

## Illinois Solar for All

May 18, 2017



#### Agenda

- 1:30 p.m. 2:00 p.m.
- 2:00 p.m. 2:30 p.m.
- 2:30 p.m. 3:30 p.m.
- 3:30 p.m. 4:30 p.m.
- 4:30 p.m. 5:00 p.m.

- Overview of programs
- . Coordination with job training programs
- . Defining Environmental Justice communities
  - Consumer protections
- ) p.m. Discussion
- Next week in Springfield (Wednesday, May 24)
  - Programs for Rural Communities
    - Note new location: Abraham Lincoln Hotel, Ottawa Room



#### Presenting Today

- Anthony Star, Director
- Brian Granahan, Chief Legal Counsel
- Levitan and Associates, Planning Consultant
  - John Bitler
  - Edward Tsikirayi



#### Goal of the Workshop

- This workshop is intended to introduce to stakeholders the Illinois Solar for All Program, and to describe certain initial proposed approaches under consideration by the Illinois Power Agency.
- The workshop is also intended to be a forum for stakeholders to provide feedback to the Agency. Additional opportunities will also be available at later dates, including the opportunity to respond to a Request for Comments following this workshop
- Discussion of potential approaches to the development and implementation of the Illinois Solar for All Program should be considered preliminary in nature.
- The Agency will release a draft Plan for comments, and file a Plan for approval by the Illinois Commerce Commission



## **Overview of programs**



#### Goals of Illinois Solar for All

"The objectives of the Illinois Solar for All Program are to bring photovoltaics to low-income communities in this State in a manner that maximizes the development of new photovoltaic generating facilities, to create a long-term, lowincome solar marketplace throughout this State, to integrate, through interaction with stakeholders, with existing energy efficiency initiatives, and to minimize administrative costs."



#### **Development and Funding**

- Program developed as part of Agency's new Long-Term Renewable Resources Procurement Plan
  - Distinct programs but share some aspects with the Adjustable Block programs for Distributed Generation and Community Solar
- Funding comes from Renewable Energy Resources Fund and also utilities
  - Renewable Energy Fund balance after commitments for the Supplemental Photovoltaic Procurement approximately \$150 million
  - Funds from Utilities' renewable resources budgets also potentially available to address funding "shortfall"
    - But funding flows through separate contracts



### Market Value of Energy, Economic Benefits

#### • Contracts will

- Ensure the wholesale market value of the energy is credited to participating low-income customers or organizations
- Ensure tangible economic benefits flow directly to program participants, except in the case of low-income multi-family housing where the low-income customer does not directly pay for energy.



#### **Community Involvement**

- Priority shall be given to projects that demonstrate meaningful involvement of low-income community members in designing the initial proposals.
- Acceptable proposals to implement projects must demonstrate the applicant's ability to conduct initial community outreach, education, and recruitment of low-income participants in the community.



#### Job Training Coordination

 Projects must include job training opportunities if available, and shall endeavor to coordinate with the job training programs described in paragraph (1) of subsection (a) of Section 16-108.12 of the Public Utilities Act.



#### Four Programs

- (A) Low-income distributed generation incentive (22.5%)
- (B) Low-Income Community Solar Project Initiative (37.5%)
- (C) Incentives for non-profits and public facilities(15%)
- (D) Low-Income Community Solar Pilot Projects (25%)
- Allocations for (A), (B) and (C) can be adjusted through a stakeholder process
- "Each contract that provides for the installation of solar facilities shall provide that the solar facilities will produce energy and economic benefits, at a level determined by the Agency to be reasonable, for the participating low income customers."



#### Low-income distributed generation incentive

- This program will provide incentives to low-income customers, either directly or through solar providers, to increase the participation of low-income households in photovoltaic on-site distributed generation.
- Companies participating in this program that install solar panels shall commit to hiring job trainees for a portion of their low-income installations, and an administrator shall facilitate partnering the companies that install solar panels with entities that provide solar panel installation job training.
- Goal of this program that a minimum of 25% of the incentives for this program be allocated to projects located within environmental justice communities.
- Note: unlike the Adjustable Block Distributed Generation program there is not a distinction between systems below and above 10 kW



