



July 31, 2018

VIA ELECTRONIC AND REGULAR MAIL

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

> Re: Rockland Electric Company Response to Questions on New Jersey Community Solar Energy Pilot Program

Dear Secretary Camacho-Welch:

Rockland Electric Company hereby responds to questions issued by Staff of the Board of Public Utilities on New Jersey Community Solar Energy Pilot Program.

Sincerely,

Joe White

Section Manager

Technology Engineering Distributed Generation

Ombudsman

c. Ariane Benrey (via electronic mail)

I. Siting and Project Size

1) What should the annual Pilot Program capacity limit be? Please justify your answer both qualitatively and quantitatively?

Response: The Pilot Program capacity limit should be established at a maximum of 80 MW statewide. This capacity limit appropriately balances the interests of allowing a sufficient number of projects of varying sizes and specifications (e.g., locations with different characteristics; varying number of subscribers; participation by residential, commercial and low income subscribers), without locking the State, developers, and participating customers into a model that is ultimately determined to be inefficient or in need of significant alteration.

Assuming a relatively small minimum subscription size of 1,000 kWh per year, more than half a million residential customers could participate in and be affected by rules that have not yet been vetted if a 450 MW pilot were adopted. Once these customers have signed contracts with the community solar developer, future rule changes – including customer protections that may be deemed necessary – cannot necessarily be retroactively applied. A pilot, defined as a "test of a plan, product, or system before introducing it more widely" should be just that. At 80 MW, no more than 100,000 customers would face this risk.

2) How should the annual Pilot Program capacity be allocated between Electric Distribution Companies ("EDCs")? How should excess annual capacity be reallocated if not used?

Response: The annual Pilot Program capacity should be allocated among the EDCs based on the percentage of statewide load served by each EDC. Such allocation, however, should not result in an increase in ratepayer costs for any particular EDC to exceed 0.5 percent of customer bills. These service territory limits should be strictly retained, regardless of the quantity of projects in individual EDC service territories, *i.e.*, unsubscribed MW in one EDC's service territory should not be reallocated to another EDC's service territory. Preventing such capacity reallocation will serve to avoid undue bill impacts on the customers of any particular EDC(s).

How should the Pilot Program annual capacity limit be divided among different project categories? What should those categories be (e.g., "small", "brownfield, landfill, historic fill," and "LMI" projects types)? Please propose a breakdown of categories, with respective percentages of the annual capacity limit.

Response: This question is best resolved by BPU Staff and the community organization with the restriction that cost shifting to non-participants limits bill impacts to 0.5 percent or less

4) Should co-location of solar projects be allowed? What conditions or limits should apply?

Response: Co-location has benefits to the developers but also introduces new operating complexities for the electric distribution grid (*e.g.*, protection and control schemes) and will significantly increase costs necessary to upgrade facilities to accommodate co-located solar projects.

Projects up to 5 MW in size should be located on separate parcels of land. Developers may locate projects on adjacent parcels but the cap of 5 MW for the combined projects should be strictly enforced. In other states, 30 MW projects are being constructed and divided up into 2-5 MW sections. These types of generators are fundamentally wholesale generators and should be providing service into wholesale, not retail, markets.

What should the geographic limitations for community solar pilot projects and subscribers be (i.e., how far from the project can subscribers reside)? Please justify how your proposal maintains the community link between project and subscribers, without compromising the feasibility of community solar pilot projects.

Response: Given the short timeframe for the program and the restrictions that would be placed on locations by a geographic limitation, a "community" should be defined as an EDC's service territory.

6) What land use restrictions and limitations, if any, should apply to siting community solar pilot projects?

Response: Developers of community solar projects should comply with all local permitting, wetlands, environmental protection and local zoning requirements.

Provide recommendations on alternative siting and creative land use in sites other than "brownfields, landfills, areas designated in need of redevelopment, in underserved communities, or on commercial rooftops." For instance, are parking lots, road rights-of-way, multifamily buildings, or schools appropriate locations for community solar? Please provide both qualitative and quantitative responses, including what specific policies may be required to facilitate development of these types of projects.

Response: RECO supports safe and reliable installations of community solar projects but recommends the BPU review impacts of any creative land uses in siting. The BPU should be cautious of costs associated with the interconnection and facility upgrade capital costs to refurbish electrical and metering areas when reviewing alternative site requirements for the sole installation of solar.

