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Subject: IEE Comments [Community Solar Regulatory Framework, Case No. NEPR-MI-2025-0003]

MEMORANDUM

TO:	Chairman Edison Alvilés Deliz
FROM:	Kirt Mayland
DATE:	April 17, 2026
SUBJECT:	Community Solar Regulatory Framework, Case No. NEPR-MI-2025-0003

Below, please find comments from the Vermont Law and Graduate School's Institute for Energy and the Environment (IEE) with respect to the Puerto Rico Energy Bureau's (PREB) request for comments on its proposed Community Solar Regulatory Framework. We are happy to answer any questions or provide further information upon request.

1. What business model for implementing community solar (e.g., privately or municipally owned) best enhances affordability, equity and reliability of the Puerto Rico electric system?

   The principal business model for community solar throughout the United States has been virtual net metering (VNM) primarily due to the fact that interconnecting multiple households or businesses to a single solar array is costly and difficult to manage operationally. The vast majority of these VNM projects are owned by third parties, but there are some examples of community-owned projects. Most community-owned projects are fully or heavily subsidized due to the financing challenges many communities face given the high upfront cost of building solar. Even though community ownership of projects seems appealing, because 100% of the net economic benefits would stay within the community itself, this model in Puerto Rico could be unrealistic at this point without significant subsidies. We discuss this model in more detail in our discussion of the NH REF model below.

   a. **NH REF Model (Community Ownership)**. The IEE is actively involved in developing low to moderate income (LMI) community owned solar projects in New Hampshire. Each one these projects is fully funded by NH's Renewable Energy Fund (REF): https://www.energy.nh.gov/renewable-energy/renewable-energy-fund.

      REF funding typically is allocated to smaller projects -- less than 100 kW. In this program, we have exclusively worked with LMI mobile home parks (that own, not

lease, their land). In these mobile home parks, there is a built-in government structure – a homeowners association board able to implement the program on behalf of the residents. This is also a VNM program where all of the net financial benefits, provided through the local utility, are shared among twenty or more mobile home park owners.

While the model has been generally successful, it does have a few drawbacks. The projects must be nearly 100% subsidized through the REF. Given how small the projects are, the cost of construction is also very high, costing nearly twice as much as one might see for larger, one-to-five-megawatt (MW) projects. The ongoing maintenance of the projects can also be an issue, often resulting in lower production numbers. Without outside assistance, in the past, we have routinely seen community owned projects producing 15-20% less power than projected, and often due to problems that could have been resolved with simple maintenance or quality control. Based on our experience, smaller community owned projects need post-construction guidance and assistance from groups like the IEE to avoid these preventable issues.

b. **The Commonwealth of Massachusetts Model**. In Massachusetts, community solar has long relied on VNM. Massachusetts enabled VNM in 2010, which allows the financial value of electricity, typically set by formula created in state statute or regulation, produced by a community solar project to be credited to multiple off-site subscribers' bills. Utilities receive and meter the power and then must apply corresponding financial credits to participating customers located in the same utility zone as the project, in accordance with a third-party developer's instructions. There are limits on project sizes, which generally may not exceed 5 MW, as well as on siting. In the past, the Commonwealth has used a declining block system to systematically reduce the value available of credits as more projects are constructed. Massachusetts also provides extra incentives (such as more money per kWh) for arrays that fit its definition of community solar and at times even offers further incentives if some percentage of the subscribers are LMI.

Although rules have changed over the years, the Commonwealth typically has mandated that at least 50% of the array's credits go to individual subscribers, with the other 50% allowed for an "anchor tenant." The "anchor tenant" provides the project with a bankable net metering credit purchase agreement to offset the challenges of financing a project with multiple subscribers, many of whom could have poor credit ratings. In this model, the developer is the entity responsible for finding, reviewing, and contracting with all the subscribers, which can be both a costly and time-consuming process. It is an opt-in process.

While this model has resulted in many community solar projects developed throughout the Commonwealth, a noticeable downside of the program is it has often resulted in minimal financial benefit to the community subscribers – typically around $25/month. Without proper guardrails or mandated minimum benefits to subscribers, developers are motivated to maximize profit, and often only offer the equivalent of around a 5% discount on a customer's monthly bill / customers' monthly bills.

