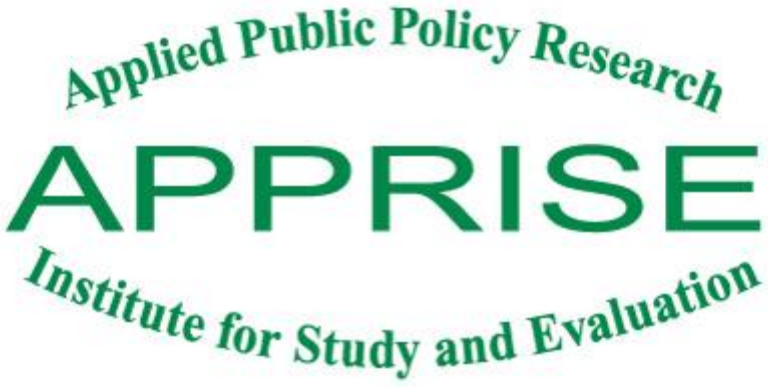

Illinois Solar For All Phase I Evaluation

Final Report

October 2019

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Executive Summary

This report presents the findings from the Phase I Evaluation of the Illinois Solar for All (ILSFA) Program. The ILSFA Program was mandated by the state's Public Act 99-0906, colloquially known as the Future Energy Jobs Act (FEJA), which was enacted on December 7, 2016 and went into effect on June 1, 2017. The ILSFA Program provides more generous Renewable Energy Credit (REC) contracts than those offered through the Illinois Adjustable Block Program (ABP) to overcome barriers to participation in the solar market faced by the low-income community.

Evaluation

The Illinois Power Agency (IPA) contracted with APPRISE, and its subcontractor Aeffect, Inc., to conduct an evaluation of the ILSFA Program. This evaluation report presents results from the Phase I Evaluation which was conducted from August through September 2019. Future evaluation research will include more detailed review of program implementation, barriers, accomplishments, and results as the program implementation progresses.

FEJA requires an independent evaluation of the ILSFA Program with objective criteria developed through a public stakeholder process. FEJA calls for an evaluation at least every two years. The evaluation is required to review the program and the third-party program administrator.

The IPA specified that the first phase of the evaluation will inform the planned revisions to the Long-Term Renewable Resources Procurement Plan (Long-Term Plan) in Fall 2019 (to be implemented, following approval by the Illinois Commerce Commission (ICC), beginning in early 2020). The focus of the Phase I Evaluation was to provide initial feedback and recommendations to the IPA for use in updating the Long-Term Plan. This research focused on the stakeholder outreach process, development of program materials and guidelines, initial Approved Vendor (AV) registration, initial project application, and the development of Grassroots Education. This research included the following activities.

- Document and Materials Review
- Illinois Power Agency Interviews
- Program Administrator Interviews
- Stakeholder Interviews
- Grassroots Educator Interviews
- Program Data Analysis

The Phase II Evaluation will include more detailed assessment of the ILSFA Program's implementation and results, including metrics required by FEJA and additional priorities identified in the Long-Term Plan. Key components of the Phase II Evaluation are as follows.

- Key metrics required by FEJA, including installations, capacity, costs, jobs created, and non-energy impacts.
- Jobs and job opportunities.
- Economic, social, and environmental benefits.

- Additional performance metrics including incentive dollars awarded, total expected cost per kWh produced, housing issues that prevent Distributed Generation (DG) installations, AV satisfaction, and average savings by business model types.
- An overall program administrator assessment.

Illinois Solar for All Program

FEJA required the development of the ILSFA Program to bring photovoltaics to low-income communities in Illinois. The objectives of the program are to maximize the development of new photovoltaic generating facilities, create a long-term, low-income solar marketplace throughout the State, integrate with existing energy efficiency initiatives, and minimize administrative costs.

FEJA mandated the ILSFA Program to include four sub-programs and indicated the funding percentages from the Renewable Energy Resources Fund for each of the four sub-programs.

1. *Low-Income Distributed Generation (DG)*: This sub-program provides funding for photovoltaic projects located on individual homes and multi-family buildings. Benefits to participants are achieved through net metering or reduction of energy costs.

2. *Low-Income Community Solar (CS)*: These projects provide the opportunity for participants to subscribe to a share of a CS system and receive credits on their utility bill for the energy produced by their share of the system. The projects must identify partnerships with community stakeholders where the project will be located.

3. *Incentives for Non-Profits and Public Facilities (NP/PF)*: NP/PF may receive incentives for on-site photovoltaic generation. These projects must serve the energy loads of non-profit or public sector customers, be installed on facilities within low-income or environmental justice (EJ) communities within the State of Illinois, and either have a sufficient connection to and input from the low-income or EJ community or be a qualified critical service provider defined as a non-profit or public sector entity that offers essential services to low-income or EJ communities.

4. *Low-Income Community Solar Pilot Projects*: This sub-program will be based on a competitive procurement approach for CS projects, based only on the price for 15 years of delivery of all Renewable Energy Credits (RECs). Payments will be made over the first ten years of the contract.

FEJA also allows stakeholders to propose alternative sub-programs to be approved by the IPA if they more effectively maximize the benefits to low-income customers.

Some of the key characteristics of the ILSFA Program are as follows.

- An emphasis on EJ communities and a requirement that 25 percent of the incentives for the first three ILSFA Program sub-programs are allocated within those communities.
- Requirements for community partnerships.

- Requirements for job training opportunities and hiring job trainees.
- Extensive consumer protections to ensure that participants receive the benefits of the ILSFA Program.

ILSFA Design

There are several important characteristics of the ILSFA Program design.

- Environmental Justice Communities: EJ communities are defined as having a higher risk of exposure to pollution based on environmental and socioeconomic factors. At least 25 percent of the incentives for DG, CS, and NP/PF projects must be allocated within EJ communities.

- Low-Income Households: Low-income households are persons and families whose income does not exceed 80 percent of the area median income, adjusted for family size and revised every five years.

- Low-Income Communities: Census Tracts having a majority (50 percent or greater) of households at 80 percent or less of area median income (AMI).

- Non-Profits and Public Facilities: Must be within an EJ or low-income community.

- Low-Income Community Solar: Selection priority is given to projects within an EJ or low-income community. Subscribers must be low-income households (one "anchor subscriber" that is not a Low-Income Household, taking up to a 40 percent share of the project, is permitted).

- Job Training: DG projects must include at least one job trainee staffed on the work for one third of the AV's projects annually. An AV's portfolio across all project types must have a specified percentage of hours (increasing by year) worked by job trainees. AVs should coordinate with FEJA-funded solar job training programs and other qualifying solar job training programs.

- Incentives: The IPA (or a utility) will purchase RECs from generation for the first 15 years of operation as an upfront payment per installed kilowatt of nameplate capacity, paid when the device is interconnected at the distribution system level of the utility and is energized.

- Consumer Protections: The ILSFA Program has developed extensive procedures to ensure that consumers are protected. These include financial protections, marketing requirements for AVs, and site suitability guidelines.

<u>ILSFA Resources</u>

The ILSFA Program is funded through three sources.

- The Renewable Energy Resources Fund (RERF): This fund was created as a special fund in the State Treasury and is administered by the IPA for the procurement of renewable energy resources. The fund was created with Alternative Compliance

Payments remitted by Alternative Retail Electric Suppliers (ARES) to comply with the State's Renewable Portfolio Standard established by the Public Utilities Act.

The IPA plans to allocate up to $20 million per year from the RERF for the ILSFA Program. RERF funding for the DG, CS, and NP/PF sub-programs will be available for seven to eight years if fully spent each year.

- Utility Funding: A portion of the funds collected by the utilities under their Renewable Portfolio Standard (RPS) tariffs. Utilities will add an additional $10 million in funding in 2018-2019, and $11.7 million in funding per year in 2019-2020 and 2020-2021. The utility funding is not required to be applied in the same percentages as the RERF funds, but will be used to supplement the sub-programs that have used up their available funds from the RERF (but not provide funding for the Low-Income CS Pilot Projects sub-program). The IPA proposed in the Long-Term Plan that the utility funding would be allocated to the three non-competitive sub-programs with the same relative weighting as the RERF funding.

- Additional Utility Funding: Potential additional funds from the utilities' renewable resources budgets may be available.

Initial Implementation Experience

The IPA and Elevate Energy had a short period of time to develop and finalize the numerous complicated aspects of the ILSFA Program design and begin implementation with vendor registration followed by project application. The IPA and Elevate worked collaboratively on the development process. Challenges resulted from a need to mirror aspects of the ABP which was being developed only slightly ahead of the ILSFA Program; the time needed for stakeholder review, comments, and modifications in response to those comments; and the aggressive target implementation dates. Despite these challenges, the ILSFA Program was launched close to the initial targeted date.

Table ES-1
Key ILSFA Program Implementation Dates

Date	Milestone
12/7/2016	Future Energy Jobs Act Legislation Enacted
6/1/2017	Future Energy Jobs Act Effective Date
9/29/2017	Draft Long-Term Renewable Resources Procurement Plan Published
12/4/2017	Long-Term Renewable Resources Procurement Plan Filed with Illinois Commerce Commission
4/3/2018	Long-Term Renewable Resources Procurement Plan Approved by Illinois Commerce Commission
9/14/2018	ILSFA Program Administrator, Elevate Energy Selected
11/1/2018	ILSFA Website Launch
1/17/2019	Environmental Justice Communities List Published
2/19/19	Approved Vendor Registration Launched

Date	Milestone
5/6/2019	Environmental Justice Community Self-Designation Application Opened
5/15/2019	Approved Vendor Portal Opened for Project Submissions, Standard REC Contract Published
6/13/19	Low-Income Community Solar Submission Window Closed
6/28/19	Low-Income Distributed Generation and Non-Profit / Public Facilities Submission Window Closed
6/27/2019	Grassroots Educators Announced
8/7/2019	ILSFA Program Evaluator, APPRISE, Selected
8/15/2019	Draft Revised Long-Term Renewable Resources Procurement Plan Released for Public Comment
8/22/2019	Non-Profit / Public Facilities Projects Selected for 2018/2019
8/29/2019	Low-Income Community Solar Projects Selected for 2018/2019
9/4/2019	2019/2020 Project Submission Window Opened
9/17/2019	2019/2020 Project Submission Window Closed
10/2/2019	Illinois Commerce Commission Approved 2018/2019 Project Selections
10/21/2019	Revised Long-Term Renewable Resources Procurement Plan Filed for Illinois Commerce Commission Approval
11/7/2019	2019/2020 Final Project Selections Announcement

Because the ILSFA Program was launched so soon after the ABP, the IPA and Elevate Energy did not have time to understand the barriers and challenges to participation by low-income households in the ABP. Therefore, the ILSFA Program could not be specifically designed to address those challenges. As noted by the IPA, they were working to design a program that addressed participation barriers for certain population segments, before fully understanding what those barriers were.

Another challenge was that the program administrator could only be contracted following approval of the Long-Term Plan. However, it would have been beneficial to have Elevate Energy involved in the development of the Long-Term Plan, to both provide feedback to the IPA and to allow Elevate more time to internalize the Long-Term Plan before beginning program implementation.

Approved Vendors

The AV registration process was opened on February 19, 2019.

- 27 vendors have been approved and one was withdrawn.[1]
- 3 of the 27 AVs are qualified as Minority or Women-Owned Businesses (MWBE).

Initial Project Submissions

The first round of project selections for the 2018-2019 program year was finalized in late August 2019 and contracts were approved by the ICC in early October 2019. The following projects were submitted and selected. Note that these data represent the initial information included in the project submissions and some project characteristics were revised after that time.[2]

[1] Vendor data as of September 17, 2019.
[2] Project data as of August 16, 2019.

- Non-Profit / Public Facility Projects: 28 projects were submitted, 12 were found eligible, and seven were selected.
  - 4 of the selected projects were non-profits and three were public facilities.
  - 6 of the projects will be funded through the RERF.
  - 4 of the selected projects were Power Purchase Agreements (PPAs), 3 were leases, and none were purchases.
  - 2 of the selected projects had a 15-year term of savings, and 5 had a 25-year term.

- Low-Income Community Solar Projects: 45 projects were submitted, 31 were found eligible, and five were selected. Eight CS projects were deemed ineligible because there was no signed interconnection agreement.
  - 3 of the CS projects had a public facility as an anchor, and 2 did not have an anchor.
  - 4 CS projects will be funded through the RERF.

- Low-Income Distributed Generation Projects: One project was submitted, but it was withdrawn. The IPA and Elevate believe that this does not reflect issues with the sub-program design, but rather the need for AVs to have more time to fully understand the sub-program and its requirements.

Other key characteristics of the selected projects were as follows.

- Approved Vendors: Five different AVs had selected projects. Solar Sense had five selected projects and Novel Energy Solutions had three selected projects. Three other AVs had one or two selected projects.
- Utility Service Territory: Nine projects in Ameren's territory and three in ComEd's territory were selected.
- Location: The selected projects are located in eight different cities, but none are located in Chicago.
- EJ Communities
  - 5 of the selected NP/PF projects were located in EJ communities.
  - 1 of the selected CS projects was located in an EJ community.
- Low-Income Census Tracts
  - All of the selected NP/PF projects were located in low-income census tracts.
  - 3 of the selected CS projects were located in low-income census tracts.
- Minority and Woman-Owned Businesses: None of the selected projects were submitted by MWBEs.

Project size and production statistics were as follows.

- Projected project size for the selected projects.
  - The mean size for the NP/PF buildings was 186 AC kW.
  - The mean size for CS projects was 1,181 AC kW. While two projects were less than 50 AC kW, one was 1,850 AC kW, and two were 2,000 AC kW. [Note: One of these that was originally 2,000 AC kW was later reduced to 187.5 AC kW.]

There is some concern that many of the CS projects are large in size and not truly community-driven. This relates to the project economics and the fact that developers are looking for economies of scale in project implementation.

- REC value for selected projects.
  - The NP/PF projects averaged about $390,000 in REC value.
  - The CS projects averaged about $3.45 million in REC value.
  - 68 percent of the REC value for NP/PF projects were in EJ communities.
  - 34 percent of the REC value for CS projects were in EJ communities.
  - Almost all of the REC value was in low-income census tracts.

- The total percentage savings (as a fraction of total energy value generated) for the customer over the term of the agreement averaged 76 percent for the selected NP/PF projects, greater than the required 50 percent.

2019/2020 Project Application and Selection

The IPA and Elevate Energy made the decision to start the second program year shortly after the selection of the first projects was finalized to take advantage of tax credits and the pent-up demand for CS, and to make sure that projects that were waiting had access to funding. Due to this decision, Elevate Energy did not have much time to process what was learned and translate the information into program and systems revisions. The 2019/2020 project application window opened on September 4, 2019 and closed on September 17, 2019.

The following projects were submitted.

- Low-Income Distributed Generation Projects: There were 11 project submissions, totaling 2,064 kW AC in system capacity and $4.2 million in incentive value.
- Low-Income Community Solar Projects: There were 30 project submissions, totaling 54,511 kW AC in system capacity and $148.8 million in incentive value.
- Non-Profit/Public Facility Projects: There were 20 project submissions, totaling 2,675 kW AC in system capacity and $6.1 million in incentive value.

Based on these submissions, project selection will only be necessary for the Low-Income CS sub-program.

Stakeholder Outreach Design and Feedback

Stakeholder outreach is an important component of the ILSFA Program. The IPA and Elevate Energy have provided extensive opportunities for stakeholder participation and feedback through invitations for comments on materials posted on the ILSFA Program website, public presentations, and posting feedback and responses on the ILSFA Program website.

Interviews with 16 ILSFA Program stakeholders provided important information about their views on the stakeholder feedback process, the ILSFA Program design, and initial program implementation. Key findings and recommendations based on those findings are presented below.

- *Stakeholder Outreach:* The most common way that stakeholders learned about opportunities to provide feedback on the ILSFA Program was through email updates.
  - 11 of 16 interviewed stakeholders felt that there was sufficient outreach for stakeholder feedback provided by the ILSFA Program.

  Stakeholders provided the following comments when asked what other actions the program could have taken to solicit additional stakeholder feedback and participation.
  - Hold meetings in EJ communities.
  - Reading materials were difficult.
  - Announce changes after meetings. [Note: Elevate Energy publishes a document that responds to stakeholder comments and provides proposed program changes.]
  - Hold more meetings in Southern Illinois.
  - Reach out to communities without projects (in future stakeholder outreach).
  - Conduct more surveys.
  - More outreach to industry stakeholders.

- *Stakeholder Engagement:* Most of the 16 stakeholders who were interviewed reported that they participated in or provided feedback during the ILSFA Program development process. Nearly all stakeholders attended presentations made by the IPA or Elevate Energy on particular aspects of the program. Most also reviewed online information and provided written comments.
  - 15 attended ILSFA Program presentations.
  - 14 reviewed online content.
  - 14 provided written comments.

  Fourteen of the 16 interviewed stakeholders stated that they would continue to provide feedback as the ILSFA Program evolves.

  Stakeholders were asked about their views on the level of stakeholder participation.
  - 8 stated there was sufficient participation.
  - 10 felt that the ILSFA Program was open to ideas and feedback from stakeholders.
  - 12 felt that the ILSFA Program responded appropriately to stakeholder comments.

  Stakeholders who did not say that there was sufficient participation in the ILSFA Program development suggested that feedback was limited in the following ways.
  - The need for access to the ILSFA Program website may have prevented some in low-income communities from participating.
  - Participation was limited to individuals who were "self-selecting", that is, already working in the renewable energy space.
  - A few respondents felt that certain groups were not well-represented in the stakeholder feedback, including non-profits focused on low-income issues, African Americans, and businesses located outside of Chicago or located in EJ communities.
  - Some stakeholders felt that their own participation may have been limited by the response timeline, which in some cases was reported to be as short as five days.

Stakeholders provided positive feedback about the online postings of the comments that were received. A few stakeholders noted that the IPA's response was better than what they have previously observed with other state agencies.

While three-quarters of the interviewed stakeholders felt that their ideas were heard and taken into account, a majority felt that that they had an impact on the development of the ILSFA Program and that stakeholder comments were integrated into the program.

- 12 stated that their ideas were heard and taken into account.
- 9 felt they had an impact on the development of the ILSFA Program.
- 10 said they felt the program incorporated stakeholder comments where feasible and beneficial.

Eleven of the 16 interviewed stakeholders felt that there were barriers to participating in the ILSFA Program development process. The following barriers to participation were noted by stakeholders.

- Pace of the program/rapid development cycle.
- Limited timeline for comments.
- Limited staff resources to respond.
- Information only provided in English.
- Overlapped with ABP submission dates.
- Other non-solar projects competing for staff's attention.
- Distance/ability to come to Chicago for meetings.
- Complexity of information/too difficult to understand.
- Concerns about consumer confidentiality.
- Technological barriers (poor audio, streaming quality).

- *Incentives and Eligibility:* Most stakeholders reported that the ILSFA Program's incentive structure is appropriate and that low-income eligibility requirements appear to be fair and appropriate.

- *Low-Income Distributed Generation:* Of the four sub-programs, stakeholders expressed the greatest concern and skepticism about the Low-Income DG design. Concerns focused on whether consumers have been adequately prepared, how they will respond, and whether the business model, where vendors must cover upfront installation costs prior to receiving REC payments, will actually work. [Note that the timing of payments for RECs is dictated by statute, while the provisions for not having upfront costs for the participants was defined in the Long-Term Plan.]
  Specific concerns about the complexity of the program or materials were as follows.
  - The complexity of the program will make it difficult for consumers and businesses to understand how it works.
  - The complexity may serve as a barrier to participation by small businesses of color and individuals living in EJ communities.
  - The disclosure language may be too difficult for low-income consumers to understand.

Concerns about customer knowledge and skepticism were as follows.

- Consumers will need reassurances due to past experience with unscrupulous alternative energy suppliers in Illinois.
- Consumers have limited knowledge about the benefits of solar energy to support vendors' sales processes since market education has been limited.

Concerns about the ILSFA Program requirements and process were as follows.

- It might be better for Elevate Energy to collect and process income information for private home owners.
- A seven-day waiting period on contracts may be confusing to some consumers and inefficient for vendors.
- Whether the 50 percent consumer savings requirement is realistic.
- It is difficult for consumers to wait months to determine whether they will receive funding, and they may need to move on with other energy solutions.

Concerns about AV's financial investments were as follows.

- It is difficult for small businesses to participate given that they must finance installations upfront.
- Concern about the RECs payment timeline (six to eight months expected).

Other comments were as follows.

- There will be need for more assistance from job training programs moving forward.
- Concerns about handling confidential consumer income information.
- There is a need to balance funding between large and small projects, i.e. apartment buildings may take up a lot of the funding and not leave enough for single-family home installations.

- *Low-Income Community Solar:* While most stakeholders supported the definition of EJ communities and the 25 percent minimum allocation, some felt that the IPA must work to further resolve project application and selection issues. Comments were as follows.
  - There is a need for greater subjectivity in the scoring process, as well as greater gradation in scales. Since it is more expensive to build and develop in Chicago, costs will be higher there and the Chicago projects should not be disqualified.
  - There may still be some confusion about how and when to submit projects.
  - There is a limited ability to direct incentives geographically, which could result in some areas (e.g. Cook County) being left out.
  - Few projects will be funded.

- *Non-Profit / Public Facilities:* Most stakeholders felt that helping NP/PF access solar energy has the potential to reduce energy costs and support their work. Some stakeholders supported an expansion of funding and extending participation to more public facilities. Stakeholder comments were as follows.
  - Funding for NP/PF should be larger relative to the other three sub-programs.
  - There is a need to review and expand the list of qualified entities, such as including libraries, on the list of qualified public facilities. [Note that libraries were added to the list of Critical Service Providers included in the Approved Vendor Manual.]
  - The ILSFA Program should allow select NP/PF that serve individuals in EJ communities to participate, even if their physical location is just outside of the census block (e.g. across the street).

- *Low-Income Community Solar Pilot Projects:* Because this sub-program is still in the development stage, stakeholders had limited feedback in this area. The concerns were as follows.
  - The project evaluation should be less focused on price and more focused on testing different, more innovative approaches and applications, which is more consistent with the law.
  - There is a need to more subjectively evaluate projects based upon additional criteria, such as whether a project that is not the lowest cost now, could potentially deliver lower cost in the future through reduced energy infrastructure cost or lower energy delivery cost.

- *Environmental Justice Communities:* The majority of stakeholders felt that the EJ community definition and funding allocation are appropriate. Some spoke positively about the EJ look-up tool on the ILSFA Program website.

- *Consumer Protections*: Vendors often indicated that the balance between consumer protection and business operation is not currently appropriate. Some felt that the program has penalized all vendors (in the project requirements), rather than monitoring for non-compliance.

- *Vendor Requirements:* In most cases, stakeholders did not have comments on vendor requirements unless they were an AV, prospective vendor, installer, or consultant.

  Specific comments about marketing materials were as follows.
  - It is unnecessary to have all AV marketing materials approved, especially given that digital and social media communications are immediate.
  - The AV did not agree with Elevate Energy's revisions to their marketing materials.

  Comments about the customer experience were as follows.
  - Certain vendor requirements may negatively affect the consumer's experience. Some suggest that it should be easier for consumers; "If you want solar, just sign up."
  - It may be difficult for consumers to fill out disclosure materials on ILSFA's website.

Other concerns were as follows.

- There was confusion about why ABP vendors are not automatically qualified for the ILSFA Program.
- Structural engineering requirements should apply after a project is approved, not before given the cost and degree of investment required to have plans reviewed and stamped.
- It may be challenging to hire job trainees if they cannot connect with job training programs.
- There is a need to look at the allocation of risk (no upfront funding) between companies and the State, as this may work for large companies but not for small companies. It may benefit larger companies working across multiple states, rather than small businesses in IL.

- *Grassroots Education:* Stakeholders' perspectives on Grassroots Education varied from a high level of support to a lack of awareness about the initiative.
  - Some stakeholders questioned what Grassroots Educators will do, believing that much of the education process will fall on developers and vendors.
  - A few stakeholders indicated that there needs to be greater outreach from the ILSFA Program to Grassroots Educators who reside in communities of color and serve IL residents who do not speak English.
  - Some vendors indicated that they would like Grassroots Educators to contact their companies and help to prepare low-income consumers for their sales efforts.

- *Program Materials:* Most stakeholders felt that the IPA and Elevate Energy are developing and improving effective program materials. However, some stakeholders made recommendations for additional improvements.
  - There needs to be an overall program brochure.
  - Efforts need to be placed on improving the usability and organization of the website.
  - Program materials need to be, at a minimum, offered in English, Spanish, Polish, Mandarin, and Hindi.
  - There is a need to develop and refine an FAQ list.
  - There is a need to develop a vendor referral program.
  - All materials need to be written at an eighth grade level and tested to ensure that low-income consumers understand them.

- *ILSFA Evaluation:* Many stakeholders did not have comments on the evaluation. The ILSFA Working Group members were more likely to comment on this topic.
  - The ILSFA Program must be evaluated on the level of participation, barriers to participation, and how well the program serves those who face life challenges.
  - The evaluation needs to be staged so that the program has had adequate opportunity to succeed.
  - One evaluation metric that was recommended is awareness and perception of solar energy use.
  - It is important to measure participants' satisfaction with the installation experience and with the savings.

- The evaluation should examine the demographic and geographic profile of those who benefit from the ILSFA Program to ensure an equitable distribution of funding.
- There should be an evaluation of the extent to which jobs are created in existing IL companies, not just in companies coming into IL, and whether the jobs created in EJ communities result in short- or long-term employment.
- It is important to understand whether small, minority, and women-owned firms receive IL prime and subcontracts through the ILSFA Program.

Grassroots Education Design and Feedback

FEJA recognized the challenge of reaching low-income and EJ communities, and included a provision that the IPA should ensure collaboration with community agencies and allocate up to five percent of the funds available under the ILSFA Program to community-based groups to assist in Grassroots Education. The first round of 11 Grassroots Educators were selected in June 2019 following an RFP process.

The goal of Grassroots Education is to ensure that the benefits of and opportunities provided by the ILSFA Program reach low-income households and communities throughout IL. APPRISE conducted in-depth telephone interviews with the 11 Grassroots Educators. This section provides a summary of findings from those interviews.

- *Selected Grassroots Organizations:* The 11 selected Grassroots Organizations vary significantly in structure, presence, services, location, population served, and expertise.
  - 7 organizations serve specific communities, cities, or neighborhoods; and 4 organizations have a statewide or multi-county presence.
  - 7 organizations focus on education and advocacy, while the other 4 organizations directly provide services to the low-income community.
  - 10 organizations previously conducted outreach campaigns similar to their planned ILSFA Program campaigns.
  - 6 organizations have experience with energy-related outreach campaigns.
  - 4 organizations have experience with job training program outreach.

- *Target Populations:* The areas served by Grassroots Educators ranged from specific neighborhoods within Chicago to larger regions throughout the state. The priority groups for the Grassroots Educators were as follows.
  - Low-income populations (5 organizations)
  - Environmental Justice communities (3 organizations)
  - Households with children under six (2 organizations)
  - Resident associations (2 organizations)
  - Elderly and disabled populations (1 organization)
  - Job seekers who are marginalized in the labor market (1 organization)
  - Any individual who qualifies for the ILSFA Program (1 organization)

- *Outreach Plans and Implementation:* Grassroots Educators are using a variety of outreach methods in their campaigns. All Grassroots Educators are organizing community events and meetings, including workshops, presentations, and open houses. They are also partnering with other community organizations, leaders, and stakeholders to conduct their campaigns.

  Four of the interviewees described one or more of their outreach methods as innovative.
  - A peer-to-peer approach, in which ambassadors from the community conduct canvassing.
  - A method of "train the trainer" which focused on training other CBOs so that they can increase awareness of the program.
  - The development of videos summarizing the content of the organization's community presentations and responding to frequently asked questions.
  - The presence of the organization through outreach offices in every county it serves.

- *Campaign Areas of Focus:* The most common areas of focus for the outreach campaigns were participant benefits, community engagement, hard-to-reach communities, effective engagement strategies and tactics, and general energy and solar education.

  Grassroots Educators communicate similar key messages in their outreach campaigns.
  - 10 emphasize the cost savings for ILSFA participants.
  - 6 convey the message that solar energy is accessible to low-income households as a result of the ILSFA Program.
  - 3 educate around the basics of solar energy and what the program will mean for their utility bills.
  - 1 emphasizes the job opportunities that the clean energy industry provides.

- *Information Accessibility:* Selected organizations make the information accessible to the groups they are targeting by simplifying it, abbreviating it, and relating to the audience's personal experiences.
  - All provide background information on solar energy and simplify and abbreviate the available information.
  - 3 provide translations of their outreach materials and presentations in Spanish.
  - 2 tailor their message to specific audiences at each event.
  - 2 relate their presentations to customers' personal experiences and issues they are familiar with.

- *Outreach Conducted to Date:* Grassroots Educators are at various stages of implementation.
  - 6 began their outreach in July.
  - 2 began in August.
  - 3 are starting their outreach campaigns in September.

  In general, interviewees have found a low level of awareness and a high level of interest in the ILSFA Program.

- While some outreach recipients were familiar with the basics of solar energy, they were not aware of the ILSFA Program.
- 3 organizations reported that some outreach recipients are skeptical about the program's benefits.
- 3 described the response to the outreach as positive.
- 2 found that their communities were confused about the differences between the ILSFA Program and other solar programs.
- 1 reported a lack of interest and low overall engagement with the outreach campaign.

