



July 31, 2018

Aida Camacho  
Secretary  
New Jersey Board of Public Utilities  
44 South Clinton Avenue  
Trenton, New Jersey 08625

Docket # Q018060646, New Jersey Community Solar Energy Pilot Program

Dear Ms. Camacho:

The Environmental Defense Fund (“EDF”) thanks the New Jersey Board of Public Utilities (“BPU”) for the opportunity to comment on Docket No. Q018060646, New Jersey Community Solar Energy Pilot Program. EDF is a national non-profit membership organization engaged in linking science, economics and law to create innovative, equitable and cost-effective solutions to society’s most urgent environmental problems. New Jersey is home to more than 74,000 of EDF’s members and activists.

A Community Solar program presents a unique opportunity to bring solar access to all New Jersey communities and create jobs while ensuring that the state’s 50% by 2030 Renewable Portfolio Standard is met and that New Jersey is on a trajectory to meet Governor Murphy’s goal of 100% clean energy by 2050.

EDF offers these comments to complement those developed collaboratively by Vote Solar and the Low Income/Equity Working Group to provide detailed responses to the questions posed in the docket. Our comments are meant to identify particularly promising solutions and are not intended as comprehensive answers to the questions posed by the BPU. In so doing, we draw attention to objective studies that we recommend be considered as part

of this record, notably, but not limited to Solar Gardens in the Garden State: Community Solar Recommendations for New Jersey, Woodrow Wilson School, Graduate Policy Workshop, January 2017 <sup>1</sup>, and NREL's Focusing the Sun: State Considerations for Designing Community Solar Policy. <sup>2</sup>

In noting the recommendations listed on page 2 of the Princeton Study, EDF also provides the following comments that highlight particularly promising solutions.

### **Siting and Interconnection:**

Community solar should be developed in light of costs and benefits it can provide to the grid, rate payers using the grid, and the environment. In conjunction with launching the Community Solar Energy Pilot Program, the BPU should institute processes to identify those benefits and costs that can be incorporated into the future permanent program. New York and California processes may offer guidance. These analyses should include distribution, transmission and generation costs (potentially avoided or incurred), as well as rate payer and environmental benefits. This locational information should then be used to inform incentives for community solar so as to encourage optimal build out from the perspectives of rate payers, grid needs and the environment.

For the pilot program, a transparent and standardized methodology should be developed for the utilities to provide data on the distribution system, especially constrained areas, such that community solar developers can ascertain, quickly and at low cost, where interconnection is available and where community solar, if not developed smartly, may trigger the need for more distribution system investments.

### **Value of the Credit:**

Fundamentally, community solar options need to be economically attractive to participants. Income-stressed homes should not face a cost premium to participate in community solar programs. This may mean, at least in the near term, additional financial support must be provided. Providing a "value of solar credit", as accomplished with NEM compensation schemes, is a fair and appropriate means to compensate distributed energy resources including

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<sup>1</sup> <http://www.princeton.edu/sites/default/files/content/WWS%20591d%20Solar%20Report%202017.pdf>

<sup>2</sup> <https://www.nrel.gov/docs/fy18osti/70663.pdf>

solar, storage and energy efficiency. These resources, used in isolation, in unison and/or in synchrony, can provide energy, grid and environmental values, including capacity values that planners can rely on to keep the lights on. Over time, as NEM participation grows, it may be appropriate to consider alternative mechanisms in advance of the end of the 36-month pilot.

Ultimately, the NEM compensation inherently depends on the retail rate itself. With this in mind, EDF concurs with the Princeton Study recommendation that “Selecting an appropriate and effective rate design is the most important element of community solar program design.” In the interim, the value of credit would be most appropriately designed as a mechanism that adjusts automatically in response to an exogenous indicator (such as the wholesale cost of a solar panel), and that can be adjusted as necessary; ratcheting downward if community solar uptake meets or exceeds program goals, or increasing the rewards if program goals are not being met (for principally financial reasons).

### **Finance:**

While the value of credit provides a power lever to incent community solar adoption and to meet program goals, many ratepayers in low and moderate income and other underserved communities face capital investment barriers that can be addressed, at least in part, by innovative financial solutions. EDF’s report, [Financing New Jersey's Clean Energy Economy: Pathways for Leadership](#), analyzes three innovative financial approaches, including a stand-alone green bank, that leverage public resources to catalyze private investment in clean energy technologies including community solar. In order to reach the New Jersey RPS goal of 50% by 2030 and Governor Murphy’s goal of 100% clean energy by 2050, the state will need innovative solutions that will leverage public funds to drive private capital investment in clean energy.

Examples of how existing green banks are engaged in the community solar space include the New York Green Bank (NYGB) that has developed a community solar program and has provided a bridge loan to a developer of community solar projects to support upfront development costs which would enable the deployment of 168 MW of solar. Additionally, the NYGB is developing financial products to support the NY Solar for All program’s investment in low and moderate income projects.

As stated in our report, “A New Jersey Green Bank could support community solar through credit enhancement, both to get projects built in general, *and to better enable projects targeted at low- and moderate-income customers.* For example, in 2017, the Maryland Public Service Commission launched a three-year community solar pilot program, assigning portions of the 193 MW total to the service territories of different utilities in the state. The Commission further designated 30% of the program’s total capacity to come from small installations or those on brownfield redevelopments, and an additional 30% to come from projects with 10% or more electricity generated allocated to low-income subscribers and 30% or more allocated overall to either medium- or low-income subscribers. *However, to date, the LMI category has been underpenetrated across the state, largely due to concerns over the credit quality of these customers by private lenders for the projects. There is ongoing work to evaluate the role of a Green Bank-like mechanism to serve in a credit enhancement role to encourage private lenders in LMI community solar projects. This includes development of credit enhancement to be used in the event that repayment rates for LMI projects fall below those of the program overall.*”

It was recently reported that the New Jersey Economic Development Authority will hire a consultant to conduct an analysis of clean energy finance tools including a potential green bank to meet Governor Murphy’s environmental goals. We look forward to working with the EDA and the BPU in support of the development of innovative clean energy finance mechanisms including a green bank.

Thank you,

Mary Barber  
Director, New Jersey Clean Energy