RECO opposes the siting of third-party solar facilities upon EDC right of ways or property.

As noted in RECO's response to Question 6, in siting community solar projects, developers should comply with all local permitting, zoning, wetlands, and environmental regulations and requirements.

8) What liability, provisions, and exemptions should apply to community solar developers and subscribers for projects located on landfills and/or contaminated land?

Response: RECO strongly recommends that developers comply with all local permitting, wetlands, environmental protection and local zoning requirements prior to submitting to an EDC an interconnection application for any community solar projects located on landfill sand contaminated lands.

- II. Low and Moderate Income Areas
- 9) Provide recommendations on the definition of LMI community solar pilot projects, with appropriate justification.

Response: An LMI community solar project should be developed to benefit low income customers so that participating low-income customers will receive a utility bill that is lower as a community solar subscriber than it would be if the customer did not participate.

The recently enacted Low Income Community Distributed Generation ("CDG") program in New York contains three components: (1) guaranteed savings; (2) low income verification process; and (3) a loss reserve. The New York Public Service Commission ("Commission") ordered that a low income customer can pledge a share (i.e., a set dollar amount) of the customer's monthly utility low income bill credit to pay a CDG developer for a portion or all of the subscription fee ("Bill Discount Pledge" program or "BDP"). The subscription fee is a monthly amount paid by the customer to the developer to participate in the CDG project and receive an allocated portion of the CDG's generation credit. The CDG developer must guarantee savings to low income customers participating in a CDG ("Participants"). Specifically, the CDG developer must guarantee each Participant that the amount of the Bill Discount Pledge is equal to or less than the amount of the monthly CDG bill credits, on an annual basis. The guarantee is for each annual period during the life of the subscription agreement. For each Participant, the developer is responsible for calculating whether the Bill Discount Pledge exceeds the CDG bill credits, on an annual basis, and if so, the developer must refund the excess to the Participant. The EDC pays the monthly Bill Discount Pledge amount directly to the developer each month. Low income customers enrolled in a direct voucher program where the assistance organization pays the customer's bill directly to the EDC, are eligible to participate in the BDP program.

¹ Case 15-E-0751, et al., In the Matter of the Value of Distributed Energy Resources, Order Adopting Low-Income Community Distributed Generation Initiatives (issued July 12, 2018)

To verify whether a customer is low income, the Commission directed that the New York State Energy and Research and Development Authority ("NYSERDA") work with the Office of Temporary and Disability Assistance to develop a low income customer database that developers could query. RECO recommends that the BPU adopt a similar verification process and work with a third party, such as the New Jersey Department of Community Affairs ("NJDCA"), to obtain customer low income status. The NJDCA is responsible for administration of the Universal Service Fund ("USF") and other low income programs. The interaction between USF benefits and Community Solar credits should be analyzed to determine whether any unintended consequences will result.

In addition, the Commission directed NYSERDA to create a loss reserve program for CDG projects serving low income subscribers. The reserve would draw on funds in New York's Green Bank or other appropriate portfolios and would be made up of public funds held in reserve that can be used to cover losses that CDG project owners and/or their lenders may incur if low income subscribers default on or terminate CDG subscriptions at a higher rate than other customers.²

10) Provide recommendations on what LMI eligibility criteria should be accepted to qualify a subscriber and/or a project as LMI. Include consideration of how many times or how often LMI subscribers should be required to submit proof of eligibility.

Response: A low income customer could be an individual that participates in USF and LIHEAP. The EDCs should not be required to verify whether a customer is low income, as this may conflict with customer privacy. Rather, as noted in RECO's response to Question 9, the developer could consult with the NJDCA. Such an arrangement would be similar to that implemented in New York. In any event, the developer should be solely responsible for determining whether a customer is low income prior to enrolling the customer. A low income customer should be allowed to remain in the program without recertification for a period of years, so as to maintain consistency in the program. RECO would note that NJDCA annually recertifies their LMI customers for USF benefit eligibility.