Further, the process of enrolling subscribers, is challenging, timely, and costly to developers, potentially taking away some of the financial benefits that could be allocated instead to the customers. Removing the procurement and allocation of net metering credits portion of the program away from the developers and giving it to the utilities instead could allow for more benefits to trickle down to the subscribers. Information on the MA SMART program, which contains its community solar program, can be found here: SMART 3.0 Program Details | Mass.gov .

c. **The Connecticut Model - Shared Clean Energy Facilities (SCEF) program** (Connecticut's Statewide Shared Clean Energy Facility (SCEF) Program Year 6 Program Manual). In Connecticut, generators bid twice annually into a reverse auction/competitive procurement carried out by the utilities and overseen by the Public Utilities Regulatory Authority. SCEF has an overall program cap of 300 MW and carries out annual auctions for 50 MW per year for projects up to 5 MW in size. The low bidders receive 20-year power purchase agreements (PPAs) with one of two state investor-owned utilities. The 20-year PPA with a highly rated utility allows investors or lending institutions to lend or invest in these projects at lower interest rates or rates of return. These lower rates can vastly improve project economics, theoretically allowing developers to bid with lower pricing in the program, in turn lessening impacts to ratepayers.

   The utilities distribute credits within this program to prioritized customers based on their energy assistance program lists. The credit is calculated with this formula: $0.025 × the average kWh customer usage over the past twelve (12) months. The amount the utilities can allocate is capped at the amount of power produced in the SCEF program. Typically, subscribers receive a monthly credit of only about $20-$25.

   Similar to Massachusetts, a principal downside of the program is that the $.025 subscriber rate only offers minimal savings to subscribers. If the PREB were to consider developing a program similar to SCEF, it should increase the subscriber rate significantly. The simplicity of the SCEF program is attractive. It could be equally simple in Puerto Rico especially if the utility has a low-income/financial hardship program to identify eligible customers.

d. Siting and other incentives – In both the SCEF and MA VNM programs, there are significant siting incentives. For example, certain SCEF projects that are sited on brownfields, landfills or as parking lot solar canopies are all given a 20% or 30% price advantage, respectively, in the bidding process. Further, there are significant siting *disincentives* in the programs, such as those prohibiting or discouraging developers from using properties with core forests, high value habitat, and prime farmland. The PREB should consider these factors in developing its program.

2. What is the appropriate governance structure for the community solar business model identified in response to question 1?

The appropriate governing structure would typically be an organization such as the PREB to oversee utility implementation of the program. In order to ensure significant community benefits and minimal impacts to ratepayers, strict program rules or tariffs should be developed by the PREB and revisited annually to address needed modifications.

3. What role do you envision different public (governmental) entities in Puerto Rico will play in the governance of community solar?

   Any program that is developed should be overseen by the PREB. Governmental entities and detailed tariffs are necessary to not only ensure third party developers are not unjustifiably profiting, but to ensure that program does not negatively impact rates across Puerto Rico generally.

4. What is the appropriate geographic (or administrative) boundaries of community solar programs?

   The appropriate geographic administrative boundary of community solar should be the service area for utility.

5. What are the different physical configurations for developing community solar?

   Please see our answer to Question #1 for the different programs (a SCEF-type structure in particular) we would recommend.

6. Should storage be required as part of the community solar configuration? Please explain.

   Battery storage should only be required if its implementation directly leads to local resiliency or benefits to the utility in a measurable way. In Massachusetts, batteries are required for all projects over a certain size. However, since the battery projects are mostly not tied to buildings (behind the meter), they do not offer the benefit of residential or commercial backup power. Any resiliency benefits should be evaluated by the utility. If, within these benefits, there are also backup benefits to the local grid which could in turn benefit the community, then they should be identified and factored in when evaluating the bids or projects.

7. What interconnection requirements are required for community solar? (explore requirements, analyzing benefits and costs of each)

   The interconnection process should be no different for community solar projects than it is for any other project. The initial individual project capacity limits should be set based on consultation with utility and should center on what could generally be reasonably interconnected on the distribution utility lines without triggering expensive upgrades and long study periods. Projects farther along in terms of interconnection should be treated more favorably in the project selection process.

If there is a battery involved, however, our recommendation is that the utility company not evaluate the solar/battery only as a generator. The utility should be required to study the system taking into account the ability of the battery to receive power during low-load, peak-generation times, or other times where generation on the lines might cause issues to the local distribution system, limiting its apparent hosting capacity.