Ten Grassroots Educators felt that they have been successful in reaching their target population to date.

- *Metrics:* Grassroots Educators are using similar metrics to measure the success of their outreach campaigns.
  - All will track quantitative indicators including event attendance and interest in program participation.
  - 4 are gathering qualitative feedback through follow-up surveys after outreach events. These surveys measure knowledge about and interest in the ILSFA Program.
  - 3 are tracking demographic information on outreach recipients, such as whether they are from EJ communities.

- *Approved Vendors:* Most Grassroots Educators reported that there is limited availability of AVs in their communities.
  - 8 believe that the number of AVs is not adequate to meet the needs of their communities.
  - All 11 hope to connect their communities to AVs.

- *Barriers to ILSFA Participation:* Grassroots Educators discussed many potential barriers to ILSFA Program participation.
  - 4 noted deferred maintenance issues and lack of solar readiness. To overcome this barrier, three organizations reported that they would refer customers to other programs or agencies. However, they noted that these programs would not cover the full cost of roof replacement or repair.

  - 4 organizations have found that their customers are skeptical of the ILSFA Program. The customers do not believe that the program has no upfront costs, or that they will actually benefit from participation.
    - 1 organization suggested using participants' testimonials to overcome skepticism.
    - 1 organization said that patience and persistence in delivering information and demonstrating successful ILSFA projects will help to overcome these barriers.

  - 3 organizations have seen a lack of basic energy and solar understanding. They would like to involve AVs and Elevate Energy staff in their education efforts.

- 2 organizations reported a lack of AVs in their service area and low interest among AVs to install rooftop solar in low-income communities.

- 2 organizations stated that the lack of available opportunities because the ILSFA Program is still in its early stages, there are not many established CS programs, and there are not many AVs who are prepared to begin installation work.

- 2 organizations found that other solar installation programs confuse potential participants.

- 1 organization reported that they want their customers to understand that there are costs associated with the program, such as the cost of obtaining additional insurance, and that customers should only participate if the benefit of participation is greater than the cost.

- 1 organization stated that the time and personnel required to research, apply to, and participate in the program would be a barrier to participation for NP/PF.

- 1 organization found in previous programs that vendor contracts were often difficult for their customers to interpret.

- 1 organization believed that because tenants often pay their own utility bills in multifamily buildings, building owners have little incentive to participate in the program. As a result, these tenants cannot participate in the DG sub-program.

- 1 organization noted the entry requirements for job training opportunities including a background check, a drug test, a driver's license, and the purchase of certain toolkits. Many lower-income households cannot meet these requirements due to criminal records or a lack of funds for a driver's license or to purchase tools.

- 1 organization noted that job training sites have traditionally been located far from their community. They suggested providing "wraparound services", such as transportation assistance and childcare support, for job trainees, so they can more easily participate in the program.

- *Outreach Materials:* All 11 organizations reported that they had developed or would be developing outreach materials for their campaign. They also reported that some or all of their outreach materials would be modified versions of the materials provided by Elevate Energy. Common outreach materials include flyers, which are being developed by seven organizations, and PowerPoint presentations, which are being developed by four organizations.

- *ILSFA Feedback:* Some Grassroots Organizations participated in the stakeholder feedback process.
  - 5 participated.
  - 4 were not familiar with the process or were unsure whether they participated.
  - 2 did not participate.

  They provided the following feedback about the process.
  - The 5 participating organizations felt that stakeholder feedback was appropriately incorporated into the program.
  - 4 of the organizations who participated described the information provided as confusing and/or overwhelming.
  - 2 of the organizations who participated believed the process was helpful.
  - 1 organization who did not participate in the program felt that the ILSFA Program should have sent direct invitations to agencies to participate.

  Most respondents described the materials provided by the ILSFA Program as helpful but lengthy or overly complicated. All modified the materials to make them accessible to their target audiences. However, many respondents found the ILSFA Program materials to be useful in helping organization staff understand the program.

  Respondents had positive feedback about Grassroots Education and the ILSFA Program overall. Educators appreciated the opportunity to participate in this effort and generally felt adequately supported by Elevate Energy. Two respondents noted that the two-day Grassroots Educators' training was very helpful.

- *Grassroots Education Recommendation:* Six of the Grassroots Educators provided recommendations about Grassroots Education.
  - 2 recommended improving the contracting and invoicing process.
  - 1 recommended re-examining the timing because it would be beneficial to have more specific information available when conducting the outreach, such as job training program availability, locations, and requirements.
  - 1 organization felt that the required Grassroots Educator reporting is cumbersome. This organization stated that it would be helpful for Educators to know what metrics and data are required in advance of their outreach.
  - 1 organization recommended less technical, lower-level reading materials for potential program participants.
  - 1 organization would like to see more AVs doing rooftop solar.
  - 1 organization would be interested in an in-person meeting with all Grassroots Educators after several months of outreach, but before the end of the program. This would allow the Educators to share successful outreach strategies, exchange advice, and collaborate to create new outreach methods.

- *ILSFA Program Recommendations:* Four of the Grassroots Educators provided recommendations for the ILSFA Program more generally.
  - 2 recommended increased vendor involvement in program application. They wanted the ILSFA Program to consider creating a list of interested households that AVs could use to conduct outreach.
  - 1 wanted program administrators to be more transparent with Grassroots Educators about the status of the ILSFA Program implementation. This includes clearly identifying areas in which more specific information is not presently available.
  - 1 would like for the ILSFA Program to provide a calendar that lists all program deadlines so that this information can be clearly communicated to potential participants.
  - 1 suggested that Elevate Energy provide case managers who could answer participants' questions about the installation process and AV contracts.
  - 1 stated that Grassroots Educators cannot make specific promises or give individuals estimates of their savings from participation. They believe it is important for the program to deliver on promised benefits given the pre-existing levels of mistrust in the served communities.
  - 1 was interested in obtaining more information on other states' progress and in success stories from their low-income participants. Ideally, past participants could speak at meetings and explain the participation process to those who are interested. Successful graduates of the job training programs are an underutilized resource for outreach and could also assist in the outreach process.

Key Findings and Recommendations

The focus of the Phase I Evaluation was to provide initial feedback and recommendations to the IPA for use in updating the Long-Term Plan. This research focused on the stakeholder outreach process, development of program materials and guidelines, initial AV registration, initial project applications, and the development of Grassroots Education.

Key Findings

The key findings from the Phase I Evaluation are summarized below.

- *Program Implementation*: Despite extensive challenges related to an aggressive implementation timeline with a need to coordinate processes with the ABP and incorporate time for extensive stakeholder review and input, the ILSFA Program was launched close to the initial target date. AV registration launched in February 2019, initial projects were selected in August 2019, and the second project application window was conducted in September 2019.

- *Low-Income Solar Challenges*: The ILSFA Program was launched very soon after the ABP launch, so the IPA and Elevate Energy did not have time to fully understand the barriers and challenges to participation by low-income households in the ABP. Therefore, the ILSFA Program could not be specifically designed to address those challenges. As a result, refinements to the ILSFA Program may be needed after more experience with solar in IL and the challenges in the ABP and the ILSFA Program are more fully understood.

- *Approved Vendor Registration*: The AV registration process was successful in many respects. There are 27 AVs, and three are qualified as MWBEs.

  It is yet to be determined if there are enough AVs around the state that will participate in the DG sub-program. Additionally, there is a concern that more MWBEs and small businesses should participate in the ILSFA Program.

- *Initial Project Submissions*: The first round of project submissions for the Low-Income CS and the NP/PF sub-programs was successful. Due to the number of applications which exceeded available funding, the project selection protocol was used for the Low-Income Community Solar sub-program. Seven NP/PF projects were found eligible and recommended for funding and five CS projects were selected using the project selection protocol. However, only one DG project was submitted (and was later withdrawn), so there were no selected DG projects.

  The initial selected projects successfully reached EJ and low-income communities.
  - 68 percent of the REC value for NP/PF projects were in EJ communities.
  - 34 percent of the REC value for CS projects were in EJ communities.
  - Almost all of the REC value was in low-income census tracts.

  Questions and concerns about the DG sub-program design include the following.
  - Will AVs submit DG projects under the existing sub-program design, or do the current requirements and other existing challenges pose too great a barrier?
  - What sub-program design changes may be needed to further encourage participation in the DG sub-program?

  There are also potential questions and concerns about the other sub-programs.
  - What types of NP/PF should be eligible for ILSFA Program funding?
  - Should there be a greater focus on smaller CS projects that are more tied to local communities and/or organizations? If yes, what additional sub-program requirements would best fulfill those goals?

  Other questions and concerns include the following.
  - Should there be additional consideration for projects in areas where it is more expensive to build, such as Chicago?
  - Should any adjustments be made to recognize locations just outside a census block that is designated to be part of an EJ community?
  - Are any additional protections needed to ensure the long-term productivity of solar installations, given that the 15 years of RECs are paid up front?
  - The ILSFA Program design works for some vendors, as evidenced by the oversubscribed NP/PF and CS sub-programs, but do smaller vendors need financial assistance, such as advance funding, to participate?

- *Stakeholder Input*: The ILSFA Program succeeded in obtaining participation and feedback from a variety of groups representing ILSFA Program stakeholders. While the interviewed stakeholders, who by definition participated in the process, felt there was sufficient opportunity for participation, there may be additions and modifications that the ILSFA Program can make to the process to generate greater and more diverse participation and feedback.

- *Grassroots Education*: The initial round of selections was successful, resulting in 11 Grassroots Educators that provide various types of outreach around the state. The 11 selected Grassroots Educators vary significantly in structure, presence, services, location, population served, and expertise.

Recommendations

Recommendations from the Phase I Evaluation are summarized below.

- *ILSFA Program Design*: Consider the ILSFA Program design a work in progress. Develop a comprehensive understanding of what is permitted to be changed without modifications to FEJA or the Long-Term Plan, and what changes require legislative or Long-Term Plan modifications. Be open to changes that are seen to be needed as the program evolves and additional data and information become available.

- *ILSFA Program Materials and Website*: Many stakeholders and Grassroots Educators commented that the ILSFA Program materials are too complex and the website needs to be streamlined and organized.
  - *Complexity of Program Information*: ILSFA is a complex program and some of the materials, particularly those that provide guidelines and instructions to AVs, must be complex due to the nature of the information that is presented. However, materials that are designed for public consumption should be reviewed for reading level and usability. Both stakeholders and Grassroots Educators indicated an issue with the complexity of the program materials, which can prevent participation in the stakeholder feedback process and participation in the program. A particular item that was mentioned was the customer disclosure. All customer-focused materials should be reviewed and tested with potential audiences to ensure that they are accessible to the target audiences. All of the Grassroots Educators are developing modified versions of the ILSFA Program materials, translated into language that is more accessible for low-income communities. Elevate Energy could use these materials as a guide for developing more customer-friendly versions of the ILSFA Program customer information.

  - *Testimonials*: Consider the use of participant testimonials in the ILSFA Program materials, website, and presentation. These testimonials could initially be from low-income solar program participants from other states, and later come from IL after there are ILSFA participants who can speak for the program. Grid Alternatives, one of Elevate Energy's partners, may have participants from other states who are willing to provide such testimonials. As noted by Grassroots Educators, information coming directly from low-income participants is likely to be most compelling and

most likely to help potential participants overcome their skepticism and fears. Successful graduates of job training program from the low-income community are also likely to be good spokespeople for the ILSFA Program.

- *ILSFA Website*: The website contains a wealth of information and resources, but it needs to be re-organized with summary information to make it easier for individuals to navigate and find the specific information they need. Stakeholders commented on the need to better organize the website. Some of the summary information that would be useful for various audiences are as follows.
  - AV Participation Instructions: Summary of the steps that an AV must take to participate in the ILSFA Program with links to related materials for each step.
  - AV Requirements: Summary of the requirements for an AV to participate in the ILSFA Program.
  - Participant Opportunities: Summary of how low-income households can participate in the program.
  - Schedule and Deadlines: Summary of upcoming ILSFA Program events and deadlines for various audiences such as local organizations, AVs, and potential low-income participants.

- *Stakeholder Outreach*: Several recommendations are made to increase the amount and diversity of participation in the stakeholder outreach process based on feedback from stakeholders and Grassroots Educators. A majority of the interviewed stakeholders felt that there were barriers to participation in the feedback process. Some stakeholders felt that certain groups were not well-represented in the stakeholder feedback, including non-profits focused on low-income issues, African Americans, and businesses located outside of Chicago or located in EJ communities.
  - *Response Time*: Stakeholders felt that their response was limited by the amount of time provided for response to program guidelines. If possible, provide greater time for stakeholders to review and digest program information prior to comment deadlines.

  - *ILSFA Working Group*: While the ILSFA Working Group has provided valuable feedback on many aspects of the ILSFA Program, it could be useful to understand the diversity of opinions among members of the group. Encourage members to submit additional information and feedback.

  - *Additional Proactive Outreach to Organizations*: Develop a list of organizations around the state that are considered key stakeholders for the ILSFA Program. These include Community Action Agencies (CAAs), solar and energy vendors, sustainability organizations, neighborhood organizations, and advocacy groups that work on low-income issues, EJ issues, sustainability, renewable energy, energy efficiency, and utility issues. Email and mail information to these groups and invite them to sign up for ILSFA Program email updates. A Grassroots Educator suggested that the ILSFA Program send invitations to community organizations, and

a stakeholder recommended that the ILSFA Program reach out to communities without projects (in future stakeholder outreach).

- *Non Web-Based Opportunities*: Provide forms of outreach outside of emails and ILSFA Program website announcements. Stakeholders suggested that the need to access the ILSFA Program website may have prevented some in low-income communities from participating. Provide flyers to CAAs, Grassroots Educators, and other groups who work with low-income households and EJ communities before each presentation that provide a brief description of the topic and invite them to attend the presentation.

- *Geographic Diversity*: Make it easier for individuals and organizations outside of Chicago to participate by holding additional presentations in other areas of the state. Stakeholders suggested that such meetings in other areas of the state and in EJ communities were needed. Grassroots Educators could be trained to use the ILSFA-developed PowerPoint Presentations to provide information in other parts of the state.

- *Language Diversity*: Create additional presentations in Spanish and other common languages and make these presentations in areas of the state where these other languages are most commonly spoken. Stakeholders commented that the lack of materials in additional languages was a barrier to stakeholder feedback. (The American Community Survey provides information on the prevalence of non-English languages and can be used to assess additional languages for translation.)

- *ILSFA Website Information*: Stakeholders provided positive feedback about the posting of comments and responses on the ILSFA Program website. Continue this process as the ILSFA Program moves forward.

- *Approved Vendors*: Consider additional outreach and/or support to encourage AV participation in all areas of the state, by MWBE, and by new and smaller businesses. Also consider changes to project selection procedures. None of the selected projects were submitted by MWBE. Both stakeholders and the program administrator expressed a potential need to reach out to these firms. Grassroots Educators were concerned that there is limited availability of AVs in their communities, and limited interest in installing rooftop solar in lower-income communities.
  - *Project Selection*: Consider including vendor diversity as an additional point area in the project diversity scoring. The first round of projects selected included five different AVs among the 12 selected projects. This was out of the total of 11 AVs that submitted CS projects and 7 that submitted NP/PF projects. One AV had five selected projects, one had three selected projects, one had two selected projects, and two had one selected project each. It may be beneficial to have a greater number of AVs represented in the selected projects.

- *Outreach and Coaching*: Develop a list of solar vendors and renewable energy organizations in the state, including those who participate in the ABP. Provide outreach and education about the ILSFA Program and encourage these vendors to participate. Stakeholders suggested that there was a need for more outreach to industry stakeholders.

- *Feedback*: Conduct focus groups and/or workshops with potential vendors to understand what support they need to participate in the ILSFA Program.

- *Financial Support*: Stakeholders questioned whether the business model, where vendors must cover upfront installation costs prior to receiving REC payments which occurs many months later, will actually work. [Note that the timing of payments for RECs is dictated by statute, while the provisions for not having upfront costs for the participants was defined in the Long-Term Plan.] Consider providing financing or other support to assist smaller businesses. This support could come with a requirement to provide DG installations in underserved areas of the state.

- *Grassroots Education*: In general, the Grassroots Educators have found a low level of awareness, a high level of interest, and skepticism about the ILSFA Program. They stated that customers have a low level of understanding of energy and solar energy. Potential participants do not believe that the program has no upfront costs, or that they will actually benefit from participation. Additionally, the organizations found confusion between the ILSFA Program and other solar programs. This indicates the importance of the Grassroots Education initiative, which should be continued and expanded.

- *Participant Screening*: Many low-income customers who are interested in participating in the ILSFA Program may have a roof that is not in the required condition for rooftop solar to be installed or other home issues that prevent participation. Grassroots Educators noted deferred maintenance issues and lack of solar readiness as a barrier. Some reported that they would refer customers to other programs or agencies to overcome these barriers. However, they noted that these programs would not cover the full cost of roof replacement or repair.
  - *Screening by Energy Efficiency Program Contractors*: Customers who participate in Ameren's and ComEd's income-qualified energy efficiency programs are good targets for the DG sub-program because their homes have already had energy efficiency improvements and these customers have shown willingness to participate in public programs. The ILSFA Program could work with Ameren and ComEd energy efficiency program implementers to train auditors to assess rooftops for solar, and assess homes for other potential barriers to solar, when they conduct the audit. The energy efficiency auditors could conduct a preliminary screening to determine whether there are significant issues that would prevent rooftop solar installation. Alternatively, the utilities could train efficiency staff to do a comprehensive solar assessment. The utility energy efficiency implementers could then develop a list of screened, solar-ready homes to provide to the program administrator. This screened

list would be valuable because it would reduce the percentage of homes that were deemed ineligible for solar due to structural, orientation, shading, or other issues.

- *Data Sharing with Energy Efficiency Programs*: If the energy efficiency program implementers are not willing to provide this assessment, they could ask customers if they are potentially interested in ILSFA Program participation, and if they have information on the age of their roof. The energy efficiency implementers could request customer permission to share the customer's contact information (and roof information) with the program administrator. The program administrator could then use Google Project Sunroof to assess whether the home has appropriate sun exposure and enough space for solar installation.

- *Working with Job Trainees to Screen Potential Participants*: Another opportunity is to work with job training programs to use the low-income energy efficiency program installations as a hands-on training opportunity. Trainees could be brought on site to develop solar assessment skills and assess the roof's suitability for a solar installation, and the information on the site's sufficiency could be used in the same manner described above. [While the ILSFA Program is not responsible for the job training program, Elevate Energy as the program administrator is responsible for coordinating with the job training programs.]

- *Energy Efficiency and Home Repairs*: The ILSFA Program should aim to provide additional resources and information for AVs to work with potential low-income participants on energy efficiency and remediating homes so that they are solar-ready.
  - *Energy Efficiency Referrals*: Ideally, the ILSFA Program participants would participate in the utility energy efficiency program prior to participating in the ILSFA Program. Because the income eligibility requirements for the energy efficiency programs are 80 percent of AMI, as with the ILSFA Program, households who were eligible to participate in the ILSFA Program would be eligible for the utility low-income energy efficiency program if they were in the Com-Ed or Ameren service territory. The ILSFA Program should encourage AVs to have their customers participate in these utility programs prior to the solar installations. The ILSFA Program should determine whether they can work with the utility programs to prioritize customers who are approved for solar installations to have energy efficiency work done in their homes prior to the solar installations.

  - *Referrals and Resource Guide:* The ILSFA Program does not provide incentives to cover the costs of roof repairs or other remediation work that may be needed to make the home solar-ready. The Long-Term Plan states that the IPA and Elevate Energy will educate AVs about utility programs, weatherization programs, and other alternative sources of funding. The ILSFA Program should also work with these other programs to determine whether additional funding can be made available for such repairs. Elevate has created a resource guide for vendors, but should make it more readily accessible on the ILSFA Program website.

- *Habitat for Humanity*: This organization is another potential source of funding for roofing repairs or replacement. The ILSFA Program should see if they can coordinate with Habitat for Humanity (and other potential funders) to provide these services to customers who are otherwise good candidates for the DG sub-program.

- *Job Training*: Consider whether support is needed for potential job trainees to help them overcome barriers to participation in the job training programs. One Grassroots Educator who focused on the job training aspect of the ILSFA Program was concerned that the entry requirements for job training opportunities would make it difficult or impossible for many potential low-income individuals to participate. These requirements included a background check, drug test, driver's license, and the purchase of certain toolkits. Many low-income households cannot meet these requirements due to criminal records or a lack of funds for a driver's license or to purchase tools. Additionally, a Grassroots Educator noted that job training sites have traditionally been located far from their community and that transportation assistance and childcare support may be need so that low-income individuals can participate in the program. [Note that this is a recommendation for the job training program which is administered separately from the ILSFA Program.]

- *Data Collection*: Elevate Energy should provide specific information about their current plans for databasing household-level data for DG and CS participants. There should then be an assessment of whether such data will be sufficient to meet FEJA mandates and IPA reporting goals, or whether additional data may need to be databased. While there is a critical need to protect participant privacy, many programs collect these data, and it is important to have the ability to document program participation characteristics and impacts. One stakeholder suggested that it may be preferable to have Elevate Energy collect and process confidential household qualification data rather than the AVs.

I. Introduction

This report presents the findings from the Phase I Evaluation of the Illinois Solar for All (ILSFA) Program. The ILSFA Program was mandated by the state's Public Act 99-0906, colloquially known as the Future Energy Jobs Act (FEJA) which was enacted on December 7, 2016 and went into effect on June 1, 2017. The ILSFA Program provides more generous Renewable Energy Credit (REC) contracts than those offered through the Illinois Adjustable Block Program (ABP) to overcome barriers faced by the low-income community to participation in the solar market.

The Illinois Power Agency (IPA) contracted with APPRISE, and its subcontractor Aeffect, Inc., to conduct an evaluation of the ILSFA Program. This evaluation report presents results from the Phase I Evaluation which was conducted from August through September 2019. Future evaluation research will include more detailed review of program implementation, barriers, accomplishments, and results as the program implementation progresses.

A. ILSFA Program Overview

FEJA required the development of the ILSFA Program to bring photovoltaics to low-income communities in Illinois. The objectives of the program are to maximize the development of new photovoltaic generating facilities, create a long-term, low-income solar marketplace throughout the State, integrate with existing energy efficiency initiatives, and minimize administrative costs.

FEJA mandated the creation of the ILSFA Program to include four sub-programs and indicated the funding percentages from the IPA Renewable Energy Resources Fund (RERF) for each of the four sub-programs.

1. *Low-Income Distributed Generation (DG)*: This sub-program provides funding for photovoltaic projects located on individual homes and multi-family buildings. Benefits to participants are achieved through net metering or reduction of energy costs.

2. *Low-Income Community Solar (CS)*: These projects provide the opportunity for participants to subscribe to a share of a CS system and receive credits on their utility bill for the energy produced by their share of the system. The projects must identify partnerships with community stakeholders where the project will be located.

3. *Incentives for Non-Profits and Public Facilities (NP/PF)*: NP/PF may receive incentives for on-site photovoltaic generation. These projects must serve the energy loads of NP/PF customers, be installed on facilities within low-income or Environmental Justice (EJ) communities within IL, and either have a sufficient connection to and input from the low-income or EJ community or be a qualified critical service provider defined as a non-profit or public sector entity that offers essential services to low-income or EJ communities.

4. *Low-Income Community Solar Pilot Projects*: This sub-program will be based on a competitive procurement approach for CS projects, based only on the price for 15 years of delivery of all RECs. Payments will be made over the first ten years of the contract.

FEJA also allows stakeholders to propose alternative sub-programs to be approved by the IPA if they more effectively maximize the benefits to low-income customers.

Some of the key characteristics of the ILSFA Program are as follows.

- An emphasis on EJ communities and a requirement that 25 percent of the incentives for the first three ILSFA Program sub-programs are allocated within those communities.
- Requirements for community partnerships.
- Requirements for job training opportunities and hiring job trainees.
- Extensive consumer protections to ensure that consumers receive the benefits of the ILSFA Program.

B. ILSFA Evaluation

FEJA requires an independent evaluation of the ILSFA Program with objective criteria developed through a public stakeholder process. FEJA calls for an evaluation at least every two years. The evaluation is required to review the program and the third-party program administrator.

The IPA specified that the first phase of the evaluation will inform the planned revisions to the Long-Term Renewable Resources Procurement Plan (Long-Term Plan) in Fall 2019 (to be implemented, following approval by the Illinois Commerce Commission (ICC), beginning in early 2020). The focus of the Phase I Evaluation was to provide initial feedback and recommendations to the IPA for use in updating the plan. This research focused on the stakeholder outreach process, development of program materials and guidelines, initial Approved Vendor (AV) registration, initial project application, and the development of Grassroots Education. This research included the following activities.

- Document and Materials Review
- Illinois Power Agency Interviews
- Program Administrator Interviews
- Stakeholder Interviews
- Grassroots Educator Interviews
- Program Data Analysis

The Phase II Evaluation will include more detailed assessment of the ILSFA Program's implementation and results, including metrics required by FEJA and additional priorities identified in the Long-Term Plan. Key components of the Phase II Evaluation are as follows.

- Key metrics required by FEJA, including installations, capacity, costs, jobs created, and non-energy impacts.
- Jobs and job opportunities.
- Economic, social, and environmental benefits.

- Additional performance metrics including incentive dollars awarded, total expected cost per kWh produced, housing issues that prevent DG installations, AV satisfaction, and average savings by business model types.
- An overall program administrator assessment.

C. Report Overview

Five sections follow this introduction.

- Section II – Illinois Solar for all Design: Provides a detailed review of the design of the ILSFA Program.

- Section III – Initial Implementation Experience and Statistics: Provides data and information on the initial implementation of the ILSFA Program based on publicly available information on the ILSFA Program website, interviews with IPA and Elevate Energy managers and staff, and data from Elevate Energy's ILSFA Program database.

- Section IV – Stakeholder Outreach Design and Feedback: Provides findings and recommendations on the design and implementation of stakeholder outreach, as well as program recommendations made by ILSFA Program stakeholders. Findings in this section are based on review of ILSFA Program materials available on the ILSFA Program website, interviews with IPA and Elevate Energy managers and staff, and interviews with 16 ILSFA Program stakeholders.

- Section V – Grassroots Education Design and Feedback: Provides findings and recommendations on the design and implementation of Grassroots Education, as well as program recommendations made by the Grassroots Educators. Findings in this section are based on review of ILSFA Program materials available on the ILSFA Program website, interviews with IPA and Elevate Energy managers and staff, and interviews with the 11 Grassroots Educators selected in the first Grassroots Educator RFP.

- Section VI – Findings and Recommendations: This section provides initial findings and recommendations based on all of the research presented in this report.

APPRISE prepared this report under contract to the IPA. The IPA and Elevate Energy facilitated this research by furnishing data and information to APPRISE. Any errors or omissions in this report are the responsibility of APPRISE. Further, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of the IPA.

II. Illinois Solar for All Design

This section provides background on the design and implementation of the ILSFA Program.

A. Future Energy Jobs Act

FEJA mandated the creation of the ILSFA Program to include four sub-programs and indicated the funding percentages from the IPA Renewable Energy Resources Fund for each of the four sub-programs.

- Low-Income Distributed Generation
- Low-Income Community Solar
- Non-Profits and Public Facilities
- Low-Income Community Solar Pilot Projects

Other specific requirements of FEJA were as follows.

Economic Benefits

- Tangible economic benefits must flow directly to program participants except in multi-family housing where the low-income customer does not pay directly for energy.
- Low-Income CS Pilot projects must provide economic benefits for members of the community where the project is located and include a partnership with at least one Community Based Organization (CBO).

Community Partnerships

- Priority should be given to projects that demonstrate meaningful involvement of low-income community members.
- Low-Income CS developers must identify partnerships with community stakeholders.
- The IPA should ensure collaboration with community agencies and allocate up to five percent of the funds available under the ILSFA Program to community-based groups to assist in Grassroots Education.

Environmental Justice

- At least 25 percent of the incentives for DG, CS, and NP/PF projects must be allocated within EJ communities.

Income Eligibility

- Low-income households are persons and families whose income does not exceed 80 percent of the area median income, adjusted for family size and revised every five years.

Job Training

- DG projects must include job training opportunities if available and should coordinate with job training programs.

Administration

- Low-Income CS Pilot Projects must be competitively bid by the IPA.
- The IPA should select a third-party program administrator through a competitively bid process.

Incentives

- The IPA (or a utility) will purchase RECs from generation for the first 15 years of operation as an upfront payment per installed kilowatt of nameplate capacity paid when the device is interconnected at the distribution system level of the utility and is energized.

Evaluation

- The IPA should select an independent evaluator to review and report on the ILSFA Program and the performance of the third-party administrator at least every two years. The evaluation should be based on objective criteria developed through a public stakeholder process. The report should include the following metrics.
  - Total installed capacity in kilowatts.
  - Average cost per kilowatt of installed capacity.
  - Number of jobs or job opportunities created.
  - Economic, social, and environmental benefits created.
  - Total administrative costs expended by the IPA and the program administrator to implement and evaluate the program.

The IPA was directed to develop a Long-Term Plan with a proposed approach to the design, implementation, and evaluation of the ILSFA Program. FEJA specified that the following would be included in this Long-Term Plan.

- Program terms, conditions, and requirements.
- Prices to be paid for RECs.
- The level of energy and economic benefits to be accrued by low-income customers.
- A definition of EJ community that is compatible with other agencies' definitions.

