

July 31, 2018

VIA ELECTRONIC MAIL

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 3rd Floor
Suite 314
Trenton, New Jersey 08625
Rule.Comments@bpu.nj.gov

Dear Secretary Camacho-Welch:

Jersey Central Power & Light Company (“JCP&L” or the “Company”) is pleased to submit comments on the Board of Public Utilities (the “Board”) Staff’s request for comments regarding the New Jersey Community Solar Energy Pilot Program. JCP&L thanks the Board for the opportunity to provide these comments and looks forward to working with Staff further to ensure successful implementation of the community solar program. Please find below JCP&L’s comments regarding each of the topics specifically enumerated in the Board’s notice dated July 6, 2018.

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 Company proposes that the Pilot Program capacity limit be set at 100 MW, or approximately 33 MW annually for each of the three years of the Pilot. This represents approximately one-half of one percent of the statewide electric demand. This would allow for up to 20 projects sized at the 5 MW limit, which would present a more manageable program size to allow for review and evaluation of the pilot.

- 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 Pilot Program capacity should be allocated between EDCs based upon each EDC’s percentage of electric sales – an allocation basis which has been used in previous solar program

and energy efficiency program offerings. This results in roughly one-half of the capacity being allocated to PSE&G, with JCP&L's allocation half that of PSE&G's, and Atlantic City Electric's (ACE) portion being half the size of JCP&L's. Rockland Electric Company typically will receive a less than 5% allocation. There should be no reallocation of any excess annual capacity.

- 3) 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" project types)? Please propose a breakdown of categories, with respective percentages of the annual capacity limit.

Response:

The Company recommends that a portion of this pilot includes utility ownership to demonstrate the efficiencies gained by leveraging the utility's economies of scale and expertise. Because of their experience with programs for the Low- and Moderate-Income ("LMI") community, the EDCs are in a particularly good position to implement a program to reach this underserved market. The costs of such a program should be recovered through a Board-approved rider mechanism.

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

Response:

Co-location can be allowed to the extent that each discrete project is treated as a separate application and evaluated in the order in which the application is received. The engineering evaluation will be made using existing Company protocols/policies in place for all distributed generation ("DG") systems and using standard good utility practices.

- 5) 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:

The Company suggests that the geographic limitations for community solar pilot projects and subscribers should be that projects and subscriber should be within the same municipality within the EDC territory in order to maintain the proximity linkage between where power is generated and where it is consumed.

- 6) What land use restrictions and limitations, if any, should apply to siting community solar pilot projects? Should siting of community solar pilot projects be restricted to certain areas? Your answer should include a specific discussion of community solar on farmland and open space. Land use restrictions will be consistent with current New

Jersey statutes and regulations.

Response:

Land use restrictions should be consistent with current New Jersey statutes and regulations, including any local land use requirements.

- 7) 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:

As the Company considers alternative siting and innovative uses of space to further the state's solar policy goals, PSEG's solar program, in particular, their use of utility assets for siting purposes, came to mind. The utility is in the best position to know the optimal location for siting solar and is in a unique position with the ability to leverage assets such as poles for siting purposes. This is a prime example of the value and benefits that utility ownership can provide to a broader range of customers (i.e. the underserved populations), leveraging efficiencies and economies of scale.

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

Response:

The Company defers comment on this topic.

II. Low- and Moderate-Income Access

- 9) Provide recommendations on the definition of LMI community solar pilot projects, with appropriate justification.

Response:

LMI projects should only be available to subscriber participants meeting the current eligibility requirement of the Office of Clean Energy's Comfort Partners program, which requires the participant have an income at or below 225% of the federal poverty guidelines. This would also include households that receive funds from the Universal Services Fund ("USF"), Lifeline, and/or Pharmaceutical Assistance to the Aged and Disabled ("PAAD"). These projects should be in close proximity to the participants and prohibited from including commercial and/or non-LMI electric customers in the subscriber base. There should be no non-LMI customers eligible to subscribe to community solar projects dedicated to LMI customers if there are going to be ratepayer subsidies to LMI participants.

- 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:

As stated in the response to 9 above, subscribers should be subject to the same eligibility requirements as those for the Comfort Partners program, including the requirement that proof of eligibility be provided. The community solar project provider should be responsible for confirming eligibility and providing proof to the BPU or its designee. Proof of eligibility should be confirmed a minimum of every two years of participation and upon request if there is reason to believe a subscriber is no longer eligible.

- 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.

