## Wired In—The Integrated Grid: A Regulator's Perspective



In 15 years, we may not recognize much about utility regulation as it is today. Innovative technologies that could revolutionize how we use and consume electricity are already in play. Because much of this modernization is taking place at the distribution level, state commissioners have taken a keen interest in EPRI's Integrated Grid research on tools to realize the full value of a transformed grid.

At the last two winter meetings of the National Association of Regulatory Utility Commissioners (NARUC), EPRI officials presented their latest reports. Importantly, the Integrated Grid concept embraces the diversity of our nation's electricity industry. As state regulators are fond of saying, there is no one-size-fits-all solution to utility planning. Any efforts to modernize the system must take this into account.

The concept fits nicely with my theme as NARUC President—Coast to Coast: Consumers, Convergence, Change. As various states and regions address the many challenges ahead, different solutions and trends will



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emerge. At its core, though, the Integrated Grid must maintain and improve reliability and provide ample benefits for the customers served and costs incurred.

As utility regulators, our job is to help bring some certainty into this rapidly changing industry—to ensure safety, reliability, customer affordability, environmental sustainability, and financial viability. This applies to all customer types, from residential to large industrial, traditional utilities, and newly emerging technologies and enterprises.

Our unique reality is that we have to regulate in the public interest while our systems are in transformation. We must consider—and even encourage—the changes that are here and those that are coming. We must add value without adding undue risk.

And that's hard. But I know, coast to coast, we are up to the challenges. We must be adaptive in our processes, recognize and appreciate our regional differences, share ideas, and stay true to our state issues and mandates. This is why so many NARUC members are intrigued by EPRI's Integrated Grid project.

As the saying goes, "Timing is everything," and the EPRI Integrated Grid research could not be more timely. States across the country are asking questions about distributed generation and its potential impacts on the grid, consumers, and the utility business. Utilities continue to roll out smart meters to provide consumers with more control over their energy use. At the same time, interest in solar has surged, and many utilities are testing the impacts of widespread integration into the grid. Also, studies on microgrids, energy storage, and electric vehicles are ongoing—potentially resulting in new demands on the electricity system.

Clearly change is upon us, and regulators are eager to see the results of this ambitious EPRI program. It is important that these technologies, as promising as they appear, be utilized in a manner that both protects consumers from unexpected rate increases and improves service. In these days of social media and instant communication, consumers have more information about their electric service than ever before. Many want information and choices, and it is the regulator's job to make sure that consumers of all types benefit from these changes.

It is also incumbent upon EPRI and the utility industry to communicate with consumers throughout this project. We must all reach out and explain the benefits and costs associated with the changes we see. Consumers expect and deserve a two-way conversation.

State regulators are excited about the future. There is no better time to be involved in this sector than right now. The decisions we make over the next few years will have lasting implications. Let's use this opportunity to work together and focus on making the Integrated Grid work for all.