B. Long-Term Renewable Resources Procurement Plan

The Long-Term Plan was approved by the Illinois Commerce Commission (ICC) on April 3, 2018. The Long-Term Plan provided more detail on the requirements for the ILSFA Program, described below and in following sections of this summary.

- Economic Benefits: Economic benefits for participants will be accrued through net metering or avoided consumption from the energy the system produces. The IPA developed the following requirements to ensure that benefits flow to low-income participants.
  - Eligible low-income residential participants should not pay up-front costs for the DG installation or pay an up-front fee to subscribe to a CS project.
  - Participation should result in immediate, reliable reductions in energy costs for residents or subscribers.

  - Any ongoing annual payments (for financed or leased projects) must be less than 50 percent of the annual first year estimated production and/or utility default service net metering value to be received by the customer.
  - While incentives must flow through to the intended recipients, the incentives will not be customized to each participant's specific economic circumstances. The evaluation will review the impact on participants' energy burden and that information will be used to inform any future modifications to incentive levels. The IPA and the program administrator will educate AVs about utility programs, weatherization assistance programs, and other alternative sources of funding.

- Net Metering: Projects are required to participate in the utility's or Alternative Retail Electric Suppliers' (ARES) net metering program. This may prevent projects in the service territory of a municipal utility or rural electric cooperative that does not offer net metering from participating.

- Project Viability: Roof repairs or wiring upgrades may be needed to implement the solar installations. The ILSFA Program will not provide funding for those upgrades.

- Capacity Factor: The Long-Term Plan describes the options for the capacity factor used in the ABP to convert kilowatt size of a project to the number of RECs the system would be expected to generate over 15 years.
  - Standard Capacity Factor: For each kW of capacity approximately 21 RECs would be generated over 15 years for a fixed-mount system and 25 RECs would be generated over 15 years for a tracking system.
  - Alternative Capacity Factor: AVs have the option of proposing an alternative capacity factor based on an analysis using PV Watts or an equivalent tool.

- REC Payments
  - The price will be expressed on a dollar per REC basis.
  - Payments will be based on the 15-year expected REC production of the system.
  - A system must be registered in GATS or M-RETS to verify it will produce RECs.

- Contracts
  - Contracts will be with the IPA if the funding source is the RERF and with the utility if the funding source is the utility.
  - Contracts will be applied to the annual Renewable Portfolio Standard (RPS) goals of the utility to which the project is interconnected, but will not count toward each utility's new photovoltaic targets.
  - RECs from projects in the service territories of municipal utilities, rural electric cooperatives, or Mt. Carmel Public Utility would not be applied to the utility RPS goals if they are procured through contracts with the IPA. Any RECs procured through contracts with a utility would be applied to the RPS goals of the contracting utility.
  - Projects that receive a contract through the ILSFA Program cannot receive one through the ABP.

C. Resources

The ILSFA Program is funded through three sources.

- The Renewable Energy Resources Fund (RERF): This fund was created as a special fund in the State Treasury and is administered by the IPA for the procurement of renewable energy resources. The RERF was created with Alternative Compliance Payments remitted by ARES to comply with the State's RPS established by the Public Utilities Act.

  The IPA plans to allocate up to $20 million per year from the RERF for the ILSFA Program. RERF funding for the DG, CS, and NP/PF sub-programs will be available for seven to eight years if fully spent each year.

- Utility Funding: A portion of the funds collected by the utilities under their Renewable Portfolio Standard (RPS) tariffs. Utilities will add an additional $10 million in funding in 2018-2019, and $11.7 million in funding per year in 2019-2020 and 2020-2021. The utility funding is not required to be applied in the same percentages as the RERF funds, but will be used to supplement the sub-programs that have used up their available funds from the RERF (but not provide funding from the Low-Income CS Pilot Projects sub-program). The IPA proposed in the Long-Term Plan that the utility funding would be allocated to the three non-competitive sub-programs with the same relative weighting as the RERF funding.

- Additional Utility Funding: Potential additional funds from the utilities' renewable resources budgets.

Table II-1 provides a summary of the funding available for the ILSFA Program.

Table II-1
Funding for Components of Illinois Solar for All

Program Component	% of RERF Funds	Funding Sufficiency (Years)	2018-2019 Funding ($Millions)	
			RERF	Utility
Low-Income Distributed Generation	22.5%	7-8 Years	$4.5	$3.0
Low-Income Community Solar	37.5%	7-8 Years	$7.5	$5.0
Incentives for Non-Profits & Public Facilities	15%	7-8 Years	$3.0	$2.0
Low-Income Community Solar Pilot Projects	25% ($50 Million CAP)	To Be Determined	$5.0	$0.0

The funding allocations are to support the following.

- REC Payments.
- Program Administration
- Grassroots Education
- Evaluation

D. ILSFA Sub-Programs

The ILSFA Program builds upon the ABP, so it was necessary to have the ABP design finalized and operationalized prior to the launch of the ILSFA Program.

There are four sub-programs within the Illinois Solar for all Program.

1. *Low-Income Distributed Generation (DG)*: This sub-program provides funding for photovoltaic projects located on individual homes and multi-family buildings. Benefits to participants are achieved through net metering or reduction of energy costs. Residents of master-metered buildings do not receive the direct benefits of the solar installation because they do not pay for their electric bill. In such a case, the building owner/manager must commit to passing along at least 50 percent of the energy savings from net metering to tenants through reduced rents or by other means.

2. *Low-Income Community Solar (CS)*: These projects provide the opportunity for participants to subscribe to a share of a CS system and receive credits on their utility bill for the energy produced by their share of the system. The projects must identify partnerships with community stakeholders where the project will be located. The AV must identify those partnerships in the project application, and provide a description of how the partnership shows that it is responsive to the priorities and concerns of low-income members of the community. Incentives for these projects are for the portion of the project that is subscribed by low-income subscribers. However, if the anchor tenant is a non-profit or a public sector entity, the incentive will not be reduced for the share subscribed by the anchor tenant.

3. *Incentives for Non-Profits and Public Facilities (NP/PF)*: NP/PF may receive incentives for on-site photovoltaic generation. These projects must serve the energy loads of NP/PF customers, be installed on facilities within low-income or EJ communities within IL, and either have a sufficient connection to and input from the low-income or EJ community or be a qualified critical service provider defined as a non-profit or public sector entity that offers essential services to low-income or EJ communities. Critical service providers include youth centers, hospitals, schools, homeless shelters, senior centers, community centers, places of worship, or affordable housing providers including public housing sites.

   These entities may not be able to capture the tax benefits that an ABP participant would be able to capture. Therefore, the adjusted incentive level can help overcome the financing barriers that NP/PF may face compared to private entities.

4. *Low-Income Community Solar Pilot Projects*: This sub-program will be based on a competitive procurement approach, based only on the price for 15 years of delivery of all RECs. Payments will be made over the first ten years of the contract.

The other following criteria established in the Long-Term Plan are minimum criteria for eligibility to participate in the competitive procurement.

- Projects must result in economic benefits for the members of the community in which the project will be located. This requirement can be met by including partnerships with community stakeholders. Projects must provide a commitment to local hiring, describe the impact on payments to community residents or organizations as part of the development process, or offer subscriptions to community residents and organizations.
- The project must also include a partnership with at least one community-based organization, an existing non-profit organization that provides programs and services within the community where the proposed project will be located.
- The funds may not be distributed solely to a utility.
- At least some funds must include community ownership by the project subscribers.

These contracts will be with the IPA and will use RERF funding.

FEJA also allows stakeholders to propose alternative sub-programs to be approved by the IPA if they more effectively maximize the benefits to low-income customers.

E. Program Administration

The Long-Term Plan provided the minimum following responsibilities for the program administrator.

- Project Eligibility: Verify project eligibility, including review of the following.
  - Income verification
  - Community involvement
  - Job training coordination
  - Consumer protections

- Income Verification: Act as the centralized source for income verification and maintain a database of program participants.

- Program Materials: Assist in the development of contracts, disclosure forms, and brochures used by ILSFA AVs and CBOs.

- Program Manual: Develop the manual and related materials for use by ILSFA AVs.

- Grassroots Education: Coordinate the distribution of funding for Grassroots Education by CBOs.

- Approved Vendor Support: Assist all AVs to meet the ILSFA Program requirements by acting as a liaison with job training organizations and informing AVs of energy efficiency, weatherization, lead abatement, and other program opportunities that could provide additional benefits to participants.

- Leveraging: Educate AVs, community groups, local government agencies, and others on how to leverage governmental policies to facilitate low-income solar programs and energy efficiency programs. These include affordable housing, economic development, public finance, and tax policies at the federal, state and local level.

- Reporting: Provide reports to IPA and the ICC on a quarterly basis on the status of the ILSFA Program. These reports should include the following information.
  - Number of applications received.
  - Number of applications approved.
  - Number of projects completed.
  - REC payments.
  - Payments for and status of Grassroots Education efforts.

F. Income Eligibility and Verification

The IPA clarified the requirements for low-income eligibility in the Long-Term Plan. They proposed to use income eligibility guidelines from HUD which bases its housing assistance programs on 80 percent of area median income (AMI) adjusted for family size, as required by the Act. The IPA proposed to use HUD's definition of an area as a Metropolitan Statistical Area (MSA), a Fair Market Rate (FMR) Area, or a county not in an MSA or FMR. Because the income guidelines for LIHEAP and IHWAP are lower than these guidelines, all LIHEAP-eligible and IHWAP-eligible (state funded) households are eligible for the ILSFA Program.

Qualified Census Tracts (QCTs) have 50 percent of households with incomes below 60 percent of the Area Median Gross Income or have a poverty rate of 25 percent or more. The Agency will use QCTs as a streamlined method for determining eligibility for Low-Income CS customers.

Specific eligibility for the sub-programs vary.

- Low-Income Distributed Generation Incentive: Income verification should be done at the household level.
  - Single-family Homes: Households must verify that they are low-income through review of federal income tax returns, verification through a third-party system, or verification of participation in another low-income energy program where income eligibility is below 80 percent of AMI.
  - Two- to four-unit buildings: At least two of the households must qualify through the same methods as the single-family homes.
  - Multi-family (five or more units): Either fifty percent of the households must be verified as low-income or the building must have an Alternative Verification. Alternative Verification includes that the property qualifies for HUD vouchers or rental assistance, property is qualified as Affordable Housing under the Illinois Affordable Housing Act, or the property qualifies for Income-Eligible Multifamily Energy Efficiency.

- Low-Income Community Solar: This sub-program can use the same method as Low-Income DG or the participant must reside in a HUD-QCT and provide a signed affidavit that they meet the income qualification level.
  - Only one anchor per project, with no more than a 40 percent share.
  - 50 percent of capacity, excluding anchor, must be subscribed by low-income households.

- Non-Profits and Public Facilities: Must be within an Illinois EJ community (defined by ILSFA) or low-income community (at least 50 percent of households at 80 percent of AMI or less).

G. Consumer Protections

The ILSFA Program has developed extensive procedures to ensure that consumers are protected. The IPA felt that it was important to ensure these protections given the experience with ARES taking advantage of low-income customers in IL.

The key financial protections with respect to the DG and CS sub-programs are as follows.

1. Up-front Payments: Customers must have no up-front payments or up-front subscription fees. Required payments or fees may not begin until the project is energized and producing value for the participant.

2. Costs and Fees: AVs must demonstrate that any ongoing costs and fees paid by the participant will not exceed 50 percent of the value of energy generated by the system or by the participant's share of the system.

3. Loans: AVs must ensure that loans for Low-Income DG systems or for purchasing a share of a Low-Income CS project will not be secured by the program participant's home or home equity.

4. Financing Terms: Financing amounts, terms, and conditions for a purchase of a system share or a lease-based subscription must be based on an assessment of the participant's ability to repay the debt, as defined by Regulation Z, a federal rule that implements aspects of the Truth in Lending Act and the Dodd-Frank Act.

5. Forbearance: Contracts for loans must offer terms that include forbearance.

The value of the energy produced and the customer's savings will be determined as follows for DG projects.

- Value will be determined by the Participant's first year net metering credits for DG projects connected directly to the participant's meter, or indirectly for qualified multi-family buildings through reduced rent or other services/improvements provided by property owners/managers.

- Savings will be calculated for the first year, as well as on average for the term of the lease or PPA contract, or for 25 years in the case of the system purchase option. A minimum savings of 50 percent is required for both.

- Savings is calculated by dividing total system costs by total energy value.

- Energy value will be based on one of the following.
  - An average statewide residential equivalent of $0.1248 per kWh (including delivery and supply charges).
  - The customer's actual rate, determined by averaging the supply rate over a 12-month period using actual bills.

- The property owner of master metered buildings must demonstrate that half of the total energy value received is passed onto tenants. This can be done through lower rents, stabilized rents, or other services to the tenants.

- The full term savings are projected utilizing degradation (0.5 percent per year) and price escalation rates based on predicted trends in energy pricing. Energy escalation can be calculated at no more than 1.7 percent per year. Annual cost increases to participants cannot exceed the energy escalation rate for that customer's calculations.

The value of the energy produced and the customer's savings will be determined as follows for CS projects.

- The value will be determined by the participant's net metering credits as represented by anticipated bill credits from the energy supplier.

- Savings will be calculated for the first year, as well as on average for the term of the lease or PPA contract, or for 25 years in the case of the system purchase option. A minimum savings of 50 percent is required for both.

- Savings is calculated by dividing total subscription costs by total energy (supply) value.

- Energy value will be based on one of the following.
  - An average statewide residential equivalent of $0.06 per kWh.
  - The customer's actual rate, determined by averaging the supply rate over a 12-month period using actual bills.

- Energy escalation can be calculated at no more than 1.7 percent per year. Annual cost increases to participants cannot exceed the energy escalation rate for that customer's calculations.

AVs must also ensure that marketing materials are accurate and do not contain misleading statements. AVs must present the ILSFA Program brochure to the customer at the first in-person or online contact. AVs must provide the disclosure form and again provide the

ILSFA Program brochure prior to the time when the contract is executed. All AV materials must be submitted to Elevate Energy for review and approval.

The AVs may state that participants will see the following benefits.

- Participants will see value from the energy the system generates.
- Participants will pay fees no more than half of the electric bill value received through the program.

Because the RECs are transferred to the IPA or to a utility, the AV cannot suggest that participants will receive or use renewables under Federal Trade Commission regulatory guidance on "green marketing". Rather, the AV can state that the benefits include the following.

- The system will help IL reach its solar goals.
- The system will create energy from the sun.
- The system will contribute to the development of solar power.

H. Environmental Justice Communities

EJ communities are defined as having a higher risk of exposure to pollution based on environmental and socioeconomic factors. FEJA directed the IPA to include the following information in the Long-Term Plan.

- Define the term "Environmental Justice Community" to ensure compatibility with other agencies' definitions. The IPA may look to definitions used by federal, state, or local governments in providing this definition.

- Design an incentive structure to meet the goal that 25 percent of the funds in the following sub-programs be allocated to projects located in EJ communities.
  - Low-Income Distributed Generation
  - Non-Profit and Public Facilities
  - Low-Income Community Solar Projects

The IPA also required the following in the Long-Term Plan.

- Non-Profits and Public Facilities: Must be within EJ or low-income community.
- Low-Income Community Solar: Must be within EJ or low-income communities and/or subscribed to by customers in EJ or low-income communities.

<u>Environmental Justice Community Long-Term Plan Guidance</u>

The Long-Term Plan proposed the adoption of a systematic evaluation and scoring system using two pre-existing tools for guidance.

- The EJ Screen tool developed by the US EPA
  - Uses standard and nationally-consistent data to identify communities with greater risk of exposure to pollution.
  - Based on 11 environmental indicators that measure potential exposure, hazard/risk, and proximity.

  - These indicators are combined with demographic data from the Census Bureau, enabling users to identify areas with minority or low-income populations that also face potential pollution issues.

- The CalEnviroScreen tool developed by the California Office of Environmental Health Hazard Assessment.
  - The most rigorous tool for analyzing communities impacted by environmental exposures or hazards.
  - Used only in California.
  - Compiles data on 12 indicators of pollution burden and eight population characteristics collected at the Census tract level.
  - Weights factors to determine a score.
  - High scoring areas are considered to be high burden and qualify for special treatment and state programs.

The Long-Term Plan developed the following guidelines.

- The IPA will utilize a streamlined approach that takes the concept of CalEnviroScreen and simplifies it for use in IL through the use of readily available data from the U.S EPA's EJ SCREEN tool.

- CalEnviroScreen does not account for race in its calculations, but by using data from EJ SCREEN the IPA will be able to do so.

- The IPA will determine EJ communities by analyzing data from IL census block groups for the following environmental and demographic indicators, as described by the EJ SCREEN Tool.

Environmental Indicators	Demographic Indicators
• NATA Air Toxics Cancer Risk • NATA Respiratory Hazard Index • NATA Diesel PM • Particulate Matter • Ozone • Traffic Proximity & Volume • Lead Paint Indicator • Proximity to Risk Management Plan Sites • Proximity to Hazardous Waste Facilities • Proximity to National Priorities List Sites • Wastewater Dischargers Indicator	• Percent Low-Income • Percent Minority • Less than High School Education • Linguistic Isolation • Individuals under age 5 • Individuals over age 64

- The IPA considered the following indicators that use data not contained in EJ SCREEN.
  - Sensitive Population Characteristics from the IL Dept. of Public Health
    - Asthma Emergency Dept. Visits
    - Low Birth Weight Infants
  - Environmental Indicators from the IL EPA
    - Drinking Water Watch
    - Site Remediation Program
    - Leaking Underground Storage Tank Incident Education
    - State Response Action Program
    - Solid Waste Facilities
  - These are not available at the same level of detail as the indicators using data from EJ SCREEN (more typically they have data at the zip code or county level), and would need to be translated to the block group level.

- They will weight each factor using an approach adapted from CalEnviroScreen.
  - Census block groups will be ranked and assigned a percentile for each exposure factor and environmental and demographic indicator.
  - The percentile scores for environmental and demographic indicators will be averaged to produce an environmental and demographic score for each block group.
  - The two averages will be multiplied together to determine a score.

- Communities with scores in the top 25 percent will be defined as EJ communities.
  - A community that is not in the top 25 percent of scores and thus is not initially defined as being an EJ community may request consideration to be self-designated.
  - The IPA will consider requests for self-designation as an EJ community based on a consideration of demonstrated quantitative environmental and/or socioeconomic factors that were not adequately captured in the screening defined above.

- The IPA will consider reasonable adjustments to the borders of EJ communities from what is calculated through the census block group analysis, provided this does not does not create an unacceptable burden because of the following.
  - The IPA notes that "communities" are typically understood by their residents to be defined through geographic, cultural, and other factors that may, or may not, correspond to census block group boundaries.
  - The US EPA cautions EJ SCREEN data is not always reliable at the block group level and it may be necessary to aggregate up to larger geographic areas in a "buffer" report.

Environmental Justice Community Final Designation Process[3]

Similar to the evaluation and designation process proposed in the Long-Term Plan, the IPA developed the final objective scoring system to borrow from both EJ SCREEN and CalEnviroScreen tools to objectively determine EJ community designation. The hybrid scoring system differed from the proposed system in several ways.

- Step 1: The IPA analyzed IL census block group data for the exposure factors, environmental effects, and demographic indicators collected from the EJ SCREEN. Examples of each of these factors are listed in the table below.
  - Unlike the process outlined in the Long-Term Plan, the initial EJ calculations dealt strictly with census block groups and did not make border adjustments based on geographic or cultural factors.
  - Proposed adjustments are considered, however, in the self-designation process.

Exposure Factors	Environmental Effects	Demographic Indicators
• Ozone • Particulate Matter (PM) • NATA Diesel PM • NATA Air Toxics Cancer Risk • NATA Respiratory Hazard Index • Traffic Proximity & Volume • Lead Paint Indicator	• Proximity to Risk Management Plan Sites • Proximity to Hazardous Waste Treatment, Storage, and Disposal Facilities • Proximity to National Priorities List Sites • Wastewater Dischargers Indicator	• Percent Low-Income • Percent Minority • Less than High School Education • Linguistic Isolation • Individuals under age 5 • Individuals over age 64

  - The following additional factors that were proposed in the Long-Term Plan were not applied in the calculation, but are included in the self-designation process.
    - Sensitive Population Characteristics from the IL Dept. of Public Health
    - Environmental Indicators from the IL EPA

- Step 2: The IPA weighted each factor analyzed in Step 1 using an approach adapted from CalEnviroScreen to determine an EJ Score.
  - Exposure factors were weighted twice that of other environmental indicators to ensure that these factors adequately informed the end results.
  - Census block groups were ranked and assigned a percentile for each exposure factor, environmental effect, and demographic indicator.
  - The percentile scores for exposure factors and environmental effects were averaged to produce an environmental score for each block group.
  - The percentile scores for demographic indicators were averaged to produce a demographic score for each block group.
  - The environmental score was multiplied by the demographic score to produce the overall EJ Score for each block group.

[3] The ILSFA Designating Environmental Justice Communities Feedback Session. 1/17/2019. Available on the ILSFA Program website.

- Step 3: Communities with EJ Scores in the top 25 percent of the overall distribution for IL were automatically designated as EJ communities.
  - The IPA granted an EJ designation to 2,422 of the 9,683 census block groups in IL.
  - The designated census blocks account for approximately 3.1 million people in 1.2 million households.
  - The designated EJ communities are located in 23 of the State's 102 counties.

Environmental Justice Community Self-Designation Process

The Long-Term Plan indicated that the ILFSA program administrator would provide communities the opportunity to self-designate if they were not designated as EJ communities through the process outlined above. The details of this process are summarized below.

- Step 1: Process Initiation and Submission of Evidence: A community member or organization, known as a *Designator*, initiates the self-designation process by submitting a two-part form to Elevate Energy.
  - Part A includes the following information:
    - The name of the community proposed for EJ designation.
    - The geographical boundaries of the proposed EJ community (streets, highways, county lines, etc.).
    - A list of census block groups within the proposed community.
    - A brief explanation of why the Designator believes that the identified territory is a cohesive community for the purposes of receiving an EJ designation.

  - Part B asks the Designator to include both qualitative and quantitative evidence to demonstrate a disproportionate environmental, health, or socioeconomic burden experienced by the proposed community. This evidence may be submitted in a variety of forms.
    - Summary Tables or Values from an Existing Database
    - Reports Compiled through Citizen Science
    - Expert Testimony Written for Submission
    - News Articles
    - Evidence of Community Organizing Around an Issue

Quantitative Evidence	Qualitative Evidence
• Drinking Water Watch • Site Remediation Program • Leaking Underground Storage Tank Incident Tracking • State Response Action Program • Solid Waste Facilities • Birth Characteristics Data • 500 Cities Asthma and COPD Prevalence • HUD Rental and Housing Assistance Data • CDC National Environmental Health Resources • Citizen Science	• Historical Events • Environmental Disasters and/or Severe Weather Events • Manufacturing Plant Openings/Closings/Operations • Economic Hardships • Community Toxicity & Poor Health • Resource Starvation

*This list is not exhaustive. The IPA is willing to consider any qualitative and quantitative data that is relevant to environmental, health, or socioeconomic burdens.

  - The form alerts the Designator that evidence from the EJ SCREEN tool analyzed in the IPA's initial designation will automatically be reviewed alongside any additional evidence provided for the self-designation process.

- Step 2: Convening an Environmental Justice Community Self-Designation Committee
  - The EJ Self-Designation committee will always consist of six to eight members and must include:
    - 3-4 representatives from Elevate Energy
    - 1-2 representatives from the IPA
    - 2 Environmental Justice Experts
  - Applications will be reviewed by the committee every 14 days and any response or request for more information will be made within four business days.

- Step 3: Assessment of Evidence and Scoring: The Committee is tasked with assessing the evidence submitted by the Designator using a rubric and point system to quantitatively express the burden experienced by the proposed EJ community.
  - The rubric divides and scores the evidence in four distinct assessment areas. These assessment areas and examples of factors they might include are summarized below.

Environmental Indicators	
Exposure Factors	**Environmental Effects**
• Ozone • Particulate Matter (PM) • NATA Diesel PM • NATA Air Toxics Cancer Risk • NATA Respiratory Hazard Index • Traffic Proximity & Volume • Lead Paint Indicator	• Proximity to Risk Management Plan Sites • Proximity to Hazardous Waste Treatment, Storage, and Disposal Facilities • Proximity to National Priorities List Sites • Wastewater Dischargers Indicator

Demographic Indicators	
Sensitive Population Indicators	**Socioeconomic Factors**
• Percent Minority • Linguistic Isolation • Individuals under 5 and over 64 • Asthma Emergency Dept. Visits • Low Birth Weight Infants	• Percent Low-Income • Less than High School Education • Unemployment • Mass Migration • Opening/Closing of Plants

*This list is not exhaustive. The IPA is willing to consider any qualitative and quantitative data that is relevant to environmental, health, or socioeconomic burdens.

- The rubric attaches weights to each of the four assessment areas according to importance by varying the maximum number of points available in each category.

Assessment Area	Maximum Points Available
Exposure Factors	20
Environmental Effects	10
Sensitive Population Indicators	15
Socioeconomic Factors	15
Total	**60**

- The committee sorts and evaluates all of the proposed evidence and then assigns a score of 0-4 to each of the proposed EJ community's assessment areas. This preliminary score dictates the percentage of the total points available for each assessment area the proposed EJC will receive.

Preliminary Score	% Awarded of Total Assessment Area Points Available
0	0%
1	25%
2	50%
3	75%
4	100%

- The points awarded for each assessment area are added together to produce a final EJ Score out of 60 possible points.
- At this point ten bonus points may also be awarded to proposed EJ communities that are adjacent to communities that received a calculated EJ community designation.

- Step 4: Approving EJ Community Self-Designations: Approval depends entirely on the final EJ Score from the process above. Proposed communities must meet the following requirements to receive an EJ designation.
  - Receive an EJ Score of at least 45/60.

- Receive points from both components of the EJ Score (exposure and environmental, sensitive and socioeconomic).

I. Approved Vendor Requirements and Registration

There are four different types of AVs who can develop projects for the ILSFA Program. All AV types, except for the Aggregator Designees, must register and maintain their status as an AV in the ABP to participate in ILSFA Program. Each vendor type is described in further detail below.

1. Approved Vendors

- The AV enters into a contract with the IPA or the utility for RECs purchased through ILSFA Program and is the entity that receives payments from the IPA or the utility for RECs when the contract obligations are met.
- The AV is responsible for submitting documentation to the program administrator, maintaining collateral requirements, and providing ongoing information and reporting.
- The AV is responsible for coordinating information from installers/developers and individual system owners to satisfy project and program requirements.

2. Aggregator Approved Vendors

- AV Aggregators can help qualified entities overcome barriers in the renewable energy market. They manage RECs on behalf of system owners.
- Designees or system owners contract directly with Aggregators, working within the Aggregator's business and fee structure as a separate contractual arrangement from the ILSFA Program.
- The Aggregator is accountable for meeting program requirements for projects developed by the Designee.
- The Aggregator AV is responsible for coordinating information from subsidiary entities to satisfy project and program requirements.

3. Aggregator Designees

- Aggregator Designees act in most respects as an AV, except they allow Aggregators to manage and act as a counterparty to their long-term REC contracts.
- Designees are required to meet all project-level requirements, including quality assurance and inspection requirements.
- Aggregator Designees are not required to register for the ABP, but they are required to register for the ILSFA Program in the same way as an AV.
- Designees can work with multiple Aggregators.
- Designees can initiate project applications and assign each new project to an AV Aggregator at the time of application.

4. Single Project Approved Vendors

- Single Project AVs must meet the following requirements.
  - Be the registered owner of the system with total capacity of at least 50kW.
  - Receive incentives only once with the ILSFA Program or the ABP, not both.
- The following ILSFA Program requirements are not applicable to Single Project AV applications.
  - Standard contracts between the AV and program participant/system host.
  - Standard disclosures.
  - The use of ILSFA standard brochures.
- For CS projects, Single Project AVs must meet all of the Consumer Protection and Job Training requirements in place for other AV types.

AVs who participate in the ABP must meet additional requirements to participate in the ILSFA Program, and must register to participate in the program. Requirements are summarized below.

- Community Involvement: Description of plans for such involvement in applicable components. Vendors can meet the requirement for meaningful involvement of low-income community members in designing proposals and demonstrating that they have the ability to conduct initial community outreach, education, and recruitment of low-income participants by including the following in their AV registration process.
  - Summarizing the efforts taken prior to application to conduct community outreach, education, and recruitment.
  - Listing CBO partnerships including verification letters from the CBOs.
  - Describing detailed ongoing plans and staffing for community outreach, education, and recruitment.
  - Describing how they will ensure that tangible economic benefits flow to program participants.
  - Participating in Elevate Energy's training on marketing, contracting, and disclosures for program participants.

- Job Training: Plan for including opportunities.
  - At least one third of DG projects include the use of one or more job trainees from the solar training pipeline program, the craft apprenticeship program, or the multi-cultural jobs program.
  - For their first year of participation ten percent of the hours worked on projects will be by job trainees.
  - For the second year of participation, 20 percent of the hours worked on projects will be by job trainees.
  - For the third year of participation, one-third of the hours worked on projects will be by job trainees.

- Hiring: Commitment to hire job trainees for Low-Income DG projects.

- Income Verification: Coordination with Elevate Energy on this process.

- Marketing: Agree to allow program administrator review and approval of all ILSFA Program marketing materials.

