To: Illinois Power Agency
From: Participants in the Illinois Solar for All Working Group
Date: February 26, 2021
Re: Illinois Solar for All Working Group Comments on Proposed Approved Manual Updates for Section 10

Dear Illinois Power Agency & Program Administration Team:

The Illinois Solar for All Working Group is pleased to deliver the enclosed comments on the proposed changes to the Approved Vendor, specifically Section 10.

Background: Illinois Solar for All Working Group

The Illinois Solar for All Working Group (the Working Group) formed from a subset of members of the Illinois Clean Jobs Coalition, who had comprised an Environmental Justice-Solar-Labor Caucus (the Caucus) during the negotiation of policies that would become the Future Energy Jobs Act (FEJA). The group formed in order to bring the best practices and policies to the Illinois energy landscape that would serve to maximize benefits to the economically disadvantaged households and communities that targeted programs are intended to serve. The group was co-facilitated by a representative of a solar company, Amy Heart of Sunrun, and a representative of an environmental justice group, Juliana Pino of the Little Village Environmental Justice Organization.

Following passage of FEJA in December 2016, the Caucus expanded into the Illinois Solar for All Working Group, an open membership group including experts on environmental justice, environmental advocacy, consumer protection, solar business, low-income solar policy, energy efficiency, job training, program design, and other areas, who have substantive research and experience to bring to bear on implementation of Illinois Solar for All. Currently, the Illinois Solar for All Working Group is co-facilitated by Juliana Pino of Little Village Environmental Justice Organization and MeLena Hessel of Environmental Law and Policy Center. Over 75 participants include representatives from the following organizations and others:

| Vote Solar | Inclusive Prosperity Capital |
|---|--------------------------------------|
| Pilsen Environmental Rights & Reform Organization | Advanced Energy Solutions Group, Inc |
| Renewable Energy Evolution | Certasun |
| SustainRockford | Sunrun |
| Central Road Energy | PosiGen |
| StraightUp Solar | Green Energy in Motion, Inc. |
| Prairie Rivers Network | |

Working Group Process

The Working Group began convening in January 2017 and has had monthly full-group meetings until the present time. From time to time, the Working Group operates with sub-teams or break out groups that

focus on specific areas relevant to the policies at hand and future work on the program. These sub-teams have included: Program Administration & Evaluation, Consumer Protection & Financing, Education & Engagement, Job Training, and Project Workshop.

Working Group Commenting and Engagement History for IL Solar for All

- A draft White Paper was delivered to the IPA on May 5, 2017.
- Many Working Group participants attended IPA's May 2017 workshops and helped develop responses to IPA's June 6, 2017 Request for Comments on the Long-Term Renewable Resources Procurement Plan.¹
- A final White Paper was published on July 11, 2017 on lowincomesolar.org.²
- The Working Group also submitted a response to the Draft Long-Term Renewable Resources Procurement Plan on November 13, 2017.³
- Additionally, the group has engaged in stakeholder sessions and submitted comments on:
 - Community Solar Consumer Protection & Marketing Guidelines Draft Documents and Illinois Adjustable Block Program Draft Guidebook to InClime on December 10, 2018;
 - Grassroots Education and Approved Vendor components on January 9, 2019;
 - Environmental Justice provisions on January 30, 2019;
 - Job Training provisions and Third-Party Evaluation provisions on February 7, 2019;
 - Project and Participant Eligibility and Verification Processes on March 13, 2019;
 - the Low-Income Community Solar REC contract on April 2, 2019;
 - Project Selection on April 15, 2019; and
 - Consumer Protection on April 19, 2019.
- Many Working Group participants also attended IPA's June 2019 workshops and helped develop the Working Group's response to IPA's July 3, 2019 Request for Comments on the Long-Term Plan Update.
- The Working Group continues to provide input to comment and stakeholder processes initiated this year to implement the Revised Long-Term Plan, including via May 2020 comments on project selection and July 2020 comments on Approved Vendor reporting.

