



# Environmental Justice Task Force Summary of Comments on Siting and Project Size

## Response to Docket Number QO18060646

### Introduction

*As a faith-based group, Unitarian Universalist Faith Action addresses issues of equality and social justice, in line with our first and second principles, “The inherent worth and dignity of every person” and “Justice, equity, and compassion in human relations.” In addition, our seventh principle, “Respect for the interdependent web of all existence of which we are a part,” motivates us to work to care for our environment. In line with these principles, we are concerned with promoting access to renewable energy and to equal access for low and minority income households.*

*We limit our comments to impact on Low and Moderate Income (LMI) households and communities, and have no opinion on questions other than 6) and 7).*

### Answers to Questions

6) What land use restrictions and limitations, if any, should apply to 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.

*Answer:* The BPU should provide incentives for siting community solar projects in urban LMI neighborhoods, not only to provide access to low-cost solar for LMI households but (at least as important) to provide job opportunities and job training opportunities.

In our response to the questions on access for LMI households, to be addressed in the next session, we propose moving a project up in the interconnection queue if more than 20% of its subscribers are LMI households. As an incentive to developers, the required percentage of LMI households for a developer to move up in the interconnection queue might be reduced if a significant percentage — say 20% — of the trainees and workers would qualify for LIHEAP.

A downside to siting solar farms in LMI neighborhoods is the potential that toxic chemicals from the PV cells will be left behind at the end of the solar cell’s life. Because of this, solar developers must be required to submit a plan for decommissioning the solar cells and contribute to a state-wide escrow account to be used for remediating any sites that are damaged by the chemicals.

*Justification:* In the NJ DEP recommendations for evaluating a solar site, which divide New Jersey's land area into Preferred (mostly urban) and Non-Preferred (mostly rural). The DEP treats urban areas as "Preferred". Using only Preferred land provides more than enough space for all the solar farms we would need:

"Even a 100% solar objective for the state's electrical consumption of 74,199,076 megawatt hours requires only 302 square miles or 4.1% of all New Jersey's land area or 14.3% of New Jersey's Preferred land area, well within this analysis' total Preferred area calculation of 29%." — NJ DEP Solar Siting Analysis Update, 2017.

Furthermore, siting a project in a community and providing jobs to the community is a great incentive for households in the community to subscribe to the project.

As to requiring a decommissioning plan and an escrow fund for remediation, the responsible parties often fight to avoid remediation and developers go bankrupt or disappear, leaving communities with serious health issues and nowhere to turn for help.

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.

*Answer:* Community Solar Projects should build primarily on rooftops, parking lots, and unused urban space. The projects should not just put down dirt and gravel under the panels, but should incorporate some green space. Also, the projects should design for stormwater management.

A creative use of the space would be to require a certain proportion of the community solar to be pollinator-friendly, rather than the standard gravel/monocrop lawn grass. Minnesota and Maryland have created standards for this<sup>1</sup>.

*Justification:* As discussed in the latest state Energy Master Plan Update, New Jersey has a commitment to developing solar without sacrificing open space. Requiring Community Solar Projects to build in otherwise unused urban space would help to fulfill this commitment.

Recently, researchers have found evidence that there is a "heat island" effect from large solar farms, even in an urban parking lot, where the difference in nighttime temperatures may be as much as 2 degrees. One of the reasons hypothesized for this is the lack of vegetation. This could be improved if green space is added to the solar installation (bushes, grasses, etc., since trees would interfere with solar production).<sup>2</sup>

The NJ DEP found that only 10.6% of New Jersey's water assessment units support their designated uses, such as recreation, water supply, aquatic life, and fish consumption. In the remainder of the surface waters, the water quality is too poor. Avoiding stormwater runoff directly into lakes and streams is one aspect of addressing this problem.