- 11) The BPU is considering a number of different approaches to encourage development of LMI community solar pilot projects, including, but not limited to:
 - 1. Dedicated capacity: e.g., a certain percentage of overall capacity for the Pilot Program would be reserved for LMI projects.
 - 2. Procedural: e.g., LMI projects would receive preference in the solar interconnection queue.
 - 3. Financial: e.g., incentives would be provided to LMI community solar pilot projects, potentially as an adder to the bill credit.

² *Id.*, pp. 8, 24-25.

Which approach, or combination of approaches, should the BPU implement in order to most effectively support LMI access to community solar pilot projects, in conformance with the Clean Energy Act? Please be specific in recommending qualitative and quantitative incentives, and proposals for implementation.

Response:

- 1. This question is best resolved by BPU Staff and the low income advocates. The Company notes that Colorado has implemented a successful program that requires community solar projects to dedicate five percent of the project's output to low-income communities.
- 2. For an LMI Project to receive preference in the interconnection queue and move up to an earlier place, the project would need to guarantee that all LMI Project requirements are met (i.e., the requisite number of subscribers are actually enrolled). The BPU would need to develop rules so that projects could not claim to be an LMI project without actually meeting the requirements.
- 3. Financial incentives, such as adders, increase the costs to all ratepayers and must be considered in the context of all low income customer support provided by ratepayers. In addition, financial support should be provided directly to the customer, and not to the developer. Providing support for low income customers in a cost neutral manner, similar to New York's program, supports both low income customers' access to renewable energy and increases utility bill savings while promoting the development of clean energy. Conversely, providing support to developers does not guarantee that any financial incentives will benefit low income customers.

III. Value of the Credit

Please define the following terms: "value of solar," "retail rate," and "avoided cost of wholesale power." Please discuss applicability and impacts on the Pilot Program.

Response: The value of the solar credit should be the avoided cost of wholesale power. As discussed in RECO's response to Question 19, projects should be eligible for SRECs, which provide additional compensation to developers for the societal and other value that solar projects deliver. Community solar projects use the distribution system to export power for their subscribers and subscribers use the system to consume electricity. Therefore, these projects should not be provided compensation at the retail rate, which includes the distribution rate. Credits should be calculated and applied on a monetary basis (i.e., a dollar (\$) credit), not on a volumetric basis (i.e., a kilowatt-hour (kWh) basis).

The credit should not be based on the underlying cost of the project because this approach removes the incentive for developers to pursue cost-effective projects Basing the calculation of the solar credit on the avoided cost of wholesale power will result in more certainty and stability for developers, EDCs and customers.

The BPU is currently working to determine an appropriate value of the credit on each participating subscriber's bill. The BPU requests that stakeholders provide indicative financial data and analysis in response to the scenarios described below. Please ensure responses include quantitative and qualitative assessments. Responses may also include quantitative and qualitative assessments for alternative variations to these scenarios that you believe to be relevant and representative of the New Jersey market (e.g., variations on project size, location, type of takers etc.).

Scenario 1: 5MW ground-mount system on a rural landfill. Assume that the landfill is owned by a municipality, who has agreed to lease the land for \$6,000/year.

Scenario 2: 400kW rooftop system on a high-school roof. Please include assumptions regarding lease payments to the school board.

Scenario 3: 1MW canopy system in an urban parking lot.

Scenario 4: 200kW rooftop system on an affordable housing multi-family building. Please assume that, of the 200kW system, 100kW will be directly net metered to offset common load, and 100kW will be used for community solar subscriptions for LMI tenants of the building.

For each of these scenarios please provide your best estimates for:

- Site acquisition, including lease or purchase, cost of applicable studies and time, and cost of negotiating land document.
- Pre-development, defined as all of the overhead costs from the day of sit control to the Day 1 of construction.

- Development, defined as all construction costs and investments, both hard (e.g., panels, balance of systems, interconnection, etc.) and soft (e.g., labor, permits).
- Customer acquisition, including number of customers, churn, cost of acquisition. Please provide differentiated estimates for higher-income versus LMI customer acquisition.
- Total project cost per kWh. Estimated time from project approval by BPU to Day 1 of operations.

Please submit the quantitative assessments in unlocked Microsoft Excel spreadsheets.

Response: This question is best resolved by BPU Staff and the developers and other industry experts. Even so, these underlying costs should not impact the value of the credit.