- Consumer Protections: Must meet the following requirements in addition to those specified in the ABP.
  - Ensure that economic benefits accrue to participants.
  - Demonstrate that participants in DG and CS projects do not have any up-front payments.
  - Explain how the project will result in a cash flow-positive experience for the participant(s), including an estimate of the monthly savings.
  - Ensure that savings are at least 50 percent of the value produced by the solar system through avoided usage or net metering credits.
  - For DG projects, provide a roof inspection report to ensure that the roof will not need substantial repairs. Plan for any needed repairs and ensure it will not place an unsustainable financial burden on the participant.
  - For DG projects, provide contracts with clear disclosure of the costs and the right to cancel within seven business days.
  - Provide financing amounts, terms, and conditions based on an assessment of the participant's ability to repay the debt.
  - Loans should not be secured by the participant's home or home equity.
  - Contracts must offer terms that include forbearance and must not include prepayment penalties.
  - Marketing and contractual materials must be in the language requested by the customer.

J. Incentives

Incentive levels are set for the same geographic groups as in the ABP.

- Group A: Projects located in Ameren Illinois, Mt. Carmel, MidAmerican, and rural electric cooperatives and municipal utilities located in MISO.
- Group B: Projects located in ComEd, and rural electric cooperatives and municipal utilities located in PJM.

The ILSFA REC prices are adjusted from the ABP prices as follows.

- Low-Income Distributed Generation
  - Assume debt financing is zero percent (versus 45 percent in the ABP pricing model).
  - Assume net metering benefit retained by customers is 100 percent of energy value for residential participants in one to four unit buildings (versus a 20 percent assumption in the ABP pricing model).
  - Assume net metering benefit is 50 percent for residential participants in larger buildings.

Table II-2
Incentives for the Low-Income Distributed Generation Program ($/REC)

Incentives for the Low-Income Distributed Generation Program ($/REC)				
System Size	1-4 Unit Buildings		5+ Unit Buildings	
	Group A	Group B	Group A	Group B
≤10 kW	$143.09	$143.09	$117.62	$118.20
>10 – 25 kW	$127.55	$127.55	$107.08	$107.65
>25 – 100 kW	$103.28	$103.28	$87.70	$88.28
>100 – 200 kW	$90.40	$90.40	$74.67	$75.26
>200 – 500 kW	$84.41	$84.41	$68.59	$69.19
>500 – 2,000 kW	$80.69	$80.69	$65.32	$65.92

- Low-Income Community Solar
  - Financing term is five years (versus fifteen years in the ABP).
  - Debt financing is 35 percent (versus 45 percent in the ABP).
  - Assume customer retains 50 percent of virtual net metering credits (versus 20 percent in the ABP).

  Projects that are 100 percent owned by low-income subscribers (including non-profit and affordable housing owners) will have their incentive increased by $5 per REC.

  Only 50 percent of the subscribers need to be identified at the time of energization, but the incentive payment will be prorated to the low-income subscription level. After one year, the remaining incentive will be paid based upon the low-income subscription level achieved by that time. The AV must provide ongoing collateral for ten years equal to five percent of the remaining REC value and report annually on low-income subscription levels, which may be reduced if the level of low-income subscription is not maintained.

Table II-3A
Incentives for the Low-Income Community Solar Projects ($/REC)

System Size	Incentives for the Low-Income Community Solar Projects ($/REC)		Incentives for Non-Qualified Participant Share of Community Solar Projects ($/REC)	
	Group A	Group B	Group A	Group B
≤10 kW	$121.99	$119.55	$85.04	$81.30
>10 – 25 kW	$111.98	$109.52	$77.03	$73.28
>25 – 100 kW	$93.32	$90.82	$62.77	$58.96
>100 – 200 kW	$80.72	$78.20	$53.50	$49.65
>200 – 500 kW	$74.78	$72.23	$49.07	$45.20
>500 – 2,000 kW	$71.29	$68.74	$46.25	$42.36
Co-located > 2MW	$64.88	$62.30	$41.61	$37.68

The Low-Income CS RECs also have adders for projects where the small subscribers are more than 25 percent of the project.

Table II-3B
Low-Income Community Solar Participation Adjustments ($/REC)

Adder ($/REC)	Group A	Group B
<25% Small Subscriber	No Adder	No Adder
>25% - 50% Small Subscriber	$11.17	$10.88
>50% - 75% Small Subscriber	$22.34	$21.77
>75% Small Subscriber	$33.51	$32.65

- Non-Profit and Public Facilities
  - The REC prices are adjusted by considering the project owner as a non-taxable entity.
  - Project sizes of up to 10 kW are assumed to receive non-residential net metering values.
  - The customer is assumed to retain 50 percent of the energy value (versus 20 percent in the ABP).

Table II-4
Incentives for Non-Profits and Public Facilities ($/REC)

Incentives for Non-Profits and Public Facilities ($/REC)		
System Size	**Group A**	**Group B**
≤10 kW	$155.87	$156.57
>10 – 25 kW	$142.55	$143.26
>25 – 100 kW	$118.57	$119.28
>100 – 200 kW	$102.83	$103.55
>200 – 500 kW	$95.61	$96.34
>500 – 2,000 kW	$91.31	$92.04

- Low-Income Community Solar Pilot Projects
  - The REC price paid is based on the bid price.
  - The total funding for this sub-program cannot exceed $50 million and the funding for a project cannot exceed $20 million.

The IPA will review and update the incentive levels on an annual basis. The ILSFA Program prices will track market conditions and remain at a higher level than for the ABP.

K. Site Suitability Guidelines

The ILSFA Program has site suitability guidelines that identify the site conditions that are considered to be barriers to the installation of rooftop DG and ground-mounted photovoltaic systems.[4]

- Roofing: Photovoltaic (PV) installers should inspect for the following problems with roofing materials.
  - Asphalt shingles: brittleness, loss of granular coating, warping, curing, and mossing growth where the roof is shaded or covered by foliage.
  - Slate, clay or concrete tiles: cracks, misalignment, chips, missing tiles, and flaking.
  - Metal roofing: rusting, corrosion, and pitting.
  - Built-up, membrane, and gravel roofs: membrane brittleness, cracking, bubbling, evidence of water penetration.

  The roofing requirements are as follows.
  - 15 years of expected life remaining and be weather-sealed.
  - The roof must comply with all local building codes.
  - If any of the conditions above are identified, they must be addressed through roof covering repair or replacement by a licensed, bonded, and insured roofer prior to or in conjunction with the installation of a PV system.
  - Repairs must not void existing warranties.
  - If it is determined that the site will need a new roof before the end of the 15-year REC period, the installation cannot proceed without a mitigation plan.

  The minimum requirements of the mitigation plan are as follows.
  - The roof will be repaired or reroofed by a licensed contractor with a warranty of at least 15 years or provisions will be made for the removal and reinstallation of the PV system to allow for the reroofing on a future date.
  - The expense of the repairs, a new roof, or future reroofing cannot be supplied by ILSFA Program funding.
  - The expense of the PV mounting system and flashing are part of the PV system and can be supplied by the ILSFA Program (as part of the REC or participant payments).
  - The expense of the removal and reinstallation of the system cannot be supplied by ILSFA Program funding.
  - Any roof repair or replacement must not place an unsustainable financial burden on the building owner.

- Structural: Roof surfaces and structures must be able to withstand the loads placed on them by PV arrays.
  - The condition of the underlying structural members – trusses, rafters, beams – must be carefully evaluated.
  - The site should be assessed to determine that there has not been any significant decay of components or unaddressed fire or water damage.

[4] ILSFA Site Suitability Guidelines dated 5/7/2019. Available on the ILSFA Program website.

- The PV installer must also inspect the roof structure for the following.
  - Significant decay, dry rot, insect, fire, or water damage of components.
  - Significant sagging, movement, or sponginess of the roof surface.
  - Added roof loads.
  - Multiple-layer roof (three or more layers).
  - Removed web members.
  - Rafter holes, notches, and truss/roof framing modifications.

  The requirements are as follows.
- If any of the conditions above are identified, they must be addressed in a manner approved by a licensed structural engineer or architect before the PV installation can proceed.
- The roof structure should meet current local structural code requirements.
- The roof structure must be evaluated to be able to support additional loading of a PV system per ASCE-7 or local building code.

- Electrical: Older homes often have electrical wiring that was installed according to previous versions of the National Electric Code (NEC) and is now out of code. This can lead to electrical issues that may need to be rectified before a PV system can be installed.

  The PV installer must conduct an initial visual inspection to confirm none of the following hazardous and out-of-code conditions are present.
  - Uncovered electrical boxes.
  - Improperly insulated or exposed wires.
  - Unsecure electrical connections.
  - Inadequate panelboard space for interconnection of the PV system.
  - Inadequate busbar capacity to handle power back fed into the panel.
  - Active knob and tube wiring.
  - Fused panelboards.

  The requirements are as follows.
  - If any of the conditions above are identified, they must be resolved by an electrician licensed by the Authority Having Jurisdiction (AHJ) before a PV installation can proceed.
  - The existing panelboard consists of circuit breakers and not Edison base fuses.
  - The existing panelboard has space for adding the necessary overcurrent protection devices for the PV system.
  - The busbar of the existing panelboard has enough capacity to handle the additional back-fed load from the PV system.
  - The existing panelboard does not present any hazardous electrical conditions (e.g., missing dead front cover, exposed wires, loose breakers, insufficient clearances, etc.).
  - The existing electrical system does not contain active knob and tube wiring in any portion of the system.
  - Electrical boxes are covered and all wiring has proper insulation and connectors.

- The electrical system must comply with the NEC enforced by the AHJ.

- Space and Accessibility: PV systems require additional power conversion and safety equipment. The installation process will require safe access to the interconnection panel, the new equipment locations, and conduit routes. Sufficient space must be available for the planned inverter, disconnects, other balance of system equipment, and the accessibility clearances for these components.
  The PV installer must conduct an initial visual inspection to confirm the following.
  - Work areas are clear of hazardous materials (flammable materials, paints, solvents, etc.) and clutter that could impede work.
  - The electrical interconnection panel has sufficient clearances as defined by local electrical and building codes.
  - The planned equipment has sufficient mounting space and code-required work clearances.

  The requirements are as follows.
  - Determine equipment locations with the building owner.
  - Ensure spaces are hazard-free and have the proper clearances.

- Health and Safety: Older buildings may contain hazardous materials that should not be disturbed.
  - Where feasible, the hazardous materials should be removed by licensed remediation professionals.
  - Where requirements cannot be met because of hazardous conditions, installation cannot be performed.
  - The ILSFA Program does not provide funding to remediate hazardous materials or conditions.
  - The ILSFA Program does not provide funding for pest control.

  The requirements are as follows.
  - Develop installation plans that do not disturb hazardous materials.
  - Do not install equipment within interior areas with exposed or damaged suspected asbestos materials.
  - Do not enter roof cavities where vermiculite is suspected.
  - Ensure work areas are free of pests prior to the installation of a PV system.

- Ground-Mounted Systems: Ground-mounted solar systems must be able to withstand the loads placed on them by PV arrays. A ground-mounted system will need to have an appropriate foundation to support the proposed PV array. The installer will need to confirm that any flooding risks can be mitigated.

  The requirements are as follows.
  - An assessment must be presented that identifies all potential barriers to the PV system installation and provides mitigation plans to address any barriers identified.
  - The AV will attest that the requirements for non-ministerial permits can be met.

- The AV should have results from the following tools and any other tools that may apply to the site. If any of these risks are present, the AV must provide the report and a mitigation plan.
  - Flood Insurance Rate Map (FIRM) or, if not available, the flood risk report through the External Data Request report.
  - The report from Fish and Wildlife Service online mapping tool showing the ground-mounted system does not intrude on protected wetlands.
  - The report from the Ecological Compliance Technical Tool Report showing no protected resources are present.

Installers are also directed to use judgement to assess the feasibility of all installations, even where these particular barriers are not encountered. All applicable local building and electrical codes, standards, permitting, and zoning requirements must also be followed.

AVs must attest that each installation meets these minimum requirements and submit a completed Site Suitability Report with each PV project application. If the conditions do not meet the minimum requirements at the time of Part I project application, the application will not be approved unless the AV develops a mitigation plan that addresses the barrier.

Table II-5A displays the number and percent of NP/PF projects that required mitigation. The table shows that one of the seven selected projects required mitigation.[5]

Table II-5A
Non-Profit and Public Facility Projects, 2018-2019
Mitigation Required

Mitigation	Non-Profit / Public Facility Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
Mitigation Required	1	14%	2	17%	0	0%	3	43%	**5**	**18%**
Mitigation Not Required	6	86%	10	83%	9	100%	4	57%	**23**	**82%**
Total	**7**	**100%**	**12**	**100%**	**9**	**100%**	**7**	**100%**	**28**	**100%**

Table II-5B displays the number and percent of CS projects that required mitigation. The table shows that one of the five selected projects required mitigation.

[5] Project data as of August 16, 2019.

Table III-5B
Low-Income Community Solar Projects, 2018-2019
Mitigation Required

Mitigation	Low-Income Community Solar Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
Mitigation Required	1	20%	6	19%	1	13%	3	50%	**10**	**22%**
Mitigation Not Required	4	80%	25	81%	7	88%	3	50%	**35**	**78%**
Total	**5**	**100%**	**31**	**100%**	**8**	**100%**	**6**	**100%**	**45**	**100%**

L. Interconnection Requirements

Illinois utilities have different requirements for interconnection agreements. The ILSFA Program provided the following guidelines.[6]

1. Projects submitted for approval to the ILSFA Program with a nameplate capacity of above 25 kW AC are required to have a valid, signed interconnection agreement at submission.
2. A limited exception will be made under certain conditions regarding previous agreement and new application outlined in the guidelines.

M. Project Selection

ILSFA projects are selected from projects submitted in batches by AVs. The submission process is summarized in the steps below.[7]

1. The ILSFA Program opens for application submission. The submission windows will be the same length for each sub-program in 2019-2020 as they were in 2018.
   - Low-Income Distributed Generation - 45 days
   - Low-Income Community Solar - 30 days
   - Non-Profit / Public Facility Projects - 45 days

2. AVs submit projects in batches with a nameplate capacity of 50kW or more.

3. Elevate Energy assesses each project to ensure that all program requirements are met. Projects that do not meet these requirements are removed from the batch.
   - Include plans for community engagement.
   - Have no upfront cost.
   - Ongoing costs and fees charged to participants do not exceed 50 percent of the value of energy generated by the system in the first year.

[6] ILSFA Interconnection Agreement Guidelines dated 4/2/2019 available on the ILSFA Program website.
[7] ILSFA Project Selection Protocol Guidance Document dated 5/12/2019 available on the ILSFA Program website.

- Include basic consumer protections (standard disclosures, no prepayment penalties, and the right to cancel contracts).
- Ten percent of the AV's entire annual portfolio of proposed projects total installation hours are reserved for trainees in qualified job training programs. This minimum rises to 20 percent in Year 2, and 33 percent in Year 3.
- Technical information and site eligibility.
- Interconnection applications and agreements.

4. Batches that maintain 75 percent of their original nameplate capacity (of 50kW or more) after being amended move on to the selection process.

5. After batches pass through the submission process, individual projects are separated and sorted by sub-program for assessment.
   - Low-Income Distributed Generation
   - Low-Income Community Solar
   - Non-Profit / Public Facility Projects

Once sorted, a general selection process is applied to projects in each sub-program at three levels of prioritization. A summary of the selection process at each level is provided in the sections below.

- Prioritization 1: Environmental Justice Community Selection
- Prioritization 2: Low-Income Community Selection
- Prioritization 3: Project Diversity

Prioritization 1: Environmental Justice Community Selection

FEJA and the Long-Term Plan require that 25 percent of the total incentive budget for each sub-program must be awarded to projects in EJ communities. To ensure that this requirement is met, EJ projects are selected before other projects using the following steps.

1. Individual projects proposed for EJ communities in each sub-program are separated from the other projects.

2. For each sub-program, the combined value of incentive credits proposed for projects in EJ communities is compared to the total incentive budget for that sub-program.
   - If the value of the incentives for proposed EJ projects is less than 25 percent of the total incentive budget for that sub-program then all of the proposed EJ projects are selected and a new submission window is opened for EJ projects in that sub-program. This process repeats until the 25 percent threshold is reached or until the program year ends.
   - If the sum of incentive credits proposed for EJ projects is more than 25 percent of the total incentive budget for that sub-program then projects go on to a scoring and selection process.

3. For sub-programs that surpass the 25 percent EJ threshold, individual projects are scored using a rubric and selected based on their score.
   - Each sub-program has its own unique rubric, assessment attributes, and maximum score.
   - Projects with the same score are grouped together.
   - Projects are selected by scoring group, starting with the maximum possible score and moving downward until the value of incentives for the selected projects is equal to 25 percent of the incentive budget for the sub-program.
   - If the process comes to a point where the 25 percent threshold has not been reached, but selecting all of the projects in the next scoring group will push the awarded EJ incentives beyond 25 percent, then the program administrator will select individual projects from the marginal scoring group at random.
   - If the final project selected is larger than the annual sub-program budget allows, the AV is given the following options.
     - Reduce the project size to align with the remaining budget.
     - Accept a reduced payment of the remaining amount.
     - Forgo the REC incentives.

The tables below provide information on how each of the sub-programs are scored for selection when the value of submitted EJ projects exceeds 25 percent of the available incentives for the sub-program.

Table II-6A
Low-Income Distributed Generation Project Selection
Prioritization 1: Environmental Justice Communities

Attribute	Score
Low-Income Community	1
MWBE Approved Vendor	1
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
Qualifying DG property with 1 to 4 units	
Qualifying DG property with 5+ units	
Total Possible Score	**8**

Table II-6B
Low-Income Community Solar Project Selection
Prioritization 1: Environmental Justice Communities

Attribute	Score
Low-Income Community	1
MWBE Approved Vendor	1
100% Subscriber Owned	1
Anchor Type is non-profit or public facility	1
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
System size </= 250kW	
System size > 250kW	
Total Possible Score	**8**

Table II-6C
Non-Profit / Public Facility Project Selection
Prioritization 1: Environmental Justice Communities

Attribute	Score
Low-Income Community	1
MWBE Approved Vendor	1
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
Entity Type: Non-profit	
Entity Type: Public facility	
System size </= 100kW	
System size > 100kW	
Total Possible Score	**10**

4. Following the Prioritization 1 (EJ communities) selection process, the incentives for all of the remaining proposed projects in each sub-program, including EJ projects that were not selected above, are added together and compared against the remaining incentive budget.
   - If the sum of incentives is less than 75 percent of the total sub-program budget then all proposed projects are selected and a new submission window opens. Projects

submitted during this new window are selected on a first-come, first-serve basis until the end of the program year.
- If the sum of incentives is more than 75 percent of the total sub-program budget then all remaining projects move on to Prioritizations 2 and/or 3.

Prioritization 2: Low-Income Community Selection

Prioritization 2 is designed to ensure that incentives are sufficiently targeted to qualified low-income communities. This goal is accomplished using the following steps.

1. Remaining projects that are proposed for low-income communities in each sub-program are separated from the other remaining projects for assessment. EJ projects that were not selected in Prioritization 1 may be included here if they are in a qualified low-income community.

2. For each sub-program, the combined value of incentive credits proposed for remaining low-income projects is compared to the total incentive budget for that sub-program.
   - If the value of the incentives for proposed low-income projects is less than 25 percent of the total sub-program budget, then all of the proposed low-income projects are selected and the selection process moves on to Prioritization 3.
   - For Prioritization 2, a new submission window is not opened if low-income projects do not exceed 25 percent of the sub-program budget.
   - If the total number of incentive credits proposed for remaining low-income projects is more than 25 percent of the total incentive budget for that sub-program, then projects go on to a Prioritization 2 scoring and selection process.

3. Similar to Prioritization 1, low-income projects in sub-programs that surpass the 25 percent threshold are scored using a rubric and selected based on their score.
   - Each sub-program has its own unique Prioritization 2 rubric, assessment attributes, and maximum score.
   - Projects with the same score are grouped together.
   - Projects are selected to move on by scoring group, starting with the maximum possible score and moving downward until the value of incentives for the selected projects is equal to 25 percent of the incentive budget for the sub-program.
   - If selecting all projects in the final scoring group will push the awarded low-income incentives above 25 percent, then the program administrator will select individual projects from the marginal scoring group at random.
   - Low-income projects that are not selected in Prioritization 2 move on to Prioritization 3.

The tables below provide information on how each of the sub-programs are scored for selection when the value of submitted low-income projects exceeds 25 percent of the available incentives for the sub-program.

Table II-7A
Low-Income Distributed Generation Project Selection
Prioritization 2: Low-Income Communities

Attribute	Score
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
1 to 4 unit	
5+ unit	
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
EJ Community	1
MWBE Approved Vendor	1
Total Possible Score	**8**

Table II-7B
Low-Income Community Solar Project Selection
Prioritization 2: Low-Income Communities

Attribute	Score
MWBE Approved Vendor	1
100% Subscriber Owned	1
Anchor Type is non-profit or public facility	1
EJ Community	1
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
System size </= 250kW	
System size > 250kW	
Total Possible Score	**8**

Table II-7C
Non-Profit / Public Facility Project Selection
Prioritization 2: Low-Income Communities

Attribute	Score
Low-Income Community	1
MWBE Approved Vendor	1
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
Group A: Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Coops and Municipal Utilities in MISO	If total incentive value of projects for this attribute is: 0-25%=2, 26-50%=1, 51-75%=0.5, >75%=0
Group B: ComEd, and Rural Electric Coops and Municipal Utilities located in PJM	
Entity Type: Non-profit	
Entity Type: Public facility	
System size </= 100kW	
System size > 100kW	
Total Possible Score	**10**

4. Following Prioritization 2, the incentive values for all of the remaining proposed projects in each sub-program, including EJ and low-income projects that were not selected above, are added together and compared against the remaining incentive budget.
   - If the sum of incentives is less than the remaining incentive budget then all remaining proposed projects are selected and a new submission window opens. Programs submitted during this new window will be selected on a first-come, first-serve basis. If any portion of the budget goes un-awarded, it will be rolled over into the next program year.
   - If the sum of incentives is greater than the remaining sub-program budget, then all remaining projects move on to Prioritizations 3.

Prioritization 3: Project Diversity

Prioritization 3, the final step in the selection process, is designed to ensure that ILSFA sub-programs include projects that cover a diverse range of attributes.

1. Similar to the previous stages, all remaining projects in each sub-program are scored using a rubric.

Table II-8A
Low-Income Distributed Generation Project Selection
Prioritization 3: Project Diversity

Attribute	Score
EJ Community	1
Low-income Community	1
MWBE Approved Vendor	1
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
If the cumulative incentive value for entire portfolio currently has <30% of projects in Group A or B, select projects in underrepresented category until 30% is reached.	
If the cumulative incentive value for entire portfolio, after balancing on group, has <30% of 1-4 unit or 5+ projects, select projects in underrepresented category until 30% is reached.	
Total Possible Score	**5**

Table II-8B
Low-Income Community Solar Project Selection
Prioritization 3: Project Diversity

Attribute	Score
EJ Community	1
Low-Income Community	1
MWBE Approved Vendor	1
100% Subscriber Owned	1
Anchor Type is non-profit or public facility	1
If the cumulative incentive value for entire portfolio currently has <30% of projects in Group A or B, select projects in underrepresented category until 30% is reached.	
If the cumulative incentive value for entire portfolio, after balancing on group, has <30% below or above the 250kW threshold, select projects in underrepresented category until 30% is reached.	
Total Possible Score	**5**

Table II-8C
Non-Profit / Public Facility Project Selection
Prioritization 3: Project Diversity

Attribute	Score
EJ Community	1
Low-Income Community	1
MWBE Approved Vendor	1
Participant Savings > 50%	If the percentage savings passed on to participants is 51-60%=.25 points, 61-80%=1 point, 81-100%=2 points
If the cumulative incentive value for entire portfolio currently has <30% of projects in Group A or B, select projects in underrepresented group until 30% is reached.	
If the cumulative incentive value for entire portfolio, after balancing on group, has <30% of projects on NP or PF, select projects in underrepresented category until 30% is reached.	
If the cumulative incentive value for entire portfolio, after balancing on project type, has <30% below or above the 100kW threshold, select projects in underrepresented category until 30% is reached.	
Total Possible Score	**5**

2. For each sub-program, the program administrator evaluates the projects selected and determines the proportion of the total sub-program capacity that falls into the below attributes.

Table II-8D
Project Diversity Attributes

Non-Profit / Public Facilities	Low-Income Community Solar	Low-Income Distributed Generation
• Group (A vs. B) • Type (NP vs. PF) • Project Size (< or >100kW)	• Group (A vs. B) • Project Size (< or > 250kW)	• Group (A vs. B) • Units (1-4 vs. 5+)

3. For each sub-program, if the total amount of the incentives chosen within a category of the first attribute in the chart above represents less than 30 percent of the total capacity for the sub-program, projects will be chosen until the 30 percent threshold is reached for that attribute.
   - If multiple projects that satisfy the desired attribute are available they will be selected based on score from highest to lowest.
   - If two or more projects that satisfy the desired attribute have the same score, the tie is broken via random selection.
   - If the final project selected is larger than the annual sub-program budget allows, the Approved Vendor is given the following options.
     - Reduce the project size to align with the remaining budget.
     - Accept a reduced payment of the remaining amount.
     - Forgo the REC incentives.
   - If the AV chooses to forgo the incentives, another project is selected.

4. After projects have been selected to balance the sub-program portfolios, the remaining projects are selected based on score from highest to lowest until there are no funds available.

After being selected, contracts (or product confirmation, as applicable) for ILSFA projects are sent on for approval from the ICC.

The selected projects are re-grouped with other ILSFA projects from the same AV. If due to the project selection process the overall batch capacity is less than 50kW, that batch will still be allowed to move forward to the ICC for approval.

If approved by the ICC, the project's AV and either the IPA or a utility will execute the contract (or product confirmation).

N. Quality Assurance

The ILSFA program administrator will develop and implement a process for quality assurance in conjunction with the program evaluator. The process will include photo documentation of all projects while under construction and on-site inspection of a random sample of installations.

- Part I Photo Review: This includes a review of photographs submitted with the Part I project application, along with the Site Suitability Report.
- Part II Photo Review: This documents the installed system, equipment, compliance with program and local code requirements, and quality of workmanship.
- Onsite Inspections: This will validate the site suitability findings and include more detailed inspection of system quality, safety, and performance.

The AV will be responsible for remedying any deficiencies that are found and AVs who have a disproportionately high number of deficient systems may lose eligibility to continue to participate in the ILSFA Program.

O. Independent Evaluation

FEJA requires an independent evaluation of the ILSFA Program with objective criteria developed through a public stakeholder process. FEJA calls for an evaluation at least every two years. The evaluation is required to review the program and the third-party program administrator.

The IPA specified that the first phase of the evaluation will inform the planned revisions to the Long-Term Plan in fall 2019 (to be implemented, following approval by the ICC, beginning in early 2020). The focus of Phase I was to provide initial feedback and recommendations to the IPA for use in updating the Long-Term Plan. This research focused on the stakeholder outreach process, development of program materials and guidelines, initial AV registration, initial project application, and the development of Grassroots Education. This research included the following activities.

- Document and Materials Review
- Illinois Power Agency Interviews

- Program Administrator Interviews
- Stakeholder Interviews
- Grassroots Educator Interviews
- Program Data Analysis

Table II-9 provides a crosswalk between the research topics and the research activities that were conducted in the Phase I Evaluation.

Table II-9
Phase I Evaluation Research Topics and Corresponding Research Activities

	Phase I Evaluation Research Topics				
Research Activities	**Stakeholder Outreach Process**	**Development of Program Materials & Guidelines**	**Initial Approved Vendor Registration**	**Initial Project Applications**	**Development & Implementation of Grassroots Education**
Document & Materials Review	✓	✓	✓	✓	✓
IL Power Agency Interviews	✓	✓	✓	✓	✓
Program Admin Interviews	✓	✓	✓	✓	✓
Stakeholder Interviews	✓	✓			✓
Grassroots Educator Interviews	✓	✓			✓
Program Data Analysis			✓	✓	

The Phase II Evaluation will assess the following specific metrics and questions.

1. FEJA requires that the evaluation report on key metrics summarized in Table II-10. These metrics focus on installations, capacity, costs, jobs created, and non-energy impacts. There are several categories for which these metrics must be reported, including sub-programs, home ownership, business model, geographic regions, and other proposed categories.

2. Jobs and job opportunities are an important focus of the evaluation. The research will address the specific types of jobs created, whether the jobs are permanent or temporary, the percent of installation hours performed by job trainees, indirect and induced jobs created, and average wages/salaries.

3. Economic, social, and environmental benefits are also emphasized in the research. The benefits to be studied include participants' costs and energy burden, the relationship between installations and where job trainees live, the percent of panels that are domestically produced, community awareness, reliability of the electric distribution system, CO_2 reductions, energy and emissions equivalencies, and other benefits.

4. Additional performance metrics are listed in Table II-10.

5. Program administrator performance research focuses on outreach including community and stakeholder engagement, support and education of AVs, AV perceptions of the administrator, Grassroots Education campaigns and impact, coordination with job training and job opportunities, and an overall program administrator assessment.

