

May 9, 2017

Anthony Star, Director  
Illinois Power Agency  
Michael A. Bilandic Building, Suite C-504  
160 North LaSalle Street  
Chicago, Illinois 60601

Re: Recommendations for Definition of Environmental Justice Community Under the Future Energy Jobs Act

Dear Director Star:

The Future Energy Jobs Act (FEJA) contains provisions that require the Illinois Power Agency (IPA) to define “environmental justice community” (EJ community) for the purposes of implementing Illinois Solar for All, a program designed to incentivize and increase access to solar energy and workforce opportunities in low-income communities across Illinois. Within low-income communities, FEJA’s goal is that a minimum of 25% of incentives for low-income distribution will be allocated to projects located within EJ communities.

Given the role of the Illinois Commission on Environmental Justice (EJ Commission), to advise on environmental justice and related community issues, the purpose of this letter is to provide information and suggestions in regard to defining “EJ communities,” as well as provide information on existing tools and methods. It should be noted that this letter is not intended to be an exhaustive list of all factors that may be appropriate to consider when defining EJ community.

Discussed herein are various methodologies to screen for demographic and environmental indicators indicative of EJ communities including Illinois Environmental Protection Agency (IEPA)’s current methodology of identifying potential environmental justice communities via a demographic analysis and United States Environmental Protection Agency (USEPA)’s EJSCREEN mapping and screening tool. The EJ Commission has also identified some additional indicators to consider moving forward with an eye toward a subset of those used by the State of California as part of CalEnviroScreen 3.0<sup>1</sup>. The EJ Commission looks forward to working with the IPA moving forward on this issue of evolving and critical importance.

### **Role of the Illinois Commission on Environmental Justice**

The Illinois Commission on Environmental Justice<sup>2</sup> serves as an advisory body on environmental justice and related community issues. The EJ Commission receives administrative staffing from the Illinois Environmental Protection Agency (IEPA) and is constituted of members from: affected communities concerned with environmental justice, state agencies,<sup>3</sup> legislators, a statewide organization representing manufacturers, a statewide

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<sup>1</sup> <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

<sup>2</sup> <http://www.epa.illinois.gov/topics/environmental-justice/commission/index>

<sup>3</sup> The following ex-officio members: Director of Commerce and Economic Opportunity or his or her

organization representing the energy sector, environmental organizations, units of local government, labor organizations, and the general public who have an interest in or expertise in environmental justice. The EJ Commission's scope of work adheres to the following statutory charges—it shall:

1. advise State entities on environmental justice and related community issues
2. review and analyze the impact of current State laws and policies on the issue of environmental justice and sustainable communities
3. assess the adequacy of State and local laws to address the issue of environmental justice and sustainable communities
4. develop criteria to assess whether communities in the State may be experiencing environmental justice issues
5. 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.

Thus, advising the IPA on matters pertaining to environmental justice falls within the statutorily mandated activities of the EJ Commission.

### **Statutory Requirement**

Relevant statutory language from Future Energy Jobs Act (PA 99-2906) is as follows:

*For the purposes of this subsection (b), 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.*

### **IEPA EJ Policy: Definition of Communities of Potential Environmental Justice Concern**

The current IEPA policy<sup>4</sup> for defining a "potential" EJ community was developed for use in implementing a "public participation strategy for permits, programs and actions in potential EJ communities."<sup>5</sup> The IEPA's definition is as follows:

*A "potential" EJ community is a community with a low-income 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*

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designee, the Director of the Environmental Protection Agency or his or her designee, the Director of Natural Resources or his or her the Director of Public Health or his or her designee, and the Secretary Director of Transportation or his or her designee, and a representative of the housing office of the Department of Human Services appointed by the Secretary of Human Services.

