

Illinois Utility Scale Wind/Solar Overview

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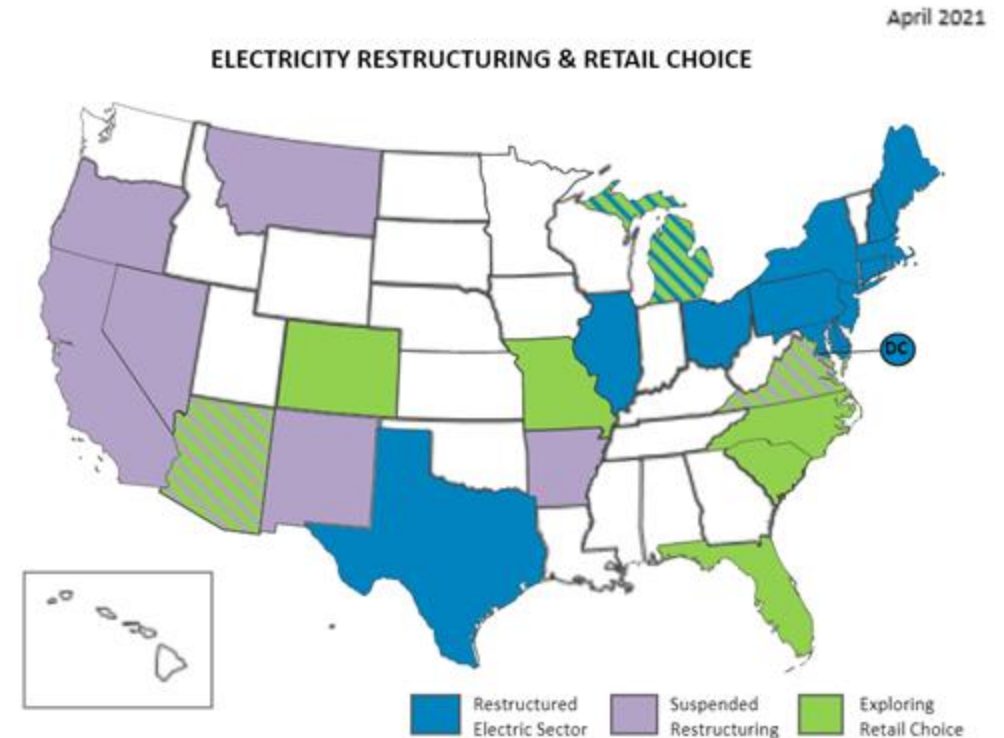
President of Strategic Economic Research, LLC

- Over 20 years of experience in the renewable energy field & has performed economic analyses at the county, region, state and national levels for utility-scale wind and Wind generation
- Has served as a consultant for Apex Clean Energy, Clean Line Energy Partners, EDF Renewables, E.ON Climate and Renewables, Geronimo Energy, Invenergy, J-Power, the National Renewable Energy Laboratories, Ranger Power, State of Illinois, Tradewind, and others.

Illinois Regulatory Structure

Illinois is a “Restructured” State

- Most states are traditionally regulated with investor-owned utilities providing electric generation, transmission, and distribution using rate-of-return regulation. Illinois is not.
- Electric generation is “competitively” provided. Transmission is operated by PJM and MISO (two regional transmission organizations) but owned by ComEd and Ameren, the two distribution utilities. Distribution was regulated by formula rates but has recently changed to allow more oversight by the regulators.



Illinois Government Agencies

- Illinois Commerce Commission (Public Utility Commission or Public Service Commission)
 - Regulates electric utilities – rates and profits for distribution
- Illinois Power Agency (no real parallel in other states)
 - Oversees procurement of electricity and RECS and ZECS according to various mandated programs; sends procurement to ICC for approval.
- Illinois Department of Commerce and Economic Opportunity
 - Responsible for workforce development programs for renewable energy
- Illinois Environmental Protection Agency
 - Oversees pollution from electric generating plants
 - Holds the State Energy Office

Federal and State Laws Concerning Wind and Solar

Inflation Reduction Act of 2022

- Production Tax Credit for Electricity from Renewables (\$0.0275/kWh, inflation adjusted; prevailing wage and apprenticeship requirements)
- Investment Tax Credit for Energy Property (30% of qualified investment)
- Numerous bonus credits (domestic content, siting, etc)
- Zero-Emission Nuclear Power Production Credit (0.3/kWh, inflation adjusted after 2024)
- After 1/1/25, Clean Electricity Production Tax Credit and Clean Electricity Investment Tax Credit will replace traditional PTC/ITC. Main difference is it is not technology specific.

