COMMENTS ON THE DRAFT LONG-TERM RENEWABLE RESOURCES PROCUREMENT PLAN ON BEHALF OF SOLAR LANDSCAPE

September 29, 2023

Solar Landscape greatly appreciates the tremendous amount of work done by the Illinois Power Agency ("IPA") to create the Draft Long-Term Renewable Resources Procurement Plan, along with the opportunity to provide comments. Solar Landscape is providing public comment on a few key priorities to further the advancement of the Illinois Shines Program and the future of community solar in Illinois.

I. Introduction

Solar Landscape is a leading commercial and industrial (C&I) rooftop community solar developer in the U.S. currently operating one of the largest community solar portfolios in the country. Our success is based upon our unique ability to connect with the communities our projects serve. After starting as a rooftop solar construction contractor over a decade ago, the company now employs more than 150 full-time employees and develops, finances, engineers, constructs, subscribes, owns, and maintains community solar projects long-term. Since 2012, the company has built more than 250 megawatts of solar energy projects and owns and operates more than 150 megawatts that are currently energized or under construction.

Our team is dedicated to developing community solar projects that create equitable access to renewable energy. For example, our in-house Community Engagement and Workforce Development teams work together to ensure that the communities in which our projects are located are involved in the planning and project development process and are receiving meaningful economic and social benefits. In addition, to ensure that each of our projects delivers discounted energy for low- and moderate-income families in the local area, we also work closely with community-based organizations to provide jobs training, educational programming, and accessibility to the green economy.

II. Rooftop Incentives

We strongly encourage the IPA to approve a $0.041/kWh rooftop community solar adder for REC pricing within the Adjustable Block Program, because the current REC pricing model does not reflect the incremental value that rooftop community solar projects provide as compared to ground-mounted community solar projects. Solar Landscape retained The Brattle Group ("Brattle"), an industry-leading economics consulting firm, to perform an analysis of the relative value of urban rooftop community solar to that of rural ground-mounted community solar in Illinois. Brattle's supporting analysis is included as an attachment to these comments. Brattle found that urban rooftop community solar projects in Illinois provide $0.028 to $0.054/kWh in incremental value compared to rural ground-mounted community solar projects, due to higher avoided distribution costs.

Brattle's value stream assessment model forecasts each levelized value stream from 2024 to 2050. Since ComEd does not provide public marginal T&D costs that can be avoided from net load reductions, Brattle surveyed utility costs from 18 cost-of-service studies around the Midwest and Northeast to arrive at proxy values. Urban projects have onsite and neighboring load and can thus defer

incremental distribution costs that would otherwise result from load growth, while—by contrast—rural projects need to utilize the distribution system to deliver solar generation to customers. Brattle developed a base case, representative of conservative assumptions about the cost of decarbonizing per Illinois's Net Zero by 2050 policy, and a High case that anticipates increased congestion and higher transmission and distribution costs due to load growth from electrification. The midpoint between Brattle's base and high case values is $0.041/kWh. This higher incremental value to ratepayers from rooftop community solar should be reflected in the REC pricing model, which would provide meaningful financial incentives to develop rooftop community solar projects in Illinois.

While the Illinois Power Agency has expressed interest in the "incentivization of project development on non-greenfield land first,"[1] the only actual incentives for locating community solar projects on rooftops are the two possible points for being sited on a rooftop in both the Traditional Community Solar and Community-Driven Community Solar project categories. Aside from these points, the Guidebook[2] and LTRRPP[3] do not explicitly consider or provide meaningful monetary incentives for rooftop community solar projects, which presents barriers to project development for the rooftop community solar industry, despite the significant incremental value these projects provide. In addition to the greater avoided transmission and distribution costs mentioned previously, rooftop projects do not interfere with land use plans or biodiversity, are typically faster to deploy and install as no ecological impact studies or land modifications are necessary, and they lend themselves to employing local workers as they remove the travel barrier associated with ground-mounted projects located in rural areas. Rooftop projects are typically more expensive to build on a per-watt basis than ground-mounted projects due to their proximity to urban population centers which have higher Prevailing Wage requirements, along with higher construction costs and site-leasing rates. In addition, rooftop projects typically have lower production on a per-watt basis due to lower panel tilt and lack of single-axis tracking. All of these factors (i.e., higher costs and lower production) make rooftop community solar projects more difficult to finance compared to ground-mounted community solar projects; and all else (including REC values) equal, that results in ground-mounted projects being incentivized over rooftop projects, despite the fact that rooftop projects are substantially more valuable to the grid. Providing a $0.041/kWh REC rooftop adder would correct this problem by incentivizing the more valuable rooftop projects.

