



Summary of Written Testimony of Arvin Ganesan, Vice President of Federal Affairs at Advanced Energy Economy for House Energy and Commerce Committee

- 1. Declining costs and consumer preferences including those of Fortune 100 and Fortune 500 corporations will continue to drive market growth and innovation in the advanced energy industry
 - a. Renewable energy will continue to grow in the United States based on economic competitiveness with the levelized cost for utility-scale wind and solar power declining by 66% and 85%, respectively, since 2006.
 - b. Large energy customers most notably Fortune 100 and Fortune 500 companies are driving demand for renewables. Many states are leading the way in creating a market that meets the needs of these customers, including Texas, Oklahoma, North Carolina, Ohio. and Illinois.
 - c. More consumers are increasingly exercising choice and control over their energy needs. Customers are now active participants in the grid, making it much more dynamic.
- 2. Advanced energy enhances the reliability and resilience of the grid by increasing fuel diversity, promoting a more flexible energy system, and responding to extreme weather events.
 - a. Grid operators are now routinely managing high levels of wind and solar generation, sometimes exceeding 50% of load, without compromising reliability, levels that would have been viewed as impossible just a few years ago.
 - b. During the 2014 Polar Vortex, grid operators were able to turn to demand response and wind energy, along with nuclear power, to meet electric power needs and keep the lights on even when other resources failed.
 - c. Utilities are implementing more advanced energy solutions to prepare for extreme weather events, as well.
 - d. Modernizing the aging energy infrastructure that has supported American prosperity for decades and moving toward a more diverse and dynamic energy system are the keys to maintaining a reliable grid in the future.
- 3. Federal policy should pursue technology-neutral competition in wholesale markets to maximize benefits to consumers and enhance the reliability and resilience of the grid
 - Technological innovation benefits consumers by increasing competition in the marketplace between energy technologies, increasing customer choice, and driving down the cost of electricity.
 - b. While some wholesale markets overseen have opened opportunities for advanced energy technologies to compete, others have maintained legacy established rules technologies from competing on price and performance.
 - c. FERC is addressing these issues with proposals to remove barriers for storage and aggregated distributed energy resources (DER). AEE fully supports, and is engaged with, this effort. The Commission also has a NOPR related to primary frequency response.