How should the community bill credit be administered? Should an annualized period mechanism be used for community solar? If yes, should the annualized period be set once per Pilot Project, or once for each individual community solar subscriber?

Response: The bill credit should be managed jointly by the EDC and the Developer. The Developer is responsible for providing the subscribing customer's account number and allocation percentage to the EDC. The EDC will calculate the monetary credit, on a monthly basis based on the excess generation for the project's billing period, and apply that credit to the subscriber's bill within two billing periods. (This time period takes into account subscribers that have a billing date close in time to the Developer billing date. For example, it may be difficult for the EDC to apply a credit to a subscriber's account when the subscriber's billing date is the day immediately following the Developer's billing date.) Calculating and applying a bill credit to a subscriber on a monthly basis reflects the actual generation of the project, as compared to a calculation on an annual period which would involve a complex reconciliation process. Monthly application of a credit based on actual excess generation mirrors rooftop solar, thereby providing the benefits of rooftop solar ownership to customers who do not have a viable rooftop. No annualized period is required because there is no cash out of credits. The EDC is not purchasing energy from the Subscriber so no payment is due to the subscriber. Further, a cash out would essentially be a refund of excess credits that the subscriber had originally purchased from the Developer.

ldentify best practices in EDC administration of community solar billing in other states and explain how they can and should apply specifically to the New Jersey Pilot Program. EDCs specifically should identify issues relating to changes in the Data Exchange and Protocol Process Flows (or subsequent versions) and how they will administer the billing and crediting process in the Electronic Data Interchange ("EDI") process.

Response: In New York, a subscriber cannot have onsite solar as this is inconsistent with the purpose of Community Solar. In addition, in Orange and Rockland Utilities, Inc.'s ("Orange and Rockland") service territory, Developers submit all Subscriber Lists, including updated lists, to Orange and Rockland via its online interconnection portal. Using this portal keeps all interactions between developers, Developers and Orange and Rockland in one location, making it easier for all parties to manage documents and interactions. Rather than using EDI, Orange and Rockland provides monthly reports to Developers, mailed with the monthly bill, containing each subscriber's account number and the dollar amount of the credit provided to that subscriber. Monthly bill inserts lower the costs to developers who will not have to maintain ongoing EDI capabilities. New York does require the use of existing EDI transactions in one instance. In New York, a CDG subscription size is tied to a subscriber's historical annual usage. New York requires that Distributed Energy Resource ("DER") suppliers obtain historical usage either directly from customers or via EDI, using established historical usage transactions. As an alternative for EDI, a nationwide standard such as Green Button Connect could be used by developers to obtain historical usage. In addition, monthly subscriber billing details can be sent along with the Developer monthly report in lieu of EDI.

16) What should happen to excess credits on a subscriber's bill at the end of a year?

Response: Excess credits on a subscriber's account should be carried forward indefinitely. There should be no cash out of any excess credits at any time, including no cash out of excess credits on the account when the account is closed. Accumulation of a large amount of excess credits would be akin to a subscriber purchasing energy that it cannot use. If the subscription is sized properly, all credit carryovers should be used over a period of time. If a large credit carryover continues to amass on a subscriber's account, the subscriber should work with the Developer to decrease its subscription size.

17) Are there charges on subscribers' utility bills towards which the community solar bill credit should not be able to be applied?

Response: Community solar credits should not offset the monthly customer charge. The customer/subscriber continues to use the EDC's distribution system and should be responsible to pay for this use.

Should unsubscribed energy be purchased by the EDCs at avoided cost or area locational marginal pricing ("LMP")? Or should the community solar pilot project bear the loss of unsubscribed energy?

Response: The unsubscribed energy should not be purchased by the EDC. The community solar project should bear the financial risk of producing excess energy over an extended period of time. Even so, the project should not be penalized on a monthly basis for timing changes in its subscriber base. One potential solution to mitigate these timing impacts on unallocated energy is to establish a Developer "Bank". (Developer Banks are used in New York.) The Developer Bank would house credits not allocated on a current basis and would be available for a "Bank Allocation" by the Developer. A Bank Allocation would allow Developers to direct a specific amount of generation in the Developer Bank to specific subscribers. Excess generation could remain in the Developer Bank for a period of time, e.g., two years, and if not allocated after that period, the excess generation would be forfeited. The intent of community solar is to allow customers without viable rooftops to participate and receive the benefits of rooftop solar. Community solar should not be a vehicle employed to offload excess generation (which likely will be unneeded) on to the EDCs and their customers. Rather, community solar projects should be fully subscribed, so that all project generation is allocated to subscribers. Establishing a Developer Bank would account for the first year when a project is becoming fully operational, and also for some timing differences in subscribers leaving the project and others replacing them. Projects should not be sized to be generators.

