

SMART GRID

Status and Opportunities in Illinois

Illinois
SMART GRID
Initiative

Illinois is the national leader in offering residential customers real-time pricing options, and is among the leading states in mandating increased renewables and energy efficiency. Using the economic stimulus bill as one catalyst, the 2009 Illinois Smart Grid Initiative (ISGI) Report maps out how Illinois can transform the electric grid into a smart grid and set the standard for the nation in stimulating the economy and protecting the environment.



Setting the Stage

At a time when both President Obama's Administration and Congress have prioritized electric grid modernization and the jobs potential it holds, Illinois is well positioned to become the national leader in the adoption of a truly consumer-focused smart grid.

The American Recovery and Reinvestment Act of 2009 includes \$4.5 billion in funding now available for smart grid technology—funds that can accelerate and expand Illinois' investment in smart grid infrastructure. Illinois' leadership in engaging stakeholders can ensure that the state is fully prepared to take hold of its energy, economic and environmental future.

Up and Coming Technology

Third party entrepreneurs continue to develop and promote technologies and tools that—along with more advanced electricity infrastructure—consumers can utilize to understand and manage their energy use. The recent promotion by Google of their new PowerMeter, an information tool that could be loaded on any consumer's computer, is a prime example of the types of initiatives that will be accelerated by smart grid investments.

by pairing real-time electricity rates with smart technology, while advocating for regulatory rule changes that encourage public and private investment in energy efficient smart grids, can open the door

Illinois Smart Grid Initiative

The ISGI April 2009 Report, *Empowering Consumers Through a Modern Electric Grid*, provides key guidance for stakeholders as they get down to the nuts and bolts of smart grid implementation in Illinois. Among the findings:

- **A smart grid can fundamentally improve reliability and efficiency**, integrate renewable energy on the local level, and empower consumers to take charge of and reduce their electricity bills—while saving energy and reducing carbon emissions.
- **Increasing consumer choice**

Now is the Time

Several activities are currently laying the foundation for the creation of a smart grid system that brings real benefits to Illinois consumers:

- » **ComEd's smart meter pilot**, proposed for 2010, will test how the system can offer real benefits to Illinois consumers. With 100,000 to 200,000 meters to be included in the pilot, Illinois has an excellent opportunity to test customer-side programs and benefits from smart meters.
- » **The Illinois Statewide Smart Grid Collaborative**, initiated by the Illinois Commerce Commission, is convening a wide range of stakeholders to address the full range of implementation issues that will shape smart grid deployment for Illinois.
- » **The American Recovery and Reinvestment Act of 2009** includes \$4.5 billion in funding for smart grid technology, funds which can accelerate and expand Illinois' investment in smart grid infrastructure.

to new 'green power', high-tech business opportunities in communities throughout the state.

- **A stakeholder-driven definition of the smart grid is necessary.** The ISGI Report offers the following working definition: "The smart grid combines new digital information technologies with the traditional electric power infrastructure to improve utility operations and to extend greater control to customers. The smart grid includes smart electricity meters that automatically transmit time-of-use prices to consumers and their appliances; electronic sensors and controls that reduce or even eliminate outages; local or "distributed" power generation such as solar-powered buildings; and infrastructure improvements that allow consumers to take advantage of plug-in hybrid electric vehicles."

Leading the Nation

Global Smart Energy recently named Illinois as one of the "smartest" states in progressing toward a modern electricity system, citing the state's collaborative approach of "engaging communities up and down and all across the state." The state's Tier 2 status, behind only California and Texas in terms of progress toward a smart grid, is a result of innovative partnerships like the Illinois Smart Grid Initiative.

About the Illinois Smart Grid Initiative

The Illinois Smart Grid Initiative (ISGI) is a public-private working group formed in 2008 to engage Illinoisans in examining the nature and potential benefits of a modernized electric grid, and to map a policy path for achieving those benefits for consumers and the economy. The ISGI is a project of the Center for Neighborhood Technology, supported in part by the Galvin Project, Inc. and assisted by the U.S. Department of Energy's Modern Grid Strategy team.

The ISGI held a series of roundtable meetings in Chicago during the summer and fall of 2008. Early meetings featured presentations and discussions about the smart grid concept, and later meetings focused on public policy formulation. Organizations in Illinois with a stake in

the electric power system and the energy future of the State joined this working group, including local governments, consumer groups, business associations, and environmental advocates.

More information, including all presentations and reports of the Initiative are available at www.ilsmartgrid.org.



Empowering Consumers Through a Modern Electric Grid Released April, 2009

A report on the potential benefits of a modernized electric grid that maps a policy path for achieving those benefits for consumers and the economy. This report identifies several key policy considerations that CNT believes should be examined in future work to develop the smart grid concept in Illinois, including the workshop and collaborative meetings held under the auspices of the Illinois Commerce Commission.

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