

# Striking the Right Balance

By **LISA WOOD**

**T**he electric power industry is undergoing a profound transformation—the generation mix is changing, the grid is becoming more digital and distributed, and customers have different expectations. This means that, over the next decade, the regulatory model also must change to provide a way for utilities to achieve policy goals and meet the changing needs of their customers. The speed of this transformation will depend on regulatory change.

## Value of the Grid

The deployment of close to 65 million digital smart meters (to about half of all U.S. households) is one key building block of a more digital and distributed grid. The integration of ever more distributed energy resources is another. Gartner predicts 25 billion Internet-connected “things” globally by 2020. Utilities are playing a central role as the integrators and enablers of this evolving Grid of Things™.

We expect the utility industry’s current \$20-billion annual investment in the distribution grid to continue over the next several years. But, for the grid to continue to provide the services that customers want and to integrate an increasing number of things, all customers who use the grid will need to share in the cost of operating, maintaining, and investing in the grid. This likely will entail moving toward a services model rather than a throughput model.

While today’s utilities are providing safe, reliable, affordable, and increasingly clean electricity, tomorrow’s utilities will be providing even cleaner electricity, providing more individualized customer services, integrating and connecting more distributed energy resources, and providing greater reliability and resilience. How do we change current ratemaking and rate-design practices to accommodate the increasingly important role of the distribution grid and the grid services it provides?

As the role of the distribution grid becomes increasingly important, the ability of utilities to recover the costs associated with providing grid services will become a significant issue.

## Our Energy Future

While the exact course and timing of the change is unclear, many of us would agree that a decade from now the electric power industry will look much different. Because electric utilities are trustees of essential infrastructure—the power grid and electricity services—the business model must be sustainable, nimble, and efficient, and it must be able to earn the support of long-term investors.

Both technology and business innovation require support from regulators and policymakers, including modifying cost-recovery and pricing mechanisms. Wholesale regulation has changed considerably in the past two decades. Now retail regulation must change and

allow utilities to evolve by enabling them to adjust to technological innovations, to provide customers more choices, and to improve the overall delivery system. This means—at minimum—adopting regulatory approaches that will lead to the appropriate recovery of the costs of operating, maintaining, and investing in the power grid and providing grid services.

Collaboration, progressive public policy, and appropriate regulatory policies are critical for the successful transformation of the regulated electric utility industry. Ultimately, it is about balancing reliability, clean energy, and individualized customer services with affordability. **EP**

### The Transition to a Clean Energy Future



### A More Digital and Distributed Grid



### Individualized Customer Services



**LISA WOOD** is executive director of the Institute for Electric Innovation and vice president of The Edison Foundation.

*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.*



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