

The Grid of the Future Workshop

Wednesday, August 22, 2018



Sponsored by: Sandia National Laboratories, IEEE, the University of New Mexico, New Mexico State University, and the Santa Fe Institute

The Centennial Engineering Center at the University of New Mexico
300 Redondo W Dr., Albuquerque, NM 87106

8:00 – 8:30 am	Registration, coffee and continental breakfast
8:30 – 8:40 am	Welcome – Dr. Christos Christodoulou <i>Jim and Ellen King Dean of Engineering and Computing, The University of New Mexico</i>
8:40 – 8:50 am	Introductory Remarks – Dr. Carol Adkins <i>Director, Energy, Earth, and Complex Systems, Sandia National Laboratories</i>
8:50 – 9:20 am	Keynote Speaker – Mr. Robert Cummings <i>North American Electric Reliability Corporation (NERC), Grid Reliability</i>
9:20 – 10:35 am	Grid Interdependencies with Critical Infrastructure Moderator: Dr. Brian Pierre Dr. Russell Bent; Los Alamos National Laboratory; Gas-Grid Resilient Design Dr. Seth Blumstack; Penn State University; Identifying Vulnerable Critical Infrastructure Dr. Charles Macal; Argonne National Laboratory; Grid-Critical Infrastructure Interdependencies
10:35 – 10:45 am	Break
10:45 – 12:00 pm	Resilient Distribution Systems Moderator: Dr. Matthew Reno Dr. Sukumar Brahma; New Mexico State University, Power System Protection in the Era of Smart Grid Dr. Satishkumar Ranade; New Mexico State University; R2- Risk Aware, Resilience Aware Management of Energy Delivery Dr. Chen-Ching Liu; Virginia Tech University; Resilient Distribution Systems
12:00 – 1:00pm	Lunch
1:00 – 2:15 pm	Evolution of Control Centers and Integrating Renewables Moderator: Dr. Ali Bidram Dr. Reinaldo Tonkoski; South Dakota State University; Voltage Control Strategies for Distribution Systems with High Penetration of Photovoltaics Dr. Anjan Bose; Washington State University; Evolution of Control Centers for the Future Grid Dr. Babak Enayati; National Grid; DER Interconnection Requirements in Islanded Distribution Systems
2:15 – 2:30 pm	Break
2:30 – 3:45 pm	EMP Resilience Moderator: Dr. Jason Neely Dr. Olga Lavrova; Sandia National Laboratories; EMP Grand Challenge Dr. Jane Lehr; The University of New Mexico; EMP Resilience at the Grid of the Future Mr. Charles Bayless; The Climate Institute; The North American Super Grid Project
3:45 – 4:00 pm	Break
4:00 – 5:15 pm	Grid Stability Moderator: Dr. David Schoenwald Dr. Daniel Trudnowski; Montana Tech University; Passive versus Active Grid Reliability Dr. John Undrill; Arizona State University; Power and Frequency Control in the Grid of 2050 Mr. Ross Guttromson; Sandia National Laboratories; Mapping Power System Stability Using Machine Learning
5:15 – 5:20 pm	Closing Remarks – Mr. Charles Hanley <i>Senior Manager, Grid Modernization & Resilient Infrastructure, Sandia National Laboratories</i>
5:20 – 7:30 pm	Reception @ The University of New Mexico Hodgin Hall



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