Bipartisan Infrastructure Law

- Creates 60 new DOE programs, including 16 demonstration and 32 deployment programs
- Expands funding for 12 existing Research, Development, Demonstration, and Deployment programs.

Illinois Laws

Future Energy Jobs Act Dec. 7, 2016

- Nuclear subsidy via Zero Emissions Credits (ZECs) – Clinton and Quad Cities Plants
- Renewable Portfolio Standard “fix”
 - 3 compliance mechanisms into 1
 - LT view of RPS compliance
 - Greater focus on new generation and localized benefits
- Lots of changes to solar

Implications for Solar

- Residential and commercial net metering
- New Community Solar via virtual net metering/meter aggregation
- Explicit solar REC goals
 - 50% from adjustable block program (split evenly on small (<10 kW); medium (10 kW-2 MW); Community Solar and IPA LT renewable program)
 - 40% from Utility Scale Solar (> 2 MW)
 - 2% from Brownfield Development
 - 8% in LT renewable program

Climate and Equitable Jobs Act (CEJA)

- Official title: Energy Transition Act (Public Act 102-662)
- Effective September 15, 2021
- New renewable energy goals: 40% renewable energy by 2030, 50% by 2040, net-zero GHG emissions by 2050, doubles the RPS
- Coal and gas electric generation retirement goals: zero GHG emissions for coal by 2030, gas by 2045
- Beneficial electrification goal: 1 million additional EVs by 2030



Climate and Equitable Jobs Act (CEJA) contd.

- Affordability and low-income protections
- Requirements for PLA's for utility-scale wind and solar projects
- \$694 million over 5 years for Byron, Dresden and Braidwood nuclear plants
- Creates a coal to solar program to support the transition of coal plants to renewable energy facilities
- Requires renewable industry reporting on diversity and inclusion efforts
- ICC will receive additional \$10 mil/year to implement
- ICC to hire additional 50+ legal/accounting/finance/IT/engineering/policy Staff



Renewable Energy Access Plan



- ICC will open an investigation to develop and adopt a Renewable Energy Access Plan no later than 12/31/22, to be revised by 12/31/25 and every other year thereafter
- The plan shall:
 - designate access plan zones where conditions are suitable for developing renewables;
 - develop a transmission plan to get renewables in access plan zones to consumers or other states in a cost-effective manner;
 - use the state's positions as a transmission hub to create investment in renewables;
 - consider programs, policies, and transmission projects that promote the cost-effective delivery of renewables to meet RPS standards;
 - consider proposals to improve RTO planning; and
 - make findings and policy recommendations to cost-effectively achieve policy goals; present conclusions and recommendations to determine actions the ICC should take
- ICC can retain experts to assist and support plan development

RECs Procurement

- RPS collections may now be rolled over for up to 5 years and should be spend on a first-in-first-out basis. Refunded, if not spent, but not with respect to obligated funding that is not paid out
- Increased REC procurement goals:
 - IPA to procure 10 mil RECs by the end of the 2021 delivery year, increasing to 45 million RECs by the end of 2030
 - New wind/solar projects: 45% shall be from wind and 55% from solar
 - Solar targets: 50% from ABP projects, 47% from utility-scale solar, and 3% from brownfield projects
 - Brownfields expanded to include renewables at former coal mine sites
 - Community Renewable Generation Projects now up to 5 MWs (was 2 MWs)
 - DG devices can include combined heat and power facilities and do not have size limits (was up to 2 MWs)
 - Utility scale projects are now above 5 MW (was above 2 MWs)



Illinois Solar For All



- Illinois Solar for All Goals:
 - 35% to low-income DG,
 - 40% to low-income community solar, and
 - 25% to low-income non-profit and public sector programs
- Low-income DG subprogram is divided into two subprograms:
 - low-income single and small multifamily (one to 4 units) customers, and
 - large low-income multifamily customers
- Either the IPA or utilities may contract for ILSFA RECs

Omnibus Energy Bill this fall

- Energy Storage
- HVDC Transmission lines
- “Fixes” to CEJA – including wind procurement
- More money to IPA?