

**OPENING STATEMENT**  
**The Honorable Ben Quayle (R-AZ), Chairman**  
Subcommittee on Technology and Innovation  
*Empowering Consumers and Promoting Innovation through the Smart Grid*

September 8, 2011

Good Morning. I would like to welcome everyone to today's hearing, evaluating the progress that has been made on the development and implementation of a nationwide smart grid.

The blackout that darkened the Northeast in the summer of 2003 opened our eyes to the vulnerability and age of our electrical system. One of the planned improvements is to modernize our electrical grid to create a system that can communicate information and relay electricity in two directions – both to and from the consumer. The smart grid has the potential to improve the reliability of electric power delivery, and promote economic growth through the development of new technologies. Given the scale and complexity of our electric grid, this transition will require systems that can seamlessly communicate.

In 2007, The Energy and Independence Security Act directed the National Institute of Standards and Technology (NIST) to coordinate the development of a common framework, including protocols and model standards for the implementation of smart grid technologies. NIST plays a key role—bringing together manufacturers, consumers, energy providers, and regulators to develop "interoperable standards" to ensure that the smart grid's many pieces are able to work together.

As a non-regulatory agency, NIST has a long history of collaborating with industry to develop voluntary standards. However, the Energy and Independence Security Act empowers the Federal Energy Regulatory Commission (FERC) to initiate a rulemaking process to adopt standards where it believes a sufficient consensus has been achieved. I am concerned with the prospect of mandating standards and the effect such mandates could potentially have on innovation. There may be parts of the smart grid where formal regulation is unnecessary and a consensus standard is sufficient to ensure interoperability. I generally believe that we should avoid imposing regulations on industry and innovators, when a collaborative product is possible through NIST's non-regulatory process.

The Committee on Science, Space and Technology has held a series of hearings assessing the transformation our electric delivery system to a smart grid. Today's hearing will further detail the progress that has been made by examining the status of efforts to develop the open standards that are necessary to support cost-effective deployment of smart grid technologies.

We should not underestimate the value of standards. Open, consensus-based standards help facilitate the development of new innovative technologies by promoting plug-and-play operability for smart grid devices in both the national and international markets. I am especially interested in how a smarter grid could enable small companies to develop new products based on a transparent standards platform that is available to all innovators. With the many renewable energy companies in my home state of Arizona, I am also interested in how the updated grid could allow small generators and intermittent renewable energy sources, to play a larger role in our electrical system.

I would like to thank all of our witnesses for their participation. I would also like to welcome and thank the gentleman from Maryland, Mr. Sarbanes, for his role in the hearing today. I now recognize him for five minutes for an opening statement.