<sup>4</sup> <http://www.epa.illinois.gov/topics/environmental-justice/ej-policy/index>

<sup>5</sup> <http://www.epa.illinois.gov/topics/environmental-justice/ej-policy/index>

*the state-wide average but greater than the statewide average and that has identified itself as an EJ community. If the low-income and/or minority population percentage is equal to or less than the statewide average, the community should not be considered a potential EJ community.*

### **IEPA EJ Policy: Methodology for Identification of Communities of Potential EJ Concern**

IEPA utilizes an internal Geographic Information Systems (GIS) demographic screening tool (EJ START) developed by Agency staff to determine potential environmental justice areas. The criteria for identification are twice the statewide average for minority population (75%) and/or low-income population (63.2%). The Agency adds a one-mile buffer around each regulated facility. The underlying data source is the latest American Community Survey 5-year estimates (2011-2015). The data used by IEPA are updated on an annual basis.

### **USEPA Criteria for Overburdened Communities**

Where IEPA's criteria are focused on low-income and minority populations, USEPA's definition of "overburdened community" takes into account additional factors:

*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 socio-economic stressors, may act cumulatively to affect health and the environment and contribute to persistent environmental health disparities.*

Consistent with its statutory charge, the EJ Commission recommends that the IPA look to both of these definitions for guidance as they develop a definition for EJ Community for the purposes of Solar for All program. Although the IEPA's definition is meant to apply to its EJ Start tool for identifying potential EJ areas for the purpose of public outreach, the USEPA's definition offers a broader set of factors that should be considered when defining an EJ Community. At this time, the EJ Commission is unaware of any additional definitions of EJ Community in other Illinois state agencies or units of government in Illinois.

### **USEPA EJSCREEN: Environmental Justice Screening and Mapping Tool**

USEPA has developed an environmental justice mapping and screening tool called EJSCREEN. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports. Indicators can be added to the available subset to facilitate layered mapping of multiple sets of data.

EJSCREEN is an environmental justice screening and mapping tool that utilizes

standard and nationally-consistent data to highlight places that may have higher environmental burdens and vulnerable populations. The tool provides both summary and detailed information at a high geographic resolution for both demographic and environmental indicators.

EJSCREEN can help identify communities with greater risk of exposure to pollution based on 11 environmental indicators<sup>6</sup> that measure potential exposure, hazard/risk and proximity, including traffic proximity, particulate matter, and proximity to superfund sites. These indicators are combined with demographic data from the U.S. Census Bureau American Community 5-year Summary Survey enabling users to identify areas with minority or low-income populations who also face potential pollution issues. There are 12 EJ indexes that combine environmental and demographic data.<sup>7</sup>

USEPA cautions that EJ SCREEN does not provide the only basis for it to identify areas as EJ communities and it is not an appropriate standalone tool for making a risk assessment. However, USEPA's position on the limitations does not bar the State of Illinois from utilizing it as a resource when screening for EJ communities as defined by the IPA and can help it ensure that the goals of the Solar For All program are met.

The EJ Commission recommends that the IPA utilize USEPA's EJSCREEN tool as a platform to map the relevant suggested indicators, as well as communicate with IEPA and the EJ Commission, where appropriate, on identification of EJ communities in Illinois.

## **CalEnviroScreen**

CalEnviroScreen 3.0 includes a broader set of demographic and environmental indicators, which IPA should consider when conducting annual policy updates and adding to the initial criteria it considers in identifying EJ communities. The EJ Commission recognizes that all the elements included in California's tool are not yet available to IPA, but may become available or able to be integrated into IPA definition and screening of EJ communities. Importantly, CalEnviroScreen 3.0 does not include race or ethnicity as an indicator.

The indicators and methods utilized by CalEnviroScreen's system represent a robust identification that accounts for demographic and environmental factors impacting community vulnerability. The set of indicators utilized by CalEnviroScreen are a more inclusive set of indicators reflecting environmental justice communities. California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) developed CalEnviroScreen, and the tool has been utilized in defining "disadvantaged communities" for the purposes of receiving climate mitigation investment opportunities.