19) Should Pilot Projects be eligible for solar renewable energy certificates ("SRECs")? If yes, should the SREC be given to be subscriber or to the community solar project owners?

Response: Yes, Pilot Projects should be eligible to receive SRECs, subject to all SREC program rules. This would provide additional compensation to the Developer to support its underlying costs and for some of the value that solar projects deliver.

What components of the Community Solar Energy Pilot Program should be eligible for rate recovery by the EDCs? Include specific reference to what costs should be included to implement and comply with the Pilot Program. What should be the process for determining eligible costs? What should the process be for reviewing eligible costs and the proposed mechanism for recovery?

Response: EDCs should receive timely recovery of all incremental costs they incur in administering the Community Solar program. These costs include both: (a) internal EDC costs, including but not limited to billing system upgrades and maintenance costs, additional personnel required to run the program, and costs to upgrade interconnection portals and hosting capacity maps; and (b) the cost of the credits.

IV. <u>Applications and Interconnection</u>

Please provide specific comments on how the Pilot Program application process should be organized, including: 1) what items should be included in the application, and 2) what specific criteria should the BPU use to rank applications?

Response: 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 community solar projects separately from other projects. Quick and easy identification of these applications/projects, as compared with typical solar installations, may prove beneficial in the technical review, design/construction and billing process as issues develop and are resolved. Projects should be required to demonstrate site control at the time of application.

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 an interconnection application as well as cost mitigation for allowing the project to integrate with the grid.

- 1) The complete detailed interconnection application should include:
- a. 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.
- b. 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.
- c. 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.
- d. Three copies of the following information:
 - i. 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:
 - Number, individual ratings, and type of units comprising the above rating;
 - General high voltage bus configuration and relay functions; and
 - Proposed generator step-up transformer MVA ratings, impedances, tap settings and winding voltage ratings.

- e. 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.
 - 2) RECO is agnostic to the ranking of applications. That said, the BPU should include deadlines and milestones for developers and utilities to move projects through the interconnection process so that projects do not negatively impact others in the queue due to developer uncertainty/inaction in moving forward.
- What specific measures should be implemented to ensure an effective and streamlined interconnection process for community solar pilot projects?

Response: A new fee schedule and refined application process with milestones for developers and EDCs should be introduced for projects up to 5 MW (AC nameplate rating) to allow for streamlining project application for community solar applications.

Milestones must include time for certain items such as application review and detailed engineering studies as well as deadlines for developers to make decisions and payments for actions such as payment for detailed engineering studies and construction.

What measures can be implemented to minimize negative impacts and maximize grid benefits to the distribution system of an EDC?

Response: The introduction of data and tools such as Hosting Capacity maps will assist developers in locating projects in beneficial areas for the EDCs and may minimize areas of conflict while alerting developers of areas with higher costs of interconnection.

Allowing appropriate time for EDCs to review projects technical characteristics and incorporating deadlines for developers to determine key decisions will facilitate the movement of projects through the interconnection process.

Development of Interconnection Technical and Policy Working Groups may also prove resourceful to engage both stakeholders, EDCs and the BPU while addressing concerns during the pilot program and later into a full program roll-out.

24) Should existing solar projects be allowed to reclassify as community solar pilot projects?

Response: Yes, existing solar sites should be able to reclassify as a community solar project as long as they meet the requirements of the program and submit an application in the community solar program.

25) How can community solar subscription organizations most efficiently submit all required information regarding individual subscriptions to both the BPU and the relevant EDC? In the case of a replacement subscriber in an existing community solar project, should the subscriber organization be allowed to provisionally accept a new subscriber, subject to BPU review and right to disapprove within 30 days? What should that required information be?