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:

As mentioned in previous comments, the utility, in concert with the BPU, is in the best position to encourage community solar for underserved populations which generally lacks siting capability as well as the ability to individually invest in solar projects. Community solar participants may tend to be of the more affluent population, and the Company believes that the utility could partner with the BPU to develop a pilot program to ensure a more equitable approach to community solar. The Company can leverage the access to these customers, economies of scale and efficiencies that only a large utility can provide in order to create a cost-effective, optimally-sited program for LMI customers to achieve state policy goals.

The Company has no objections to creating a set-aside of dedicated capacity for community solar projects located in areas of, and serving, LMI participants. As mentioned earlier, this is considered an under-served market which generally lacks siting capability, as well as the ability to individually invest in solar projects, and therefore JCP&L believes 25% would be a suitable portion of the program. The Company does not believe there should be any preference in the solar interconnection queue. However, if it is the Board's intent to implement a specific interconnection queue process either in parallel to or in place of current interconnection practices, then that process should be handled by the BPU or its designee, as it is assumed that

this would also involve some Board approval of community solar projects' eligibility to participate. If that is indeed the case, the Company defers that decision to Board Staff. The Company does not know whether additional incentives would be necessary for LMI community solar projects. The need for such incentives depends on whether the costs to construct and attract subscribers are significantly higher than comparable projects that are not dedicated to LMI communities. However, if additional incentives or bill credits are employed, these additional costs, if imposed on the EDCs and their ratepayers, should be fully recoverable through a rider mechanism in a timely manner.

III. Value of the Credit

12) 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:

Value of Solar - For Community Solar, the cost per kWh for basic generation service (BGS) or generation service provided by a third-party supplier (TPS).

Retail Rate - A composite of all retail tariff charges, including distribution, transmission and generation, and all applicable surcharges as applied on a customer, kW and/or kWh basis.

Avoided Cost of Wholesale Power - The cost of capacity, energy and ancillary services as determined by PJM Interconnection, LLC ("PJM") based on the locational marginal price at the most appropriate, identified node or zone.

13) 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 off 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 site control to the Day 1 of construction.

Development, defined as all construction costs and investments, both hard (e.g., panels, balance of system, 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 operation.

Please submit the quantitative assessments in unlocked Microsoft Excel spreadsheets.

Response:

The question infers that the “value of the credit” on a subscriber’s bill will be established based on the monthly subscription charge under the four proposed scenarios. The Company believes that the “value of the credit” on a subscriber’s bill should be determined independently from the subscription cost, based on either the cost per kWh for BGS or generation service provided by a TPS, as applicable.

- 14) 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 a monthly adjustment to a customer bill in either kWh or dollar credit. Vendors should be required to submit necessary subscriber information forty-five days in advance, at a minimum, to allow for validation/processing of information. The credit value should be defined in set quantity terms of generator output. Generation output is for a set monthly period and would be apportioned per subscriber percentages for crediting to customer bills in the next available billing period. A credit format using kWhs would reduce billable kWhs of the BGS portion of the customer’s bill, while a dollar credit format would reduce charges for the current billed period. There should be a single, pre-set annualized period for each project, as defined within the EDC tariff for all community solar participants. In the event there are any excess credits on a subscriber’s account, there should be an annual cash-out provision at the average annual LMP value, with the costs fully recoverable by the EDCs via a rider, as stated in the response to question 16) below. A standardized process treats all subscribers uniformly.

- 15) Identify 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 (CUEDI") process.

Response:

FirstEnergy has some experience with the implementation of community solar programs from the Maryland Community Solar Pilot. Certain of the practices established in that pilot could be applied to the New Jersey program. For example, allowing the EDUs to decide whether to provide a kWh reduction of the BGS or TPS component, or a monetary value, gives the EDC flexibility to maximize automation in place with various processes, to reduce manual handling and improve accuracy. The mechanism for bill credits should be as simple as possible to allow for efficiencies in implementation of the New Jersey pilot program. The requirement for specific subscriber information and a universal method of delivery allows for development of interface processes to transfer information into EDC billing systems for community solar customer identification. The EDC's supplier support department's data exchange systems can be utilized to handle vendor communications. Rules should not allow subscriptions to be retroactive to prevent any adjustments needed to be made for multiple subscribers. EDI systems face similar problems as those associated with energy billing processes. Indicator labels may be an option to identify a relationship to a host. The current EDI concerns are still a work in progress as mechanisms to handle community solar billings continue to be developed.

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

Response:

If properly sized, any excess credits at the end of the year should be minimal. However, to the extent that there are excess credits at the end of the year, regulations should provide for an annual cash-out at the average annual locational marginal pricing ("LMP") value set by PJM with costs fully recoverable by the EDCs.

