

**Rockland Electric Company** 

July 3, 2018

RECEIVED MAIL ROOM

JUL 0 9 2018

BOARD OF PUBLIC UTILITIES

Rockland Electric Company 390 W Route 59 Spring Valley NY 10977 www.oru.com

## RECEIVED CASE MANAGEMENT

JUL 092018

BOARD OF PUBLIC UTILITIES TRENTON, NJ

## VIA ELECTRONIC AND REGULAR MAIL

Honorable Aida Camacho-Welch Secretary State of New Jersey Board of Public Utilities 44 South Clinton Avenue, 3<sup>rd</sup> Floor, Suite 314 Trenton, New Jersey 08625-0350

Q018060646

Re: Rockland Electric Company Response to Questions on Community Solar Program

Dear Secretary Camacho-Welch:

Rockland Electric Company (the "Company") hereby responds to community solar questions issued by Staff of the Board of Public Utilities (the "Board") on June 19, 2018 via the New Jersey Utilities Association meeting.

Sincerely,

Joe White Section Manager – Technology Engineering Distribution Generation Ombudsman

c. Ariane Benrey (via electronic mail)

Enclosure

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Before the issuance of a draft Straw Proposal for public discussion, the BPU is seeking input from the EDCs to help inform the Straw Proposal, specifically if there are any key issues and technical specifications from the EDCs that are important for the BPU to consider in the development of a Community Solar Energy Pilot Program.

Rockland Electric Company (RECO) submits the following synopsis of key issues based on the practice and experience of its corporate parent, Orange and Rockland Utilities, Inc., in New York State supporting the effective management of a community solar program. This list is not meant to be all inclusive but rather to be used to facilitate the discussion regarding the development of a community solar program. RECO encourages the BPU to consider the following rules and requirements as it establishes a Community Solar Energy Pilot Program in New Jersey.

Under a community solar program, there are three main parties: the community solar Host (Host), community solar Subscribers (Subscribers), and the EDC. A Host is the project sponsor and is responsible for owning or operating the generation facility, coordinating the project's interconnection and operation, and enrolling and managing contracts with Subscribers. Subscribers are the project subscribers who will own or contract for a proportion of the credits accumulated at the generation facility's meter, as a percentage of the facility's output in excess of usage on the Host's account. The EDC will be responsible for distributing the credits from the Host's account to Subscribers in accordance with the Host's instructions as to Subscriber allocation percentages and any excess allocations.

The Host is required to submit a Subscriber Allocation list to the EDC before commencing service as a community solar project. The Subscriber Allocation List, as well as any updated Subscriber Allocation Lists, will be a complete listing of all subscribers as of the submission date. The initial subscriber list must be received by the EDC at least 60 days prior to the project's permission to operate (PTO) date to allow the EDC to establish proper accounting for the project. To change a subscriber (remove or add) or change the percentage allocated to a subscriber, the Host must submit a new allocation request, 30 days before the Host's next bill cycle. This new request would contain a complete current listing of all subscribers (those that did not change and those that did). No special notation is needed to indicate that a subscriber is new or removed or that the subscriber's allocated percentage changed.

The EDC will notify the Host when submission of a complete and accurate allocation request has been accepted. Subscriber accounts that are not eligible (e.g., finaled) or have an incorrect account number will be rejected. The Host should contact the subscriber to confirm the information.

The percentage of Host's excess generation allocated to each Subscriber cannot exceed the Subscriber's historical annual consumption (or forecast of consumption if no historical data exists). This will help avoid excess credit carryovers on a Subscriber's account. A Host should strive to maintain full allocation of its subscriptions (i.e., 100 percent of generation is allocated to Subscribers). The total of the percentages allocated to all Subscribers cannot exceed 100%. If the total percentage allocated is less than 100%, the unallocated portion (kWh) will remain in a "Bank" that is available for future distribution to Subscribers. Because the intent of the community solar program is to provide a mechanism for Subscribers to receive the benefit of rooftop solar when they do not have the ability to do so on their own property, this Bank of unallocated credits must be kept to a minimum. A Host can make a special allocation of these unallocated Bank credits to a Subscriber(s). This request can be made once a month by submitting a Bank allocation request to the EDC and will be implemented by the EDC with the next Host billing cycle. Any credits remaining in the Bank after two years will be forfeited as maintenance of a balance does not further the purpose of community solar

There should be a reasonable minimum number of subscribers for each community solar project. New York has a ten subscriber minimum with some exceptions for multi-family buildings. Rules should also be established as to the maximum total percentage of credits allocated to commercial customers. This maximum is intended to further the purpose of community solar to allow residential and small commercial customers without available rooftops to participate in solar.

The community solar bill credit should be valued at the PJM Load Weighted Average Residual Metered Load Aggregate Locational Marginal Price of the month in which the excess generation is produced. This option will allow the EDCs to leverage existing values used for net metering compensation.

The EDC will calculate the credit at the time that Host bills. The credit will appear on each Subscriber's bill within the next two bill cycles. (Two cycles may be required if the Subscriber bills close to the time that Host bills.) In order to place credits on a Subscriber's bill, a Host/Subscriber relationship must be established in the EDC's billing system.

A Subscriber may carryover any unused credit on a bill to the subsequent bill. However, no cash-out is permitted as this may encourage the Host to allocate a large portion of the generation / credit to a particular Subscriber. This is contrary to the intent of a community solar program.

The EDC will provide a monthly report to the Host listing all Subscriber account numbers and the amount of the credit allocated to each Subscriber. This report will assist the Host when answering questions from its Subscribers.

