Utility-Scale Renewable Energy Projects

What Are Utility-Scale Renewable Energy Projects?

Utility-scale wind or solar projects in Illinois operate at a size comparable to a traditional power plant, but without the emissions. Occupying hundreds, and sometimes thousands of acres, and thus differing significantly in scale from the solar projects that support individual homes and businesses, utility-scale renewable energy projects constitute a key part of the transition to Illinois' clean energy future.

As of the end of 2022, more than 7,000 MW of utility-scale wind and 2,000 MW of utility-scale solar operated in Illinois. This represented more than 18% of the generation capacity in the state, producing roughly 12% of the energy generated. These numbers will continue to grow as new wind and solar facilities get built.

An additional option for the development of utility-scale projects:

The Agency's Large Customer Self-direct Program allows large commercial or industrial energy users to contract directly with a new utility-scale renewable energy project to procure RECs in exchange for reducing their electric bill for part of the charge that supports the Renewable Portfolio Standard.

How Does the Illinois Power Agency Spark the Development of Utility-Scale?

As part of administering the Illinois Renewable Portfolio Standard (RPS), the Illinois Power Agency supports the development of utility-scale wind and solar through conducting competitive procurements for Renewable Energy Credits (RECs) from the new projects. RECs represent the environmental attributes of renewable energy and serve as a tool in the RPS to track progress toward meeting its goals.

The Agency's procurement of RECs from utility-scale wind and solar projects utilizes an indexed REC pricing approach that was established by the Climate and Equitable Jobs Act (Public Act 102-0662, or CEJA). The Agency holds

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procurement events twice a year in which renewable energy project developers submit bids to sell RECs from their proposed projects for a twenty-year term. The bid comes in the form of what is called a strike price, which is fixed over the twenty-year term. The actual price for RECs from each project is calculated each month and represents the difference (positive or negative) between that strike price and the wholesale market's price of electricity for the month. After a project is selected in a procurement, it typically takes several years to build it and begin operation.

The IPA's Procurement Administrator runs each procurement. Bids must first meet confidential benchmarks, and then the Administrator evaluates eligible bids by price, with certain adjustments made for projects committed to exceeding minimum equity standards or located in Energy Transition Community Grant Areas. The Illinois Commerce Commission must approve the results of each procurement.

For utility-scale projects to participate in the IPA's procurements, they must be at least 5 MW in size, be located in Illinois (or meet a set of public interest criteria if located in an adjacent state), and fulfill project maturity requirements. The developer must also commit to satisfying the labor and equity standards established by CEJA.

Since 2010, IPA procurements have supported the completion of more than 2,300 MW of utility-scale wind and 2,000 MW of utility-scale solar projects, and an additional 200 MW of utility-scale wind and more than 950 MW of utility-scale solar remain under development. Outside of IPA procurements, 4,700 MW of utility-scale wind projects and 140 MW of utility-scale solar projects have also been developed in Illinois, with additional projects under development or consideration.

[1] Prevailing wage is a minimum compensation level for each county set by the Illinois Department of Labor for construction activities related to public works.

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