CalEnviroScreen scores are calculated from the scores for two groups of indicators: Pollution Burden and Population Characteristics. Pollution burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution. The indicators for pollution burden include:

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<sup>6</sup> The 11 environmental indicators are: National Scale Air Toxics Assessment Air Toxics Cancer Risk; National Scale Air Toxics Assessment Respiratory Hazard Index; National Scale Air Toxics Assessment Diesel PM (DPM); Particulate Matter (PM2.5); Ozone; Lead Paint Indicator; Traffic Proximity and Volume; Proximity to Risk Management Plan Sites; Proximity to Treatment Storage and Disposal Facilities; Proximity to National Priorities List Sites and Proximity to Major Direct Water Dischargers.

<sup>7</sup> The six demographic indicators are: percent low-income; percent minority; less than high school education; linguistic isolation; individuals under 5; and individuals over age 64.

- Air Quality PM 2.5 and Ozone,
- Diesel Particulate Matter,
- Drinking Water Contaminants,
- Toxic Releases from Facilities,
- Traffic Density,
- Cleanup Sites,
- Groundwater Threats,
- Hazardous Waste Generators and Facilities,
- Impaired Water Bodies and Solid Waste Sites and Facilities.

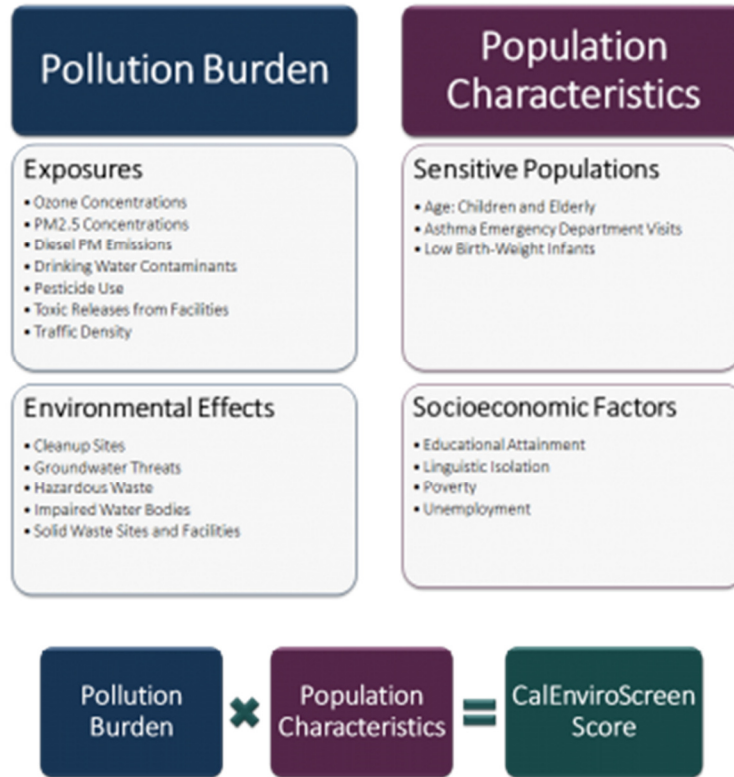
Population Characteristics indicators represent biological traits, health status, or community characteristics that can result in increased vulnerability to pollution. The indicators for population characteristics are:

- Age: Children and Elderly,
- Asthma,
- Low Birth Weight Infants,
- Educational Attainment,
- Linguistic Isolation,
- Poverty and Unemployment.

The methodology that OEHHA used to identify census tracts as disadvantaged communities in California combines the pollution burden and population characteristics. The overall score is calculated by combining the individual indicator scores within each of the two groups, then multiplying the Pollution Burden and Population Characteristics scores to produce a final score. Based on these final scores the census tracts across California are ranked relative to one another. Please see the text and models below for an explanation of how this method is used:

- Each census tract receives scores for as many of the 19 indicators as possible. Some census tracts will not have scores for every one of the indicators.
- For each indicator, the scores are put in order from highest to lowest. This allows us to calculate a percentile for all areas that have a score.
- The Population Characteristics score for a census tract is the average of the percentiles for all the Sensitive Populations indicators and Socioeconomic Factors indicators for that census tract.
- The Pollution Burden score is the average of the percentile scores from Environmental Effects and Exposures indicators.
- The Environmental Effects indicator percentiles are divided in half because California considers environmental effects to make a smaller contribution to pollution burden than exposures do.
- To get the CalEnviroScreen score, multiply the Pollution Burden score by the Population Characteristics score.