#### Low-Income Community Solar Project Initiative

- Incentives shall be offered to low-income customers, either directly or through developers, to increase the participation of low-income subscribers of community solar projects.
- The developer of each project shall identify its partnership with community stakeholders regarding the location, development, and participation in the project, provided that nothing shall preclude a project from including an anchor tenant that does not qualify as low-income.
- Incentives should also be offered to community solar projects that are 100% low-income subscriber owned, which includes low-income households, not-for-profit organizations, and affordable housing owners.
- Goal of this program that a minimum of 25% of the incentives for this program be allocated to community photovoltaic projects in environmental justice communities



#### Incentives for non-profits and public facilities

- Under this program funds shall be used to support on-site photovoltaic distributed renewable energy generation devices to serve the load associated with not-for-profit customers and to support photovoltaic distributed renewable energy generation that uses photovoltaic technology to serve the load associated with public sector customers taking service at public buildings.
- Goal of this program that at least 25% of the incentives for this program be allocated to projects located in environmental justice communities



#### Low-Income Community Solar Pilot Projects

- Persons, including, but not limited to, electric utilities, shall propose pilot community solar projects.
- Community solar projects proposed may exceed 2,000 kilowatts in nameplate capacity, but the amount paid per project under this program may not exceed \$20,000,000.
- Pilot projects must result in economic benefits for the members of the community in which the project will be located.
- The proposed pilot project must include a partnership with at least one community-based organization.
- Approved pilot projects shall be competitively bid by the Agency, subject to fair and equitable guidelines developed by the Agency.
- Funding may not be distributed solely to a utility, and at least some funds must include a project partnership that includes community ownership by the project subscribers.
- A project proposed by a utility that is implemented under this subparagraph (D) shall not be included in the utility's ratebase.



#### **Exemption from Qualified Person Requirement**

• The requirement that a qualified person, as defined in paragraph (1) of subsection (i) of Section 1-56 of the IPA Act, install photovoltaic devices does not apply to the Illinois Solar for All Program



#### **Upfront Payments**

- The Agency shall purchase renewable energy credits from generation that is the subject of a contract under these programs, and may pay for such renewable energy credits through an upfront payment per installed kilowatt of nameplate capacity paid once the device is interconnected at the distribution system level of the utility and is energized.
- The payment shall be in exchange for an assignment of all renewable energy credits generated by the system during the first 15 years of operation and shall be structured to overcome barriers to participation in the solar market by the low-income community.



#### REC Pricing compared to Adjustable Block Programs

- The incentives provided for in this Section may be implemented through the pricing of renewable energy credits where the prices paid for the credits are higher than the prices from programs offered under subsection (c) of Section 1-75 of this Act to account for the incentives.
- The Agency shall, consistent with the requirements of this subsection (b), propose the Illinois Solar for All Program terms, conditions, and requirements, including the prices to be paid for renewable energy credits, and which prices may be determined through a formula, through the development, review, and approval of the Agency's longterm renewable resources procurement plan described in subsection (c) of Section 1-75 of this Act and Section 16-111.5 of the Public Utilities Act



#### **Grassroots Education**

 The Agency shall ensure collaboration with community agencies, and allocate up to 5% of the funds available under the Illinois Solar for All Program to community-based groups to assist in grassroots education efforts related to the Illinois Solar for All Program.



#### Additional Program Proposals

 In the course of the Commission proceeding initiated to review and approve the plan, including the Illinois Solar for All Program proposed by the Agency, a party may propose an additional low-income solar or solar incentive program, or modifications to the programs proposed by the Agency, and the Commission may approve an additional program, or modifications to the Agency's proposed program, if the additional or modified program more effectively maximizes the benefits to low-income customers after taking into account all relevant factors, including, but not limited to, the extent to which a competitive market for low-income solar has developed.



#### Adjustments to the Program

- Following the Commission's approval of the Illinois Solar for All Program, the Agency or a party may propose adjustments to the program terms, conditions, and requirements, including the price offered to new systems, to ensure the long-term viability and success of the program.
- The Commission shall review and approve any modifications to the program through the plan revision process described in Section 16-111.5 of the Public Utilities Act.



#### Third-Party Administrator(s)

- The Agency shall issue a request for qualifications for a third-party program administrator or administrators to administer all or a portion of the Illinois Solar for All Program.
- The third-party program administrator shall be chosen through a competitive bid process based on selection criteria and requirements developed by the Agency, including, but not limited to, experience in administering low-income energy programs and overseeing statewide clean energy or energy efficiency services.



