

# Data Analytics: From Hype to Strategic Asset

By **LISA WOOD**

**T**he U.S. energy grid is in the midst of a digital transformation that is unleashing a vast amount of data. These data are produced by smart meters, by distributed energy resources (DERs), and by other grid-connected devices. Energy companies are putting data analytics to use in at least two ways—to improve customer services and to manage a more complex grid.

## Early Gains

Energy company investments in smart grid technologies are providing unprecedented visibility into the grid. For example:

In April 2016, torrential downpours and historic flooding in Houston caused 240,000 customers to lose power. With visibility into real-time grid conditions, dispatchers used intelligent grid switching devices to locate and isolate faults more rapidly and to send the right crews to the right places for faster outage restoration. “Our smart grid saved customers 26 million outage minutes in April 2016, more than in all of 2014,” said Scott Prochazka, president and CEO of CenterPoint Energy.

Analytics and automation helped Georgia Power avoid more than 17 million customer minutes of interruption between January and August 2016. According to Leslie Sibert, vice president of distribution for Georgia Power, “Today’s customers not only demand greater

reliability, they expect resiliency. New technology is part of the answer.” About half of Georgia Power’s 2.3 million customers reside in areas with self-healing technology, which the company plans to expand in the coming years.

During Hurricane Matthew in October 2016, Florida Power & Light’s (FPL’s) investments in smart grid technologies prevented large numbers of outages and aided in power restoration efforts. “FPL customers now see the benefits of a smarter and stronger energy grid when they need us the most,” said Eric Silagy, president and CEO of FPL.



In addition to reliability and resiliency enhancements, customers can access new services powered by data analytics—including high-usage notifications, automated energy management, online price comparisons, and behavior-based energy savings tips.

Advanced data analytics will continue to unlock opportunities. Early gains, such as enhanced visibility into the energy grid, rapid outage restoration or avoidance, and new customer services, are just the tip of the iceberg.

## What’s Next?

The electric power industry is still in the early days of gleaning insights from data and turning those insights into actions that add value. What’s down the road?

- Data analytics will be a crucial driver in connecting DERs to markets where new revenue opportunities can encourage innovation.
- Advanced data analytics will drive next-generation grid management where keeping the lights on 24/7 is essential.
- Data analyzed from a multitude of sources will help energy companies gain a deeper understanding of individual customers in order to offer the right products and services seamlessly to each one.

Without a doubt, data analytics have moved beyond hype to producing results that add value—and that will continue. Data analytics are now an essential part of the transformation of the energy grid. **EP**



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