Response: The BPU should develop and implement a registration process for all community solar developers who wish to conduct business in New Jersey. All registered developers (*i.e.*, Hosts) should be required to submit a Subscriber Allocation list to both the EDCs and the BPU before commencing service as a community solar project. The initial subscriber list should be received by the EDC at least 60 days prior to the project's initial permission to operate ("PTO") date. This will allow the EDC to establish proper accounting for the project.

The Subscriber Allocation List should be a complete listing of all subscribers as of the submission date. To update or replace a subscriber or to change the percentage allocated to a subscriber, the Host should submit a new allocation request, 30 days before the Host's next bill cycle. No special notation or approval from the BPU or the EDC would be required to indicate that a subscriber is new or removed or that the subscriber's allocated percentage changed using this method. The EDC will verify that each subscriber on the list has an active electric account.

Subscriber Allocation lists should include each customer's account number, and the corresponding allocated percentage of credit.

26) What reporting requirements should apply to EDCs with respect to the Pilot Program?

Response: The EDCs can provide reports to Hosts (and BPU as desired) by means of a spreadsheet online for queued and installed projects and updated on a monthly basis for the duration of the Pilot Program. The data should include the Host's name, the geographic area of the project, project capacity (*i.e.*, kW AC nameplate rating), project status and application date.

The EDCs can also provide monthly reports to Hosts that contain the total bill credit generated by the project, each subscriber's monthly credit, and the amount of unallocated credits remaining in the Host Bank account. For additional information on these reports, please see the response to Question 15.

27) What specific measures, if any, should apply to multi-family buildings?

Response: For crediting, each subscriber should be an individual customer with its own meter and utility account. As long as the units in the multi-family building or home have their own separately metered space, the EDC will be able to apply credits.

What specific measures, if any, should apply to master-metered buildings in terms of eligibility for a Pilot Project? Please discuss specifically how to ensure that benefits of a community solar subscription are passed through to tenants.

Response: For master metered buildings, the owner is the customer, so the owner is the subscriber for crediting purposes. Please see the Company's response to Question 27. Subscribers must have their own meter, customer account number and monthly bill, in order to receive a credit for community solar.

What information regarding community solar pilot projects should be made available on the BPU website? Should website publication be automatic upon approval of the project by the Board, or only upon request from community solar project owners?

Response: Information regarding project application status, project number, size, geographic area of the project and status of key application date milestones, should be featured on the BPU website. Website publication should be made automatically upon approval by the BPU.

What specific elements should the BPU consider to ensure a smooth transition from the Pilot Program to a full-scale Community Solar Program?

Response: Formation of both an interconnection technical group and policy working group to address issues and share best practices/lessons learned during the Pilot Program would facilitate the full-scale development of the Community Solar Program.

Both groups should have representation from community stakeholders, developers, EDCs and the BPU.

- V. <u>Customer Subscriptions</u>, Customer Protection
- 31) Should there be a minimum number of subscribers per community solar pilot project? If so, what should it be? Please provide specific support for this number.

Response: There should be a minimum of ten subscribers. Setting the minimum number of subscribers too low is the functional equivalent of Remote Net Metering and does not serve the "community."

What should be the maximum subscription size for each subscriber? Should specific limits be placed on residential versus commercial subscribers?

Response: A subscriber's maximum subscription size should align with their annual historical usage. The BPU should establish rules regarding the maximum total percentage of credits allocated to commercial customers. This maximum is intended to further the purpose of the community solar pilot program to allow residential and small commercial customers without available rooftops to participate in solar. For example, New York limits large commercial and industrial subscriptions to 40 percent of any community solar project's output.

A Host cannot allocate more than 100 percent of the project. The project should be fully subscribed with all generation allocated to subscribers, taking into account a start-up period and timing of enrollments and de-enrollments.

What specific measures should be enacted for both community solar subscription organizations and the BPU to manage subscriptions effectively? Please provide specific churn rate assumptions.

Response: 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 the Host through the use of one single medium.

The Host should be 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 Allocation List should be received by the EDC at least 60 days prior to the project's initial PTO date to allow the EDC to establish proper accounting for the project.