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<sup>1</sup> Fresh Energy, Pollinator Friendly Solar: Everybody Loves It, May 15, 2017, <https://fresh-energy.org/pollinator-friendly-solar-everybody-loves-it/>

<sup>2</sup> Barron-Gafford, Greg A. and Minor, Rebecca L. and Allen, Nathan A. and Cronin, Alex D. and Brooks, Adria E. and Pavao-Zuckerman, Mitchell A. "The Photovoltaic Heat Island Effect: Larger solar power plants increase local temperatures," Scientific Reports, Volume 6, article number: 35070 (2016).

## Resources

New Jersey Board of Public Utilities and New Jersey Department of Environmental Protection, New Jersey Energy Master Plan Update, December 2015, [https://nj.gov/emp/docs/pdf/New\\_Jersey\\_Energy\\_Master\\_Plan\\_Update.pdf](https://nj.gov/emp/docs/pdf/New_Jersey_Energy_Master_Plan_Update.pdf)

New Jersey Department of Environmental Protection, Solar Siting Analysis Update, December 2017, <https://www.nj.gov/dep/aqes/SSAFINAL.pdf>

Vivian Chang, Cara Goldenberg, Jack Hoskins, Stephen Lassiter, Zhongshu Li, Eri Nakatani, Sheree Oluwafemi, Hannah Safford, Solar Gardens in the Garden State, The Woodrow Wilson School, January 2017.

IREC/Vote Solar Initiative, Model Rules for Shared Renewable Energy Programs, 2013, <https://irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/>

# Summary of Comments on Low and Moderate Income Access

## Response to Docket Number QO18060646

### Introduction

*As a faith-based group, Unitarian Universalist Faith Action addresses issues of equality and social justice, in line with our first and second principles, “The inherent worth and dignity of every person” and “Justice, equity, and compassion in human relations.” In addition, our seventh principle, “Respect for the interdependent web of all existence of which we are a part,” motivates us to work to care for our environment. In line with these principles, we are concerned with promoting access to renewable energy and to equal access for low and minority income households.*

*In answering the BPU’s questions on Low and Moderate Income Access, we considered three important goals:*

- A. Attract solar developers to providing access to LMI households.*
- B. Attract LMI households to community solar.*
- C. Make it easy for the BPU to administer and for households to apply.*

### Answers to Questions

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

*Answer:* In a LMI community solar pilot project, at least 20% of the subscribers must be LMI households. An LMI household should be defined as eligible for the Low Income Home Energy Assistance Program (LIHEAP), as a household with income below 200% of the Federal poverty level. Also, workers from LMI households should be involved in construction and installation of the solar project. There should be a training and certification program available to the community, such as those provided by Isles, and trainees should be preferred for working on the project in some capacity.

There should also be a requirement that 5% of a developer’s total subscribers be LMI households.

If many LMI workers are involved in construction and installation of a project — say more than 20% — other requirements on developers could be relaxed, or incentives could be provided such as allowing a project to move ahead of projects with fewer workers in the interconnection queue.

Before a Community Solar Project qualifies for any incentives, it must be registered with the BPU, including information about ownership, site, and financial and technical ability to manage the project.

*Justification:* An LMI project will receive special incentives not available to other projects, such as moving ahead in the interconnection queue. The 20% subscriber criterion is the same as the criterion used in New York for moving ahead of other projects in the interconnection queue. We propose that in New Jersey, to encourage

projects to include more than 20% of LMI subscribers, a project could move ahead of all projects with a lower percentage of LMI subscribers.

For LMI communities, jobs and job training will be even more important than lowering energy bills, and so we include requirements on providing jobs in LMI communities and provide incentives for that as well.

In case the incentive alone doesn't motivate a developer to take part in the LMI program, a carveout of 5% of a developer's total community solar subscribers should be required. This 5% could apply to all of the developer's projects, or come from a small number of LMI projects.

Incentives to developers and subsidies to subscribers should help to ensure that developers create at least some projects with a high percentage of LMI subscribers. The pilot will help to determine how well this works.

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.

*Answer:* The level should be 200% of the federal poverty level and should be re-verified annually. In addition, if an applicant to LIHEAP is eligible for a local Community Solar project, the applicant must join the Community Solar Project.

