

Utility-Scale and Brownfield Site Photovoltaic Procurements: The Nature Conservancy (TNC) in Illinois Response to Request for Stakeholder Feedback

9. What “other approaches,” if any, should the IPA consider proposing as part of Plan development? Could this mean an administratively determined REC price as used in the Adjustable Block Program and Illinois Solar for All with a project selection protocol as used in Illinois Solar for All (and will be used for community-driven community solar)? Should the IPA first observe the results of one or more competitive procurements for brownfield site photovoltaic projects before considering alternative procurement approaches? What barriers would alternative procurement approaches be best-suited to solving?

Illinois’ current procurement approach does not include measures to minimize impacts of renewable development on biodiversity and ecosystem services. We strongly recommend prioritizing and incentivizing renewables development on brownfields and other previously degraded lands, such as mine lands and landfills, as well as project sites with minimal impacts for wildlife, habitat, climate resilience, natural carbon stores, and prime farmland.

The state could amend the current approach for scoring the public interest criteria (Section 1-75(c)(1)(I) of the IPA Act) that are used to determine the eligibility of RECs from projects located in states adjacent to Illinois, and also use these criteria to score procurements from Illinois. More specifically, we recommend amending Criterion 5 (Contributing to a cleaner and healthier environment for the citizens of this State) to include low-impact siting considerations. Criterion 5 is currently measured by taking the average of the first and fourth public interest criteria, which does not directly address siting and land-use impacts related to a cleaner and healthier environment.

We propose that Criterion 5 can be measured by assigning the most points to projects located in previously disturbed areas, partial points to land with marginal agricultural production value, and zero points to projects in areas of conservation value or prime farmland. For instance, you could follow the following tiered approach for assigning points.

Full Points - Renewable generation proposed or located in previously disturbed areas (e.g., brownfields; landfills; active, inactive, and abandoned mine lands; state and federally listed Superfund sites) or lands identified to have low probability of significant adverse impacts¹ to species of greatest conservation need or their habitats². Renewable generation located in the built environment (e.g., rooftops, parking lots) should also receive full points.

Partial Points - We encourage the state to consider a subset of agricultural lands that are sensitive or have low productivity, such as highly erodible, drought- or flood-prone lands. Identification of such lands should be undertaken in collaboration with relevant stakeholders, including federal and state agriculture agencies. If these lands are also low value for wildlife, habitat, and have low habitat restoration potential, their use for renewable energy deployment can provide farmers with a new revenue stream and yield “edge of field” water management benefits for communities.

¹ As defined in U.S. Fish and Wildlife Service. Land-Based Wind Energy Guidelines. 2012. www.fws.gov/windenergy/docs/weg_final.pdf

² The Illinois Department of Natural Resources, along with its other state counterparts, has developed a State Wildlife Action Plan that identifies Species in Greatest Conservation Need (SGCN) and their habitat.

No Points - Renewable generation facility proposed or located in a conservation area, and/or there is a high incidence of state or federal threatened or endangered species (e.g., area that indicates protected land use designation, nature conservation areas, important habitat or areas with a protective designation indicating high ecological values, and connected lands) where development will contribute to the loss of natural habitat, and/or there is a moderate or high probability of significant adverse impacts³ to species of concern or their habitats. This includes Illinois' Conservation Opportunity Areas⁴ (COAs), which are the priority areas the state has identified for conserving Illinois' species in greatest need of conservation. Prime farmland could also fall in this category.

Several other states have adopted approaches to procurement that either prioritize specific lands or include a tiered approach or point system that incentivizes development on previously disturbed lands, areas that are low conflict for wildlife, habitat, and natural carbon stores, and avoid impacts to important farmland. Two examples, from Massachusetts and Maine, are provided here and can be used as models for Illinois to consider:

- In 2016, the Massachusetts legislature directed the state energy department to develop a tariff-based solar incentive program designed to yield 1,600 megawatts of new generation.⁵ The Solar Massachusetts Renewable Target (SMART) Program incentivized solar development in previously developed areas, such as brownfields.⁶ New regulations adopted in July 2020 doubled the size of the program to 3,200 MW and strengthened the consideration of habitat by including additional land use and siting criteria. The program gives higher preference for projects that are building mounted solar and located on brownfields or landfills. Projects that are ineligible for participation include those located in “Priority Habitat, Core Habitat, and/or Critical Natural Landscape” and open space as defined by the state. Projects located in prime farmlands, unique farmlands, and additional land of statewide importance as defined by the state are eligible but must allow for the continued use of the land for agriculture or meet other criteria.⁷
- In 2019, Maine adopted legislation that directed the Maine Public Utilities Commission (PUC) to procure by 2024 125 MW of distributed generation resources associated with commercial or institutional customers and 250 MW of shared distributed generation resources.⁸ The PUC must use a competitive solicitation and evaluate bids based on minimum costs. However, projects located on “previously developed or impacted land,” defined as “covered by impervious surfaces, capped landfills or brownfield sites as defined by the Department of Environmental Protection,” must be evaluated at 90% of the offered rate.⁹

³ As defined in U.S. Fish and Wildlife Service. Land-Based Wind Energy Guidelines. 2012.

www.fws.gov/windenergy/docs/weg_final.pdf

⁴ Illinois' Conservation Opportunity Areas Map:

<https://www2.illinois.gov/dnr/conservation/IWAP/pages/conservationopportunityareas.aspx>

⁵ Commonwealth of Massachusetts. “Solar Massachusetts Renewable Target (SMART) Program.”

<https://www.mass.gov/info-details/solar-massachusetts-renewable-target-smart-program#general-information->

Last visited January 4, 2019.

⁶ Chapter 75 of the Acts of 2016

⁷ 20.05(5)(e)(7)(d). <https://www.mass.gov/doc/225-cmr-2000-final-071020-clean/download>

⁸ 2019 LD 1711, §3485(1). “An Act To Promote Solar Energy Projects and Distributed Generation Resources in Maine.”

⁹ 2019 LD 1711, §3484(6). “An Act To Promote Solar Energy Projects and Distributed Generation Resources in Maine.”

10. To what extent, if any, do the changes to the competitive procurement REC pricing construct found in Section 1-75(c)(1)(G)(v) of the IPA Act address prior barriers observed in brownfield site photovoltaic project procurements?

Renewable energy deployment on previously disturbed lands can be a path to avoiding unnecessary environmental and community conflict. For this reason, several renewable energy developers have explicitly pursued development on these lands. However, developers estimate that solar development on a brownfield site can be 10 percent to 25 percent more expensive compared to a greenfield site, even assuming that cleanup has already been done. These additional costs include enhanced site due diligence and increased permitting, title, and insurance costs. For this reason, price-based competitive procurement or a tiered approach that gives preference for these sites should be considered.