The current REC pricing model utilizes a cost-based approach, per Sustainable Energy Advantage's recommendation, but this approach ignores the ratepayer and societal benefits that these projects provide. In addition to our proposed $0.041/kWh REC rooftop adder, we encourage the IPA to adopt a value-based approach to the REC pricing model in future updates to better account for the vast array of benefits that community solar projects provide. Given that the Agency has explicit interest in incentivizing rooftop community solar project development, rooftop-specific cost data should inform the REC pricing model. As it currently stands, there have not been many rooftop community solar projects developed through the Program, meaning that the cost data used in the REC pricing model is not fully representative or accurate. If the IPA chooses to continue with a cost-based rather than a value-based

[1] https://illinoisshines.com/wp-content/uploads/2023/08/2024-Draft-Long-Term-Plan-15-Aug-2023.pdf, p. 160
[2] https://illinoisshines.com/wp-content/uploads/2023/08/Shines-Program-Guidebook_Aug_3_2023.pdf
[3] https://illinoisshines.com/wp-content/uploads/2023/08/2024-Draft-Long-Term-Plan-15-Aug-2023.pdf

REC pricing approach going forward, the agency should source cost data from rooftop community solar projects, whether through developers or NREL or elsewhere, and update the REC pricing model assumptions accordingly.

III. Developer's Cap

The proposed block size and 20% developer cap for Community-Driven Community Solar is extremely prohibitive and nearly defeats the purpose of participating in the CDCS project category moving forward. As CDCS is one of the newly introduced project categories and is the most community-centric, enabling the development of projects with meaningful community engagement and workforce development opportunities, it requires a certain level of scalability from developers, which isn't possible with the proposed developer's cap. Since these projects require significantly more time and resources to develop, due to extensive community engagement and workforce development efforts, these projects only pencil out economically with scale and long-term community investment, which can only be achieved through continuous Program participation and ongoing CDCS involvement. The proposed block size for CDCS in the 2024-2025 Program Year is 20 MW (6 MW for Group A and 14 MW for Group B). We understand that the reduced block size is to accommodate the increasing EEC capacity within the Program, but a 20% developer cap would mean that there would be a 2.8 MW cap for CDCS developers in Group B, which is prohibitively low. Since CDCS is the most community-focused project category and is still emerging as a central pillar of the Program, this cap would stymie the purpose and intent of creating this project category and would limit the number of projects developed with tangible and meaningful community benefits. We strongly encourage the IPA to not implement a 20% developer cap for CDCS.

IV. Co-Location Policies

As it currently stands, the Program's co-location policies appear to be aimed at preventing large ground-mounted community solar projects from gaming the system, but these concerns do not apply to rooftop projects because projects are naturally limited by the size of buildings. The Program rules treat two separate rooftop community solar projects located on adjacent buildings as co-located if they reside on the same or contiguous parcel of land, despite being two entirely different projects. The Guidebook states that "if there are multiple projects owned or developed by a single entity (or its affiliates) located on one parcel of land, or on contiguous parcels of land, any size-based adders will be based on the total size of the projects owned or developed on the contiguous parcels by that single entity or its affiliates."[4] These neighboring rooftop projects would thus be saddled with significantly lower co-located REC pricing. The co-location policy for distributed generation projects (i.e., as opposed to community solar projects), however, does distinguish between rooftop and ground projects, noting that, "for purposes of determining the system's REC price, a system's location is considered to be a single building (regardless of the number of utility accounts at the location) for rooftop installations, and a single property parcel for ground-mounted systems. Additionally, systems located on multiple different rooftops or ground locations on the same parcel will be considered a single system if each system is owned by the same entity or its affiliates."[5] We understand that the co-location policies were likely intended to prevent