*Justification:* There are different income levels required by different programs in New Jersey. Like LIHEAP, the cutoff for weatherization assistance is 200% of the Federal poverty level. The Universal Service Fund cutoff is at 175% of the Federal poverty level.

200% of the Federal poverty level in 2016 was about 2/3 of the 2016 New Jersey median income of roughly \$76,126 and consistent with the level used in LIHEAP. The Woodrow Wilson School study "Solar Gardens in the Garden State" recommended a higher cutoff of 100% of New Jersey median income, roughly 300% of the federal poverty level.

We rejected a strategy of combining a higher percentage of the federal poverty level to define a LMI Solar Community Pilot Project (say 300%), while limiting access to subsidies to those below 200% of the federal poverty level. Although this would include a number of households that are more financially stable, and therefore potentially more attractive to developers, it might result in cream-skimming.

Because the Universal Service Fund (USF), LIHEAP, and the Weatherization Assistance Program use the federal poverty level in their criteria for LMI households, this approach simplifies administration and would allow applicants to apply for all programs simultaneously.

We chose annual review because at least one group of LMI households must use Federal income tax returns to establish eligibility. Other groups use recent pay stubs, unemployment benefits documents, or other such financial information. These would not be as sensitive to the timing of the review.

Motivating low-income subscribers whose bills are subsidized by LIHEAP to join a Community Solar project may be difficult, since the impact on their own payments for energy may be quite small. For this reason, we require households that are applying for

LIHEAP funding to subscribe to a Community Solar Project if there is one that they are eligible to join.

11) The BPU is considering a number of different approaches to encouraging development of LMI community solar pilot projects, including, but not limited to:

1. 1. Dedicated capacity: e.g., a certain percentage of overall capacity for the Pilot Program would be reserved for LMI projects.
2. 2. Procedural: e.g., LMI projects would receive preference in the solar interconnection queue.
3. 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 projects, in conformance with the Clean Energy Act? Please be specific in recommending qualitative and quantitative incentives, and proposals for implementation.

*Answer:* Use all three approaches.

*Dedicated capacity:* Require that 5% of the total developer subscribers be LMI households, rather than requiring that a percentage of each project be LMI households.

*Procedural incentive:* Set the minimum percentage to move up in the queue at 20% LMI subscribers or 20% LMI workers, i.e., for a project to move up in the queue it must be an LMI project or involve many LMI workers. Once a project has 20% LMI subscribers (or workers), it can move ahead of all projects with a lower percentage of LMI subscribers (or workers).

*Financial incentives:* Use on-bill credits for assistance to LMI households. The payments for these should come out of LIHEAP funding. Although the credits might be provided by aggregated net metering, making the connection with energy usage apparent and thereby motivating the household to use energy more efficiently, a dollar amount will be more flexible in the long run as the state converts to Value of Solar.

*Justification:* By itself, dedicated capacity can backfire and become a ceiling rather than a floor for making solar accessible for LMI communities. However, combining dedicated capacity with incentives to include LMI households should make inclusion of these households more attractive to developers. At the end of the pilot, examining solar developers' decision-making process should make the requirements clearer.

Basing the percentage on a developer's total subscribers rather than the subscribers in each project gives the developers maximum flexibility.

The actual percentages resemble those of other states.

To avoid administrative overhead and keep applications simple, we propose providing financial support to LMI customers through a state-run program based on two federal programs, the Universal Service Fund (USF) and the Low Income Home Energy Assistance Program (LIHEAP). Since the eligibility criteria for USF and LIHEAP differ, and since both are based on the federal poverty level, we propose setting the limit at 200% of the federal poverty level, which is the same as LIHEAP and (for a family of 4) would amount to about 2/3 of the NJ median income. Because the Federal poverty level also accounts for various family sizes, New Jersey would not have to do its own research to establish levels for each family size and individuals could restrict their

attention to a single table to establish their eligibility.