#### Reporting

 If the Agency retains a program administrator or administrators to implement all or a portion of the Illinois Solar for All Program, each administrator shall periodically submit reports to the Agency and Commission for each program that it administers, at appropriate intervals to be identified by the Agency in its long-term renewable resources procurement plan, provided that the reporting interval is at least quarterly.



#### Evaluation

- The long-term renewable resources procurement plan shall also provide for an independent evaluation of the Illinois Solar for All Program.
  - At least every 2 years, the Agency shall select an independent evaluator to review and report on the Illinois Solar for All Program and the performance of the third-party program administrator of the Illinois Solar for All Program.
  - The evaluation shall be based on objective criteria developed through a public stakeholder process. The process shall include feedback and participation from Illinois Solar for All Program stakeholders, including participants and organizations in environmental justice and historically underserved communities.



#### Evaluation, cont.

- The report shall include a summary of the evaluation of the Illinois Solar for All Program based on the stakeholder developed objective criteria.
- The report shall include
  - the number of projects installed
  - the total installed capacity in kilowatts
  - the average cost per kilowatt of installed capacity to the extent reasonably obtainable by the Agency
  - the number of jobs or job opportunities created
  - economic, social, and environmental benefits created
  - the total administrative costs expended by the Agency and program administrator to implement and evaluate the program.



#### Additional Funding

• If additional funding for the programs described in this subsection (b) is available under subsection (k) of Section 16-108 of the Public Utilities Act, then the Agency shall submit a procurement plan to the Commission no later than September 1, 2018, that proposes how the Agency will procure programs on behalf of the applicable utility. After notice and hearing, the Commission shall approve, or approve with modification, the plan no later than November 1, 2018.



#### Low-income and Environmental Justice Community Definitions

- "Low-income households" means persons and families whose income does not exceed 80% of area median income, adjusted for family size and revised every 5 years.
- The Agency shall define "environmental justice community" as part of long-term renewable resources procurement plan development, to ensure, to the extent practicable, compatibility with other agencies' definitions and may, for guidance, look to the definitions used by federal, state, or local governments.



#### **Income Verification**

- What should be the balance between verifying income eligibility and using other criteria such median income of census tract?
- Standards for distributed generation and for community solar projects could be different
- Use of proxies such as LIHEAP participation, what else?
- Transaction costs for community solar may make this inefficient
  - What other means to consider?
- How should income verification work for consideration of non-profit and public facilities?



# Coordination with job training programs



### Utility Funded and Administered Job Training Programs

- \$3 million for Solar Training Pipeline Program
- \$3 million for Craft Apprenticeship Program
- \$4 million for Multi-cultural Jobs Programs (Six specific programs)
- Implementation Plan due to be filed for ICC approval by July 31, 2017
- Issues for consideration in the Long-Term Renewable Resources Procurement Plan
  - When will program graduates be available?
  - Geographic considerations, availability downstate
  - How to ensure installers offer meaningful employment opportunities and career advancement
  - How to maximize interest and participation



# Defining Environmental Justice communities



## Illinois Commission on Environmental Justice

- Created by General Assembly in 2011 via Illinois Environmental Justice Act
- Legislative findings of the Act

(i) the principle of environmental justice requires that no segment of the population, regardless of race, national origin, age, or income, should bear disproportionately high or adverse effects of environmental pollution;

(ii) certain communities in the State may suffer disproportionately from environmental hazards related to facilities with permits approved by the State; and(iii) these environmental hazards can cause long-term health effects.

- Legislatively mandated activities
  - Advise State entities on environmental justice and related community issues
  - Review and analyze the impact of current State laws and policies on the issue of environmental justice and sustainable communities
  - Assess the adequacy of State and local laws to address the issue of environmental justice and sustainable communities
  - Develop criteria to assess whether communities in the State may be experiencing environmental justice issues
  - Recommend options to the Governor for addressing issues, concerns, or problems related to environmental justice that surface after reviewing State laws and policies, including prioritizing areas of the State that need immediate attention.