Table II-10
Phase II Evaluation Reporting

Statute-Required Metrics		Jobs Created Analysis Categories	Non-Energy Impacts	Additional Performance Metrics
Metrics	**Analysis Categories for All Metrics**			
# Projects Installed	Total	Construction/ Installation	Participant Energy Costs & Burden	Incentive $ Awarded
Installed Capacity (kW)	Sub-program	Sales, System Design, General Construction, Trades	Installation Locations and Job Trainee Residence	Average $/kWh Produced (expected)
Avg $/kW Installed	Owner/Renter	Supply Chain	% Panels Produced in U.S.	Housing Issues that Prevented DG
# Jobs Created	Purchase/Lease/Power Purchase Agreement	Indirect/Induced	Community Awareness, and other well-being	% Projects Not Completed & Factors
Economic Impact	Environment Justice	Permanent/Temp	Electric Distribution System Reliability	Vendor Satisfaction/ Complaints
Environmental Impact	Low-Income	% of Install Hours by Job Trainees	CO_2 Reduction	Average Savings by Business Model Types
Social Impact	Rural Suburban, Urban	Average Salary	Homes Powered, Fossil Fuel Displacement	
Admin $	Additional	Coordination between Job Training Providers and Vendors	Other	

The Phase II Evaluation will include the following research activities.

- Document & Materials Review
- IL Power Agency Interviews
- Program Admin Interviews
- Stakeholder Presentations
- Stakeholder Interviews
- Grassroots Educator Interviews
- Approved Vendor Interviews
- Approved Vendor On-Line Survey
- Electric Utility Interviews
- Job Trainee Interviews
- Participant In-Depth Interviews
- Participant Surveys
- Program Data Analysis
- Environmental & Economic Analysis
- Elevate Energy Assessment

Table II-11 provides a crosswalk between the research topics and the research activities to be conducted in the Phase II Evaluation. A holistic research approach will be used where many of the topics of interest are addressed through several different research activities, usually in both a quantitative and qualitative manner.

Table II-11
Phase II Evaluation Research Topics and Corresponding Research Activities

	Phase II Evaluation Research Topics				
Research Activities	**Statutory Required Metrics**	**Job and Job Opportunities Created**	**Economic, Social, and Environmental Benefits**	**Performance Metrics**	**Additional Issues**
Document & Materials Review					✓
IL Power Agency Interviews		✓	✓	✓	✓
Program Admin Interviews		✓	✓	✓	✓
Stakeholder Presentations	✓	✓	✓	✓	✓
Stakeholder Interviews		✓	✓	✓	✓
Grassroots Educator Interviews		✓	✓	✓	✓
Approved Vendor Interviews		✓	✓	✓	✓
Approved Vendor On-Line Survey		✓	✓	✓	✓
Electric Utility Interviews		✓	✓	✓	✓
Job Trainee Interviews		✓			✓
Participant In-Depth Interviews			✓	✓	✓
Participant Surveys			✓	✓	✓
Program Data Analysis	✓	✓	✓	✓	✓
Environment & Economic Analysis	✓	✓	✓	✓	✓
Elevate Energy Assessment	✓	✓	✓	✓	✓

Statutory-Required Metrics

AVs are responsible for submitting documentation to the program administrator and providing ongoing information and reporting, including downstream information from installers/developers and system owners. Key data will come from the following sources.

- Approved Vendor registrations
- Project applications
- Income verification forms
- Job training reports
- Annual Approved Vendor reports

This information will be critical to providing an analysis of the Statutory-Required Metrics. Table II-12 lists the metrics, the data sources for each metric, and the categories of analysis for all listed metrics.

Table II-12
Statutory-Required Metrics, Data Source, and Categories for Analysis

Statutory-Required Metrics	Data Sources	Categories for Analysis (All Metrics)
Number of Projects Installed	PA Data	Total Across ILSFA Program
Total Installed Capacity in kW	PA Data	Sub-program
Average Cost per kW of Installed Capacity	PA Data	Home Ownership (for DG, CS)
Number of Jobs or Job Opportunities Created	PA Data Program Administrator Interviews Vendor Interviews Vendor On-Line Survey Economic Analysis	Business Model (Purchase, Lease, PP Agreement)
Economic, Social, and Environmental Benefits	PA Data Economic Analysis Environmental Analysis	Geography (EJ, low-income, Rural, Suburban, Urban)
Total Administrative Costs	PA Data	Other

The table below provides information on the timing of each evaluation activity. Several activities will be conducted in multiple evaluation periods to obtain ongoing feedback from program informants and updated statistics on program accomplishments during the implementation period.

Table II-13
Phase II Evaluation Research Activity Timeline

	Phase II Evaluation Research Timeline By Report Deadline			
Research Activities	**12/5/19**	**6/30/2020**	**12/5/2020**	**6/30/2021**
Document & Materials Review	✓	✓	✓	✓
IL Power Agency Interviews				✓
Program Admin Interviews	✓	✓	✓	✓
Stakeholder Presentations	✓			✓
Stakeholder Interviews	✓	✓		✓
Grassroots Educator Interviews			✓	
Approved Vendor Interviews	✓	✓		✓
Approved Vendor On-Line Survey			✓	
Electric Utility Interviews				✓
Job Trainee Interviews				✓
Participant In-Depth Interviews		✓		
Participant Surveys			✓	
Program Data Analysis	✓	✓	✓	✓
Environment & Economic Analysis				✓

	Phase II Evaluation Research Timeline By Report Deadline			
Research Activities	**12/5/19**	**6/30/2020**	**12/5/2020**	**6/30/2021**
Program Administrator Assessment				✓

Table II-14 provides information on the number and types of interviews to be conducted in each reporting period. Several of the groups will be interviewed and/or surveyed more than once during the evaluation period. For example, the program administrator will be interviewed during each period to obtain updates on the program implementation, accomplishments, and challenges. Different topics will be highlighted as well during each set of interviews. The research will include in-depth interviews with AVs during the first two Phase II Evaluation periods, a detailed on-line survey during the third Phase II Evaluation period, and in-depth interviews in the last evaluation period.

Table II-14
Phase II Evaluation Interview Summary Information

	Phase II Evaluation Interviews and Surveys By Report Deadline				
	Interview Length	**12/5/19**	**6/30/2020**	**12/5/2020**	**6/30/2021**
Interview Target		**Number of Interviews**			
IL Power Agency Interviews	1 hour				8
Program Admin Interviews	30 minutes	16	15	15	15
Stakeholder Interviews	30 minutes	16	15		25
Grassroots Educator Interviews	30 minutes			20	
Approved Vendor Interviews	20 minutes	20	20		25
Approved Vendor On-Line Survey	25 minutes			Up to 500	
Electric Utility Interviews	45 minutes				10
Job Trainee Interviews	15 minutes				25
Participant In-Depth Interviews	20 minutes		100		
Participant Surveys	15 minutes			400	

Economic, Social, and Environmental Benefits

The evaluation will assess a wide range of economic, social, and environmental benefits from the ILSFA Program through a variety of research activities. The table below provides a matrix of which research activities will provide information on each non-energy impact.

Table II-15
Evaluation Activities to Measure Economic, Social, and Environmental Benefits

	Economic, Social, and Environmental Benefits							
Research Activities	**Low-Income or Org Energy Costs**	**Installation Location & Job Trainee Home Location**	**U.S. Produced Panels**	**Community Awareness & Other Well-Being**	**Electric Dist. System Reliability**	**CO_2 Impact**	**Energy & Emissions (homes powered, fossil fuel displaced)**	**Other Environ. Benefits**
IL Power Agency Interviews					✓			
Program Admin Interviews		✓			✓			
Stakeholder Interviews		✓		✓				
Grassroots Educator Interviews				✓				
Vendor Interviews		✓		✓				
Vendor On-Line Survey		✓	✓					
Electric Utility Interviews					✓			
Job Trainee Interviews		✓		✓				
Participant Interviews	✓			✓				
Participant Surveys	✓			✓				
Program Data Analysis	✓				✓	✓	✓	✓
Economic Analysis								
Environmental Analysis						✓	✓	✓

Performance Metrics

The table below provides information on how the additional performance metrics will be measured through the evaluation activities. There are several data sources and research activities that will be used for this analysis.

- The program administrator data will provide information on the incentive dollars awarded, the all-in average cost per kWh of expected production, the rate of projects not completed, and the average savings by business model types.
- Program administrator interviews will add information to these metrics on the categories of costs and costs that may not be included in the program data.
- Interviews with program administrators, AVs, and participants (or incomplete participants) as well as the AV on-line survey will provide information on the rate and causes of projects not being completed.

- Interviews with program administrators, stakeholders, Grassroots Educators, and AVs, and the AV on-line survey will provide information on housing stock issues that prevented DG installations.
- Interviews with the IPA, program administrators, stakeholders, and Grassroots Educators will provide information on satisfaction with AVs. Review of quality control results will provide additional information on the performance of the AVs.

Table II-16
Evaluation Activities to Measure Additional Performance Metrics

	Additional Performance Metrics					
Research Activities	**Incentive $ Awarded**	**Avg. Total $ per kW Expected Production**	**Housing Stock Issues Prevented DG Install**	**Rate of Projects Not Completed & Causes**	**Satisfaction with Approved Vendors**	**Average Savings by Business Model Types**
IL Power Agency Interviews					✓	
Program Admin Interviews		✓	✓	✓	✓	
Stakeholder Interviews			✓		✓	
Grassroots Educator Interviews			✓		✓	
Vendor Interviews			✓	✓		
Vendor On-Line Survey			✓	✓		
Electric Utility Interviews					✓	
Job Trainee Interviews						
Participant In-Depth Interviews				✓		
Participant Surveys					✓	
Program Data Analysis	✓	✓		✓		✓
Economic Analysis						
Environmental Analysis						

III. Initial Implementation Experience and Statistics

This section provides data and information on the initial implementation of the ILSFA Program. The information in this section is based on publicly available information on the ILSFA Program website, interviews with the IPA and Elevate Energy managers and staff, and data from the ILSFA Program Database.

A. Overview

Key dates in the implementation of the ILSFA Program are provided in Table III-1. There was a short time period in which this complicated program design was finalized and the program was implemented. Challenges resulted from a need to mirror aspects of the ABP which was being developed at the same point; time needed for stakeholder review, comments, and modifications in response to those comments; and aggressive target implementation dates. Despite these challenges, the ILSFA Program was launched close to the initial targeted implementation schedule.

Table III-1
Key ILSFA Program Implementation Dates

Date	Milestone
12/7/2016	Future Energy Jobs Act Legislation Enacted
6/1/2017	Future Energy Jobs Act Effective Date
9/29/2017	Draft Long-Term Renewable Resources Procurement Plan Published
12/4/2017	Long-Term Renewable Resources Procurement Plan Filed with Illinois Commerce Commission
4/3/2018	Long-Term Renewable Resources Procurement Plan Approved by Illinois Commerce Commission
9/14/2018	ILSFA Program Administrator, Elevate Energy Selected
11/1/2018	ILSFA Website Launch
1/17/2019	Environmental Justice Communities List Published
2/19/19	Approved Vendor Registration Launched
5/6/2019	Environmental Justice Community Self-Designation Application Opened
5/15/2019	Approved Vendor Portal Opened for Project Submissions, Standard REC Contract Published
6/13/19	Low-Income Community Solar Submission Window Closed
6/28/19	Low-Income Distributed Generation and Non-Profit / Public Facilities Submission Window Closed
6/27/2019	Grassroots Educators Announced
8/7/2019	ILSFA Program Evaluator, APPRISE, Selected
8/15/2019	Draft Revised Long-Term Renewable Resources Procurement Plan Released for Public Comment
8/22/2019	Non-Profit / Public Facilities Projects Selected for 2018/2019
8/29/2019	Low-Income Community Solar Projects Selected for 2018/2019
9/4/2019	2019/2020 Project Submission Window Opened
9/17/2019	2019/2020 Project Submission Window Closed

Date	Milestone
10/2/2019	Illinois Commerce Commission Approved 2018/2019 Project Selections
10/21/2019	Revised Long-Term Renewable Resources Procurement Plan Filed for Illinois Commerce Commission Approval
11/7/2019	2019/2020 Final Project Selections Announcement

Because the ILSFA Program was launched so soon after the ABP, the IPA and Elevate did not have time to understand the barriers and challenges faced by low-income households in participating in the ABP and to design a program that specifically addressed those challenges.

B. Long-Term Renewable Resources Procurement Plan

The IPA published a Draft Long-Term Plan on September 29, 2017 and stakeholders were provided with 45 days to provide written comments. The IPA answered questions, provided presentations on the Long-Term Plan, received public comments, and revised the Long-Term Plan. The Long-Term Plan was filed at the ICC for review and approval on December 4, 2017.

C. Program Administration

The IPA could not enter contracts until the Long-Term Plan was approved. Following approval, Elevate Energy was hired to administer the ILSFA Program. However, it would have been beneficial to have Elevate involved in the development of the Long-Term Plan, to both obtain feedback and ideas from Elevate and to provide Elevate with more time to internalize the Long-Term Plan for a greater period of time before beginning program implementation.

The IPA selected Elevate Energy to serve as the program administrator. Elevate Energy is responsible for the Low-Income DG, Low-Income CS, and the Incentives for NP/PF sub-programs. NERA Economic Consulting (NERA), the IPA's Procurement Administrator, is responsible for the Low-Income CS Pilot Projects sub-program. Their responsibilities include the following (in applicable sub-programs).

- Project Eligibility Verification: This includes income verification, review of community involvement, review of job training coordination, and review of consumer protections such as ensuring that economic benefits accrue to low-income participants.
- Data Maintenance: Act as the central source for income verification and maintain database of program participants.
- Vendor Administration: Assist in the development of contracts, disclosure forms, and brochures for use by AVs and their partner CBOs.
- Grassroots Education: Coordinate distribution of funding for Grassroots Education by CBOs, prioritizing promotion of funding in EJ communities.
- Vendor Liaison: Facilitate partnerships between AVs and job training organizations. Maintain a clearinghouse of information that AVs can use to identify potential job training program graduates to hire. Inform AVs of other program opportunities and funding sources (such as energy efficiency, weatherization, and lead abatement) that could provide additional benefits to participants.

- Leveraging Resources: Provide guidance to AVs, community groups, and others on how to leverage other relevant policies such as affordable housing, economic development, public finance, and tax policies to facilitate low-income solar projects and energy efficiency programs.
- Program Materials: Develop the program manual and related documents for use by AVs.
- Reporting: Provide quarterly reports to the IPA and the ICC on the status of the program, including number of applications received, number of applications approved, number of projects completed, REC payments, payments for grassroots education efforts, status of grassroots education, and technical assistance provided.
- Quality Assurance: Develop, in coordination with the program evaluator, a process for quality assurance, including photos of projects under construction and on-site inspection of a random sample of installations.

D. Program Guidelines and Materials

Most of the program materials have been developed by Elevate Energy with detailed review and edits provided by the IPA. Elevate has designed these materials to incorporate their consistent branding strategy.

There were many guidelines and materials developed for the ILSFA Program within a short period of time, including the following.

- ILSFA Brochures (English and Spanish)
- Press Releases
- Designation of Environmental Justice Communities
- Income Verification
- Customer Protections
- Site Suitability Guidelines
- Approved Vendor Manual
- Project Selection Procedures
- Grassroots Education Guidelines, RFP, and Scoring Rubric

IPA developed the REC contracts with their procurement consultant, NERA.

Elevate Energy conducts a review of all marketing materials created by AVs and by Grassroots Educators to ensure that the information is consistent with the ILSFA Program guidelines and that all of the information is accurate. AVs must have their materials formatted with the official ILSFA Program design, but Grassroots Educators can include their own branding.

E. ILSFA Website

Elevate Energy works to ensure that all ILSFA Program information is on the website and up-to-date. They are working to make sure that the website is easily accessible on smart phones. They use Google Analytics to track how individuals use the website and respond to marketing emails. They are hoping to conduct surveys and/or focus groups to develop a better understanding of what needs to be changed on the website.

Initial response to the website acknowledges the vast amount of information that is available, and the usefulness of that information. However, there is some agreement that it is not well-organized and information can be difficult to locate.

F. ILSFA Portal

Elevate Energy designed the Salesforce platform used by the ILSFA Program. The ILSFA Program database was designed to mirror the ABP to make it easier for the AVs to use. For example, the building assessment data are the same for both programs.

The system was being developed as the rules and the parameters for the ILSFA Program were still under development. Elevate Energy had a short window to design and implement the database before the program went live, and some of the details and internal checks in the system were still being improved at that time. They have incorporated additional forms into the system to allow for easier data entry and checking. They are now working to optimize the system.

There are several users of the database system.

- Elevate Energy Project, AV, and Grassroots Educator Managers
- Grid Alternatives, for job training oversight
- Shelton Solutions and Elevate Energy staff responsible for recipient verification
- Elevate Energy IT staff
- Elevate Energy Call Center staff

There are several capabilities that are built into the system.

- Lead Tracking: Elevate Energy is working to track where leads come from, how they get into the program, where they fall out of participation, and the reasons for falling out.
- Approved Vendor Project Submissions: AVs can only view the projects they are involved in. AVs must have at least 50 kW across their projects to submit a batch of projects. They submit expected technical specifications at project submission, final approved specifications, the final project specifications, and what was found at inspection.
- Income Documentation: This is tracked at the project and recipient level with sign off and correlated documents.
- Grassroots Educator Reporting: They report on outreach events and participation.

Elevate Energy has worked to design the system to be as simple as possible for the users. The have found that the AVs need reinforcement of what is expected in each field, so they have provided training sessions and may provide videos for the components of the training sessions for AV reference.

One concern about the data collection is the level of demographic detail that will be available for ILSFA Program participants. While certain forms will be scanned and maintained as PDF files, current plans do not include for those data to be tracked in the portal. This may pose challenges for the evaluation assessment and reporting.

G. Vendor Registration

The ILSFA AV registration opened on February 19, 2019. AVs are required to respond to 25 questions and provide extensive supporting documentation. Elevate Energy conducts a thorough review of each vendor's business plan, follows up with questions about aspects of their submission, and scores the submission based up on a rubric developed with the IPA. They submit the information to the IPA for final approval.

As expected, most of the ABP vendors did not apply to become AVs for the ILSFA Program due to the large number of additional requirements. Some vendors who did not have projects selected in the ABP became ILSFA Program AVs and had their projects selected in the first round of selections.

Analyses provided below are based on data on vendor registrations in the ILSFA Program database as of September 17, 2019.

Table III-2 displays the status of the AVs. Twenty-seven vendors have been approved and one was withdrawn. Elevate reported that the AVs include large regional companies and local companies, some of whom are new to solar.

Table III-2
Approved Vendor Registration Status

Status	Vendors	
	#	%
Approved	27	96%
Withdrawn	1	4%
Total	**28**	**100%**

Table III-3 displays the number of AVs that were qualified as MWBEs. Three of the 27 AVs are qualified as MWBEs.

Table III-3
Approved Vendors
Minority or Women-Owned Status

Minority or Women Owned	Vendors					
	Approved		Withdrawn		Total	
	#	%	#	%	#	%
MWBE	3	11%	0	0%	**3**	**11%**
Not MWBE	20	74%	1	100%	**21**	**75%**
Missing	4	15%	0	0%	**4**	**14%**
Total	**27**	**100%**	**1**	**100%**	**28**	**100%**

Table III-4 displays the types of projects that the AVs stated they would provide in their registrations. Twenty-two stated that they would do NP/PF projects, 17 said they would do CS projects, and 13 said they would do DG projects. AVs are not held to these statements, and it is not clear how many of the AVs will actually engage in the DG sub-program. There may need to be more proactive outreach to engage AVs who will undertake these projects.

Table III-4
Approved Vendors
Project Types, 2018-2019

Project Types	Vendors					
	Approved		Withdrawn		Total	
	#	%	#	%	#	%
Non-Profit/Public Facilities	22	81%	1	100%	23	82%
Community Solar	17	63%	0	0%	17	61%
Distributed Generation: 1-4 Unit Buildings	13	48%	1	100%	14	50%
Distributed Generation: 5+ Unit Buildings	13	48%	1	100%	14	50%

NOTE: Vendors can pursue multiple project types.

Table III-5 displays the utility territories where the AVs work. While 22 perform work in Ameren's and ComEd's territories, 12 perform work in the territories of municipal utilities and rural electric cooperatives, ten perform work in the Mid-American territory, and eight perform work in the Mt. Carmel territory.

Table III-5
Approved Vendors by Utility Territories

Utility Territories	Vendors					
	Approved		Withdrawn		Total	
	#	%	#	%	#	%
Ameren	22	81%	1	100%	23	82%
ComEd	22	81%	1	100%	23	82%
Municipal Utilities	12	44%	1	100%	13	46%
Rural Electric Cooperatives	12	44%	1	100%	13	46%
Mid-American	10	37%	1	100%	11	39%
Mt. Carmel	8	30%	1	100%	9	32%

NOTE: Vendors can work in multiple utility territories.

Elevate Energy noted that there may be a need to recruit vendors to have diversity with MWBEs. Elevate has a workforce development program where they work with these businesses that are new to solar. Elevate is working to ensure that these vendors understand the requirements to become an AV. They are working with the Grassroots Educators to

understand the availability of AVs throughout the state. While all of the AVs stated that they worked throughout the state, this may not be the case.

H. Initial Project Applications and Selection

This section provides data on the project applications and projects that were initially selected in late August 2019 based on project data as of August 16, 2019. These contracts were approved by the ICC in early October 2019. Note that these data represent the initial information included in the project submissions and some project characteristics were revised after that time.

Table III-6 displays the number of projects submitted, eligible, ineligible, withdrawn, and selected by sub-program for the 2018-2019 program year. The table provides the following information.

- Non-Profit / Public Facility Projects: 28 projects were submitted, 12 were eligible, and seven were selected. Nine NP/PF Projects were deemed ineligible for the following reasons.
  - Not in EJ community or low-income community (4 projects)
  - Batch size reduced by too much (2 projects)
  - EJ self-designation submitted too late (1 project)
  - Failed to submit all required documentation (1 project)
  - Not a critical service provider (1 project)

  Seven NP/PF Projects were withdrawn for the following reasons.
  - No signed interconnection agreement (4)
  - Financial constraints (1)
  - Slate roof being installed (1)
  - Unresponsive upper management (1)

- Low-Income Community Solar Projects: 45 projects were submitted, 31 were eligible, and five were selected. Eight CS projects were deemed ineligible because there was no signed interconnection agreement. Six CS projects were withdrawn for the following reasons.
  - Waiting to next program year (2)
  - Interconnection cost higher than expected (2)
  - No signed interconnection agreement (1)
  - Not financially feasible (1)

- Low-Income Distributed Generation Projects: One project was submitted, but it was withdrawn. The IPA and Elevate believe that this does not reflect issues with the program design, but rather the need for AVs to have more time to fully understand the sub-program and its requirements.

Table III-6
All Submitted Projects, 2018-2019
Eligibility Status

Status	Non-Profit / Public Facility		Community Solar		Distributed Generation		Total	
	#	%	#	%	#	%	#	%
Selected	7	25%	5	11%	0	0%	**12**	**16%**
Eligible	12	43%	31	69%	0	0%	**43**	**58%**
Ineligible	9	32%	8	18%	0	0%	**17**	**23%**
Withdrawn	7	25%	6	13%	1	100%	**14**	**19%**
Total	**28**	**100%**	**45**	**100%**	**1**	**100%**	**74**	**100%**

Table III-7 displays the number of projects submitted by AVs in each ILSFA sub-program. The vendors that submitted the most projects were Novel Energy Solutions, Central Road Energy, Community Power Group, and Solar Sense.

Table III-7
All Submitted Projects, 2018-2019
Approved Vendors

Vendor	Non-Profit / Public Facility		Community Solar		Distributed Generation		Total	
	#	%	#	%	#	%	#	%
Novel Energy Solutions LLC	2	7%	11	24%	0	0%	**13**	**18%**
Central Road Energy LLC	8	29%	1	2%	0	0%	**9**	**12%**
Community Power Group, LLC	0	0%	9	20%	0	0%	**9**	**12%**
Solar Sense, Inc.	7	25%	2	4%	0	0%	**9**	**12%**
Advanced Energy Solutions Group Inc	6	21%	0	0%	0	0%	**6**	**8%**
Ameresco, Inc.	0	0%	5	11%	0	0%	**5**	**7%**
Groundswell, Inc.	1	4%	3	7%	0	0%	**4**	**5%**
Promethean Solar	0	0%	4	9%	0	0%	**4**	**5%**
Trajectory Energy Partners	0	0%	4	9%	0	0%	**4**	**5%**
Citrine Power LLC	0	0%	2	4%	0	0%	**2**	**3%**
LiveWire Electrical Systems, Inc.	2	7%	0	0%	0	0%	**2**	**3%**
PSG Energy Group	2	7%	0	0%	0	0%	**2**	**3%**
SA Energy LLC	0	0%	1	2%	1	100%	**2**	**3%**
Other	0	0%	3	7%	0	0%	**3**	**4%**
Total	**28**	**100%**	**45**	**100%**	**1**	**100%**	**74**	**100%**

Table III-8 displays the number of selected projects by AV. There were five different AVs who had selected projects. Solar Sense had five selected projects and Novel Energy Solutions had three selected projects. Three other vendors had one or two selected projects.

Table III-8
All Selected Projects, 2018-2019
Approved Vendors

Approved Vendor	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
Solar Sense, Inc.	3	43%	2	40%	**5**	**42%**
Novel Energy Solutions LLC	2	29%	1	20%	**3**	**25%**
PSG Energy Group	2	29%	0	0%	**2**	**17%**
SunPower Corporation, Systems	0	0%	1	20%	**1**	**8%**
Trajectory Energy Partners	0	0%	1	20%	**1**	**8%**
Total	**7**	**100%**	**5**	**100%**	**12**	**100%**

Table III-9 displays the number of submitted projects by utility territory. The table shows that 44 projects were submitted in Ameren's territory, 27 were submitted in ComEd's territory, and three were submitted in the territory of rural or municipal utilities.

Table III-9
All Submitted Projects, 2018-2019
Utility Territory

Utility Territory	Non-Profit / Public Facility		Community Solar		Distributed Generation		Total	
	#	%	#	%	#	%	#	%
Ameren	22	79%	22	49%	0	0	**44**	**59%**
ComEd	3	11%	23	51%	1	100%	**27**	**36%**
Rural Electric Co-op	2	7%	0	0	0	0	**2**	**3%**
Municipal Utility	1	4%	0	0	0	0	**1**	**1%**
Total	**28**	**100%**	**45**	**100%**	**1**	**100%**	**74**	**100%**

Table III-10 displays the number of selected projects by utility territory. The table shows that nine projects in Ameren's territory and three in ComEd's territory were selected.

Table III-10
All Selected Projects, 2018-2019
Utility Territory

Utility Territory	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
Ameren	5	71%	4	80%	**9**	**75%**
ComEd	2	29%	1	20%	**3**	**25%**
Total	**7**	**100%**	**5**	**100%**	**12**	**100%**

Table III-11 displays the number of selected projects by city. The table shows that the selected projects are located in eight different cities, but none are located in Chicago.

Table III-11
All Selected Projects, 2018-2019
Illinois City

City	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
Champaign	1	14%	2	40%	**3**	**25%**
Urbana	2	29%	1	20%	**3**	**25%**
Alton	1	14%	0	0%	**1**	**8%**
Aurora	1	14%	0	0%	**1**	**8%**
Granite City	1	14%	0	0%	**1**	**8%**
Montgomery	1	14%	0	0%	**1**	**8%**
Rockford	0	0%	1	20%	**1**	**8%**
Watseka	0	0%	1	20%	**1**	**8%**
Total	**7**	**100%**	**5**	**100%**	**12**	**100%**

Figure III-1 displays the location of the selected projects.