Providing financial support would help to assure developers that the financing for LMI households would be stable and encourage LMI households to subscribe. The total amount of money required from the government (state or federal) should not change significantly from current subsidies, and may even decrease, allowing payments to more households, because of the dropping price of solar energy.

On-bill credits are easy to administer and easy for subscribers to understand, and are recommended by various organizations, including Vote Solar, the Interstate Renewable Energy Council (IREC), and the Coalition for Community Solar Access (CCSA)..

## **Resources**

Vivian Chang, Cara Goldenberg, Jack Hoskins, Stephen Lassiter, Zhongshu Li, Eri Nakatani, Sheree Oluwafemi, Hannah Safford, Solar Gardens in the Garden State, The Woodrow Wilson School, January 2017.

Coalition for Community Solar Access, Community Solar Policy Decision Matrix, November 2016, <http://www.communitysolaraccess.org/wp-content/uploads/2016/03/CCSA-Policy-Decision-Matrix-Final-11-15-2016.pdf>

IREC/Vote Solar Initiative, Model Rules for Shared Renewable Energy Programs, 2013, <https://irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/>

New Jersey Energy Assistance Programs, <http://www.njcommunityresources.info/njenergy.html>



# Environmental Justice Task Force

## Summary of Comments on Customer Subscriptions, Customer Protection

### Response to Docket Number QO18060646

#### Introduction

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*Attracting customer subscriptions and providing customer protection will be an important issue in low and moderate income communities. There are three important issues raised in these questions: portability of subscriptions (so that once a customer has a subscription, s/he can take it in case of moving), transferability of subscriptions (so that a customer can actually sell a subscription that s/he can’t afford any more), and customer protection rules.*

*In another summary response, we specified that “Before a Community Solar Project qualifies for any incentives, it must be registered with the BPU, including information about ownership, site, and financial and technical ability to manage the project.” In this response, we assume that some projects are registered as “LMI Community Solar Projects.”*

*In the following, we answer only those questions we view as particularly important to Low and Moderate Income (LMI) communities.*

#### Answers to questions

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.

*Answer:* More than one.

*Justification:* A higher number may preclude community solar for on-site multi-family housing units. In a pilot, we should allow maximum flexibility to allow evaluation of as many types of community solar as possible. Flexibility will be especially important in LMI communities, which have not previously had access to community solar, in order to provide as many models as possible.

This is also a recommendation of Coalition for Community Solar Access (CCSA) in the CCSA Policy Decision Matrix (see Resources).

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

*Answer:* Subscriptions must be sized so that customers may expect to fully offset their annual usage without having excess credits at the end of the year. This suggests they be sized to offset some percentage (100% for example) of their typical bill. A larger percentage could also be used, with a lower valuation on excess credits, so that subscribers are incentivized to use realistic allocations.

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

*Answer:* Subscriptions should be portable, but only as long as the subscriber remains in the original territory of the community solar organization.

*Justification:* This is important for LMI communities, because members of these communities are more likely to move. The benefits of this are several: the developer can assume more stability in the membership of the community solar project, the subscribers can continue their membership, there is less administrative cost when a subscriber moves (because new subscribers don't need to be found and evaluated), and the flexibility this allows is appropriate in a pilot program.

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 subscriptions 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?

*Answer:* Subscriptions should be transferable in as many situations as possible.

*Justification:* The rules should be flexible to promote assurances of continued subscriptions to the developers and to allow subscribers to recover their costs and end their obligations as simply as possible.

However, the BPU should not establish a community solar subscription market. This will open the program up to speculation and other risky financial mechanisms that could drive up cost for consumers and limit access to community solar programs, and divert benefits of renewable electricity generation to those who are not served by the system.

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

*Answer:*

*Marketing activities:* Consumers must be protected from misleading claims about the impact of subscribing on their monthly bills. Accurate disclosure of upfront charges and monthly subscription charges must be required, for comparison to a customer's current bills, whatever

they are, or to the PSE&G charge<sup>1</sup>. The BPU must review any marketing materials sent to subscribers.