[4] https://illinoisshines.com/wp-content/uploads/2023/08/Shines-Program-Guidebook_Aug_3_2023.pdf, p. 44
[5] https://illinoisshines.com/wp-content/uploads/2023/08/Shines-Program-Guidebook_Aug_3_2023.pdf, p. 43

gaming of REC pricing by developers submitting multiple adjacent ground-mounted projects to receive higher RECs, but these policies are resulting in significantly lower REC prices and thus negative impacts on project economics for neighboring rooftop projects that should not be deemed co-located. We urge the Agency to establish an exemption for rooftop community solar projects sited on separate but adjacent buildings to ensure that rooftop projects receive the appropriate REC pricing.

V. Zoning Code Issues

Some local zoning code requirements and policies that are aimed at preventing large ground-mounted solar projects unintentionally limit rooftop community solar development by failing to distinguish between ground-mounted projects (which can pose various land use and aesthetic challenges) and rooftop projects (which do not pose such challenges); and the collateral payment schedule required by the Program should be amended to reflect this reality. As an example, the Village of Schaumburg, IL has a Renewable Energy code which apparently aims to limit ground-mounted solar, but which unintentionally also limits rooftop community solar. Specifically, the Schaumburg code stipulates that "energy produced through the solar energy system shall be utilized on site"[6] which is presumably aimed at preventing large ground-mounted grid-supply solar projects while still allowing rooftop projects (inasmuch as people often think of behind-the-meter solar, where the solar energy is used on site, as being mostly rooftop solar), but which technically also prohibits rooftop community solar projects (inasmuch as rooftop community solar projects do not use all energy on site). Similarly, the Schaumburg code states that solar installations "shall be designed and located to avoid glare or reflection onto adjacent properties, businesses, residential homes and adjacent roadways and shall not interfere with traffic or create a safety hazard,"[7] which are concerns that are only attributable to ground-mounted solar projects, not rooftop projects (i.e., rooftop projects would not adversely impact land use aesthetics of the Village). Local zoning policies like these unintentionally prevent rooftop community solar project development. Zoning code amendments in the Village of Schaumburg can take three to four months, which means that developers run the risk of potentially having to forfeit collateral payments in order to push for these amendments. We urge the Agency to grant conditional extensions on the posting of collateral payments for projects that encounter zoning code restrictions similar to the one in Schaumburg mentioned above, to ensure that these projects stand a fair chance of moving forward. Incidentally, this zoning issue exemplifies how there is generally a lack of consideration/awareness of siting community solar projects on rooftops and underscores the importance of having the Illinois Shines Program make a clear distinction between rooftop and ground projects, so rooftop projects aren't hindered by restrictions that were intended for ground projects.

VI. Waitlist Procedures

The Agency proposed discontinuing the netting of waitlisted capacity against a new Program Year's block of capacity. If the Agency is to discontinue this practice, we strongly advocate for an announcement of this change well in advance of the start of the Program Year, as the change would

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[6] https://library.municode.com/il/schaumburg/codes/code_of_ordinances?nodeId=TIT15LAUS_CH154ZO_GEPR_S154.70REEN, Section 154.70, (A)(2) b.

[7] https://library.municode.com/il/schaumburg/codes/code_of_ordinances?nodeId=TIT15LAUS_CH154ZO_GEPR_S154.70REEN, Section 154.70, (A)(2) d.

otherwise hamstring all developers making business decisions that rely upon waitlisted projects being able to secure future capacity. Moreover, the proposed CDCS capacity allocation for 2024-2025 should be large enough to at least grant capacity to waitlisted projects from 2023-2024, as we did significant development work under the assumption that waitlisted projects from 2023-2024 would be guaranteed capacity in 2024-2025.