Figure III-1
ILSFA Program Selected Project Locations, 2018-2019

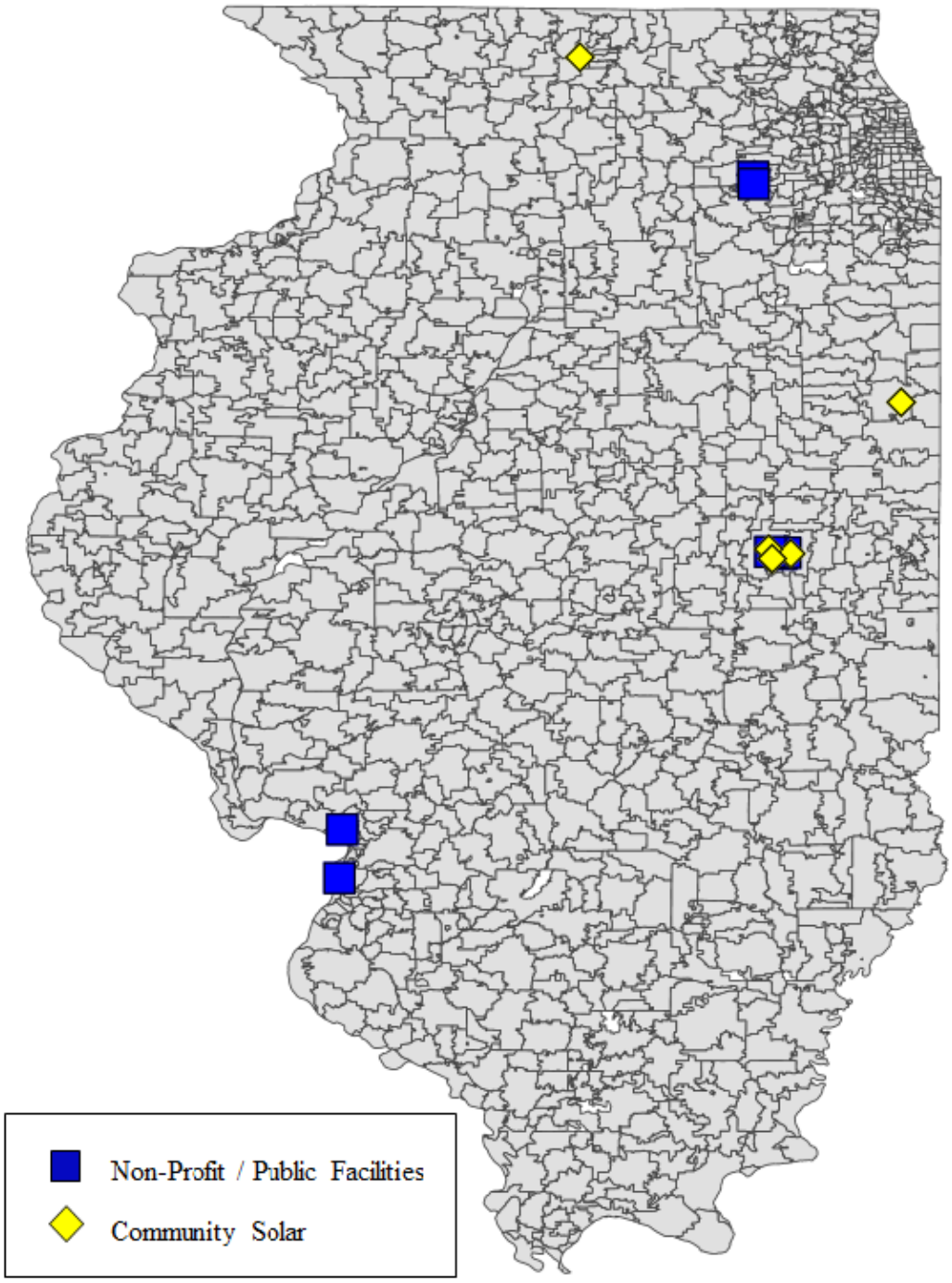


Table III-12 displays the number of projects submitted in EJ communities, in low-income census tracts, and by minority or women-owned businesses.

- 50 percent of submitted NP/PF projects were in EJ communities.
- 42 percent of submitted CS projects were in EJ communities.
- 79 percent of submitted NP/PF projects were in low-income census tracts.
- 62 percent of submitted CS projects were in low-income census tracts.
- Only two of the NP/PF projects and none of the CS projects were submitted by minority or women-owned businesses.

Table III-12
All Submitted Projects, 2018-2019
Environmental Justice Community
Low-Income Census Tract
Minority or Women Owned Business

Category	Non-Profit / Public Facility		Community Solar		Distributed Generation		Total	
	#	%	#	%	#	%	#	%
Environmental Justice Community	14	50%	19	42%	0	0	**33**	**45%**
Low-Income Census Tract	22	79%	28	62%	1	100%	**51**	**69%**
Minority or Women-Owned Business	2	7%	0	0	1	100%	**3**	**4%**
At Least One of the Above Categories	**22**	**79%**	**30**	**67%**	**1**	**100%**	**53**	**72%**
None of the Above Categories	**6**	**21%**	**15**	**33%**	**0**	**0%**	**21**	**28%**

Table III-13 displays the number of selected projects in EJ communities, in low-income census tracts, and by minority or women-owned businesses.

- 5 of the 7 selected NP/PF projects were located in EJ communities.
- 1 of the 5 selected CS projects was located in an EJ community.
- All 7 NP/PF projects were located in low-income census tracts.
- 3 of the 5 selected CS projects were located in low-income census tracts.
- None of the selected projects were submitted by MWBEs.

Table III-13
Selected Projects, 2018-2019
EJ Community, Low-Income Census Tract, and MWBE Businesses

Category	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
Environmental Justice Community	5	71%	1	20%	**6**	**50%**
Low-Income Census Tract	7	100%	3	60%	**10**	**83%**
Minority or Women-Owned Business	0	0%	0	0%	**0**	**0%**
At Least One of the Above Categories	**7**	**100%**	**3**	**60%**	**10**	**83%**
None of the Above Categories	**0**	**0%**	**2**	**40%**	**2**	**17%**

Table III-14 breaks down the NP/PF projects into the two sub-program segments. The table shows that 17 of the submitted and four of the selected projects were non-profit and that 11 of the submitted and three of the selected projects were public facilities.

Table III-14
Non-Profit and Public Facility Projects, 2018-2019
Non-Profit or Public Facility

Type of Project	Non-Profit / Public Facility Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
Non-Profit	4	57%	9	75%	2	22%	6	86%	**17**	**61%**
Public Facility	3	43%	3	25%	7	78%	1	14%	**11**	**39%**
Total	**7**	**100%**	**12**	**100%**	**9**	**100%**	**7**	**100%**	**28**	**100%**

Table III-15 displays the anchor type for the CS projects. While three of the CS projects had a public facility as an anchor, two did not have an anchor.

Table III-15
Low-Income Community Solar Projects, 2018-2019
Projected Anchor Type

Anchor Type	Community Solar Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
Public facility	3	60%	13	42%	0	0%	3	50%	16	36%
Non-Profit	0	0%	4	13%	1	13%	2	33%	7	16%
Other	0	0%	1	3%	0	0%	0	0%	1	2%
None	2	40%	13	42%	7	88%	1	17%	21	47%
Total	**5**	**100%**	**31**	**100%**	**8**	**100%**	**6**	**100%**	**45**	**100%**

Table III-16 displays the projected anchor share for the CS projects. The table shows that two of the selected projects did not have an anchor, one had an anchor share between 11 and 20 percent, and two had an anchor share between 31 and 40 percent.

Table III-16
Low-Income Community Solar Projects, 2018-2019
Projected Anchor Share

Anchor Share	Community Solar Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
0%	**2**	**40%**	14	45%	7	88%	1	17%	22	49%
1% - 10%	**0**	**0%**	3	10%	1	13%	2	33%	6	13%
11% - 20%	**1**	**20%**	1	3%	0	0%	0	0%	1	2%
21% - 30%	**0**	**0%**	2	6%	0	0%	0	0%	2	4%
31% - 40%	**2**	**40%**	11	35%	0	0%	3	50%	14	31%
Total	**5**	**100%**	**31**	**100%**	**8**	**100%**	**6**	**100%**	**45**	**100%**

Table III-17 displays the funding source for the selected projects. Six of the seven NP/PF projects and four of the five CS projects will be funded through the RERF.

Table III-17
All Selected Projects, 2018-2019
Funding Source

Utility Territory	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
RERF	6	86%	4	80%	**10**	**83%**
Utility	1	14%	1	20%	**2**	**17%**
Total	**7**	**100%**	**5**	**100%**	**12**	**100%**

Table III-18 displays the agreement type for the NP/PF projects. While four of the selected projects were Power Purchase Agreements (PPAs), three were leases, and none were purchases.

Table III-18
Non-Profit and Public Facility Projects, 2018-2019
Agreement Type

Agreement Types	Non-Profit / Public Facility Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
PPA	4	57%	5	42%	2	22%	7	100%	**14**	**50%**
Lease	3	43%	7	58%	5	56%	0	0%	**12**	**43%**
Purchase	0	0%	0	0%	2	22%	0	0%	**2**	**7%**
Total	**7**	**100%**	**12**	**100%**	**9**	**100%**	**7**	**100%**	**28**	**100%**

Table III-19 provides the term of savings for the NP/PF projects. The table shows that two of the selected projects had a 15-year term and five had a 25-year term.

Table III-19
Non-Profit and Public Facility Projects, 2018-2019
Term of Savings

Term	Non-Profit / Public Facility Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
15 Years	2	29%	2	17%	0	0%	0	0%	**2**	**7%**
20 Years	0	0%	1	8%	0	0%	0	0%	**1**	**4%**
25 Years	5	71%	9	75%	0	0%	0	0%	**9**	**32%**
Missing	0	0%	0	0%	9	100%	7	100%	**16**	**57%**
Total	**7**	**100%**	**12**	**100%**	**9**	**100%**	**7**	**100%**	**28**	**100%**

Table III-20 displays the number of arrays in the NP/PF projects. Of the selected projects, four had one array, one had three arrays, and two projects had four or more arrays.

Table III-20
Non-Profit and Public Facility Projects, 2018-2019
Number of Arrays

Number of Arrays	Non-Profit / Public Facility Participants									
	Selected		Eligible		Ineligible		Withdrawn		Total	
	#	%	#	%	#	%	#	%	#	%
1	4	57%	7	58%	9	100%	2	29%	**18**	**64%**
2	0	0%	1	8%	0	0%	5	71%	**6**	**21%**
3	1	14%	2	17%	0	0%	0	0%	**2**	**7%**
4+	2	29%	2	17%	0	0%	0	0%	**2**	**7%**
Total	**7**	**100%**	**12**	**100%**	**9**	**100%**	**7**	**100%**	**28**	**100%**

Table III-21 displays the projected project size for the selected projects. The mean size for the NP/PF buildings was 186 AC kW and the mean size for CS projects was 1,181 AC kW. There is some concern that many of the CS projects are large in size and not truly community-driven. This relates to the project economics and the developers looking for economies of scale in project implementation.

Table III-21
All Selected Projects, 2018-2019
Projected Project Size (AC kW)

Project Size (AC kW)	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
≤50 kW	1	14%	2	40%	**3**	**25%**
51-100 kW	3	43%	0	0%	**3**	**25%**
101-1,000 kW	3	43%	0	0%	**3**	**25%**
1,001-1,999 kW	0	0%	1	20%	**1**	**8%**
2,000 kW	0	0%	2	40%	**2**	**17%**
Total	**7**	**100%**	**5**	**100%**	**12**	**100%**
Mean Size	**7**	**186**	**5**	**1,181**	**12**	**601**

Table III-22 displays the projected estimated production from the PV Watts tool for the selected projects. The mean production for the NP/PF projects was about 275 MWh per year and the mean for CS was about 2,326 MWh per year.

Table III-22
All Selected Projects, 2018-2019
Projected Estimated Production (MWh/Year)

Project Type	# Projects	Projected Estimated Production (MWh/Year)							
		Mean	Min	Percentile					Max
				P10	P25	P50	P75	P90	
Non-Profit / Public Facility	7	275	21	21	116	140	474	854	854
Community Solar	5	2,326	41	41	66	3,715	3,860	3,947	3,947
Total	**12**	**1,130**	**21**	**41**	**91**	**170**	**2,285**	**3,860**	**3,947**

Table III-23 displays the contracted number of RECs for the selected projects. The table shows that the mean was 3,932 for the NP/PF projects and 33,144 for the CS projects.

Table III-23
All Selected Projects, 2018-2019
Contracted Number of RECs

Project Type	#	Contracted Number of RECs							
		Mean	Min	Percentile					Max
				P10	P25	P50	P75	P90	
Non-Profit / Public Facility	7	3,932	306	306	1,682	1,996	6,990	11,916	11,916
Community Solar	5	33,144	595	595	957	52,823	55,425	55,919	55,919
Total	**12**	**16,104**	**306**	**595**	**1,320**	**2,446**	**32,370**	**55,425**	**55,919**

Table III-24 displays the REC value for the selected projects. The table shows that the NP/PF projects averaged about $390,000 and the CS projects averaged about $3.45 million in REC value.

Table III-24
All Selected Projects, 2018-2019
REC Value ($ Millions)

Project Type	#	REC Value ($ Millions)							
		Mean	Min	Percentile					Max
				P10	P25	P50	P75	P90	
Non-Profit / Public Facility	7	$0.39	$0.04	$0.04	$0.20	$0.21	$0.67	$1.10	$1.10
Community Solar	5	$3.45	$0.09	$0.09	$0.12	$5.36	$5.81	$5.86	$5.86
Total	**12**	**$1.67**	**$0.04**	**$0.09**	**$0.16**	**$0.27**	**$3.23**	**$5.86**	**$5.86**

Table III-25 displays the dollars and percent of REC dollars in EJ Communities and low-income Census Tracts. The table shows that 68 percent of the REC value for NP/PF projects and 34 percent of the REC value for CS projects were in EJ communities. Almost all of the REC value was in low-income Census Tracts.

Table III-25
All Selected Projects, 2018-2019
REC Value ($) in Environmental Justice Communities and Low-Income Census Tracts

REC Value	Non-Profit / Public Facility		Community Solar		Total	
	#	%	#	%	#	%
REC Dollars in EJ Communities	$1,889,613	68%	$5,808,540	34%	**$7,698,153**	**38%**
REC Dollars not in EJ Communities	$875,000	32%	$11,423,978	66%	**$12,298,977**	**62%**
REC Dollars in LI Census Tracts	$2,764,613	100%	$17,024,576	99%	**$19,789,188**	**99%**
REC Dollars not in LI Census Tracts	$0	0%	$207,942	1%	**$207,942**	**1%**
Total	**$2,764,613**	**100%**	**$17,232,518**	**100%**	**$19,997,130**	**100%**

Table III-26 displays the first year costs savings and the total costs and savings for the NP/PF projects.

Table III-26
Non-Profit and Public Facility Projects, 2018-2019
Selected Project Costs and Savings

Costs and Savings	#	Selected Non-Profit/ Public Facility Project Costs and Savings							
		Mean	Min	Percentile					Max
				P10	P25	P50	P75	P90	
First Year Costs	7	$8,762	$12	$12	$12	$867	$22,228	$32,800	$32,800
Total Costs	7	$205,712	$181	$181	$181	$12,561	$322,000	$948,692	$948,692
First Year Savings	7	$14,731	$1,838	$1,838	$5,400	$10,953	$24,951	$32,800	$32,800
Total Savings	7	$354,678	$31,584	$31,584	$156,187	$258,112	$447,869	$948,692	$948,692

Table III-27 displays the total percentage savings over the term of the agreement. This averages 76 percent, greater than the required 50 percent, for the selected NP/PF projects.

Table III-27
Non-Profit and Public Facility Projects, 2018-2019
Total Savings over the Term of Agreement

Status	#	Total Savings over Term of Agreement (%)							
		Mean	Min	Percentile					Max
				P10	P25	P50	P75	P90	
Selected	7	76%	50%	50%	50%	71%	> 99%	100%	100%
Eligible	12	82%	50%	50%	58%	> 99%	> 99%	> 99%	100%
Ineligible	9	61%	19%	19%	50%	61%	71%	100%	100%
Withdrawn	7	58%	57%	57%	58%	58%	58%	60%	60%
Total	**28**	**69%**	**19%**	**50%**	**57%**	**59%**	**> 99%**	**100%**	**100%**

I. 2019/2020 Project Application and Selection

Elevate Energy made the decision to start the second program year shortly after the selection of the first projects was finalized to take advantage of tax credits and the pent up demand for CS, and to make sure that projects that were waiting had access to funding. Due to this decision, Elevate Energy did not have much time to process what was learned and translate the information into program and systems revisions. The 2019/2020 project application window opened on September 4, 2019 and closed on September 17, 2019.

The following projects were submitted.

- Low-Income Distributed Generation: There were 11 project submissions, totaling 2,064 kW in system capacity and $4.2 million in incentive value.
- Low-Income Community Solar: There were 30 project submissions, totaling 54,511 kW in system capacity and $148.8 million in incentive value.
- Non-Profit/Public Facilities: There were 20 project submissions, totaling 2,675 kW in system capacity and $6.1 million in incentive value.

Based on these submissions, project selection will only be necessary for the Low-Income CS sub-program.

IV. Stakeholder Outreach Design and Feedback

This section summarizes the findings related to stakeholder outreach. Findings in this section are based on review of ILSFA Program materials available on the website, interviews with IPA and Elevate Energy managers and staff, and interviews with 16 ILSFA Program stakeholders.

A. Overview

Stakeholder engagement is an important aspect in the development and implementation of the Illinois Solar for All (ILSFA) Evaluation. The Future Energy Jobs Act (FEJA), which required the development of this program, specifically stated that an objective was to include interaction with stakeholders.

Stakeholders for the Illinois Solar for All Program include the following.

- Environmental Justice Communities
- Low-Income Households
- Affordable Housing Owners
- Job Training Organizations
- Job Trainees
- Community Organizations
- Non-Profit and Public Sector
- IL Commerce Commission
- Investor-Owned Electric Utilities

FEJA included stakeholders in the following.

- Program Component Funding: If incentives are not adequately subscribed to fully utilize the Illinois Power Agency Renewable Energy Resources Fund (RERF), the allocation of funding between the sub-programs may be re-distributed. This should be determined including input from a stakeholder process.

- Alternative Programs: Stakeholders may propose alternative low-income solar or solar incentive sub-programs or modifications to the sub-programs proposed by the IPA. The Commission may approve those sub-programs if they more effectively maximize benefits to low-income customers.

- Project Selection: Priority is to be given to projects that demonstrate meaningful involvement of low-income community members in designing the initial proposals. Applicants must demonstrate their ability to conduct initial community outreach, education, and recruitment of low-income participants in the community.

- Low-Income Community Solar Project Initiative: The developer of each project shall identify its partnership with community stakeholders regarding the location, development, and participation in the project.

- Evaluation: The objective criteria should be developed through a public stakeholder process. The process shall include feedback and participation for ILSFA Program stakeholders, including participants and organizations in EJ and historically underserved communities.

The Long-Term Plan states that the IPA and the program administrator will work with stakeholders to do the following.

- Designate specific communities as EJ communities. (Also includes the IL Commission on EJ and the IL Environmental Protection Agency (IEPA)).
- Refine and finalize requirements for bidder participation in the Low-Income CS Pilot Projects.

The IPA began workshops and solicitation of stakeholder feedback in May 2017. The draft Long-Term Plan was published in September 2017 and parties had 45 days to provide written comments. IPA answered questions, provided presentations on the Long-Term Plan, received public comments, and revised the plan. The Long-Term Plan was filed at the Illinois Commerce Commission for review and approval on December 4, 2017.

Other opportunities for stakeholder participation and feedback occurred during the following meetings and presentations, as well as in response to ILSFA Program guidelines posted on the website.

- Stakeholder Engagement Session (11/29/2018)
- Grassroots Education Stakeholder Sessions (12/18/2018)
- Approved Vendor Registration Feedback Session (12/19/2018)
- Designating Environmental Justice Communities Session (1/17/2019)
- Feedback Session to Review Third Party Program Evaluation (1/29/2019)
- Job Training Requirements Feedback Session (2/1/2019)
- Approved Vendor Registration Training (2/15/2019)
- Project and Participant Eligibility and Verification Processes Presentation (2/27/2019)
- Quality Assurance and Quality Control for Project Installations Presentation (3/26/2019)
- REC Contract Presentation (3/28/2019)
- Project Selection Protocol Presentation (4/8/2019)
- Long-Term Renewable Resources Procurement Plan Update Stakeholder Workshop Presentations (6/26/19)

Elevate reported that they had good attendance at the stakeholder outreach presentations, ranging from 60 to 70 attendees at the smaller events and up to 120 at the larger events, depending on the subject matter.

Much of the stakeholder feedback has come through the ILSFA Working Group, a coalition of many organizations which provides a single comment document for each topic that has been filtered through a consensus-building process. It may be useful for the IPA and Elevate to receive a wider variety of comments that express the diverse viewpoints that are likely to exist within the Working Group. In some cases, individual groups within the ILSFA Working Group sent additional feedback.

The IPA and Elevate stated that stakeholder participation was strong, but it could have been beneficial to have additional feedback from certain groups or on particular topics.

- There could have been greater participation in stakeholder outreach among low-income advocates. These groups are less focused on solar than on energy assistance and energy efficiency.
- The stakeholders that have been most involved are in the EJ and solar fields.
- There was an expectation for greater participation from government and advocacy groups in the EJ area.
- More specific comments about technical program design issues would be useful.

The ILSFA Program adopted many of the recommendations received in the stakeholder feedback process.

B. Research Methodology

The targets for the stakeholder interviews included representatives from the ILSFA Working Group and individuals and organizations who responded to invitations to comment on ILSFA Program guidelines and materials. The following numbers were identified in each group and targeted for interviews.

- ILSFA Working Group Leaders
  - 2 leaders listed
  - 2 targeted for interviews

- ILSFA Working Group Members – Non-Profit/Community Organizations
  - 12 organizations listed
  - 6 to 7 targeted for interviews

- ILSFA Working Group Members – Solar/Energy Providers
  - 4 individuals listed
  - 1 to 2 targeted for interviews

- Non-Solar Responders to Invitations for Written Comments on ILSFA Materials
  - 4 individuals listed
  - 2 targeted for interviews

- Solar Responders to Invitations for Written Comments on ILSFA Materials
  - 9 organizations listed
  - 4 targeted for interviews

16 in-depth interviews were conducted with ILSFA Stakeholders from the following groups.

- 4 Solar Companies
- 3 Environmental Non-Profits
- 3 Solar Installers
- 2 Energy Policy Experts

- 2 Solar Energy Consultants
- 2 Non-Solar Commenters

Over half of the stakeholders who participated in interviews participated in the ILSFA Working Group, comprised of 80 to 90 companies and organizations who work together to support expansion of solar energy in Illinois. Two leaders and other members of the working group participated. In some cases the ILSFA Working Group members participated in all aspect of ILSFA's development, and in other cases they limited their involvement to their specific areas of expertise, such as consumer protection, energy policy, low-income communities, etc.

The interviewed stakeholders had interest in the development of the ILSFA Program for a variety of reasons.

- 3 were involved in the development of the ILSFA Program.
- 3 because of their work in low-income and EJ communities.
- 3 because of their work as solar vendors.
- 2 were interested in the NP/PF sub-program of ILSFA.
- 1 had a general interest in the ILSFA Program.
- 1 was a policy/advocacy expert.
- 1 had a general interest in EJ.
- 1 had a general interest in low-income programs and services.
- 1 had an interest in consumer protection.

Stakeholder interviews were conducted in late August/early September 2019. The interviews ranged in length from 30-55 minutes.

The moderator prepared written interview summaries of each stakeholder interview. The summaries were then checked against an interview transcript. After the summaries were checked against transcripts to ensure accuracy, they were sent electronically to stakeholders for review. Some stakeholders made additions or revisions to their interview summary, while others did not. This analysis includes stakeholder feedback made during and/or after the interviews.

Stakeholders were asked how well they understand the design of the ILSFA Program. Regardless of their self-assessed level of understanding, most stakeholders stated that ILSFA Program is highly complex and requires an investment of time to understand. While stakeholders who have been working on the ILSFA Program since its inception and those in solar companies sometimes appeared to have a stronger understanding of the program's design, those who were involved only in a specific aspect of development were more apt to say they have limited understanding. Non-solar commenters indicated that the program was overly complex, hard to understand, and difficult to keep up with.

- 4 stated that they had a strong understanding or understood the program very well
- 8 said they had a moderate understanding, or understood some but not all of the details
- 4 said that they did not understand it very well or found it confusing.

The interviewees stated that they understood the following areas the best.

- 3 on Distributed Generation/residential solar
- 3 on program design
- 1 on Community Solar
- 1 on Public Facility/Non-Profit Projects
- 1 on participation requirements

The interviewees stated that they understood the following areas less fully.

- 2 on program requirements
- 1 on workforce development
- 1 on program participation
- 1 on Community Solar
- 1 on the funding mechanism

C. Stakeholder Outreach Process and Participation

Stakeholders were asked several questions to elicit their opinions on the stakeholder outreach process.

The most common way that stakeholders learned about opportunities to provide feedback on the ILSFA Program was through email updates. The 16 stakeholders reported the following information sources.

- 9 received an email or newsletter from the ILSFA Program.
- 2 learned both from emails and from the ILSFA Program website.
- 2 reached out to the ILSFA Program.
- 1 learned at the ILSFA Working Group meetings.
- 1 learned at work.
- 1 learned at a webinar.

Most of the stakeholders reported that the program provided a sufficient amount of outreach to encourage stakeholders to participate in the ILSFA Program development process.

- 11 stated that they felt it was sufficient.
  - Four felt, however, that the process could have been improved.
- 4 stated it was not sufficient.
- 1 stakeholder was not sure.

Stakeholders provided the following comments when asked what other actions the program could have taken to solicit additional stakeholder feedback and participation.

- Hold meetings in EJ communities.
- Reading materials were difficult.
- Announce changes after meetings. [Note: Elevate Energy publishes a document that responds to stakeholder comments and provides proposed program changes.]
- Hold more meetings in Southern Illinois.
- Reach out to communities without projects (in future stakeholder outreach).
- Do more surveys.

- Reach out to industry stakeholders more.

Most of the 16 stakeholders who were interviewed reported that they participated in or provided feedback during the ILSFA Program development process. Nearly all stakeholders attended presentations made by IPA or Elevate Energy on particular aspects of the program. Most also reviewed online information and provided written comments.

- 15 attended ILSFA Program presentations.
- 14 reviewed online content.
- 14 provided written comments.

Approximately half of the stakeholders indicated that they provided feedback to IPA multiple times and on many different ILSFA Program topics. Others commented less frequently or more narrowly on topics they perceived to be relevant to their work. They provided feedback on the following program elements.

- 6 did not specify.
- 2 provided feedback on every part of the program.
- 2 provided feedback on vendor requirements.
- 1 provided feedback on the low accessibility of information.
- 1 asked questions.
- 1 provided feedback on the EJ community mapping process.
- 1 provided feedback on job training requirements.
- 1 provided feedback on consumer protection.
- 1 provided feedback on library participation in the NP/PF sub-program.

Fourteen of the 16 interviewed stakeholders stated that they would continue to provide feedback to IPA as the ILSFA Program evolves. The other two indicated that they might or might not comment in the future or have no plans to do so right now.

Stakeholders were asked about their views on the level of stakeholder participation.

- 8 stated there was sufficient participation.
- 10 felt that the ILSFA Program was open to ideas and feedback from stakeholders.
- 12 felt that the ILSFA Program responded appropriately to stakeholder comments.

Among those who stated that they did not know or felt there was not sufficient participation in the ILSFA Program development, stakeholders suggested that feedback was limited in the following ways.

- Participation was limited to those who could access the ILSFA Program website, which they felt may have pre-empted some in low-income communities from participating.
- Participation was limited to individuals who were "self-selecting", that is, already working in the renewable energy space.
- A few respondents felt that certain groups were not well-represented in the stakeholder feedback, including non-profits focused on low-income issues, African Americans, and businesses located outside of Chicago or in EJ communities.

Some stakeholders felt that their own participation may have been limited by the response timeline, which in some cases was reported to be as short as five days. While many stakeholders recognized that IPA had to balance the feedback opportunity with implementation timelines, most stakeholders felt that responding within the quick turn-around provided was difficult, and sometimes limited their ability to provide well thought-out and detailed commentary. Others indicated that the short timeframes for feedback may have also limited the ability of non-profit volunteers and non-English speakers to participate.

Stakeholders expressed positive feedback about the process where feedback was posted online with a summary of all responses that were provided. A few stakeholders noted that IPA's response was better than they have previously observed with other state agencies.

While three-quarters of stakeholders felt that their ideas were heard and taken into account, a majority felt that they had an impact on the development of the ILSFA Program and that stakeholder comments were integrated into the program.

- 12 stated that their ideas were heard and taken into account.
- 9 felt they had an impact on the development of the ILSFA Program.
- 10 said they felt the program incorporated stakeholder comments into the program where feasible and beneficial.

A few stakeholders provided examples of how their feedback helped shape the ILSFA Program overall or in specific areas. Others, however, did not know if their feedback had made a difference and a few felt it had not. These individuals explained that while IPA listened, it did not act upon what they suggested.

Eleven of the 16 interviewed stakeholders felt that there were barriers to participating in the ILSFA Program development process.

The following barriers to participation were noted by stakeholders.

- Pace of the program/rapid development cycle.
- Limited timeline for comments.
- Limited staff resources to respond.
- Information only provided in English.
- Overlapped with Adjustable Block Program submission dates.
- Other non-solar projects competing for staff's attention.
- Distance/ ability to come to Chicago for meetings.
- Complexity of information/too difficult to understand.
- Concerns about consumer confidentiality.
- Not knowing whether contracts will be funded.
- Technological barriers (poor audio, streaming quality).

D. ILSFA Feedback and Recommendations

Most stakeholders reported that the ILSFA Program's incentive structure is appropriate and that low-income eligibility requirements appear to be fair and appropriate. Additionally, the majority of stakeholders felt that the EJ community requirements are appropriate. Some spoke positively about the EJ look-up tool on the ILSFA Program website, indicating that it is helpful.

Low-Income Distributed Generation Component

Of all four sub-programs, stakeholders express the greatest concern and skepticism about how the Low-Income DG Component is designed and how it will play out. Concerns, often identified by solar company vendors and industry consultants, focused on whether consumers have been adequately prepared and/or how they will respond to the new offer of solar energy. Stakeholders worried about if and how the program's business model, where vendors must cover upfront installation costs prior to receiving RECs payments, will actually work. [Note that the timing of payments for RECs is dictated by statute, while the provisions for not having upfront costs for the participants was defined in the Long-Term Plan.]

Specific concerns about the complexity of the program or materials were as follows.

- The complexity of the program will make the ILSFA Program difficult for consumers and businesses in Illinois to understand how it works.
- The complexity may serve as a barrier to participation by small businesses of color and individuals living in EJ communities.
- The disclosure language on form may be too difficult for low-income consumers to understand.

Concerns about customer knowledge and skepticism were as follows.