To update a subscriber Allocation List (remove or add) or change the percentage allocated to a subscriber, the Host should submit a new allocation request, 30 days before the Host's next bill cycle. This new request would contain an updated listing of all subscribers. No special notation is needed to indicate that a subscriber is new or removed or that the subscriber's allocated percentage has changed.

34) Should subscriptions be portable? If yes, under what conditions?

Response: Subscriptions should not be portable and should be monitored by the Host. If a customer closes his/her account and moves within an EDC's service territory, the Developer should work with the Subscriber to determine if the Subscriber wants to enter a new agreement at the new location. Entering into a new agreement provides the customer an opportunity to re-evaluate the size of its subscription, taking into account the anticipated usage at the new residence.

Please identify what specific limits, if any, should be placed on the transferability of subscriptions, in accordance with applicable statues, rules, and regulations. If the BPU were to determine that transcriptions are fully transferable (i.e., able to be brokered and sold), what consumer protections should be established? Please include consideration of, among other things, necessary approvals and certificates, to ensure that if a community solar subscription market, including through third parties, were to develop, that said market is fair and transparent?

Response: Whether subscriptions are transferable or tradeable is a decision for the BPU. All transactions between the project and the EDC must be between the EDC and the Host, including subscription enrollments and de-enrollments. Such an arrangement will avoid confusion and potential misunderstandings. For example, the EDC cannot presume that a customer who calls to say he or she purchased a subscription and therefore should be allocated a credit is truly a subscriber. This could lead to over-subscribing of a project.

Please provide comments on consumer protection measures, including ideas and language for consumer protection rules, and proposed customer disclosure form.

Response: In New York, community solar developers are required to comply with the Uniform Business Practices for Distributed Energy Resources.³ These rules were developed to protect customers from deceptive marketing tactics used by solar developers, which often targeted the elderly and disabled veterans. Putting in place customer protection rules now will lay a solid foundation for the growing DER market. In the long—run, such rules will benefit customers, DER suppliers, and EDCs — providing appropriate protections while allowing innovative business models to thrive. The BPU must require that customer agreements include the appropriate level of detail, in clear, readily understandable language, regarding the terms and conditions applicable to the product or service offered by solar developer. Other states, such as Arizona, have found it necessary to take strong steps to protect customers from bad actors in the DER

³ At: http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={E2E3114D-B0A7-401C-AA31-198C4845D6C9}

marketplace. In a proceeding opened by the Arizona Corporation Commission, customer letters show that actual cost savings were only a fraction of the savings promised by solar providers, resulting in financial hardship for many families, seniors, and disabled veterans.⁴ As a result of the proceeding's findings, the Arizona State Legislature adopted a statute establishing minimum disclosure requirements for DER agreements.⁵

The Company believes that adoption of cyber security protections is also important for interactions between utilities and third-party suppliers, DER suppliers, utility vendors, and any other parties that have a demonstrated need to access customer or system data from the EDCs.

37) Besides NJ building codes and standards, what specific technical standards should the BPU cite in its rules and regulations for the community solar pilot projects?

Response: Rules associated with the interconnection of community solar projects should include requirements that only UL certified be used.

Please provide general comments on any issues not specifically address in the questions above. Please do not reiterate previously made comments, keep these comments succinct, and make specific reference to their applicability in the New Jersey context.

Response: The relatively short duration of the Pilot Program may not be sufficient to gather sufficient lessons from the program given the time needed to bring a Community Solar project online and enroll a sufficient number of subscribers representing a variety of customers, *e.g.*, residential, low income, small commercial, and large commercial. It may be important to establish the areas which the BPU believes are most important to learn from and steer the initial projects to be established to generate results in these areas.

In addition, the development of an Environmental Justice adder requires a discussion that will extend beyond the timing allowed for the implementation of the Pilot Program. Some of the issues that should be analyzed include: (a) whether it is appropriate to provide additional compensation to a solar project that locates in a particular area; (b) what caused the environmental concern (e.g., electricity generation, a local transportation hub); (c) will a solar project minimize the cause of the environmental concern sought to be remedied; and (d) is it appropriate for electric ratepayers to bear the financial burden for this improvement.

⁴ Arizona Corporation Commission. Docket E-00000J-14-0415. Consumer Comments/Letters. http://edocket.azcc.gov/Docket/DocketDetailSearch?docketId=18816#docket-detail-container2.