Grid Integration

- Illinois Renewable Energy Portfolio
- Net Metering
- Grid Interconnection Requirements
- Financing Options
Illinois Renewable Portfolio Standard

- Effective 8-10-09, Public Act 096-0159 modified the Illinois Power Agency Act to include the Renewable Portfolio Standard.
- Utilities must buy and retire RECs at certain levels from defined resources.
- Resources shall be procured from facilities located in Illinois. If not available in Illinois, then they’ll be procured in states that adjoin Illinois. If not available in Illinois or in states that adjoin Illinois, then they may be purchased elsewhere.
Illinois Renewable Energy

- IOUs must ramp up to a wind energy component of 18.75% of sales in compliance year 2024-2025.
- ARES must also comply with wind requirement and ramp up to 15% of sales in compliance year 2024-2025.
- All must ramp up to PV energy component of 1.5% of total sales in compliance year 2024-2025.
Net Metering

- Net metering is a way to capture the energy used and produced by a renewable energy generator located at a home or small business.

- Owners of renewable energy power systems can use net metering to offset traditional utility costs while using cleaner energy.
Net Metering in Illinois


- In Illinois, net metering is available to electric customers that generate electricity using:
  - Solar energy
  - Wind energy
  - Dedicated energy crops
  - Anaerobic digestion of livestock or food processing waste
  - Hydropower
  - Fuel cells and microturbines powered by renewable fuels
While Illinois's investor-owned utilities and alternative retail electricity suppliers must offer net metering, the state's municipal utilities and electric cooperatives are not required to do so.
Net Metering in Illinois

- Systems up to 40 kilowatts (kW) in capacity that are intended primarily to offset the customer's own electrical requirements are eligible and receive a one-to-one retail rate credit.
- These customers will be compensated for excess electricity generated by their renewable energy systems at the same rate that they pay when buying electricity from their utility, including time of use rates.
- These credits will be carried over month-to-month, with the annual period running from May to April, or November to October, at the customer's discretion.
Net Metering in Illinois

- For systems up to 40 kW in capacity, any net excess generation (NEG) during a billing period is carried over as a kilowatt-hour (kWh) credit to the following billing period.
- At the end of an annualized period, any remaining NEG credits in the customer's account expire.
- All net-metering customers (and dual-metering customers) hold ownership and title to all renewable-energy credits (RECs) and greenhouse-gas credits associated with customer generation.
Net Metering in Illinois

- The utility must provide the necessary metering equipment for systems up to 40 kW in capacity, while customers with systems greater than 40 kW but less than 2 MW must pay for the costs of installing necessary metering equipment.
- Net metering and dual metering are not available to systems greater than 2 MW.
Net Metering in Illinois

Before you install a net metering system, it is important to ask the following questions:

- Are there tax incentives or rebates for installing a renewable energy system available in your area?
- Are there zoning laws or building ordinances that restrict what kind of system you can install in your area?
- Are there licensed contractors in your area to install the system you want?
- What is the process for connecting your system to the local electrical grid?
Interconnection Requirements

- To learn more about interconnection, view the general rule at: [http://www.ilga.gov/commission/jcar/admin code/083/08300466sections.html](http://www.ilga.gov/commission/jcar/admin code/083/08300466sections.html)

- Electric Interconnection of Distributed Generation Facilities, Code Citation: 83 Illinois Adm. Code, Part 466
Contacts

- Ameren Illinois Utilities:
  - RenewablesIllinois@ameren.com

- ComEd:
  - http://www.comed.com/sites/customerservice/Pages/SelfGenerated.aspx
Contacts

- MidAmerican – Illinois:
  - 888-427-5632 for additional distributed generation information
The Illinois Solar Energy Association offers the Renewable Energy Credit Aggregation Program (RECAP) to Illinois solar photovoltaic (PV) system owners, providing them with an opportunity to receive payment for their solar renewable energy credits (SRECs*). The program was created in 2008 to provide an additional revenue stream for small PV system owners and to support Illinois solar development.
Special Assessment for Solar Energy Systems

Illinois offers a special assessment of solar energy systems for property-tax purposes. For property owners who register with a chief county assessment officer, solar energy equipment is valued at no more than a conventional energy system. Eligible equipment includes both active and passive solar-energy systems. The exemption is not valid for equipment that is equally usable in a conventional energy system or for components that serve non-solar energy generating (e.g., structural, aesthetic, insulating, etc.) purposes.
PACE Financing

- Property-Assessed Clean Energy (PACE) financing effectively allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of years. Illinois has authorized certain local governments to establish such programs.

