



Connected Conversations

By Lisa V. Wood, executive director of the Institute for Electric Innovation and vice president of The Edison Foundation.

On March 19, the Institute for Electric Innovation will hold its 5th annual Powering the People event. This year's theme is *Connected Conversations*, and electric power industry thought leaders—utility executives, technology company executives, and policymakers—will discuss the emerging trends shaping the evolving power grid.

There is no doubt that this is an unprecedented time of change in the electric power sector. And in taking a long view, Powering the People pushes the dialogue beyond the next rate case or approaching quarterly earnings call, to focus on the technologies, policies, and partnerships needed to best serve customers.

NorthWestern Energy CEO Bob Rowe summarized last year's discussion as follows: "There is a benign triangle of technology, public policy, and the electric utility business model. All of them have to be in harmony. At the center of the triangle is the customer."

It's difficult to predict where the evolving power grid will go, but the utility's basic function remains: to provide safe, reliable, affordable, and increasingly clean electricity. The future is an expansive electrified economy as limitless as the imagination. It will offer choices to customers, entrepreneurs, and utilities. But, electricity service also must remain simple. After all, the nation's power system is the best plug-and-play platform in the world—and still an aspiration for many technology companies. Almost everyone agrees on the importance of the grid, but we also must meet the demands of growing customer expectations. This means finding balance in the path forward.

First, a smart information technology overlay of the grid, which is beginning to take place, is needed as more renewable and distributed energy resources are integrated into the existing power grid.

Second, as new tools emerge for analyzing massive amounts of data in real or almost-real time, utilities have an opportunity to leverage technology and data analytics to better manage and optimize the grid.

Third, customers expect a power grid that supports all of their needs all of the time at the lowest possible cost. Electric utilities and policymakers must weigh the need for investments to improve grid reliability, grid operations, and the seamless integration of "things" with the cost to customers of doing so. This is no easy task.

Evolving Power Grid

At the 5th annual Powering the People event, more than 25 thought leaders will present their individual perspectives about the evolving electric distribution grid. This will include some basic "grid talk" about resiliency, reliability, and optimization to discussion about connecting "things" to the grid, such as distributed generation, electric vehicles, storage, and microgrids. But, ultimately all of these conversations are connected to how the electric power grid is evolving into an integrated grid platform to connect a growing number of things and what that future platform and business model might look like.

As new energy services and technologies multiply, today's grid is changing into a broad platform to connect an increasingly diverse set of both supply- and demand-side resources of varying types and sizes.

Managing this integrated grid platform will require utilities to continue to upgrade and modify their distribution systems, to invest confidently in technology, and to maintain close connections and open dialogues with customers. This new business environment relies increasingly on utilities collaborating with and balancing the interests of three key strategic stakeholders: technology companies whose innovative products and services plug into the grid; regulators who define appropriate business models for the plug-and-play grid platform; and customers/communities who have specific wants and needs. Regulators may have the toughest job of all, because it's their responsibility to bring order and fairness to this process.

Ultimately, the winners will be those who are most adaptable and stay as close to the mission as possible: serving customers. As the grid continues to evolve and to connect more things, only utilities have the end-to-end visibility and mandate to provide safe, reliable, affordable, and increasingly clean electricity. **EP**

powering the people

CONNECTED CONVERSATIONS

The Institute for Electric Innovation focuses on advancing the adoption and application of new technologies that will strengthen and transform the power grid. The Institute's members are investor-owned electric utilities that represent about 70 percent of the U.S. electric power industry and are committed to an affordable, reliable, secure, and clean energy future.

The logo for the publication, consisting of the letters 'EEEP' in a stylized, bold font inside a dark blue square.

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