Specifically, the BPU would appreciate input in the following areas:

1. Billing: the community solar bill credit will be applied directly to community solar subscribers' utility bills.

What information do the EDCs need from community solar subscriber organizations in order to apply this bill credit?

To facilitate the billing of community solar subscribers, the EDC would need the following information from each community solar Host:

- 1. Subscriber allocation list including the subscribers (*i.e.*, names on the customer accounts), their account numbers, and percentage of credit allocated to each subscriber;
- 2. Community solar host company's (Host) certification statement confirming that the community solar project meets all NJ requirements;
- 3. Host's name, address, and 24 hour contact phone number;
- 4. Host's contact name for billing issues; and
- 5. Authorization "signed" by Host verifying that it has authorization to enroll the accounts listed in the Subscriber Allocation List.

## What measures can we implement to ensure billing accuracy?

Billing of community solar projects is a multi-step process that requires the EDC to modify a variety of systems and functions within the EDC's billing system. To facilitate billing accuracy, the billing process should be automated in the EDC's billing system. Automating the calculation of the credit, Host /

subscriber relationship, tracking of excess credit carryovers, reporting of the transaction for financial and recovery purposes, placing the credit on the bill, offsetting the appropriate bill charges, and application/tracking of Host's unallocated credit bank is essential for reducing the time required to calculate and apply community solar credits to customers' bills and to minimize the possibility of error associated with manual data entry.

Metering at each community solar site should be reviewed to insure accuracy of the amount of export energy at the point of common coupling to be applied to subscribers of each facility.

## 2. What changes to the Electronic Data Interchange (EDI) system business rules may need to be updated to address the billing and crediting issues of community solar?

No changes to the EDI system business rules will be required to process community solar enrollments or removals of subscribers, or any other updates to a subscriber, including a change in allocation percentage. All relationships between a Host and its subscribers, as well as all updates and Banking allocations, should be made through the same portal used for the project's application process. This will allow all documentation relating to the project to be maintained in one repository and to be accessed by Host by using one single medium.

3. Interconnection: Is there any reason for the community solar interconnection application to be different from existing solar interconnection applications?

While the information requested in the current application is sufficient, due to the size of community solar systems, their unique operating characteristics, challenges in the local permitting process and required engineering review, the current application should be augmented to track the applications separately. Many community solar developers do not own the project once it is granted permission to operate. Because most of the projects are primarily exporting facilities, quick identification of these applications/projects, as compared with typical solar installations, may prove beneficial in the technical review, design/construction and billing process.

A new set-fee schedule for community solar applications should be introduced for projects up to 5 MW (AC nameplate rating) to allow for streamlining project application cost allocations for the developer and utility.

O&R uses an online software system for accepting and reviewing applications. The system is called PowerClerk and it has been in use since April 2016. The customers in New Jersey have been using the system with no major concerns or reported issues. The software is currently capable of accepting Community Solar applications.

4. Technical specifications: What specific technical specifications, if any, should we account for in considering solar systems of 5MW maximum?

Typically community solar projects are export only facilities. Distribution and Substation protection schemes should be reviewed so the interconnection does not negatively impact the reliability of any customers. Allowing sufficient time to conduct a detailed engineering review should be included in the technical specification submittal for interconnection as well as cost mitigation for allowing the project to integrate with the grid.

The complete detailed interconnection design package shall include:

1) Electrical schematic drawing(s), including a site plan, reflecting the complete proposed system design which are easily interpreted and of a quality necessary for full interconnection. The drawings shall show all electrical components proposed for the

installation and their connections to the existing on-site electrical system from that point to the point of common coupling (PCC). In addition, the drawings shall be clearly marked to distinguish between new and existing equipment. For those systems proposed to be interconnected at a system voltage of 1000 volts or greater, the drawings shall be sealed by a NJ licensed Professional Engineer.

- 2) A complete listing of all interconnection devices proposed for use at the PCC. A set of specifications for this equipment shall be provided by the applicant upon request from the EDC.
- 3) The written verification test procedure provided by the equipment manufacturer, if such procedure is required by this document. For non-inverter based systems, testing equipment must be capable of measuring that protection settings operate within the appropriate times and thresholds allowed by the EDC.
- 4) Three copies of the following information:
  - a. Proposed three-line diagram of the generation system showing the interconnection of major electrical components within the system. Single line diagrams shall be acceptable for single phase installations. Proposed equipment ratings shall clearly indicate:
    - i. Number, individual ratings, and type of units comprising the above rating;
    - ii. General high voltage bus configuration and relay functions; and
    - iii. Proposed generator step-up transformer MVA ratings, impedances, tap settings and winding voltage ratings.
  - b. Electrical studies as requested by the EDC to demonstrate that the design is within acceptable limits, inclusive and not limited to the following: system fault, relay coordination, flicker, voltage drop, and harmonics. This shall include all relay, communication, and controller set points.
- 5. Project siting: What measures can we implement to encourage project siting that minimizes impacts on the distribution system? How can community solar developers be informed of which geographic areas are currently overloaded and unable to support additional capacity without system upgrades?

O&R has used Hosting Capacity Maps in its New York service territory as an indicator to assist developers in reviewing areas of potential development. Hosting capacity indicates the amount of DER that can be accommodated (1) without adversely impacting power quality or reliability under existing control configurations, and (2) without requiring infrastructure upgrades to the primary line and/or secondary network system. It also assists developers in locating areas where interconnection may be less costly.

Although Hosting Capacity Maps are used as an indicator, a detailed engineering study may still need to be performed to review the protection and required system upgrades for interconnection.