

Opening Statement of the Honorable Fred Upton
Subcommittee on Energy
Hearing on “Powering America: Technology’s Role in Empowering
Consumers”
September 26, 2017

(As prepared for delivery)

Good morning. Today we kick off our fifth hearing in the energy subcommittee’s Powering America hearing series. These hearings have provided valuable insight into the complexities of our nation’s electric grid and electricity markets. As many in this room are aware, this week is National Clean Energy Week, which makes our hearing this morning all the more timely. I look forward to the opportunity to hear how advanced energy technologies are giving consumers greater control, convenience, and choice when it comes to their electricity use.

Our nation’s electric grid is an engineering marvel that has enabled our country to become the advanced and modern society that it is today. However, the electric grid is currently undergoing a significant transformation – changing fuel mixes, advances in energy technologies, and evolving consumer demands. These changes present opportunities for consumers to become active market participants and to have greater control over their energy usage. Some within the electric industry are recognizing the need to address and integrate these new energy technologies to meet consumers’ demand and preferences.

Consumers now expect a certain level of control, convenience and choice. No longer dependent on one centralized generation source, consumers, or “prosumers” can generate their own energy and sell the surplus power back to the electric grid. Behind-the-meter energy storage lets consumers store electricity for later use. Intelligent energy technologies enable consumers to monitor and manage their energy consumption. The ability to manage energy gives consumers the opportunity to utilize techniques such as peak shaving – which is reducing electric power consumption during periods of maximum demand. This allows consumers to save money on their electric bills. Technological innovation is moving us closer to integrating artificial intelligence into our electricity systems – which can help ensure an efficient, reliable, and resilient electrical grid.

Most of these energy technologies are located at the distribution level of the electric grid. State utility regulators have jurisdiction over distribution level or retail markets, while the FERC has jurisdiction over the wholesale markets. However, the traditional jurisdictional lines are becoming blurred, in part, by the development and deployment of energy technologies, state energy policies, and the valuation of new energy resources such as demand response.

The digitization of the electric grid coupled with more distributed generation, energy storage, energy management technologies, and other distributed energy resources opens the door for market-based transactive exchanges between energy producers and consumers. This “transactive energy” would allow for a more dynamic balance of supply and demand across the entire electricity system using value as a key operational parameter. At the same time, energy technologies could help ensure that reliability, security, and resiliency of our electric grid is not compromised. Looking forward the traditional utility model could operate more as a market “platform” where consumers can find what they need to meet their energy needs. Ultimately, this platform could lead to a better optimized electric grid, where consumer demand is more responsive in real-time to price.

Today we will hear from a robust panel of witnesses representing a variety of energy technologies on the cutting edge of innovation. We also have several witnesses who represent different electric utilities and companies that are leading the way in accommodating and integrating these new energy technologies.

A more dynamic and flexible electric grid empowers consumers and allows for energy to be available in reliable and affordable manner. These energy technologies will enhance the reliability, security, and resiliency of our nation’s electric grid – particularly in the event of extreme weather events. The key to ensuring the continued growth of technological innovation is competitive and well-functioning energy markets, which is an issue the committee will continue to explore going forward.