



*The Edison Foundation*

INSTITUTE for  
ELECTRIC INNOVATION

## IEI National Dialogue

# Emerging Energy Solutions for Customers

Key Takeaways  
November 2018



# IEI National Dialogue: Emerging Energy Solutions for Customers

## November 15, 2018 | Denver, CO

Hosted by Xcel Energy

### KEY TAKEAWAYS

Seventeen senior leaders from five electric companies and nine technology companies gathered in Denver to discuss emerging energy solutions for customers, including (1) improving large commercial and industrial customer engagement; (2) trends in residential customer energy management; and (3) integrating customer solutions. The following takeaways outline how electric companies are leveraging technology and partnerships, and embracing “coopetition” – the notion of collaborating with competitors – to deliver greater choice and convenience and to enhance the customer experience.

#### Improving Large C&I Customer Engagement

*This discussion focused on the partnerships and approaches that are improving electric company engagement with and response to the changing energy needs of large customers. Increasingly, large customers are looking for ways to enhance energy management and sustainability in their operations. In turn, electric companies are working closely with these customers to better understand their needs, facilitate relationships, provide options, and forge solutions that work.*

- Improving *customer stickiness* requires electric companies to deliver a consistently better and convenient value transaction. Electric companies are working to meet the needs of their large customers by focusing on what large customers want and what they are prioritizing – like renewable energy – and are creating a culture of “YES.” Examples include:
  - Xcel Energy’s Sustainable Growth Coalition. Xcel Energy designed it’s Renewable\*Connect program for large customers with a stated goal of helping to achieve a 100% renewable energy-supplied system. Through a process of deep stakeholder engagement, Xcel Energy has seven MOUs signed so far representing 200 megawatts (MW) of new renewable load, compared to the initial 75 MW when the project was first announced.
  - Xcel Energy’s Partners in Energy. Working with the City of Denver to help meet its 100% renewable energy goal, Xcel Energy proactively positioned itself as the City’s energy partner, ready to deploy resources and minimize the effort needed by the city. Having the right products on the shelf, the ability to put the pieces together, and the willingness to do what it takes to get to YES are all key.
  - DTE has pre-sold 600 MWs of wind energy to large customers and achieved a billion-dollar investment without an increase in rates (largely by leveraging the investment tax credit).

- AEP established a new energy services team to help large customers who have a carbon reporting requirement analyze their usage so that AEP can make specific recommendations to reduce the customer's emissions profile.
- Some large customer energy decisions are not based on economics, but on shareholder, environmental, social, or other drivers. How do electric companies get to a place where they are able to participate in these types of projects and meet customer objectives?
- Large customers expect electric companies to deliver solutions and capabilities at scale, price points, and terms that make their decisions simple. For example, large customers want flexible renewable energy options with shorter contract terms. Electric companies need to provide solutions and avoid shifting costs onto other customers.

## **Trends in Residential Customer Energy Management**

*This discussion explored the energy solutions and services that electric companies are offering to residential customers today, and those that are on the horizon.*

- Residential customers are very interested in options that take the volatility out of bills, and provide different prices for different levels of service.
  - For example, a major midwestern electric company found that 12 percent of their residential customers would sign up for a flat bill today. An additional 12 percent would sign up tomorrow if they knew more about the program.
- A residential customer trend to follow is monthly subscription services that address upfront cost barriers and expand customer access to connected technologies.
  - For example, customers are very interested in connected home service packages (i.e., smart thermostat, LED bulbs, Wi-Fi enabled smart plugs, smart speakers, etc.).
  - Customers like “getting a deal” and are accustomed to no upfront payment for devices. This approach follows the successful model of wireless carriers billing customers for the cost of their mobile devices.
- Residential customers value frictionless transactions and advisory experiences, in addition to having choice in product offerings. Ease of use and thoughtfulness in the offer are equally as important as having a whole suite of bundled products.
- Partnerships with technology companies allow electric companies to build products and services that enhance customer value and can help broaden the reach of customer programs. Even partnership with direct competitors can be beneficial. Building and managing this ecosystem is key.
- Electric companies are balancing data protection and regulatory requirements, and are partnering with technology firms that specialize in analytics-based customer insights to deliver relevant and timely information to customers.

## Integrating Customer Solutions

*This discussion explored how energy management solutions are becoming more targeted and responsive to large customer needs and how electric companies are starting to take the first steps toward integrating EE, DR, solar, and storage to deliver an integrated energy solution.*

- Customer-sited energy storage can enable both system and customer benefits and serve as a coordinating central asset for a host of DERs and energy services. Electric companies can help optimize the energy storage resources for the life of the asset, customer use, and system needs.
- Customers want reliability, certainty, price stability, etc., and are very interested in simplifying the complexity of transactions.
- As electric companies develop a track record of providing solutions that work for the customer, the regulatory environment will need to become more flexible.
- Scaling a unique, targeted approach to many individual customers requires a sophisticated understanding of the customer, plus internal alignment and coordination across service and product teams within the electric company.

| Meeting Participants  |  |
|---|--|
| <i>Electric Companies</i><br>American Electric Power<br>Arizona Public Service Company<br>DTE Energy<br>NorthWestern Energy<br>Xcel Energy Inc. | <i>Technology Companies</i><br>AutoGrid<br>FirstFuel<br>IBM<br>Itron<br>Powerley<br>Siemens<br>Simple Energy<br>Stem<br>TROVE Predictive Data Science<br><hr/> Institute for Electric Innovation |

## About the Institute for Electric Innovation

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

IEI promotes the sharing of information, ideas, and experiences among regulators, policy makers, technology companies, thought leaders, and the electric power industry. IEI also identifies policies that support the business case for the adoption of cost-effective technologies.

IEI is governed by a Management Committee of electric industry Chief Executive Officers. In addition, IEI has a Strategy Committee made up of senior electric industry executives and a select group of technology companies on its Technology Partner Roundtable.

## About the Edison Foundation

The Edison Foundation is a 501(c)(3) charitable organization dedicated to bringing the benefits of electricity to families, businesses, and industries worldwide. Furthering Thomas Alva Edison's spirit of invention, the Foundation works to encourage a greater understanding of the production, delivery, and use of electric power to foster economic progress; to ensure a safe and clean environment; and to improve the quality of life for all people. The Edison Foundation provides knowledge, insight, and leadership to achieve its goals through research, conferences, grants, and other outreach activities.



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