- Consumers will need reassurances due to past experience in Illinois with unscrupulous alternative energy suppliers in Illinois.
- Consumers have limited knowledge about the benefits of solar energy to support vendors' sales processes since market education has been limited.

Concerns about ILSFA Program requirements and process were as follows.

- A seven-day waiting period on contracts may be confusing to some consumers and inefficient for vendors.
- Whether the 50 percent consumer savings requirement is realistic.
- It is difficult for consumers to wait months to determine whether they will receive funding and they may need to move on with other energy solutions.

Concerns about vendors' financial investments were as follows.

- It is difficult for small businesses to participate given that they must finance installations upfront.
- Concern about the REC payment timeline (six to eight months expected).

Other comments were as follows.

- There will be need for more assistance from job training programs to identify trainees for the installation projects.
- Concerns about handling confidential consumer income information.
- There is a need to balance funding between large and small projects, i.e. apartment buildings may take up a lot of the funding and not leave enough for single-family home installations.

Some stakeholders suggested that it might be better for Elevate Energy to collect and process income information for private home owners. Other stakeholders suggested that the low-income qualification could be determined through integration of other government databases via inter-governmental use agreements.

Some vendors indicated that they will not engage in the ILSFA Program until they understand how the financial side of the program will work or until they can determine how many single family projects they can take on or fund. Though non-profits tend to believe that solar companies' cash flow should not be a barrier to participation because the focus needs to be on low-income individuals, solar companies maintain that they do not have unlimited resources to fund installations and are proceeding in a measured, cautious manner rather than with an "all-in" level of enthusiasm. At least one potential vendor indicated that this is the reason his company has not yet submitted an application to become an Approved Vendor, and industry consultants warn that the current business model for DG may not make sense.

Low-Income Community Solar Component

While most stakeholders supported the definition of EJ communities and the allocation of at least 25 percent of the funds to projects located in those communities, some felt that the IPA must work to further resolve pricing issues. Comments were as follows.

- There is a need for greater subjectivity in the scoring process, as well as greater gradation in scales used to score potential projects. Since it is more expensive to build and develop in Chicago, costs will be higher there. Chicago projects should not be disqualified given that they cost more. Initial solar investments in Chicago could be offset by lower energy transmission costs given that homes there are closer together.
- There may still be some confusion about how and when to submit projects given the limited outreach that has been conducted.
- There is a limited ability to direct incentives geographically, which could result in some areas (e.g. Cook County) being left out.
- Few projects will be funded. There is an expectation that only two CS projects will be selected per year.

Incentives for Non-Profit and Public Facilities

Most stakeholders felt that helping non-profits and public facilities access solar energy has the potential to reduce energy costs and support their work. Because of this belief, most of the comments made by stakeholders supported an expansion of funding for these incentives and extending participation to more public facilities. Stakeholder comments were as follows.

- Funding for non-profit and public facilities should be larger relative to the other three sub-programs.
- There is a need to review and expand the list of qualified entities, including libraries, on the list of qualified public facilities. [Note that libraries were added to the list of Critical Service Providers included in the Approved Vendor Manual.]
- The ILSFA Program should allow select non-profits and public facilities that serve individuals in EJ communities to participate, even if their physical location is just outside of the census block (e.g. across the street).

Low-Income Community Solar Pilot Projects

Because pilot projects are still in the development stage, stakeholders had limited feedback in this area. The concerns were as follows.

- Low-Income Community Solar Pilot projects should be evaluated using different criteria. The evaluation should be less focused on price and more focused on testing different, more innovative approaches and applications, which is more consistent with the law.
- There is a need to more subjectively evaluate projects based upon additional criteria, such as whether a project that is not the lowest cost now, could potentially deliver lower cost in the future through reduced energy infrastructure cost or lower energy delivery cost.

Consumer Protection

Vendors often indicated that the balance between consumer protection and business operation is not currently appropriate. Some felt that the program has penalized all vendors (in the project requirements) by assuming they will be bad actors, rather than monitoring for non-compliance and only penalizing those companies that do not conform to program guidelines.

Vendor Requirements

In most cases, stakeholders did not have comments on vendor requirements unless they were an AV, prospective vendor, installer, or consultant.

Specific comments about marketing materials were as follows.

- It is unnecessary to have all marketing materials approved, especially given that digital and social media communications are immediate.
- The AV did not agree with Elevate Energy's revisions to their marketing materials.

Comments about the customer experience were as follows.

- Certain vendor requirements may negatively affect the consumer's experience. Some suggest that it should be easier for consumers; "If you want solar, just sign up."
- It may be difficult for consumers to fill out disclosure materials on ILSFA's website.

Other concerns were as follows.

- There was confusion about why ABP vendors are not automatically qualified for the ILSFA Program.

- Structural engineering requirements should apply after a project is approved, not before given the cost and degree of investment required to have plans reviewed and stamped.
- It may be challenging to hire job trainees if they cannot connect with job training programs.
- There is a need to look at the allocation of risk (no money upfront) between companies and the State, as this may work for large companies but not for small companies. It may benefit larger companies working across multiple states, rather than small businesses in Illinois.

Grassroots Education

Stakeholders had very different perspectives on Grassroots Education. They varied from a high level of support for the process to a lack of awareness about the program. While some stakeholders were aware that the ILSFA Program selected Grassroots Educators and felt that appropriate organizations had been chosen, others would like to learn more about it. Some stakeholders questioned what Grassroots Educators will do, believing that much of the education process will fall on developers and vendors.

A few stakeholders indicated that there needs to be greater outreach from the ILSFA Program to Grassroots Educators who reside in communities of color and serve Illinois residents who do not speak English.

Some vendors indicated that they would like Grassroots Educators to contact their companies and help to prepare low-income consumers for their sales efforts.

Program Materials

Most stakeholders felt that the IPA and Elevate Energy are continuing to develop and improve effective program materials. However, some stakeholders made recommendations for additional improvements.

- There needs to be an overall program brochure, not just brochures for each of the four sub-programs.
- It is hard to find content on the website; efforts need to be placed on improving usability of the website and organization of its content.
- Program materials need to be, at a minimum, offered in English, Spanish, Polish, Mandarin and Hindi, given that these languages are spoken frequently in Chicago.
- There is a need to develop and refine a FAQ list.
- There is a need to develop a vendor referral program to ensure that vendors recommended are currently offering appropriate services and that they follow up with the leads they are given.
- All materials need to be written at an eighth grade level and tested to ensure that low-income consumers understand them.

ILSFA Evaluation

Though many stakeholders do not offer suggestions about how the program should be evaluated, ILSFA Working Group members were more likely to comment. These stakeholders indicated that the program should not be evaluated simply on common or

expected metrics (e.g. number of installations, REC prices, costs, etc.), but that the ILSFA Program must also be evaluated on softer dimensions, as well, such as level of participation, barriers to participation, and how well the program serves those who face life challenges.

They stated that the evaluation needs to be staged so that the program has had adequate opportunity to succeed. Some expressed concern that the evaluation may be starting too early given delays in getting the program off the ground.

One important evaluation metric that was identified is awareness and perception of solar energy use. Stakeholders indicated that it is important to monitor residents' awareness to understand whether there is growing receptivity to use of solar in Illinois, as well as satisfaction with solar users. Specifically, they noted that it is important to measure participants' satisfaction with the installation experience and with the savings. Some stakeholders viewed market receptivity as an important driver to expansion of solar within the State.

Other stakeholders indicated that the evaluation should examine how project funding is allocated and not allocated, looking at what projects were selected and the demographic and geographic profile of those who benefit from the Program. They indicated that this is important to ensure equitable distribution of funding.

Some stakeholders indicated that there should be an evaluation of the extent to which jobs are created in existing Illinois companies, not just in companies coming into Illinois, and whether the jobs created in EJ communities result in short- or long-term employment. Similarly, some stakeholders indicated that it is important to understand whether small, minority and women-owned firms receive Illinois prime and subcontracts through the ILSFA Program.

V. Grassroots Education Design and Feedback

The ILSFA Program aims to engage EJ communities and low-income communities across the state, and these communities can be difficult to reach. Populations including seniors, the very low-income, rural communities, and those with language barriers can be among the most difficult to reach.

FEJA recognized this challenge and included a provision that the IPA should ensure collaboration with community agencies and allocate up to five percent of the funds available under the ILSFA Program to community-based groups to assist in Grassroots Education.

This section provides an overview of the initiative, a discussion of the initial Grassroots Educator selection process, and a summary of the methodology and findings from interviews with the initial 11 Grassroots Educators selected in June 2019. In addition to the Grassroots Educator interviews, information from this section was obtained from review of materials on the ILSFA Program website and interviews with IPA and Elevate Energy managers and staff.

A. Overview

The goal of Grassroots Education is to ensure that the benefits of and opportunities provided by the ILSFA Program reach low-income households and communities throughout the state of Illinois. Grassroots education efforts are administered by community agencies, known as Grassroots Educators. Campaigns aim to directly and indirectly drive program participation. Each campaign targets specific audiences and issues, and collectively, the campaigns will reach a diversity of audiences across the state with information about the targeted topic areas. The goal of the Grassroots Education is to address the following issues and priority groups.

- Participant benefits
- Job training
- Environmental Justice communities
- Community engagement
- Hard-to-reach communities
- Geographically diverse communities
- Effective engagement strategies and tactics
- General energy and solar education
- Deferred maintenance and lack of solar readiness

EJ Communities are a key focus of the Grassroots Education initiative. Up to sixty percent of total funding for Grassroots Education is designated to support these communities.

The Grassroots Education campaign was designed to allow the selected organizations the flexibility to create and implement outreach campaigns that they believed would be most successful based on the characteristics of their targeted communities.

Qualified organizations must meet the following criteria to be selected as a Grassroots Educator.

- Be a registered non-profit organization with the Illinois Secretary of State, excluding trade and political non-profits.
- Regularly provide services to low-income or EJ communities.
- Work within the communities where they will be providing education.
- Have a demonstrated ability to provide outreach, education, training, or program delivery to low-income property owners and renters, workforce development stakeholders, or other community organizations; or for energy-related programs or services.

Some community-based organizations that are qualified to conduct Grassroots Education Campaigns may not be registered non-profits or have the capacity to manage the financial and contractual obligations of the program. In these cases, a registered non-profit organization can act as a fiscal sponsor and serve as the lead applicant for the partnership.

Elevate Energy released an RFP for organizations interested in conducting Grassroots Education in early 2019. Elevate Energy and the IPA developed a scoring rubric, Elevate scored the proposals, and the IPA provided final approval of the selections. The selection of the Grassroots Educators focused on a variety of factors, including the following.

- Having a clear proposal strategy for direct and indirect community engagement.
- Experience with similar strategies.
- Understanding of the ILSFA Program and the goals of the program.
- Understanding their responsibilities with respect to Grassroots Education.
- Ideas for how to achieve the Grassroots Education goals.
- How their proposal linked to their own work and what they are already doing.

Elevate was looking for groups that had relationships and outreach experience in low-income and EJ communities, so that they were already trusted in the community. They selected some Community Action Agencies (CAAs) that perform LIHEAP enrollment, and some EJ organizations. Elevate looked at whether the organizations were trusted, where they had gaps, and whether they had partners in place to bolster them in the areas where they did have gaps.

The selected organizations were announced in June 2019. In the future, Elevate may have multiple application windows throughout the year. They would like to allow more time to publicize the RFP and for organizations to respond to the RFP in following rounds.

Elevate held an onboarding meeting where the Grassroots Educators from across the state came to Chicago for a session that reviewed the basics of solar, the ILSFA Program, consumer protections, how individuals qualify for the program, how savings are calculated, and administrative procedures such as invoicing and marketing guidelines.

B. Research Methodology

Eleven organizations were selected to implement the first round of Grassroots Education Campaigns for the ILSFA Program. APPRISE conducted telephone interviews with all eleven selected organizations. The interviews addressed the following topics.

- Organizational background
- Outreach plans and implementation
- Feedback and recommendations

The following procedure was used to implement the interviews.

- Grassroots Educators were contacted via phone and email to set up an interview. Eight of the eleven organizations responded to the first email attempt, and the remaining three organizations responded after a second email attempt.
- Interviews were conducted with seventeen participants, representing all eleven organizations.
- The interview length ranged from 30 to 55 minutes.
- Interviews were completed between August 23, 2019 and September 10, 2019.
- Interview summaries were sent to each organization for review and editing. Additional follow-up questions were sometimes included in these emails, as well as a request for marketing materials they developed for the ILSFA Program.

C. Selected Grassroots Organizations

This section provides an overview of the Grassroots Educators selected in the initial round of the ILSFA Grassroots Education Campaign.

Overview of Selected Grassroots Educators

This section provides a description of the organization's type, location, and services provided.

1. *Chicago Bungalow Association (CBA)* is a non-profit agency that serves the City of Chicago, with a focus on EJ communities. CBA's mission is to provide practical education on preservation and energy efficiency resources to owners of single-family vintage houses. They provide full-home retrofits, including attic insulation and air sealing, at no cost to homeowners.

2. *C.E.F.S. Economic Opportunity Corporation* is a Community Action Agency (CAA) that provides a variety of services to low-income clients of all ages in seven counties in IL. C.E.F.S. administers LIHEAP, Meals on Wheels, and Head Start. They also provide workforce development services, transportation services, and literacy programs; and they conduct outreach to the homeless population.

3. *The Chicago Jobs Council (CJC)* is a non-profit with a statewide presence that focuses on workforce development for marginalized communities. CJC is a member-based organization whose members consist of workforce development providers, grassroots organizations, and Community Based Organizations (CBOs). CJC provides professional development training and support for staff of member organizations and advocates for

policies that have the potential to benefit low-income job seekers and the organizations that serve them.

4. *Community Organizing and Family Issues (COFI)* is a non-profit organization that focuses on parent leadership development. They work in low-income communities in south Chicago and across the state. COFI utilizes a peer-to-peer model, in which parent leaders conduct outreach to their community on policy areas that are relevant to them. COFI works with parent leaders to identify issues in their community, and to organize and implement initiatives to address these issues. Initiatives include early learning programs, summer meal distribution programs, and community cleanups.

5. *Ecology Action Center (EAC)* is an environmental education organization located in Normal, Illinois. EAC serves central Illinois. In addition to environmental education, they provide technical services in solid waste reduction, recycling, clean water protection, energy efficiency, and renewable energy.

6. *Embarras River Basin Agency* is a CAA that provides a variety of services to low-income clients of all ages in east-central Illinois. Embarras administers state and federal government grants for low-income individuals and families. The organization administers about 25 different programs. The main services the organization provides are LIHEAP and weatherization assistance, housing programs, credit counselling, Head Start, and education programs through the Community Services Block Grant (CSBG) Program.

7. *Faith in Place* is a non-profit that educates communities of faith about the environment, advocacy, and sustainability. Faith in Place serves communities across the state, with a focus on EJ communities. It utilizes a "Green Team" model, in which groups of three or more community members work alongside Faith in Place staff to implement programs that promote the environment and sustainability within their communities.

8. *People for Community Recovery (PCR)* is an environmental and economic justice non-profit. PCR is located in Altgeld Gardens, a Chicago Housing Authority (CHA) public housing community on the far south side of Chicago. In addition to Altgeld Gardens, PCR serves several neighborhoods on the far south side, including the Riverdale community area and the Greater Roseland area. PCR advocates for clean energy, job training opportunities, and affordable housing.

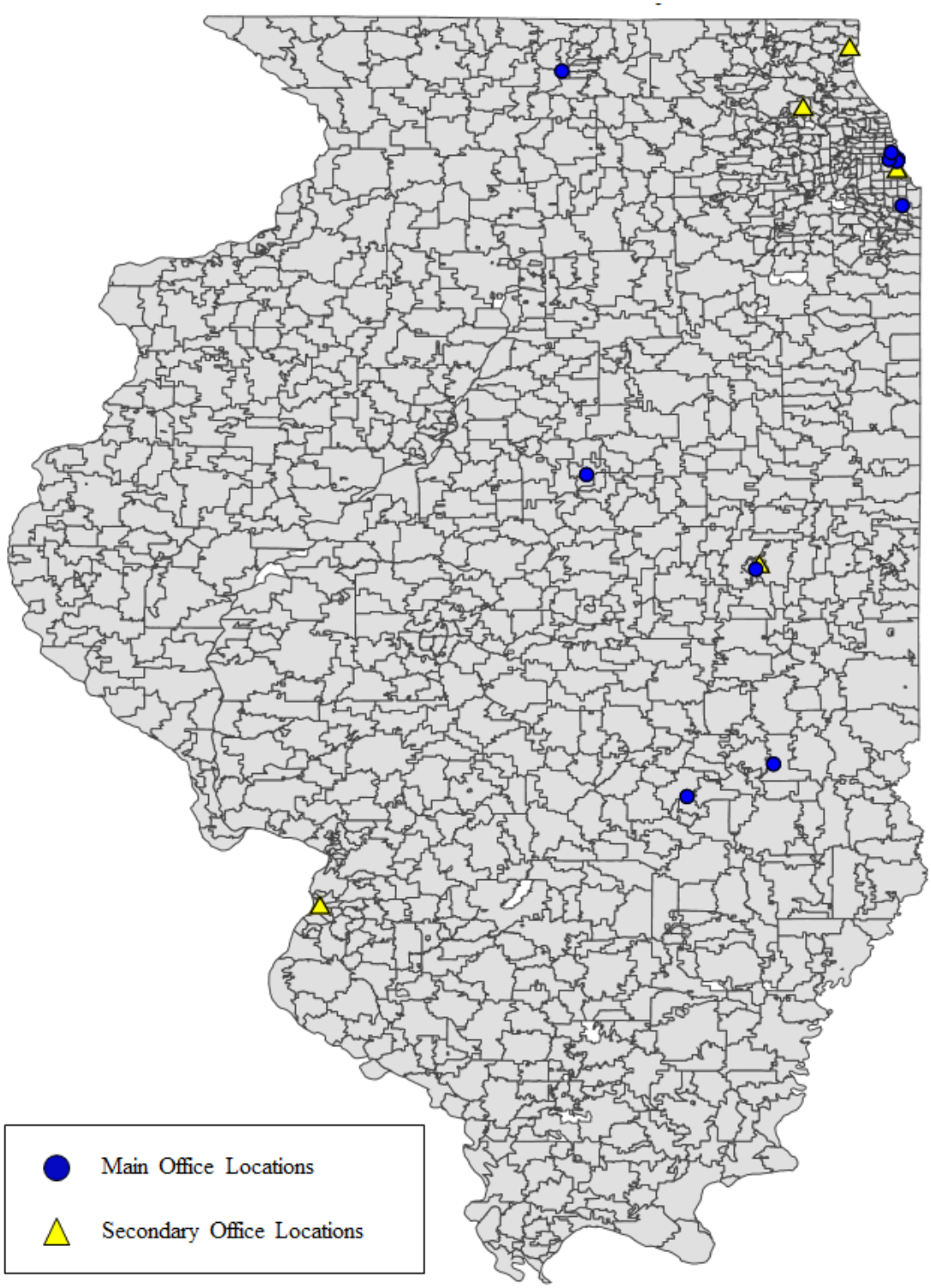
9. *Pilsen Environmental Rights and Reform Organization (PERRO)* is an all-volunteer, EJ organization that serves the Pilsen neighborhood in Chicago. PERRO is a grassroots organization, with no paid staff, no office, and no operating budget. PERRO has organized several EJ campaigns. They have successfully advocated for the shut-down of coal-fired power plants and worked to have certain polluting industries cited by the EPA for particulate matter, including metal and lead. PERRO also campaigns for awareness of water lead content and has conducted water and soil testing.

10. *Prairie Rivers Network (PRN)* is an environmental advocacy non-profit organization that works to protect rivers and communities from pollution and the harms of coal mining and coal-fired plants. Recently, they have been working with communities to advance renewable energy. PRN serves the Urbana-Champaign area.

11. *Sustain Rockford* is a non-profit formed in July 2018. Their main purpose is to assist the Rockford community in adopting a sustainability platform. They conduct outreach and advocacy. They do not administer any programs, aside from Grassroots Education for the ILSFA Program.

The map on the next page displays the location of main and secondary office locations for the Grassroots Educators. While the offices are not distributed across the state, Elevate Energy reported that the organizations collectively provide services in diverse areas of the state.

Figure VI-1
Grassroots Educators' Main and Secondary Office Locations



Characteristics of Selected Grassroots Educators

This section provides a summary of the organizations' characteristics and experience with outreach campaigns. It also provides a description of the interviewees' roles and organization staff involved in the ILSFA Program campaign.

Selected Grassroots Organizations vary significantly in structure, presence, services, location, population served, and expertise.

- Organization Types
  - 2 are CAAs.
  - 2 are EJ organizations.
  - 1 is a workforce development organization.
  - 1 is a community organizing group.
  - 1 is a city housing agency.
  - 1 is a faith-based organization.

- Areas Served
  - 7 organizations focus on a specific community, city, or neighborhood area.
  - 4 organizations have a statewide or multi-county presence.

- Services Provided
  - 7 organizations focus on grassroots education and advocacy on environmental and economic issues, including energy efficiency, renewable energy, water and air pollution, affordable housing, and sustainability.
  - 4 organizations provide direct services to the low-income community, including meals, afterschool programs, energy assistance, housing assistance, and training programs.

Most selected organizations indicated that they have experience providing similar types of outreach campaigns as that conducted for the ILSFA Program.

- All reported significant ties to the communities they will serve for the ILSFA Program campaign. They have previous experience working in these communities and have formed connections with local residents and stakeholders.
- 10 previously conducted outreach campaigns similar to their planned ILSFA Program campaign. One organization with no relevant experience plans to partner with other organizations that have relevant outreach experience.
- 6 have experience with energy-related outreach campaigns, including local group-buy solar energy programs, EJ campaigns, and energy assistance outreach for LIHEAP.
- 4 have experience with job training program outreach, including outreach for Future Energy Jobs Act (FEJA) trainings and other green job workforce development programs.

Interviewees had a diverse set of roles and responsibilities within their organizations. Their titles were as follows.

- 6 Executive or co-Executive Directors
- 5 Program Directors or Coordinators or Assistant Program Directors

- 3 Directors of Advocacy
- 1 ILSFA Program Administrator
- 1 Director of Administration
- 1 Energy Assistance Program Director

All interviewees were responsible for overseeing, managing, and implementing the ILSFA Grassroots Education Campaign. Most interviewees were also working on other programs and had additional responsibilities within their organizations. Four interviewees worked solely on the ILSFA Grassroots Education. In all organizations, additional staff were involved in the design, oversight, and implementation of the ILSFA Program campaign. The number of staff involved in the ILSFA Grassroots Education Campaign ranged from one to eleven. Some of these other staff members were minimally involved, supervising or advising on program implementation, and others were primarily focused on creating ILSFA Program materials or conducting outreach.

D. Target Populations

Grassroots Education Campaigns were required to target specific populations, and to collectively reach a diversity of geographic regions and population groups.

The Grassroots Educators were asked about the geographic regions that they are serving. The scope of the geographic regions ranged from specific neighborhoods within Chicago to larger regions throughout the state. Specific geographic regions mentioned by Grassroots Educators were as follows.

- Cook County (7 organizations)
  - 3 organizations serve neighborhoods on the south side of Chicago.
  - 2 organizations serve neighborhoods on the west side of Chicago.
  - 2 organizations serve the entirety of Cook County.

- Central Illinois (4 organizations)
  - 1 serves South-Central Illinois.
  - 2 serve East-Central Illinois.

- Cities in Northern Illinois (2 organizations)
  - Rockford, Illinois
  - Waukegan, Illinois

- Each of the ten Illinois Economic Development Regions (1 organization).
  - The Workforce Innovation and Opportunity Act (WIOA) that provides federally-funded workforce development services across the country divided Illinois into ten Economic Development Regions (EDRs).
  - Local governments in each community within an EDR must work together to undertake economic development regional planning and coordination efforts.

- East St. Louis, St. Clair County, Southwest Illinois (1 organization)

Grassroots Educators were also asked about the priority groups which their outreach was targeting. They provided the following responses.

- Low-income populations (5 organizations)
- Environmental justice communities (3 organizations)
- Households with children under six (2 organizations)
- Resident associations (2 organizations)
- Elderly and disabled populations (1 organization)
- Jobseekers who are marginalized in the labor market (1 organization)
- Any individual who qualifies for the ILSFA Program (1 organization)

Several organizations noted that there is often overlap between the locations of priority groups. For example, marginalized job seekers are often located in low-income areas. Additionally, EJ communities and low-income communities in Chicago often overlap.

E. Outreach Plans and Implementation

Grassroots Educators are using a variety of outreach methods and focusing on a wide range of topics. This section provides an overview of each organization's outreach plans and implementation, including their outreach methods, their areas of focus, their current stage of implementation, and the response by the targeted communities. The section also lists potential barriers and solutions to the ILSFA Program identified by the interviewees.

Outreach Methods

Organizations reported that they have or will use the following outreach methods.

- Community events and meetings (11 organizations).
  - Presentations and workshops on the ILSFA Program and solar energy
  - Presentations at existing community forums, meetings, and events
  - Open houses, fairs, and expositions
  - Presentations at congregations
  - House parties organized by community members

- Canvassing (5 organizations)

- One-on-one consultations and meetings held with community members, current clients of the organization, and those who have otherwise expressed interest in the ILSFA Program (5 organizations)
  - 2 will have one-on-one meetings with interested attendees following community events.
  - 1 plans on providing information about the ILSFA Program to every energy assistance intake client.
  - 1 will have regular office hours for one-on-one consultations about the program.

- Direct mailing campaign (1 organization)

- Webinar (1 organization)

All eleven organizations will be partnering with other leaders and organizations in their communities to conduct their outreach. Partners include the following.

- Non-profit organizations, CBOs, and CAAs
- Residential, business, neighborhood, and other local associations
- Local and municipal government, including school districts and public housing authorities
- Faith communities and congregations
- Community leaders

Four of the interviewees described one or more of their outreach methods as innovative.

- A peer-to-peer approach, in which ambassadors from the community conduct canvassing.
- A method of "training the trainer" which focused on training other CBOs so that they can increase awareness of the program.
- The development of videos summarizing the content of the organization's community presentations and responding to frequently asked questions.
- The presence of the organization through outreach offices in every county it serves.

Seven of the respondents said they would not consider any of their outreach methods innovative. These organizations are instead utilizing methods that have been successful for them in the past.

Campaign Areas of Focus

ILSFA's RFP for Grassroots Educators required that participants center their campaigns on one or more areas of focus. The ILSFA Program identified nine potential areas of focus for campaigns. The organizations reported that they work on the following areas.

- **Participant Benefits**: All eleven organizations discuss cost savings for program participants and/or the potential benefits of solar energy for their communities and the environment.

- **Community Engagement**: Ten organizations focus on community engagement, such as community meetings and events.

- **Hard-to-Reach Communities**: Ten organizations identified a variety of characteristics that define the members of their communities as hard-to-reach, including low-income, rural geography, elderly households, lack of public transportation, and language barriers.

- **Effective Engagement Strategies and Tactics**: Ten organizations identified one-on-one conversations and/or presentations and community events as effective methods.

- **General Energy and Solar Education**: Ten organizations provide basic information on solar energy and how solar can impact utility bills.

- **Environmental Justice**: Seven organizations are either located in EJ communities or primarily target these communities with their outreach. Two of these organizations discuss the meaning of the EJ designation with community members during their campaigns.

- **Deferred Maintenance and Lack of Solar Readiness**: Seven organizations are providing referrals for programs that can assist residents with maintenance and weatherization for solar readiness.

- **Job Training**: Five organizations are focusing on job training, and one of these organizations considers this to be the main focus of their campaign. Three additional organizations were interested in including job training in their outreach but were unsure about the availability of opportunities for their clients.

- **Geographically Diverse Communities**: Four organizations are focusing on geographically diverse communities. Respondents defined this as working in both rural and urban/suburban communities.

Key Messages and Framing

While the outreach methods vary, Grassroots Educators communicate similar key messages in their outreach campaigns.

- 10 emphasize the cost savings for ILSFA participants. They believe that this education will increase participation in the ILSFA Program.
- 6 convey the message that solar energy is accessible to low-income households as a result of the ILSFA Program.
- 3 educate around the basics of solar energy and help outreach participants better understand what the program will mean for their utility bills.
- 1 emphasizes the job opportunities that the clean energy industry provides. They communicate that the clean energy industry presents an opportunity for low-income jobseekers who have not benefitted in the past from economic growth and growth in the energy sector.

Selected organizations make the information accessible to the groups they are targeting by simplifying it, abbreviating it, and relating to the audience's personal experiences.

- All provide background information on solar energy to their audiences and simplify and abbreviate the available information.
- 3 provide translated versions of their outreach materials and presentations in Spanish.
- 2 tailor their message to specific audiences at each event.
- 2 relate their presentations to customers' personal experiences and issues they are familiar with.

Outreach Conducted to Date

Grassroots Educators are at various stages of implementation.

- 8 organizations have started their outreach campaigns. Six organizations began their outreach in July, and two organizations began in August.
- 3 organizations are starting their outreach campaigns in September. One organization is awaiting approval of their outreach materials by Elevate Energy before starting.

In general, interviewees have found a low level of awareness and a high level of interest in the ILSFA Program. Respondents provided the following additional detail about the initial response to their outreach campaigns.