#### Recommendations from the Illinois Commission on Environmental Justice

- The Commission provided recommendations to the IPA in a May 9, 2017 Letter
- Key recommendations
  - Consider the Commission's definition of Potential Environmental Justice Community and the US EPA's definition of Overburdened Community
  - Consider efforts to compile and map data
    - US EPA EJSCREEN
      - 11 environmental indicators
      - 12 EJ indices that combine environmental and demographic data
    - CalEnviroScreen
      - Assigns scores based on pollution burden and population characteristics
      - 19 indicators
      - Sophisticated weighting methodology
    - Availability of data from Illinois EPA and Illinois Department of Public Health, as well as other federal and state databases



## Commission's definition of Environmental Justice Community

• A "potential" EJ community is a community with a lowincome and/or minority population greater than twice the statewide average. In addition, a community may be considered a potential EJ community if the low-income and/or minority population is less than twice the statewide average but greater than the statewide average and that has identified itself as an EJ community. If the lowincome and/or minority population percentage is equal to or less than the statewide average, the community should not be considered a potential EJ community.



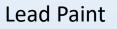
#### US EPA Definition of "Overburdened Community"

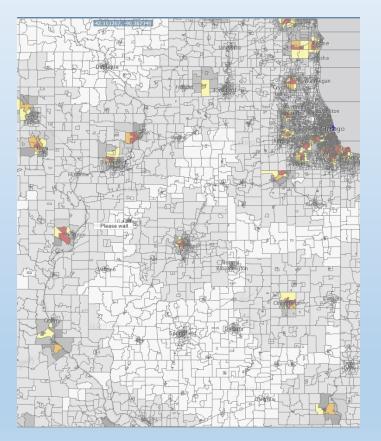
 Overburdened Community — Minority, low-income, tribal, or indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks. This disproportionality can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors. Increased vulnerability may be attributable to an accumulation of negative or lack of positive environmental, health, economic, or social conditions within these populations or places. The term describes situations where multiple factors, including both environmental and socioeconomic stressors, may act cumulatively to affect health and the environment and contribute to persistent environmental health disparities.

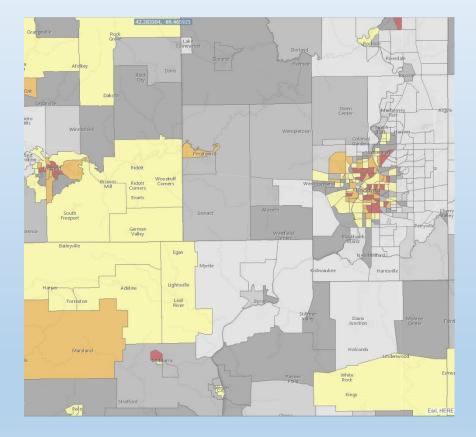


#### Sample US EPA EJScreen Maps

#### Hazardous Waste Proximity

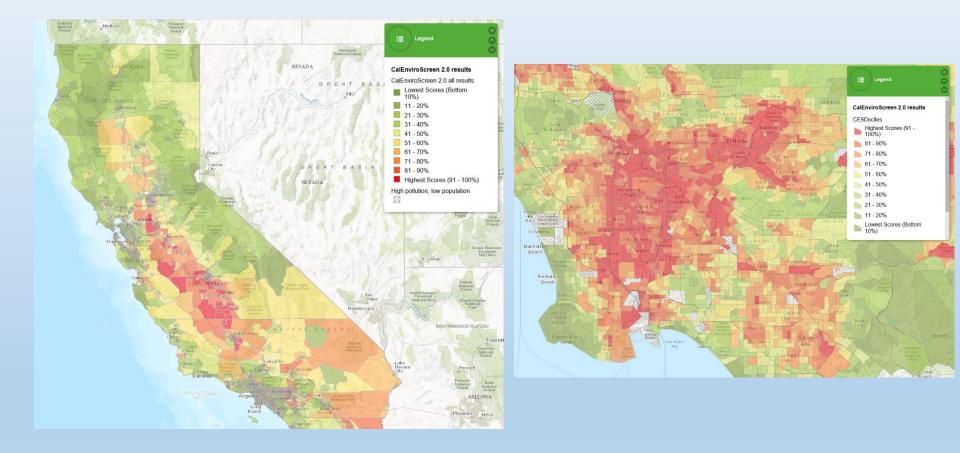








#### Sample CalEnviroScreen Maps: Composite Indices





#### CalEnviroScreen Scoring Methodology

#### **Pollution Burden**

#### Exposures

- Ozone Concentrations
- PM2.5 Concentrations
- Diesel PM Emissions
- Drinking Water Contaminants
- Pesticide Use
- Toxic Releases from Facilities
- Traffic Density