The Federal Housing Financing Agency (FHFA) issued a statement in July 2010 concerning the senior lien status associated with most PACE programs. In response to the FHFA statement, most local PACE programs have been suspended until further clarification is provided.
Illinois business owners, non-profit organizations, and local governments seeking loans for certain energy efficiency and renewable energy upgrades may apply for a rate reduction, under the Green Energy Loan program through the Illinois State Treasurer's Office, in partnership with eligible banks in the state (loan seekers are encouraged to verify if the eligible banks are actively participating in the program). Loan amounts range from $10,000 to $10 million.

To qualify, the project must be located in Illinois and meet one of the following four criteria:

1. Participation in a state or utility administered efficiency program (ComEd, Ameren, or Dept of Commerce and Economic Opportunity); or

2. Have a contract with an Energy Service Company (commonly referred to as ESCO); or

3. Have a LEED Certified Professional working on the project with the intent to pursue LEED Certification*; or

4. Have a plan to install renewable energy system.
The Illinois Finance Authority (IFA) is a state conduit issuer of tax-exempt bonds & credit enhancement for projects in Illinois. The IFA funding is available to commercial as well as non-profit entities as long as those entities meet strict eligibility criteria. Specifically, entities seeking funding must demonstrate that their projects provide a significant public benefit for the citizens of Illinois. In 2009, the IFA was authorized by legislation (S.B. 1906 and S.B. 390) to provide funding via issuance of tax-exempt bonds for renewable energy projects and energy efficiency projects.
DCEO – Solar and Wind Energy Rebate Program

- The program is open to customers of investor-owned and municipal utilities, as well as electric cooperatives, which impose the Renewable Energy Resources and Coal Technology Development Assistance Charge. (A list of participating utilities appears in the program guidelines, available on the program web site.) Eligible applicants include individuals, businesses, associations, public and private schools, colleges and universities, the public sector, and nonprofit organizations. Rebates are available to applicants that contribute a minimum of 25% of the total project cost (personal private investment or in coordination with financial partners). Applicants may utilize funds from other incentive programs as well, so long as the total incentive from additional programs plus the RERP rebate does not exceed 75% of the project cost (this includes the Federal Individual Tax Credit).
Established by the *Energy Policy Act of 2005*, the federal tax credit for residential energy property initially applied to solar-electric systems, solar water heating systems and fuel cells. *The Energy Improvement and Extension Act of 2008* (H.R. 1424) extended the tax credit to small wind-energy systems and geothermal heat pumps, effective January 1, 2008. Other key revisions included an eight-year extension of the credit to December 31, 2016; the ability to take the credit against the alternative minimum tax; and the removal of the $2,000 credit limit for solar-electric systems beginning in 2009. The credit was further enhanced in February 2009 by *The American Recovery and Reinvestment Act of 2009* (H.R. 1: Div. B, Sec. 1122, p. 46), which removed the maximum credit amount for all eligible technologies (except fuel cells) placed in service after 2008.

- A taxpayer may claim a credit of 30% of qualified expenditures for a system that serves a dwelling unit located in the United States and used as a residence by the taxpayer.
Database of State Incentives for Renewable & Efficiency (DSIRE)

- DSIRE is a comprehensive source of information on state, local, utility, and federal incentives and policies that promote renewable energy and energy efficiency. Established in 1995 and funded by the U.S. Department of Energy, DSIRE is an ongoing project of the N.C. Solar Center and the Interstate Renewable Energy Council.

Choose one or both databases: Renewable Energy Energy Efficiency

- **Federal Incentives**: www.dsireusa.org
Illinois Smart Energy Design Assistance Center

Web site: www.sedac.org
Contact: info@sedac.org
1–800–214–7954