8. What role should NEM play in valuing power from community solar? Explain why.

   Please see our response to Question #1.

9. What entity will purchase excess electricity generated by the community solar project?

   Please see our response to Question #1. In both the Massachusetts VNM and CT SCEF programs, there is no excess electricity generated. In both programs, all of the power is sold and delivered to the local utility.

10. What are options for pricing power injected into the grid?

    An effective option would be for the PREB or the utility (with government oversight) to hold reverse auctions/competitive procurements, similar to SCEF, while placing a firm upper cap on bid prices (reflecting market pricing) to ensure that the utility is always receiving below-market pricing from participants.

11. How is the power delivered to members of the community solar organization (from grid sources or the community solar facilities) priced (credited) and accounted for?

    The power under both a VNM or a program similar to SCEF would be delivered to the utility directly. The subscribers would receive financial benefits in the form of net metering credits directed by either developers or the utility depending on the program chosen for implementation.

12. What will be the basis for crediting electricity provided by the community solar organization to the ultimate buyer for its members?

    The credits in the scenarios we present would be financial credits, not electricity credits. Ultimately, the projects selected should be those that have the lowest power price AND the highest benefit to the community subscribers.

13. Will credits to community solar members be based on a tariff, or contract, or some other vehicle? Please explain.

    Credit should be based on both vehicles. The program itself should have a strict tariff, and third-party developers should be required to contractually abide by the tariff as well as their project proposals or bids. They should also execute PPAs with the utility, locking in a fixed power price.

14. Do participants in community solar sign up for a fixed amount of energy to be delivered? If so, how is excess energy consumed priced, and energy not taken credited?

    Previously answered.

15. Should participation in community solar be "opt-in" or "opt-out"? Why?

    The SCEF model is an "opt-out" model and is an appropriate model for participation in that program. LMI ratepayers often do not know these programs exist, and it is difficult to disseminate information to recruit customers. There is no apparent downside to the utility automatically subscribing customers, as the only impact to them is savings on their monthly electric bills.

    However, if a VNM model is used, and third-party developers are responsible for finding and contracting with the subscribers, an "opt-in" model should be employed. As indicated earlier, there should be government oversight with this process to ensure that developers are providing the promised benefits to the subscribers in their contracts.

16. What reporting requirements are necessary to oversee community solar entities?

    Third-party developers should be required to provide annual reports to the PREB, demonstrating, among other things, that they are continuing to deliver the promised benefits to the community subscribers.

17. What entity should receive those reports?

    Please see our response to Question #16.

18. How should concern for distributional equity be incorporated in the regulatory rules and design of community solar projects?

    LMI or disadvantaged customers should be priority subscribers. However, in a VNM model where the creditworthiness of the subscribers could be problematic for the developer and its project financing, they should be allowed to contract with larger "anchor tenants" for a portion of the credits to offset these challenges.

19. Should there be set-asides for service to low income or disadvantaged customers? How would that work?

    Yes, LMI or disadvantaged customers should be the priority in any program subject to the condition described in Section 18. If the utility is receiving the power, however, and distributing the financial credits, there is no reason to send them to non-LMI customers, at least in the infancy stages of the project. The utility in CT has found it challenging in particular trying to accommodate all of the customer types outside of those they have on their energy assistance lists.

20. Should there be limits on the capacity of community solar projects? If yes, what is the basis of those proposed limits? What entity would establish those limits?

    There should not only be individual project capacity limits, but there should be an overall program cap to start. The program should be revisited, reviewed, and modified annually.

21. Conclusion

    Given high power pricing in Puerto Rico and the termination of federal tax credits pushing third party developers outside of their traditional business areas, a community solar program in Puerto Rico could attract a significant amount of investment. High interconnection costs/study timelines and long permitting timelines could prove barriers to outside investment, however, so along with developing the community solar program, the PREB should simultaneously address these potential concerns. Further, without significant subsidies available, a community solar program in Puerto Rico should probably be developed with an eye towards third parties developing, financing, constructing and owning the projects. In this scenario, however, it is critical that with either a SCEF type program or a VNM model guardrails are put into place to ensure the utility receives the lowest power price possible while at the same time ensuring meaningful savings for subscribers. Given high solar capacity factors and high-power pricing in Puerto Rico, it seems a program could be designed to achieve both goals.