Program Principles for Illinois Solar for All

During the negotiation of FEJA, the Caucus membership collectively agreed upon the following policy principles to guide our work moving forward. These principles were rooted in the *Low-Income Solar Policy Guide*⁴ authored by GRID Alternatives, Vote Solar, and the Center for Social Inclusion; further adapted through iterative deliberations in the Caucus; and ultimately adopted by the Working Group. The principles include:

• Affordability and Accessibility. Offers opportunities for low-income residents to invest in solar through a combination of cost savings and support to overcome financial and access challenges Creates economic opportunities through a job training pipeline. Supports skill development for family-supporting jobs, including national certification and apprenticeship programs.

• Community Engagement. Recognizes community partnerships are key to development and

¹ <u>https://www.illinois.gov/sites/ipa/Documents/ILSfA-Working-Group-Response-RequestforComments.pdf</u>

² http://www.lowincomesolar.org/wp-content/uploads/2017/07/20170711-ILSfA-Working-Group-White-

Paper Final wAppendices.pdf

³ https://www2.illinois.gov/sites/ipa/Documents/2018ProcurementPlan/2018-LTRenewable-Illinois-Solar-for-All-Working-Group-Comments.pdf

⁴ <u>www.lowincomesolar.org</u>

implementation, ensuring community needs and challenges are addressed. Strive to maximize projects located in, and serving, environmental justice (EJ) communities. Allows for flexibility for non-profit/volunteer models to participate, and strives to meet potential trainees where they are, with community-led trainings.

• Sustainability and Flexibility. Encourages long-term market development and will be flexible to best serve the unique low-income market segment over time and as conditions change. Program administrator ensures community engagement, statewide geographic equity, and flexibility to meet goals. Job training program includes all training partners in design and implementation. Training offerings should come through diverse channels including utilities, unions, tech schools, non-profits, government agencies, and existing community-based job training organizations.

• **Compatibility and Integration.** Low-income program adds to, and integrates with, existing renewable energy and energy efficiency programs, and supports piloting of financing tools such as PAYS (pay-as-you-save), on-bill financing, PACE or community-led group buy programs. Jobs training programs will strive to ensure low-income solar installations incorporate workforce development, including coordinating opportunities for job training partners and individual trainees from the same communities that the low-income solar program aims to serve.

The Working Group researched and prepared the enclosed comments to deliver high quality information and recommendations on considerations for the Illinois Solar for All Program and the Long-Term Renewable Resources Procurement Plan. The contents are not intended to reflect universal consensus on any point amongst working group members. These contents reflect extensive deliberation regarding aspects that the Working Group believes are important to the Program's success moving forward.

In closing, we make these recommendations and comments to ensure high-quality implementation for Illinois communities. Communities throughout Illinois need the opportunities and services the Illinois Solar for All Program will provide and the support of groups with substantive experience in the solar industry and low-income solar in particular. Please do not hesitate to contact us with questions or comments in regards to this matter.

Illinois Solar for All Working Group Comments on Proposed Approved Vendor Manual Updates for Section 10

The Illinois Solar for All Working Group ("Working Group") appreciates this opportunity to comment on the proposed changes to Section 10 of the Approved Vendor Manual to the Illinois Power Agency and Elevate Energy in its role as Program Administrator. The Working Group stresses the goal of the program should be to expand access to solar solutions for households through the Low-Income Distributed Generation (LIDG) subprogram of the Solar for All Program.

The Working Group does not believe the proposed changes to Section 10.4 regarding limitations on north facing arrays and the Specific Yield requirements improve the LIDG subprogram at this time. In fact, the Working Group is concerned that these requirements may unnecessarily restrict otherwise viable projects from a subprogram that has yet to gain appreciable traction.

In particular, we are very concerned the proposed changes regarding north facing arrays and specific yield array requirements will be a detriment to the goals of the program by:

- Unnecessarily restricting the number of low-income households that can participate in the LIDG subprogram.
- Excluding geographic areas intended to benefit such as identified Environmental Justice and urban neighborhoods where roofs tend to be smaller and where existing shading would disqualify many projects.
- Restricting the number of Approved Vendors that can operate within the subprogram and thereby reducing the number of LIDG projects.

