



ENERGY SECTOR: RESILIENT COMMUNICATIONS FOR CRITICAL INFRASTRUCTURE

TUESDAY: SESSION 2, TRACK 1

SESSION CHAIR

Brad Nelson, Idaho National Laboratory

PANELIST

- Alberto Lopez, CenterPoint Energy
- Chris Irwin, Department of Energy, Office of Electricity
- Chloe Applegate, Lawrence Livermore National Laboratory

ABSTRACT

Today's power grid infrastructure is increasingly coupled with communication networks for many new and existing power grid operations and control applications. This interdependent relationship between the two systems, in which the grid operations and control is dependent on communications and communications is dependent on the underlying power, creates unique challenges in power grid resilience and communications infrastructure planning. In this session, attendees will receive an overview of a recent and ongoing Department of Energy, Office of Electricity (OE) project that investigates these challenges using simulation and co-simulation tools. Attendees will be challenged to consider these increasingly interdependent systems and how they might offer future insights, research, or practical experience to this emerging field of study.

TOPICS

- Project name: Power and communications co-simulation in dense metropolitan networks
- Power distribution and communications co-simulation and visualization
- Communications infrastructure planning and analysis