- While some outreach recipients were familiar with the basics of solar energy, they were not aware of the ILSFA Program.
- 3 organizations reported that some outreach recipients are skeptical about the program's benefits. This is a result of participation in previous assistance programs that did not deliver on the promised benefits.
- 3 described the response to the outreach as positive.
- 2 organizations found that their communities were confused about the differences between the ILSFA Program and other solar programs, such as the Adjustable Block Program.
- 1 reported a lack of interest and low overall engagement with the outreach campaign.

Ten Grassroots Educators felt that they have been successful in reaching their target population to date. The eleventh organization reported that they were not able to determine whether outreach recipients are part of their target population due to the sensitive nature of the personal information, such as income level and age, required for this determination.

The eight Educators who had started their outreach campaigns were asked about their most successful outreach methods to date. Three Educators identified canvassing and one-on-one conversations as their most successful outreach method. One Educator identified group meetings as their most successful method. The other four Educators did not identify their most successful method. One of these four Educators was unsure which methods were most successful, and the other three said that it is too early for this assessment.

Metrics

Grassroots Educators are using similar metrics to measure the success of their outreach campaigns.

- All selected organizations will track quantitative indicators. These quantitative metrics include event attendance, interest in program participation, and number of houses visited during canvassing.
- 4 are gathering qualitative feedback through follow-up surveys after outreach events. These surveys measure knowledge about and interest in the ILSFA Program.
- 3 are tracking demographic information on outreach recipients, such as whether they are from EJ communities.
- 7 plan to develop additional metrics as needed.

Nine organizations plan to revise their outreach plan based on feedback and metrics. These revisions include changing the content of the outreach presentations to better reach targeted audiences and modifying the outreach methods to increase engagement.

Approved Vendors

Interviewees were asked about the availability of Approved Vendors (AV) serving their community. Most Grassroots Educators reported that there is limited availability of AVs in their communities.

- 5 have one AV serving their community. Two Educators who serve rural areas indicated that there is no AV serving their community and the closest AV was within 50 to 70 miles.
- 8 believe that the number of AVs is not adequate to meet the needs of their communities. Some respondents specifically felt that there was a lack of AVs for DG projects.
- All selected organizations hope to connect their communities to AVs. Two organizations distribute contact information of AVs who serve their communities and invite AVs to attend their community events.

Barriers to Solar

Grassroots Educators were asked about the barriers to solar they had discovered in their initial outreach efforts and how they thought these barriers could be overcome. Educators provided the following information about the three ILSFA sub-programs (Low-Income CS, DG, and NP/PF).

- *Deferred maintenance issues and lack of solar readiness.* Four organizations believed that many of the homes in their service area were not solar ready due to maintenance issues. One of these organizations also reported that the homes in their service area were heavily shaded.

  To overcome this barrier, three organizations reported that they would refer customers to other programs or agencies that would provide weatherization or maintenance assistance to make the home solar ready. These programs include the Chicago Roof and Porch Repair Program, Habitat for Humanity McLean County Brush with Kindness, and the MidCentral Community Action Weatherization Program. However, they noted that these programs would not cover the full cost of roof replacement or repair.

- *Skepticism.* Four organizations have found that their customers are skeptical of the ILSFA Program. These customers do not believe that the program has no upfront costs, or that they will actually benefit from participation. This is a product of the fact that they have negative experiences with high costs charged by alternative energy suppliers.

  One organization suggested using personal testimonies from individuals who have participated in the program to overcome the skepticism and provide more insight into the participation process. Another organization said that patience and persistence in delivering information about the ILSFA Program, in addition to demonstrating

successful projects that have been completed through the program, will help to overcome these barriers.

- *Lack of basic energy and solar understanding.* Three organizations reported that their customers generally did not understand energy and solar energy in particular.

  All three organizations said that education would be a key component to overcoming this barrier. Two organizations stated that they would like to involve other entities, including Approved Vendors and Elevate Energy staff, to provide additional education.

- *Lack of Approved Vendors.* Two organizations reported that a lack of AVs in their service area was a barrier to participation. One of these organizations further specified that there is a low interest among AVs to install rooftop solar in lower-income communities

- *Other solar programs.* Two organizations found that the existence of other solar installation programs confuses potential participants and creates a barrier to participation in the ILSFA Program. One organization noted that some of the vendors for these other solar programs conceal important financial information from potential participants to convince them to sign up in the program.

- *Lack of available opportunities for participation.* Two organizations stated that the lack of available opportunities for participation is a barrier. Because the ILSFA Program is still in its early stages, there are not many established CS programs, nor are there many AVs who are prepared to begin installation work.

  When asked how they overcome this barrier, one organization said that they have been upfront with their staff and their community about the opportunities (or lack of opportunities) that are currently available. This organization is currently focusing on increasing program awareness, rather than program participation.

- *Cost of participation.* One organization reported that they want their customers to understand that there are costs associated with the program, such as the cost of obtaining additional insurance, and that customers should only participate if the benefit of participation is greater than the cost. Another organization stated that the time and personnel required to research, apply to, and participate in the program would be a barrier to participation for non-profits and public facilities.

  The first organization suggested that state assistance for subscriptions to CS programs, potentially through LIHEAP grants, would be one way to overcome the cost barrier.

- *Difficulty interpreting vendor contracts.* One organization found through their experience with previous programs that vendor contracts were often difficult for their customers to interpret.

To address this barrier, they plan to help customers connect with AVs. However, the ILSFA Program has not provided much information to Grassroots Educators about what the AV contracts might look like, so they are unsure if they will be able to effectively help participants with this issue.

- *Lack of incentive for multifamily building owners.* One organization believed that because tenants often pay their own utility bills in multifamily buildings, building owners have little incentive to participate in the program. As a result, these tenants cannot participate in the DG sub-program.

  This organization recommended that the ILSFA Program adjust policies so that residents of multifamily buildings can more easily participate, but they did not specify how they wanted the policies to be changed.

Regarding barriers to participation in the job training component of the program, Grassroots Educators provided the following responses.

- *Strict entry requirements for job training opportunities*. One Grassroots Educator cited the Illinois Brotherhood of Electrical Workers apprenticeship, which is one of the ILSFA-affiliated job training programs. The program requires participants to pass a background check and a drug test, have a driver's license, and to purchase certain toolkits. Many lower-income households in the communities this organization serves cannot meet these requirements due to criminal records or a lack of funds for a driver's license or to purchase tools. These requirements prevent those who would benefit most from participating in the job training.

  This Grassroots Educator suggested that the best way to overcome the barrier would be to remove these requirements from the job training programs. They felt that requirements should only be maintained for public safety issues, and an effort should be made to make job training programs less burdensome to participants. Alternatively, they proposed the creation of a barrier reduction fund that could finance prospective job training candidates so they can meet the program requirements.

- *Location of job training sites*. One Grassroots Educator noted that job training sites have traditionally been located far from their community.

  They suggested providing "wraparound services", such as transportation assistance and childcare support, for job trainees, so they can more easily participate in the program.

Outreach Materials

All eleven organizations reported that they had developed or would be developing outreach materials for their campaign. They also reported that some or all of their outreach materials would be modified versions of the materials provided by Elevate Energy. The following types of outreach materials were developed by the Grassroots Educators.

- Flyers (7 organizations)

  - Most organizations reported that they would be mailing flyers or distributing them at events.
  - One organization specified that they would be putting flyers in food pantry bags and meals that they distribute to seniors.
- PowerPoint presentations (4 organizations)
  - Two of the organizations collaborated to create their PowerPoint presentations.
- Online advertisements via Facebook, websites, other social media (3 organizations)
- Radio advertisements (2 organizations)
- Newspaper advertisements (2 organizations)
- Door hangers (2 organizations)
- Videos (1 organization)
  - This organization reported that they would be creating three videos that were each eight to ten minutes in length. These videos would discuss solar basics, how to participate in the ILSFA Program, and frequently asked questions. The videos would be played at the organization's presentations and would be available online.

APPRISE received outreach materials from six of the Grassroots Educators. These included the following.

- *Flyers* – Of the six flyers received, two of them were one-pagers that provided basic solar and program information, in addition to the Grassroots Educator's contact information. The other three flyers provided information about meetings that would be hosted by the Grassroots Educators. One of these flyers was in Spanish.

- *PowerPoint Presentations* – Three organization provided the PowerPoint presentations they were using for outreach events. Two of these organizations collaborated to create their PowerPoint slides, which included basic information about solar energy and the ILSFA Program and the various ways to participate. Each presentation also had a slide that provided a breakdown of the income eligibility guidelines for participation in their area.

  The PowerPoint presentation from the third organization included more in-depth information on all topics included above, in addition to other topics including relationships with AVs and consumer protections.

- *Door Hanger* – Two organizations provided door hangers. One included information about meetings that would be hosted by the Grassroots Educator. The other promoted job training opportunities that are part of the ILSFA Program.

- *Public Service Announcement (PSA) Script* – One organization had their local State Representative record a PSA. The PSA was brief and informed listeners of the upcoming events that would be held by the Grassroots Educator.

F. ILSFA Feedback and Recommendations

Grassroots Educators were asked to provide feedback on the stakeholder outreach process, the ILSFA Program materials and guidelines, and the design and implementation of Grassroots Education. This section provides a summary of the recommendations received.

When asked whether they participated in the Stakeholder Outreach process, the organizations provided the following information.

- 5 said that they participated.
- 4 were not familiar with the process or were unsure whether they participated.
- 2 did not participate.

All seven organizations that were aware of the Stakeholder Outreach process were given the opportunity to provide feedback on the process.

- All five of the organizations who participated felt that stakeholder feedback was appropriately incorporated into the program.
- 4 of the organizations who participated in the process described the information provided as confusing and/or overwhelming.
- 2 of the organizations who participated believed the process was helpful.
- 1 organization who did not participate in the program felt that the ILSFA Program should have sent direct invitations to agencies to participate.

Most respondents described the materials provided by the ILSFA Program as helpful but lengthy or overly complicated.

- All Grassroots Educators felt that they had to modify the materials to make them accessible to their target audiences. They described the materials as too technical or lengthy for the communities they were trying to reach. However, many respondents found the ILSFA Program materials to be useful in helping organization staff understand the program.

- One respondent thought that the job training materials lacked enough specificity to be useful to jobseekers. The job training materials did not include job training locations, dates, and eligibility requirements.

- One respondent noted a lack of Spanish language materials, particularly for the job training component of the program.

- One respondent found the ILSFA Program website difficult to navigate. The respondent also felt that it had insufficient information. For example, they were unable to find the recent announcement for projects that were selected on the ILSFA Program website.

Respondents had positive feedback about Grassroots Education and the ILSFA Program overall. Educators appreciated the opportunity to participate in this effort and generally felt

adequately supported by the ILSFA program administrator. Two respondents noted that the two-day Grassroots Educators' training was very helpful.

Four Educators were concerned that interested community members will not be able to enroll in the ILSFA Program and realize the promised benefits due to a lack of opportunities to participate. One respondent reported that job training outreach was "educating the public about a program that is not fully implemented."

At the end of their interview, Grassroots Educators were asked to provide recommendations for the Grassroots Education and for the ILSFA Program. This section provides a summary of the recommendations received.

Six of the Grassroots Educators provided recommendations for the Grassroots Education. Their recommendations were as follows.

- *Improving the contracting and invoicing process*. Two organizations provided this recommendation. One organization reported that the formatting of the contract was difficult and that drafting it took a lot of time.

- *Re-examine the timing of the program.* One organization said that though they understood the need to conduct outreach before implementation, it would be beneficial to have more specific information available when conducting the outreach. For example, when they had their first presentation in July, they were not able to provide as much specific information as they had hoped. There was a lack of information on job training program availability, locations, and requirements. This information was not available in the ILSFA Program materials or on the website.

  Having specific information can help increase program participation because customers are not required to do their own research on program availability. Individuals are often unwilling or unable to spend large amounts of time contacting different job training providers.

- *Easier reporting.* One organization felt that the required Grassroots Educator reporting is cumbersome. When the organization began their campaign, they were unaware of the need to record certain metrics, such as demographic data. This organization stated that it would be helpful for Educators to know what metrics and data are required in advance of their outreach.

- *Lower-level reading materials.* One organization wanted the ILSFA Program to provide less technical, lower-level reading materials for potential program participants.

- *More Distributed Generation Approved Vendors.* One organization would like to see more AVs doing rooftop solar, which will allow for increased participation in the sub-program.

- *Check in meeting with Grassroots Educators*. One organization would be interested in an in-person meeting with all Grassroots Educators after several months of outreach, but before the end of the program. The meeting could be held in a central location, so that no organizations need to travel too far. This would allow the Educators to share successful outreach strategies, exchange advice, and collaborate to create new outreach methods.

Four of the Grassroots Educators provided recommendations for the ILSFA Program more generally. Their recommendations were as follows.

- *Increased vendor involvement in program application.* Two organizations felt that an issue with the ILSFA Program is that it places the onus for participation on potential program participants, and low-income households may not have the time to pursue program participation. They wanted the ILSFA Program to consider creating a list of interested households that AVs could use to conduct outreach. This may also lead to increased competition between the AVs, which will increase the likelihood of competitive, low-cost pricing for participants. This list could be managed by Elevate Energy, in conjunction with the Grassroots Educators.

- *Transparency about the status of program implementation.* One organization wanted program administrators to be more transparent with Grassroots Educators about the status of the ILSFA Program implementation. This includes clearly identifying areas in which more specific information is not presently available.

- *Program calendar.* One organization would like for the ILSFA Program to provide a calendar that lists all program deadlines so that this information can be clearly communicated to potential participants.

- *Case managers.* One organization suggested that Elevate Energy provide case managers who could answer participants' questions about the installation process and AV contracts.

- *Delivery of promised benefits.* One organization stated that due to limited resources and the fact that projects depend largely on developer interest, Grassroots Educators cannot make specific promises or give individuals estimates of their savings from participation. They believe it is important for the program to deliver on promised benefits given the pre-existing levels of mistrust in the served communities.

- *Information on solar programs in other states.* One organization was interested in obtaining more information on other states' progress in similar programs, since Elevate Energy has worked with similar programs in other states, such as Oregon. The organization would also be interested in success stories from low-income homeowners in other states. They feel that the most convincing advocates for this program will be other low-income homeowners who have successfully participated in and benefited from solar. Ideally, past participants could speak at meetings and explain the participation

process to those who are interested. Successful graduates of the job training programs are an underutilized resource for outreach and could also assist in the outreach process.

VI. Findings and Recommendations

The focus of the Phase I Evaluation was to provide initial feedback and recommendations to the IPA for use in updating the Long-Term Plan. This research focused on the stakeholder outreach process, development of program materials and guidelines, initial AV registration, initial project applications, and the development of Grassroots Education.

A. Key Findings

The key findings from the Phase I Evaluation are summarized below.

- *Program Implementation:* Despite extensive challenges related to an aggressive implementation timeline with a need to coordinate processes with the ABP and incorporate time for extensive stakeholder review and input, the ILSFA Program was launched close to the initial target date. AV registration launched in February 2019, initial projects were selected in August 2019, and the second project application window was conducted in September 2019.

- *Low-Income Solar Challenges:* The ILSFA Program was launched very soon after the ABP launch, so the IPA and Elevate Energy did not have time to fully understand the barriers and challenges to participation by low-income households in the ABP. Therefore, the ILSFA Program could not be specifically designed to address those challenges. As a result, refinements to the ILSFA Program may be needed after more experience with solar in IL and the challenges in the ABP and the ILSFA Program are more fully understood.

- *Approved Vendor Registration:* The AV registration process was successful in many respects. There are 27 AVs and three are qualified as Minority or Women-Owned Businesses.

  It is yet to be determined if there are enough AVs around the state that will participate in the DG sub-program. Additionally, there is a concern that more Minority and Woman-Owned Businesses and small businesses should participate in the ILSFA Program.

- *Initial Project Submissions:* The first round of project submissions for the Low-Income CS and the NP/PF projects was successful. Due to the number of applications which exceeded available funding, project selections were made for both. Seven NP/PF projects and five CS projects were selected. However, only one DG project was submitted and withdrawn, so there were no selected DG projects.

  Note that these data represent the initial information included in the project submissions and some project characteristics were revised after that time.

  The initial selected projects successfully reached EJ and low-income communities.
  - 68 percent of the REC value for NP/PF projects were in EJ communities.
  - 34 percent of the REC value for CS projects were in EJ communities.
  - Almost all of the REC value was in low-income Census Tracts.

Questions and concerns about the DG sub-program design include the following.

- Will AVs submit DG projects under the existing design, or do the current requirements and other existing challenges pose too great a barrier?
- What design changes may be needed to further encourage participation in the DG sub-program?

There are also potential questions and concerns about the other sub-programs.

- What types of non-profits and public facilities should be eligible for ILSFA Program funding?
- Should there be a greater focus on smaller CS projects that are more tied to local communities and/or organizations? If yes, what additional sub-program requirements would best fulfill those goals?

Other questions and concerns include the following.

- Should there be additional consideration for projects in areas where it is more expensive to build, such as Chicago?
- Should any adjustments be made to recognize locations just outside a census block that is designated to be part of an EJ community?
- Are any additional protections needed to ensure the long-term productivity of solar installations, given that the 15 years of RECs are paid up front?
- The ILSFA Program design works for some vendors, as evidenced by the oversubscribed NP/PF and CS sub-programs, but do smaller vendors need financial assistance, such as advance funding, to participate?

- *Stakeholder Input:* The ILSFA Program succeeded in obtaining participation and feedback from a variety of groups representing ILSFA Program stakeholders. While the interviewed stakeholders, who by definition participated in the process, felt there was sufficient opportunity for participation, there may be additions and modifications that the ILSFA Program can make to the process to generate greater and more diverse participation and feedback.

- *Grassroots Education:* The initial round of selections was successful, resulting in 11 Grassroots Educators that provide various types of outreach around the state. The 11 selected Grassroots Educators vary significantly in structure, presence, services, location, population served, and expertise.

B. Recommendations

Recommendations from the Phase I Evaluation are summarized below.

- *ILSFA Program Design:* Consider the ILSFA Program design a work in progress. Develop a comprehensive understanding of what is permitted to be changed without modifications to FEJA or the Long-Term Plan, and what changes require legislative or Long-Term Plan modifications. Be open to changes that are seen to be needed as the program evolves and additional data and information become available.

- *ILSFA Program Materials and Website:* Many stakeholders and Grassroots Educators commented that the ILSFA Program materials are too complex and the website needs to be streamlined and organized.
  - *Complexity of Program Information:* ILSFA is a complex program and some of the materials, particularly those that provide instructions to AVs, must be complex due to the nature of the information that is presented. However, materials that are designed for public consumption should be reviewed for reading level and usability. Both stakeholders and Grassroots Educators indicated an issue with the complexity of the program materials, which can prevent participation in the stakeholder feedback process and participation in the program. A particular item that was mentioned was the customer disclosure. All customer-focused materials should be reviewed and tested with potential audiences to ensure that they are accessible to the target audiences. All of the Grassroots Educators are developing modified versions of the ILSFA Program materials, translated into language that is more accessible for low-income communities. Elevate Energy could use these materials as a guide for developing more customer-friendly versions of the ILSFA Program customer information.

  - *Testimonials:* Consider the use of participant testimonials in the ILSFA Program materials, website, and presentation. These testimonials could initially be from low-income solar program participants from other states, and later come from IL after there are ILSFA participants who can speak for the program. Grid Alternatives, one of Elevate Energy's partners, may have participants from other states who are willing to provide such testimonials. As noted by Grassroots Educators, information coming directly from low-income participants is likely to be most compelling and most likely to help potential participants overcome their skepticism and fears. Successful graduates of job training program from the low-income community are also likely to be good spokespeople for the ILSFA Program.

  - *ILSFA Program Website:* The website contains a wealth of information and resources, but it needs to be re-organized with summary information to make it easier for individuals to navigate and find the specific information they need. Stakeholders commented on the need to better organize the website. Some of the summary information that would be useful for various audiences are as follows.
    - AV Participation Instructions: Summary of the steps that an AV must take to participate in the ILSFA Program with links to related materials for each step.
    - AV Requirements: Summary of the requirements for an AV to participate in the ILSFA Program.
    - Participant Opportunities: Summary of how low-income households can participate in the program.
    - Schedule and Deadlines: Summary of upcoming ILSFA Program events and deadlines for various audiences such as local organizations, AVs, and potential low-income participants.

- *Stakeholder Outreach:* Several recommendations are made to increase the amount and diversity of participation in the stakeholder outreach process based on feedback from stakeholders and Grassroots Educators. A majority of the interviewed stakeholders felt that there were barriers to participation in the feedback process. Some stakeholders felt that certain groups were not well-represented in the stakeholder feedback, including non-profits focused on low-income issues, African Americans, and businesses located outside of Chicago or located in EJ communities.
  - *Response Time:* Stakeholders felt that their response was limited by the amount of time provided for response to program guidelines. If possible, provide greater time for stakeholders to review and digest program information prior to comment deadlines.

  - *ILSFA Working Group:* While the ILSFA Working Group has provided valuable feedback on many aspects of the ILSFA Program, it could be useful to understand the diversity of opinions among members of the group. Encourage members to submit additional information and feedback.

  - *Additional Proactive Outreach to Organizations:* Develop a list of organizations around the state that are considered key stakeholders for the ILSFA Program. These include Community Action Agencies (CAAs), solar and energy vendors, sustainability organizations, neighborhood organizations, and advocacy groups that work on low-income issues, EJ issues, sustainability, renewable energy, energy efficiency and utility issues. Email and mail information to these groups and invite them to sign up for ILSFA Program email updates. A Grassroots Educator suggested that the ILSFA Program send invitations to community organizations and a stakeholder recommended that the ILSFA Program reach out to communities without projects (in future stakeholder outreach).

  - *Non Web-Based Opportunities:* Provide forms of outreach outside of emails and ILSFA Program website announcements. Stakeholders suggested that the need to access the ILSFA Program website may have prevented some in low-income communities from participating. Provide flyers to CAAs, Grassroots Educators, and other groups who work with low-income households and EJ communities before each presentation that provide a brief description of the topic and invite them to attend the presentation.

  - *Geographic Diversity:* Make it easier for individuals and organizations outside of Chicago to participate by holding additional presentations in other areas of the state. Stakeholders suggested that such meetings in other areas of the state and in EJ communities were needed. Grassroots Educators could be trained to use the ILSFA-developed PowerPoint Presentations to provide information in other parts of the state.

  - *Language Diversity:* Create additional presentations in Spanish and other common languages and make these presentations in areas of the state where these other

languages are most commonly spoken. Stakeholders commented that the lack of materials in additional languages was a barrier to stakeholder feedback. (The American Community Survey provides information on the prevalence of non-English languages and can be used to assess additional languages for translation.)

- *ILSFA Website Information:* Stakeholders provided positive feedback about the posting of comments and responses on the ILSFA Program website. Continue this process as the ILSFA Program moves forward.

- *Approved Vendors:* Consider additional outreach and/or support to encourage AV participation in all areas of the state, by Minority and Women-Owned Businesses, and by new and smaller businesses. Also consider changes to project selection procedures. None of the selected projects were submitted by Minority or Woman-Owned Businesses. Both stakeholders and the program administrator expressed a potential need to reach out to these firms. Grassroots Educators were concerned that there is limited availability of AVs in their communities, and limited interest in installing rooftop solar in lower-income communities.
  - *Project Selection*: Consider including vendor diversity as an additional point area in the project diversity scoring. The first round of projects selected included five different AVs among the 12 selected projects. This was out of the total of 11 AVs that submitted CS projects and 7 that submitted NP/PF projects. One AV had five selected projects, one had three selected projects, one had two selected projects and two had one selected project each. It may be beneficial to have a greater number of AVs represented in the selected projects.

  - *Outreach and Coaching:* Develop a list of solar vendors and renewable energy organizations in the state, including those who participate in the ABP. Provide outreach and education about the ILSFA Program and encourage these vendors to participate. Stakeholders suggested that there was a need for more outreach to industry stakeholders.

  - *Feedback:* Conduct focus groups and/or workshops with vendors to understand what support they need to participate in the ILSFA Program.

  - *Funding:* Stakeholders questioned whether the business model, where vendors must cover upfront installation costs prior to receiving REC payments which occurs many months later, will actually work. [Note that the timing of payments for RECs is dictated by statute, while the provisions for not having upfront costs for the participants was defined in the Long-Term Plan.] Consider providing financing or other support to assist smaller businesses. This support could come with a requirement to provide DG installations in underserved areas of the state.

- *Grassroots Education:* In general, the Grassroots Educators have found a low level of awareness, a high level of interest, and skepticism about the ILSFA Program. They stated that customers have a low level of understanding of energy and solar energy.

Potential participants do not believe that the program has no upfront costs, or that they will actually benefit from participation. Additionally, the organizations found confusion between the ILSFA Program and other solar programs. This indicates the importance of the Grassroots Education initiative, which should be continued and expanded.

- *Participant Screening:* Many low-income customers who are interested in participating in the ILSFA Program may have a roof that is not in the required condition for rooftop solar to be installed or other home issues that prevent participation. Grassroots Educators noted deferred maintenance issues and lack of solar readiness as a barrier. Some reported that they would refer customers to other programs or agencies to overcome these barriers. However, they noted that these programs would not cover the full cost of roof replacement or repair.
  - *Screening by Energy Efficiency Program Contractors*: Customers who participate in Ameren's and ComEd's income-qualified energy efficiency programs are good targets for the DG sub-program because their homes have already had energy efficiency improvements and these customers have shown willingness to participate in public programs. The ILSFA Program could work with Ameren and ComEd energy efficiency program implementers to train auditors to assess rooftops for solar, and assess homes for other potential barriers to solar, when they conduct the audit. The energy efficiency auditors could conduct a preliminary screening to determine whether there are significant issues that would prevent rooftop solar installation. Alternatively, the utilities could train efficiency staff to do a comprehensive solar assessment. The utility energy efficiency implementers could then develop a list of screened, solar-ready homes to provide to the program administrator. This screened list would be valuable because it would reduce the percentage of homes that were deemed ineligible for solar due to structural, orientation, shading, or other issues.

  - *Data Sharing with Energy Efficiency Programs*: If the energy efficiency program implementers are not willing to provide this assessment, they could ask customers if they are potentially interested in ILSFA Program participation, and if they have information on the age of their roof. The energy efficiency implementers could request customer permission to share the customer's contact information (and roof information) with the program administrator. The program administrator could then use Google Project Sunroof to assess whether the home has appropriate sun exposure and enough space for solar installation.

  - *Working with Job Trainees to Screen Potential Participants:* Another opportunity is to work with job training programs to use the low-income energy efficiency program installations as a hands-on training opportunity. Trainees could be brought on site to develop solar assessment skills and assess the roof's suitability for a solar installation, and the information on the site's sufficiency could be used in the same manner described above. [While the ILSFA Program is not responsible for the job training program, Elevate Energy is responsible for coordinating with the job training programs.]

- *Energy Efficiency and Home Repairs:* The ILSFA Program should aim to provide additional resources and information for AVs to work with potential low-income participants on energy efficiency and remediating homes so that they are solar-ready.
  - *Energy Efficiency Referrals*: Ideally, the ILSFA Program participants would participate in the utility energy efficiency program prior to participating in the ILSFA Program. Because the income eligibility requirements for the energy efficiency programs are 80 percent of AMI, as with the ILSFA Program, households who were eligible to participate in the ILSFA Program would be eligible for the utility low-income energy efficiency program if they were in the Com-Ed or Ameren service territory. The ILSFA Program should encourage AVs to have their customers participate in these utility programs prior to the solar installations. The ILSFA Program should determine whether they can work with the utility programs to prioritize customers who are approved for solar installations to have energy efficiency work done in their homes prior to the solar installations.

  - *Referrals and Resource Guide:* The ILSFA Program does not provide incentives to cover the costs of roof repairs or other remediation work that may be needed to make the home solar-ready. The Long-Term Plan states that the IPA and Elevate Energy will educate AVs about utility programs, weatherization programs, and other alternative sources of funding. The ILSFA Program should also work with these other programs to determine whether additional funding can be made available for such repairs. Elevate has created a resource guide for vendors, but should make it more readily accessible on the ILSFA Program website.

  - *Habitat for Humanity*: This organization is another potential source of funding for roofing repairs or replacement. The ILSFA Program should see if they can coordinate with Habitat for Humanity (and other potential funders) to provide these services to customers who are otherwise good candidates for the DG sub-program.

- *Job Training:* Consider whether support is needed for potential job trainees to help them overcome barriers to participation in the job training programs. One Grassroots Educator who focused on the job training aspect of the ILSFA Program was concerned that the entry requirements for job training opportunities would make it difficult or impossible for many potential low-income individuals to participate. These requirements included a background check, drug test, driver's license, and the purchase of certain toolkits. Many lower-income households cannot meet these requirements due to criminal records or a lack of funds for a driver's license or to purchase tools. Additionally, a Grassroots Educator noted that job training sites have traditionally been located far from their community and that transportation assistance and childcare support may be need so that low-income individuals can participate in the program. [Note that this is a recommendation for the job training program which is administered separately from the ILSFA Program.]

- *Data Collection:* Elevate Energy should provide specific information about their current plans for databasing household-level data for DG and CS participants. There should

then be an assessment of whether such data will be sufficient to meet FEJA mandates and IPA reporting goals, or whether additional data may need to be databased. While there is a critical need to protect participant privacy, many programs collect these data, and it is important to have the ability to document program participation characteristics and impacts. One stakeholder suggested that it may be preferable to have Elevate Energy collect and process confidential household qualification data rather than the AVs.