#### Environmental Effects

- Cleanup Sites
- Groundwater Threats
- Hazardous Waste
- Impaired Water Bodies
- Solid Waste Sites and Facilities

#### Population Characteristics

#### **Sensitive Populations**

- · Age: Children and Elderly
- Asthma Emergency Department Visits
- . Low Birth-Weight Infants

#### Socioeconomic Factors

- Educational Attainment
- Linguistic Isolation
- Poverty
- Unemployment

Pollution Burden



#### **Environmental Justice Issues for Consideration**

- Environmental Justice is a multi-faceted issue with multiple indicators that can be used to assess an Environmental Justice Community
- How to weigh various factors?
  - Income
  - Race/ethnicity
  - Other demographics
  - Environmental impacts
- How do Census Tracts really correspond to local communities?
- What level of community self-designation should be considered (or community ability to decline designation)?
- How widely should the criteria be applied?
  - Goal is to target 25% of incentives to Environmental Justice Communities



## **Consumer protections**



#### **Key Consumer Protection Issues**

- Representations around energy savings:
  - What electricity rate is used?
  - What other assumptions are made (such as how that rate changes over time)?
  - Could the use of disclosure forms standardize these representations?
- What is a "subscription"?
  - It's an "interest," but what is an "interest?"
  - Ownership clearly is an interest; are there clear boundaries around what other contractual relationships would fit under that term?
- Should up-front fees for subscriptions be capped/prohibited?
- Should up-front deposits for subscriptions be capped/prohibited?



#### Marketing Materials

- Should IPA have the opportunity to review marketing materials?
- Should IPA have guidelines (or rules) around appropriate marketing materials?



#### Additional Considerations

- In the case of up-front payments by customers, should there be a uniform approach to projecting project payback period and should that be required as part of the disclosure to customers?
- Should warranties around system performance (and thus system benefits) be required between the community solar project developer and the subscriber?
- Are there consumer privacy implications to a community solar project subscription, and if so, how should those best be managed or regulated?



#### Disclosures

- What sort of disclosures around project insurance and project maintenance, if any, should be required between the project developer and the subscriber? Should there be requirements around maintaining insurance?
- Are disclosures sufficient, or are certain parameters around contract terms between community solar project developers and subscribers required?
  - Price escalation caps?
  - Transfer fees? Project can be "transferable," but does that prohibit fees for transfers?
  - Fees around downsizing allocations? Should those be capped?
  - Uniform cost savings projections?
  - Uniform system output projections?

## Ideas from the ARES Part 412 Rules for Community Solar Subscriptions



- Provisions around minimum terms for supply contracts, among those that might be applicable to the solar context
  - Legal name of the business
  - Business address
  - Contact information (phone number; email also appropriate? Website?)
  - Contract length
  - Termination fees and amounts
  - Any deposits required
  - Any switching fees
  - "cooling" period under which the contract can be rescinded without penalty
  - Statement of what the entity is and that it's not a representative of the utility company
  - If savings are guaranteed, a clear description of the provisions that must be present for savings to occur
- Door-to-door sales conditions
  - Identification requirements
  - A statement of what type of entity the salesperson represents
  - Verbal disclosure of a uniform disclosure statement
    - That statement then must be initialed by the customer
  - Third-party verification
  - Translation services if necessary

- Telemarketing
  - Disclosure of the purpose of the call
  - Translation services if necessary
  - Verbal disclosure of a uniform disclosure statement
  - Third-party verification
- Direct mail
  - Including aspects of uniform disclosure statement
  - Copy of the contract communicated after utility acceptance of customer switch
- Online marketing
  - Similar materials
  - Verification data by encrypted customer input on RES website
- Sales agent training
  - Familiarity with power and energy services
  - Toll-free number for questions
  - Prohibition against misleading marketing statements
- Record retention
  - Records kept for two years
  - Contract available upon written request
- **Renewal Terms** 
  - Disclosure of automatic renewal terms
- Notification within certain period



#### Changes to Subscriptions

- How are these consumer protection issues different for community solar projects?
- Subscriptions must be portable
  - Can be taken from address to address (only within a utility service territory? Presumably)
- Subscriptions must be transferrable
  - Can be assigned to a different ratepayer (only within a utility service territory? Presumably)
- What about exiting an agreement? Not an issue with a rooftop installation, outside of the sale of the house and new net metering application to be filed



## Discussion