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

Response:

The bill credit for Community Solar projects should be based on the cost of retail generation service, such as BGS. In the case of Community Solar, because the host is not collocated with the load, inarguably there is use of the distribution system, and in some cases, the transmission system, to provide this service. Therefore, credits or excess credits should not be applied to retail distribution charges, including distribution base rate charges and riders.

18) 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 EDCs should not be required to purchase any unsubscribed energy from a community solar project. The project should seek to sell any excess energy through the PJM market. To safeguard against the possibility of a project being undersubscribed, the sizing of a community solar generator should be restricted to a size to provide, at most, 100% of the energy needs of

eligible subscribers. A more conservative sizing would be 90% to 95% of confirmed energy requirements.

Moreover, these units should be registered at PJM and unsubscribed energy formally recognized in the energy accounting of the transmission zone. This would allow for anyone to purchase the output easily. Further, a review of the entire energy accounting mathematics should be undertaken to ensure both retail and wholesale energy accounting processes are kept in sync. This would require the host to be metered at least hourly. Further, if the projects are large enough – it would provide immediate visibility to the transmission owner and provider about the operations and impacts of such host units.

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

Response:

JCP&L believes that SRECs, or some other mechanism, will be required as a subsidy in order to make community solar projects viable. If community solar projects are qualified to receive SRECs, then the revenue from the SRECs should be used to reduce the subsidy or credit paid to customer subscribers.

- 20) 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:

There will be numerous community solar program costs that will be incurred by the EDCs, including increased administrative burdens that would be incremental to existing processes. Any costs that are incurred by the EDCs in support of community solar should be recoverable in a full and timely manner via a rate rider. These costs would include: subsidies paid to subscribers (if any); administrative costs for new billing practices, reporting, engineering reviews, incremental interconnection processes and coordination of metering data and subscriber participants with projects; and IT-related costs for billing system additions. Redundant metering should be required at community solar hosts, at least one of which would be owned by the EDC and installed at the community solar project's cost. This reduces the possibility of a defective meter that must be estimated, as any billing errors will impact possibly hundreds of customers' billings. In addition, due to the virtual nature of proposed credits, there is a fixed distribution component that should be assured recovery. The review of costs and recovery mechanism can be handled through the regulatory process.

IV. Applications and Interconnection

- 21) 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:

A standard application form should be used, along with an additional attached form to record the information of the initial subscribing customers. The information should include developer information (name, address, contact information, etc.), project information (size/capacity, location, number of subscribers, subscription cost, etc.) and subscriber information (EDC, name, address, EDC account number, annual kwh consumption, etc.) If ranking of projects for approval is a consideration, the Company believes that cost should be a primary determinant, with the caveat that LMI projects may have a different ranking methodology. Another item for consideration as a ranking determinant should be location relative to adequate EDC facilities for interconnection.

- 22) What specific measures should be implemented to ensure an effective and streamlined interconnection process for community solar pilot projects?

Response:

The application process should be similar to the existing net metering process, with applications handled in the order they are received subject to the local grid limitation and in parallel with any grid connected (PJM queue) wholesale applications.

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

Response:

The Board should allow each EDC to continue to evaluate connections using their existing protocols and circuit limits. The Board should also minimize the maximum size of community solar host sites to allow for continued small net metering system connections to distribution feeders. In short, the Board should not allow large connections to crowd out future small connections.

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

Response:

Existing solar projects should not be allowed to reclassify as community solar projects. The fact that these projects are currently in operation means that there were no barriers to the participants to deploy solar.

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:

JCP&L recommends the development of designated websites designed to interact with subscriber organizations for both BPU and EDC requirements. Template gathering formats should be compatible with end user systems for ease in transferring data for various user purposes.

A replacement subscriber to an existing community solar project could be accepted, provided information is processed in accordance with tariff provisions and does not create an over-subscribed situation. Vendor contractual processes should be followed and subject to BPU regulatory requirements. Some of the requirements on subscriber information may include some or all the following, depending on BPU or EDC needs:

- Date of submission;
- Applicable month;
- Identification Number for Community Solar Project assigned by the Company;
- Subscriber Organization Identification Number assigned by the Commission;
- Subscriber Organization name;
- Each Subscriber's name (per Company account);
- Each Subscriber's Company account number;
- Each Subscriber's Electric Choice ID;
- Subscriber's LMI eligibility;
- Percentage share of each Subscriber stated as % value; and
- Change action indicator (add,drop,change %).

