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Illinois Power Agency
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[via *electronic mail*]

RE: 2024-25 Program Guidebook Feedback

Dear Program Administrator,

Third Pillar Solar is pleased to provide the following comments to the “Program Guidebook, Draft Version Released March 13, 2024 for Stakeholder Feedback” published by the Illinois Power Agency (the “Draft Program Guidebook”). Third Pillar Solar is a Floating Solar Photovoltaic (“FPV”) project developer and operator pursuing community solar and other distributed generation projects in Illinois and other markets in the United States. Third Pillar Solar focuses its comments on treatment of FPV in the Traditional Community Solar point-scoring rubric, which (if clarified) would ensure that FPV projects are placed on equal footing with other projects that do not impact greenfields or prime agricultural land.

Floating Solar Photovoltaic Background and Benefits

FPV projects consist of conventional solar PV panels mounted on robust high density polyethylene plastic and metallic floating docks that are mechanically stabilized on water. More than 500 Projects have been installed worldwide with a cumulative capacity of 2.5GW. In the United States, FPV projects are one of the fastest growing segments of the overall solar market, with over 30MW of projects having been deployed to date.

Third Pillar Solar, like other developers in the field, focus on FPV projects built and operated on man-made industrial, commercial or municipal waterbodies. Such FPV projects are a true “dual-use” application of solar, thus eliminating the need to remove land from agricultural or other productive uses. Third Pillar Solar estimates that there are upwards of several gigawatts of potential FPV capacity in Illinois alone on man-made bodies of water.

Development of FPV in Illinois is consistent with the aims of Illinois Shines and its enabling statutes to reduce impact to land.

As the program has evolved from an initial lottery to a modified first come/first served approach, the Illinois Shines Traditional Community Solar Block has been designed to incentivize development of solar projects away from undisturbed greenfield properties. In its enabling statutes, the General Assembly directed the IPA to design Illinois Shines to “ensure that renewable energy credits are procured from projects in diverse locations and are not concentrated in a few regional areas.”¹ FPV projects on commercial and industrial properties or municipally owned waterbodies represent one of the most achievable pathway to meeting this objective. By utilizing man-made industrial, commercial, or municipal waterbodies that do not currently have public access or recreational uses, FPV projects represent a completely new category of locations for community solar projects, increasing the diversity of locations sought after in the Illinois Power Agency Act. Moreover, FPV projects can be sited closer to urban areas and population centers as they can be sited on man-made waterbodies with no public access uses in populated areas where land costs a premium and rooftop space may not otherwise be available or large enough to support a community solar project. By specifically targeting man-made industrial or commercial waterbody structures, Third Pillar Solar actively screens out and avoids sites that host public recreation, present viewshed concerns for surrounding residents, and/or have significant value as habitat to flora or fauna.

As per the official definition by the Department of Energy, FPV projects serve as a prime example of Dual Use Photovoltaic Technologies.² FPV projects provide significant additional benefits to waterbody owners that are not otherwise compensated to the FPV project. These include savings due to significantly lower evaporation in the waterbody³ and reduced algal blooms.⁴ As such, much like rooftop projects provide additional value to the landowner and receive additional points for siting, FPV projects should be treated similarly and at least have the certainty of receiving two points in the siting category for Traditional Community Solar Projects. As a reference, several other states, such as New York, New Jersey, and Massachusetts, have in fact implemented FPV-specific incentives and preferred siting criteria to ensure that FPV projects are incented for deployment.

In addition, FPV projects are consistent with the Illinois Power Agency’s objective of avoiding siting solar projects on greenfield sites and incentivizing siting projects at locations that are otherwise developed. In August 2023, in seeking comment on the 2024 Long-Term Procurement Plan, to which the Draft Program Guidebook is responsive, Illinois Power Agency actively sought feedback on incentives and criteria to encourage siting community solar projects on “non-greenfield” sites and otherwise “away from undeveloped greenfield sites.”⁵ As noted above, by utilizing man-made industrial, commercial or municipal waterbodies, FPV projects are precisely the type of project Illinois Power Agency sought to incentivize in the 2024 Long-Term Procurement Plan and, accordingly, the Draft Program Guidebook.

However, even though FPV projects on commercial, industrial, and municipally owned artificial bodies of water with no public access or recreational uses meet the geographic diversity objectives and is on

¹ 20 ILCS 3855/1-75(c)(1)(K)

² Source: <https://www.energy.gov/eere/solar/dual-use-photovoltaic-technologies>

³ <https://onlinelibrary.wiley.com/doi/10.1002/er.5170>

⁴ <https://aggietranscript.ucdavis.edu/floating-photovoltaics-fpvs-impacts-on-algal-growth-in-reservoir-systems/>

⁵ Draft Long-Term Renewable Resources Procurement Plan for Commission Approval dated October 20, 2023, pp 159-60.

land that is currently in use, the Traditional Community Solar scoring guidelines are not clear that such FPV projects in fact qualify for points pursuant to Section 1(a) of Appendix E to the Draft Program Guidebook. The Draft Program Guidebook describes points-scoring opportunities for projects sited on disturbed land, rooftops, “other structures,” and brownfields.⁶ FPV projects achieve the same end as such listed projects in avoiding the need to be sited on greenfield land. As such, recognizing the value of FPV projects toward meeting the objectives of the statute, Long Term Procurement Plan and Draft Program Guidebook favors clarifying that FPV sited on commercial, industrial, or municipally owned man-made bodies of water with no public access uses should be eligible for points pursuant to Section 1(a) of Appendix E to the Draft Program Guidebook.

Third Pillar Solar requests clarification that certain man-made waterbodies are eligible for two points under the IL Shines Scoring Criteria for Traditional Community Solar Projects so that FPV projects are considered on equal footing with other types of solar projects.

In order for FPV projects to participate in the Illinois Shines program on equal footing with rooftop and ground mount community solar projects that equally meet the goals of CEJA, and to enable FPV projects to contribute to the aims of the Illinois Shines program, Third Pillar Solar requests the following clarification to be made to Section 1(a) of Appendix E to the Draft Program Guidebook:

Sited on “disturbed land” as defined by United States Geological Survey, “contaminated lands” as defined by the United States Environmental Protection Agency, or rooftops **or man-made industrial, commercial or municipal waterbodies with no public access use** or other structures as outlined in the Commission’s Final Order. (Add 2 points)

This clarification provides FPV projects parity with both rooftop and other solar projects that meet the objectives of the program that incentivize projects that are not located on greenfield sites.

The ambiguity in the existing language in the Draft Program Guidebook may hinder the development of FPV in Illinois. The lack of clarity on the ability of a FPV project to reach the five-point threshold to be put on a waitlist for a REC contract, or to better compete with the many projects submitted with more than five points, is likely to chill development of FPV projects. The Draft Program Guidebook simply does not provide enough certainty for developers of successful awarding of a REC contract. As a result, Developers may decide to delay or avoid investing in certain FPV sites that would otherwise meet the objectives of the Illinois Shines programs stated above. This lack of clarity is easily remedied by the limited additional language proposed above.

Finally, FPV projects, much like rooftop solar, projects face cost and energy yield related challenges compared to traditional ground mounted solar projects. In order to receive the same treatment as rooftop solar projects, FPV projects should have the certainty of receiving two points in the siting criteria for community solar projects under the Illinois Shines program.

⁶ Draft Program Guidebook, p. 132.

Thank you very much for the opportunity to provide these comments on the Draft Program Guidebook. For any questions or concerns regarding the above, please contact me at dghorbi@thirdpillarsolar.com.

Sincerely,

Darian Ghorbi
General Counsel