theft, disclosure, or inappropriate use of customer-specific data. The details surrounding the customer application process, selection criteria and the requirements for community organization participation will be submitted as part of the Company's Implementation Plan.

viii. Estimated Size of the Program and Associated Costs

Based on estimates of available Company-owned space suitable for developing solar generation, Con Edison believes that up to 11 MWs of solar generation capacity can be built on Company rooftops and open space, at more than 40 locations in New York City and Westchester. Con Edison estimates that this amount of generation capacity will be able to serve between 3,000 and 6,000 low income customers, depending on the amount of solar generation each customer elects to use. Additional solar generation could be made available if the Company can cost-effectively develop solar generation over parking lots owned by the Company using solar canopy technology.

The Company will not be able to develop all 11 MWs of capacity at once, but instead proposes to initially develop approximately 3 MW on Company-owned locations. Should the initial 3 MW phase of the program prove to be successful, the Company will continue development up to the 11 MW of capacity.

Based on current information on the cost of building solar resources in New York City, the Company believes the total cost of building 11 MWs will be approximately \$33 million. The cost of the 3 MW of solar generation to be developed under the initial phase of the Program will be approximately \$9 million.

ix. Installed Technologies

The Company will focus primarily on solar photovoltaic generation, but is willing to consider installing other non-emitting renewable technologies on its properties for this program, including small wind generation.

The Company believes that at this time pairing energy storage resources with the solar electric generation in the Shared Solar Pilot Program will result in higher costs that may not be economically justified. However, this may change over time, particularly depending on the

outcome of the *Value of DER Proceeding*. Therefore, the Company may consider including storage in the Shared Solar Pilot Program after that proceeding's methodology has been approved by the Commission and over time if the Program is expanded.

D. Customer And Community Engagement Plan

i. Unique Value Proposition

The Shared Solar Pilot Program provides a number of valuable and important benefits to customers. The Company plans to create a simple and easy process for customers to enroll and participate in the Shared Solar Pilot Program. The application will provide customers with a simple explanation of the Program, and an easy explanation of the ability to subscribe for up to 100 percent of their historic annual usage. Once Con Edison receives the application and verifies the customer's eligibility, the customer will be informed that he/she qualifies and can be enrolled in the Shared Solar Pilot Program, and agrees to be offered energy efficiency opportunities as well.

The Program does not require a customer to contribute upfront capital, and protects low-income customers from the possibility of a "loss" due to their participation in the Program. Participating customers in the Shared Solar Pilot Program will receive solar credits directly on their Con Edison bill that reflect their share of the solar generation's benefits (*i.e.*, solar credits after accounting for the cost incurred by the Company to construct and operate the solar energy resource).

ii. The Role of Partners and Third-Parties

Con Edison will work with a number of partners and third parties to implement the Shared Solar Pilot Program. The Company expects this will include:

- Solar developers who will be selected via competitive procurement to execute solar array design, siting, permitting, construction, and commissioning;
- Local community organizations to facilitate community outreach, awareness and application processing of participants;
- Other stakeholders with a strong interest in the Company’s low-income customer programs, such as the City of New York; and
- NYSERDA, which offers programs that support low-income customer participation in energy efficiency, solar and other clean energy areas.

iii. Alignment with other Con Edison programs

The Shared Solar Pilot Program proposed herein enables the Company to provide clean renewable energy to low-income customers interested in supporting these resources with the added benefit of potential credits on their electricity bill in addition to their participation in the low-income bill assistance program. In this regard, the Program acts as an enhancement to the Company’s electric low-income program and supports the Commission’s efforts to unlock the benefits of DER for underserved customer segments.²⁴ The Shared Solar Pilot Program will also benefit customers by increasing energy literacy and awareness of clean energy opportunities, and encouraging them to consider additional actions that will help them better manage their energy consumption. The Program will encourage additional participation in energy efficiency programs by low-income customers. Finally, the Program will provide valuable learning about renewable energy programs which may be useful in future renewable energy program designs,

²⁴ The Company will shortly be launching a Request for Information (“RFI”) to the market for REV Demonstration Project proposals with a focus on low- and moderate-income (“LMI”) customers. The Shared Solar Pilot Program is not a replacement to or competition for projects that would be proposed by third parties under the REV Demonstration Projects LMI RFI. Moreover, the funding for the Shared Solar Pilot Program is separate from the funding for REV Demonstration Projects. The REV Demonstration RFI includes instructions and a process for answering questions from prospective third-party partners; questions about how the LMI RFI relates to the Shared Solar Pilot Program may be submitted to the REV Demonstration Projects’ team once the LMI RFI is released.

including testing how to increase customer engagement in renewable energy and how to communicate the benefits of renewable energy to customers.

E. Marketing and Sales Channels

During the marketing process of the Shared Solar Pilot Program, the Company plans to emphasize the benefits of the program to potential low-income participants using clear language and compelling marketing material. Once participants are enrolled, the Company will provide customized information regarding the location and performance of the solar generation, avoided greenhouse gas emissions, and accumulation of net metering credits. Convenient reference information will also be provided, including resources to help customers manage their accounts. The above materials will be distributed in both digital and/or hard-copy formats.

As part of the Implementation Plan, the Company will develop a strategy for outreach and how different marketing channels will be used to make product offerings to customers.

These channels may include:

- Community organizations;
- On-line advertising;
- Company website;
- Email; and
- Direct mail.

F. Financials Dimensions of the Shared Solar Pilot Program

i. The Value of Solar Credits

Con Edison expects that the Shared Solar Pilot Program can provide direct financial benefits to participating customers from the difference between the value of the exported energy

from the solar generation resource (with the valuation based on the methodology approved in the *Value of DER Proceeding*) and the costs of the resource built under a Universal Renewables model (which is strongly influenced by construction and financing costs of the solar generation resource).

The amount of the solar credit provided depends on the specific design adopted for the solar credit, which will be detailed in the Implementation Plan. Con Edison believes a typical low-income electric customer in New York City could save up to an average of \$5 per month on their electric bill. This monthly savings estimate relies on forecasted costs of building and operating shared solar generation arrays as well as forecasts of delivered energy prices, and is subject to change as additional details become available about actual costs, rates, and compensation for exported energy.

ii. Costs and Cost Recovery for Solar Generation Arrays and Other Program Costs

As a general principle, the Company will seek to recover its costs for the Program including a regulated return and other carrying costs typically included for other Company regulated investments, from the revenues produced by the Program. The Program will be designed to credit any revenues above the carrying costs for the solar projects to participating low-income customers. To the extent there is an under-recovery, it would be collected from all customers, via an adjustment mechanism (including, for example, the Monthly Adjustment Clause). The specific mechanism(s) to be used to effectuate the recovery of these costs will be set forth in the to-be-filed Implementation Plan.

IV. Conclusion

Con Edison believes that it would be in the public interest for the Commission to approve the development of a Shared Solar Pilot Program. The Program would allow a novel approach to be implemented to learn whether such a program could have broad appeal to low-income customers seeking access to the benefits of distributed energy resources, while also achieving regulatory and environmental policy goals in the State. The Program would provide information about the dynamics of a market for distributed energy resources not currently being served by market participants. The Company will recover all its costs for the Shared Solar Pilot Program including a regulated return, and will propose an innovative cost recovery model and other program details in its Implementation Plan.

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Respectfully submitted,

CONSOLIDATED EDISON COMPANY
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By its Attorney

/s/

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