The ILSfA program requirements for REC determination and savings benefits are based on system generation (i.e.kWhac output), regardless of the array efficiency. As such, the RECs are paid out based on performance only. In addition, the low-income homeowner's payments, whether via power purchase agreement (PPA), lease, or purchase, are grounded in production (via the savings requirements) not system size or system cost. While we trust that the Agency's and the Program Administrator's motivations are based in consumer protection and "best practice" concerns, we fear those concerns will have unintended consequences that will further exacerbate extremely limited program participation.

Finally, we are very concerned that the proposed changes will force many of the Approved Vendors out of the LIDG subprogram at a time when the LIDG subprogram is still in a fledgling state. Members of the Approved Vendor community have provided the Agency and the Program Administrator with ongoing feedback about the various challenges they face (including high administrative and unsustainable staff burdens) in getting their projects approved. To date, and including Program Year Three, only five 1-4 unit LIDG projects have been completed.

| | 1. Project Submitted / Part I Review | 2. Dropped - Ineligible / Withdraw n | 3. Eligibility Determine d | 4. Projects Selected | 5. Project Developm ent | 6. System Energized / Part II Review | 7. Project Complete | Total |
|---|--|--|-------------------------------------|----------------------------|----------------------------------|--|---------------------------|-----------|
| By Num- ber of Projects | 0 | 1 | 0 | 0 | 3 | 1 | 6 | 11 |
| By System AC Ca- pacity (in kW) | | 6 kW | | | 17 kW | 5 kW | 2,037 kW | 2,064 kW |
| By Incen- tive Value (in mil- lions of dollars) | | \$0.02 MM | | | \$0.04 MM | \$0.01 MM | \$4.09 MM | \$4.16 MM |

2019-2020 Received ILSFA Low-Income Distributed Generation Project Submissions

We are very concerned that additional requirements and restrictions may result inApproved Vendors abandoning the LIDG subprogram.

The Working Group also provides written comments on the Program Administrator's specific questions on the proposed Section 10 restrictions below:

1. Do the proposed changes advance the intended goal of promoting optimal solar array performance?

While we feel the intent of the requirement is laudable and would promote efficient solar array performance, the requirement as currently suggested does not reflect the reality of constructing solar in the urban settings where most low-income and environmental justice communities are located. In low-income neighborhoods, homes are typically smaller with less roof space. Off-property vegetation and obstructions from neighboring properties are sources of shade that are often outside the control of the homeowner in a city environment. These conditions often necessitate the addition of solar panels to suboptimal west, east and north facing roofs to match the array generation with customer electrical usage. We are concerned that limiting installation to just south facing roofs will result in undersized systems that offset only a small portion of the low-income households electrical usage. Many low-income residents may weigh the downsized savings against the fear of the unknown, such as roof leaks, and decide to pass on a system. The LIDG subprogram already suffers from underutilization; we fear additional obstructions will only exacerbate this condition.

For example, LIDG Approved Vendor Sunrun provides the following example of how a specific yield restriction would have resulted in six of their 10 first projects submitted for Part 1 approval being rejected.