If an interactive website is not developed, the initial application and subscriber list should be sent in using the existing method for net metering applications (email, hard copy or fax). Once approved for construction, and after approval to operate, any changes to the subscriber list should go through the EDC Call Center. Changes to the subscriber list should be minimized and a per change charge should be applied to recover administrative costs.

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

Response:

Assuming that "reporting requirements" refers to the EDCs' reporting to the Board, the Company believes that the reporting requirements should be primarily the responsibility of community solar projects. It is assumed that, as part of the program, there would be a registration process that is overseen by the Board which should also establish reporting requirements for developers.

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

Response:

The Company defers comment on this topic.

28) 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:

The Company defers comment on this topic.

29) 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:

The BPU website should include basic information such as MW available by EDC and project type (i.e. LMI and other). In addition, it should identify approved projects, including project location and contact information for the developer to allow potential participants to identify potential projects to which they may subscribe. It should be the responsibility of the project developers to provide required information to potential subscribers.

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

Response:

The BPU should have a complete review of the Pilot Program prior to transitioning to a full-scale Community Solar Program. This will allow for the identification of program elements that work, and those elements which should be changed or eliminated. Careful crafting of rules promulgated by the Board will be necessary to allow for program adjustments following the pilot phase.

V. Customer Subscriptions. 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 number of subscribers per community solar pilot project. The minimum number of subscribers could vary with the size of the community solar project. For instance, a smaller project of less than 100 kW may have a requirement of 10 minimum subscribers, while a larger project may require several dozen or more, possibly based on a

fraction of the project size. The reason for requiring a larger number of subscribers is to provide some protections against abuse of the program to get around contiguous property rules. Customers should not be allowed to simply install solar in a remote location and assign themselves the benefit of the generation.

In addition to a minimum subscriber requirement, there should also be a maximum number of subscribers per project to help limit some of the administrative burden on the EDCs. The Company suggests that the maximum number of subscribers per project be 350 accounts or less.

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

Response:

There should be a maximum subscription size to avoid a situation where a customer constructs a community solar project and assigns the majority of the generation to itself. This maximum percentage can vary for residential projects and commercial projects. Due to differences in electrical usage, commercial customers would have a higher percentage limit for subscription, possibly around 25%. The residential projects should have a lower maximum subscription size of approximately 10%.

33) 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:

The Company defers comment on this topic.

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

Response:

The Company interprets "portable" to mean the ability to retain an existing subscription in a community solar project for credits to an electric account in a new location. Under certain circumstances, subscriptions could be portable within the existing EDCs territory depending on program rules regarding siting and proximity to subscribers. Under no instance should a subscription be portable in violation of established program rules. In order to allow for the updating of customer account records, any address or subscriber revisions should be provided at least 30 days in advance to reduce the potential for errors.

35) Please identify what specific limits, if any, should be placed on the transferability of subscriptions, in accordance with applicable statutes, 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:

The statute requires that the BPU establishes that subscriptions should be transferable. In order to limit the burden on the EDCs, the majority of this transaction should take place between the subscriber, a potential transferee and the community solar host, with the EDC's involvement limited to updating subscriber names and accounts for billing purposes. Since, it appears the intent of the community solar program is to allow participants to benefit from the use of solar generation where they otherwise would not be able to site and install a project as well as communities underserved by solar generation there should be limitations imposed on the number of transfers to prevent excessive brokering and sale of subscriptions as simply financial transactions that would not be any benefit to the intended solar beneficiaries such as renters, multi-housing families and environmental justice communities.

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

Response:

There should be a standardized subscription application and a clear, concise customer disclosure form for the protection of consumers. These forms should be approved by the BPU as part of a registration process for community solar developers and include indemnification language protecting the EDCs due to the potential exchange of customer account information.

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:

All projects should also be subject to EDC tariffs and construction standards, as applicable.

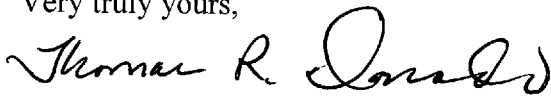
38) Please provide general comments on any issues not specifically addressed in the questions above. Please do not reiterate previously made comments, keep these comments succinct, and make specific reference to their applicability in the New Jersey context.

Response:

The Company defers comment on this topic.

JCP&L again thanks the Board for the opportunity to provide comments on this important issue. If you have any questions or would like to further discuss any of JCP&L's above comments, please do not hesitate to contact me.

Very truly yours,



Thomas R. Donadio