- Communities at the top 25% of scores relative to the state's range of scores qualify as disadvantaged.
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### Overview of Indicators: Illinois Data Available

The EJ Commission researched the environmental indicators utilized in CalEnviroScreen 3.0 that are publicly available via Illinois databases. The information from Illinois EPA and other state agency databases may be pulled into any future GIS mapping done in furtherance of the IPA's implementation of the Future Energy Jobs Act. The databases include:

- Drinking Water Watch: <http://water.epa.state.il.us/dww/index.jsp>
- There are a variety of IEPA Bureau of Land databases covering cleanup and regulatory programs: [www.epa.illinois.gov/topics/cleanup-programs/bol-database/index](http://www.epa.illinois.gov/topics/cleanup-programs/bol-database/index)

Minimally, those that would be of interest are:

- Site remediation: [epadata.epa.state.il.us/land/srp/index.asp](http://epadata.epa.state.il.us/land/srp/index.asp)
- The Leaking Underground Storage Tank Incident Tracking ("LUST") database: [www.epa.illinois.gov/topics/cleanup-programs/bol-database/leaking-ust/index](http://www.epa.illinois.gov/topics/cleanup-programs/bol-database/leaking-ust/index)

- Solid state sites: [epadata.epa.state.il.us/land/ssu/index.asp](http://epadata.epa.state.il.us/land/ssu/index.asp)
- Solid waste: [epadata.epa.state.il.us/land/solidwaste/index.asp](http://epadata.epa.state.il.us/land/solidwaste/index.asp)
- Asthma:  
[http://www.idph.state.il.us/about/chronic/asthma/documents/ILBurdenAsthma\\_August2013R.pdf](http://www.idph.state.il.us/about/chronic/asthma/documents/ILBurdenAsthma_August2013R.pdf)

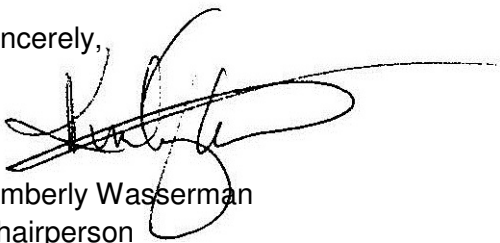
The Illinois Department of Public Health report on asthma burdens referenced above only gets down to the county level, so it poses challenges for granularity. We recommend that the EJ Commission work with a member from Illinois Department of Public Health to investigate if current asthma information exists at the census tract level.

Finally USEPA's EJSCREEN,<sup>8</sup> contains many national data sources that mirror the indicators used by California. Combining state databases and federal databases provides the indicator set needed to implement the Act.

### Ongoing Collaboration

The EJ Commission looks forward to continued collaboration on the issue of environmental justice community identification in Illinois. We anticipate supporting the IPA in its efforts to deliver a robust, statewide incentive program to communities in most need. The EJ Commission believes the recommendations made in this letter in regard to defining an EJ Community, as well as the suggested existing platforms for mapping, will help to accomplish these goals. Please do not hesitate to contact IEPA Environmental Justice Officer Chris Pressnall or Illinois Commission on Environmental Justice Chairperson Kimberly Wasserman with any questions regarding this correspondence and the contents wherein.

Sincerely,



Kimberly Wasserman  
Chairperson  
Illinois Commission on Environmental Justice



Chris Pressnall  
IEPA EJ Officer

cc: Brian P. Granahan, Chief Legal Counsel, Illinois Power Agency

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<sup>8</sup> <https://www.epa.gov/ejscreen>