Chart 1

| | | Each Array on a Roof Plane on Home | | | | | Sunrun Contract | | | | ILSFA Proposal | |
|-----------|------------------|------------------------------------|------------------|-------------------|-------------------|-------|-----------------|---------|--------|--------|----------------|--|
| Project # | Zip Code of Home | Array 1 (kWh/kWp) | Array 2 kWh/kWp) | Array 3 (kWh/kWp) | Array 4 (kWh/kWp) | kW | Year 1 | kWh/kWp | Offset | SFA kW | % of original | |
| 1 | 60629 | 1,228 | | | | 8.19 | 10043 | 1226 | 97% | 8.19 | 100% | |
| 2 | 60192 | 1,174 | 1,351 | | | 13.02 | 15763 | 1211 | 102% | 13.02 | 100% | |
| 3 | 60620 | 1,137 | 639 | 1,024 | | 7.59 | 6369 | 839 | 84% | 3.45 | 45% | |
| 4 | 60484 | 766 | 782 | 855 | 809 | 5.89 | 4672 | 793 | 66% | 0 | 0% | |
| 5 | 60652 | 1,101 | | | | 3.1 | 3413 | 1101 | 82% | 3.1 | 100% | |
| 6 | 60649 | 1,032 | | | | 4.65 | 4,800 | 1032 | 78% | 4.65 | 100% | |
| 7 | 60629 | 1,189 | 793 | 1,041 | | 4.1 | 4084 | 997 | 93% | 2.52 | 62% | |
| 8 | 60641 | 977 | 926 | | | 4.73 | 4463 | 945 | 66% | 0 | 0% | |
| 9 | 60176 | 969 | | | | 4.34 | 4249 | 979 | 55% | 0 | 0% | |
| 10 | 60089 | 818 | 1184 | 1029 | 998 | 9.92 | 10006 | 1009 | 71% | 4.65 | 47% | |

Chart 1, provided by Sunrun, outlines the specific yield of each array located on a low-income home submitted for Part 1 approval. All 10 of these projects were approved by the Program Administrator. The arrays that are below the specific yield threshold, highlighted in red, would not have been submitted to the program. The final column outlines the reduction of system size as a result of the proposed restriction. Six out of these 10 projects would have not been feasible due to either not meeting the proposed yield threshold or being deemed not buildable by Sunrun due the reduced array size no longer being able to provide a significant portion of the household's electrical usage. Sunrun's experience in the market has been that even low-income households are reluctant to allow solar on their homes when the array only offsets a very small percentage of their total bill.

As previously noted, the program, with its savings requirements, necessitates that a power purchase agreement, lease agreement, or a purchase agreement be based on production, not system size. Furthermore, the REC payout is based solely on energy generation. Consequently, regardless of the solar array efficiency, a low-income household and the program ultimately pay only for the system production. Too much shading will result in the economics associated with installing an "inefficient" array becoming untenable and the developer will not install a system. The value of the Investment Tax Credit (ITC) is not a motivation to construct an oversized or inefficient solar system: an investor would soon grow broke trading a dollar of capital expense for \$0.26 in tax credits (i.e., the current ITC rate). We feel the determination of array size in the ILSfA LIDG subprogram should be left dependent on market conditions (e.g., the price of solar panels and labor) and should not be based on a specific yield or array location standard.

2. Do you have specific recommendations as to how to better adjust these guidelines to promote optimal solar array design and performance?

As described above, we do not believe these guidelines are warranted nor do they improve the program. We suggest that, at this stage of the LIDG subprogram, the market be left to determine optimal solar array design and performance.

3. Will the proposed changes significantly limit potential project submissions compared to previous ILSfA program years?

Yes. We believe these standards will negatively affect project submissions in a program that is already suffering from very low uptake. For example, Sunrun's example above demonstrates that six of their first

10 submissions would have been rejected from the program. These were six low-income families that had an identified need to reduce their energy burdens. We should be expanding solutions so that more households can benefit from ILSfA, especially during an economic downturn, a pandemic and slow program uptake.

4. For arrays with a tilt greater than 10 degrees, are having a northerly azimuth greater than 270 or less than 90 appropriate limits for best practice to maximize participant benefit and program expenditures? Alternatively, what would be an acceptable azimuth range for roofs not perfectly aligned on a north/south axis?

We believe this level of regulation is unwarranted at this time and does nothing to improve an already underutilized program. These standards do nothing to maximize participant benefit and program expenditures as both are solely dependent on array generation not array efficiency.

5. Is the 1,000 kWh AC/KWp DC standard appropriate statewide, or should it be different in northern Illinois versus southern Illinois?

We do not support a specific yield standard. Also, a significant reduction in specific yield is more dependent on a home's setting than on a home's location in Illinois. The same shading issues and roof limitations will adversely affect low-income homes in East St, Louis as those in Chicago.