Use of on-bill monthly charges for repayment of any initial loans and on-bill charges for electricity use should simplify comparison to existing bills, so customers don't need to compare net present values of their charges with an up-front investment.

The flip side of the customer protection problem is making sure that potential subscribers can identify beneficial projects. Customers are rightly suspicious of mail offers and telephone offers promising great savings. The BPU must make sure that projects registered with the state as LMI Community Solar Projects are publicized and that their registration is easy to verify.

Developers of LMI community solar projects that are registered with the state should be encouraged to work with houses of worship, tenant organizations, local social service agencies such as Comfort Partners and United Community Corporation in Newark, local governmental groups such as Environmental Commissions or Green Teams, and local non-profits to spread information about their offerings and to help potential subscribers with applications.

Cold-calling to generate leads, either with robocalls or in person, should be prohibited. Such operations can be fronts for fraudulent behavior<sup>2</sup> and will poison the well for legitimate operations. The operation of the grid is mystifying even to well-informed consumers, and such calls are likely to be received with suspicion in any case.

*Subscriber Protections:* There must be a standard state-wide contract or disclosure form required for all community solar projects, as recommended by the CCSA.

Any deposits and costs for signing up must be limited to a reasonable amount. For an LMI household, financing must be available for a nominal fee (perhaps through a fund from excess electrical generation), and the payments should appear as on-bill charges.

The BPU must develop a standard outline for a solar quote. The potential subscriber should receive complete and accurate information about charges and potential savings, such as:

- Up-front lump-sum fees and available financing;
- Estimate of monthly fees and credits, compared to comparable fees from the local utility (for this purpose, the BPU should establish a standardized method of estimating future charges);
- Duration of subscriptions;
- Transferability of subscriptions;
- Portability of subscriptions.

This information must be provided in understandable language and readable print.

Once subscribers are signed up, there must be some assurances that the developer will either complete the project or return the deposits. Maryland requires an escrow account for this. Subscribers must also be able to recover payments made for the subscription if their life circumstances change.

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<sup>1</sup> For subscribers to non-PSE&G generation, PSE&G includes a notice of what the subscriber's bill would have been in the preceding month if the subscriber had used PSE&G generation.

<sup>2</sup> FTC News Release, [Solar Panel Lead Generation Robocallers Who Pitched Energy Savings Settle FTC Charges](https://www.ftc.gov/news-events/press-releases/2017/11/solar-panel-lead-generation-robocallers-who-pitched-energy), November 8, 2017, <https://www.ftc.gov/news-events/press-releases/2017/11/solar-panel-lead-generation-robocallers-who-pitched-energy>

Other protections that must be provided in the contract: No yearly price escalation beyond the rate of inflation; no transfer fees if the subscriber moves and transfers the subscription.

## **Resources**

Coalition for Community Solar Access, CCSA Policy Decision Matrix <http://www.communitysolaraccess.org/wp-content/uploads/2016/03/CCSA-Policy-Decision-Matrix-Final-11-15-2016.pdf>

IREC/Vote Solar Initiative, [Model Rules for Shared Renewable Energy Programs](https://irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/), 2013, <https://irecusa.org/publications/shared-renewable-energy-for-low-to-moderate-income-consumers-policy-guidelines-and-model-provisions/>

Vivian Chang, Cara Goldenberg, Jack Hoskins, Stephen Lassiter, Zhongshu Li, Eri Nakatani, Sheree Oluwafemi, Hannah Safford, [Solar Gardens in the Garden State](#), The Woodrow Wilson School, January 2017.

Federal Trade Commission, [Something New Under the Sun: Competition & Consumer Protection Issues in Solar Energy](https://www.ftc.gov/system/files/documents/public_events/943943/solar_workshop_transcript.pdf), June 21, 2016, [https://www.ftc.gov/system/files/documents/public\\_events/943943/solar\\_workshop\\_transcript.pdf](https://www.ftc.gov/system/files/documents/public_events/943943/solar_workshop_transcript.pdf)