

## **Advanced Grid Modeling Activities and Areas of Interest**

The energy system is facing an era of rapid and dramatic change at both ends (supply and demand) as well as all along the system. New electric generation coming onto the grid including wind, solar, and natural gas offer fundamentally different characteristics and capabilities from our past generation mix. The increasing electrification and digitalization of our economy is growing the demand for a more resilient and reliable grid. As we address these factors, DOE assesses its R&D within a vision to ensure a Reliable, Resilient, Secure, Affordable, Flexible, and Efficient grid. The presentation goes over a number of Advanced Grid Modeling program, under the DOE's Office of Electricity, activities and areas of interest.