

Illinois' Fresh Approach to Smart Grid

TAKING A LOOK AT DYNAMIC PRICING

BY KATHRYN THOLIN

CAN A SMART GRID HELP A CHICAGO

suburb take better care of its senior citizens? A new approach to thinking about the smart grid is under way in Illinois that expands the conversation beyond the traditional technical topics such as meters, communications platforms, and rate-recovery mechanisms held among utilities, technology companies, and regulators.

This past June, Illinois kicked off the Illinois Smart Grid Initiative, or ISGI, to create a different kind of dialogue. Representatives from Illinois state and local governments, consumer groups, businesses, environmental organizations and utilities are coming together to examine the nature and potential benefits of a smart grid, along with the policy paths that may be necessary to bring the benefits of a smart grid to Illinois consumers.

This public-private collaboration is co-chaired by Chicago Mayor Richard M. Daley and former U.S. Speaker of the House Representative Dennis Hastert, managed by the Chicago-based Center for Neighborhood Technology and funded by the nonprofit Galvin Electricity Initiative. What makes the Illinois effort unique is that this stakeholder-led initiative approaches grid modernization from the point of view of electricity consumers, many of whom have no idea of what a smart grid is or that the current grid is in desperate need of an upgrade.

In a series of stakeholder meetings, participants are looking at the hows and the whys of making the electricity grid smarter through up-to-date digital controls and communications technology. Presentations and discussions are exploring the

links between smart grid and energy management, the deployment of renewables, reliability, and the ultimate costs to consumers.

In an age when making time for lunch is a challenge, a standing-room-only crowd of more than 70 stakeholders took



Participants in the August 5th Illinois Smart Grid Initiative meeting listen to consumer advocate Nancy Brockway discuss the policy considerations of a smart grid.

PHOTO COURTESY OF CNT

time to attend the first all-day meeting in July. It is even more promising that these meetings include groups that are not traditionally considered energy stakeholders. Representatives from AARP and the League of Women Voters came together with members of the Building Owners and Managers Association, local entrepreneurs and the utility industry, the City of Chicago and the Metropolitan Mayors Caucus, and village managers and presidents from six Illinois suburbs.

So far, these meetings have been more than local political glad-handing. The July gathering exposed stakeholders to the smart grid value proposition by challenging them to step outside their usual professional roles. The meeting combined short presentations on the economic and environmental opportunities of smart grid technologies with workshops in which participants took on the perspective of a particular type of consumer – an elderly man living alone, for example, or a small business owner – and thought through how a smart grid would impact this individual's life. In one group, a village manager became excited about how the better flow of information could be used by his town to better manage emergency events, such as deciding whether or not to evacuate a high-rise senior center during an outage.

To date, utility benefits from a smart grid are far better quantified than consumer benefits. The benefits to end users are an important part of the rationale for an upgraded grid, but the hard numbers that are needed to frame an implementation plan or regulatory solution, or make the business case to consumer groups, are not yet quantified.

In Illinois, dynamic pricing, one of the key opportunities associated with the smart grid, isn't a new

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idea. Legislation passed in 2006 requires utilities to offer residential customers the option of real-time pricing, and consumer groups have supported its implementation and understand the value proposition to consumers. The question on the table, then, is how the smart grid could expand the value of dynamic pricing by improving information flows and automating demand-response and energy efficiency.

Ultimately, the best smart grid implementation is one that addresses both utility and consumer interests. Without a process of engaging consumers, however, it's unlikely that proposals will be designed to provide maximum benefits for end users. The ISGI aims to understand the extent to which smart grid upgrades can give Illinois consumers more reliable electricity, a cleaner environment and the lowest possible costs over time. Early next year, ISGI will release a report identifying key steps – and policies – needed for improving electricity services throughout Illinois and how the state can create a more responsive and smarter power system that benefits consumers as much as system operators. ☒

Kathryn Tholin is the CEO of the Center for Neighborhood Technology, organizer of the Illinois Smart Grid Initiative.

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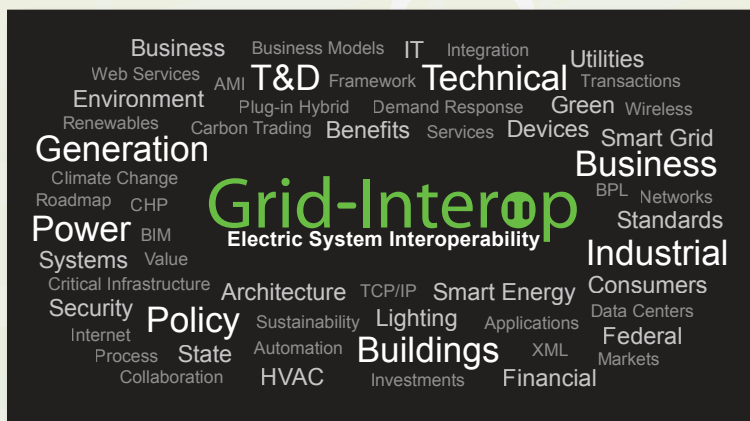
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At Grid-Interop, NIST, working with the GridWise Architecture Council, will seek input from industry stakeholders to achieve consensus on an interoperability framework for this key report that will influence Federal Policy.

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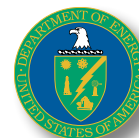
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