Commissioner-Led Reliability Technical Conference

Docket Nos.: AD16-15-000
[ER16-1085-000, ER16-1649-000]

Wednesday, June 1, 2016
9:30 a.m. – 5:00 p.m.

9:30 a.m. Commissioners' Opening Remarks

9:45 a.m. Introductions

10:00 a.m. Panel I: 2016 State of Reliability

Presentations: Ten years have passed since the enactment of Section 215, initiating the framework of mandatory reliability standards. The challenges addressed so far include changing voluntary standards into mandatory standards, defining the scope of the bulk electric system and incorporating cyber and physical security into the standards. As we consider the 2016 State of Reliability report issued by the North American Electric Reliability Corporation (NERC), panelists will be asked to address the following questions:

a. What have been the primary accomplishments of the past decade, and what new issues will the future bring? How is the standards process working? What are the leading challenges today and in the near-term future? How can the Commission, NERC, the Regional Entities, and the industry best meet those challenges?

b. Discuss the 2016 State of Reliability report's assessment of the effectiveness of NERC's reliability activities and related industry efforts. Discuss key events or developments in the past year concerning grid reliability.

c. What metrics have been, or should be, developed to define whether reliability, in whole or in part, is improving? How can we assess if the risk of blackouts is increasing or decreasing and, if increasing, due to what causes? Can a quantitative risk analysis be used?

Panelists:

- Gerry W. Cauley, President and Chief Executive Officer, North American Electric Reliability Corporation
- Roy Thilly, Vice Chair and Chair-Elect of the Board of Trustees, North American Electric Reliability Corporation
- Patricia A. Hoffman, Assistant Secretary for the Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy
- Commissioner David Clark, Public Service Commission of Utah, on behalf of NARUC
- Miranda Keating Erickson, Vice-President, Operations, Alberta Electric System Operator
- Paul Koonce, Chief Executive Officer, Dominion Generation Group, on behalf of the Edison Electric Institute
- Marija Ilic, Professor, Carnegie Mellon University
- Joseph Eto, Staff Scientist, Lawrence Berkeley National Laboratory

11:30 a.m. Panel II: Emerging Issues – Part I: International Perspectives

Presentations: The continuing changes in the nation's resource mix present ongoing issues for the Commission, NERC, and industry to monitor. Panelists will be asked to address the following questions:

a. What lessons can be learned from the European experience with integrating renewables?

b. How are the Mexican grid and regulatory framework changing? Does this have significant implications for the United States?

Panelists:

- Héctor A. Beltrán Mora, Director General, Unidad de Sistemas Eléctricos, Comisión Reguladora De Energía
- Klaus Dieter Borchardt, Director for the EU Internal Energy Market, Directorate-General for Energy, European Commission

12:15 p.m. Lunch

1:15 p.m. Panel II: Emerging Issues – Part II

Presentations: The continuing changes in the nation's resource mix present ongoing issues for the Commission, NERC, and industry to monitor. Panelists will be asked to address the following questions:

a. Discuss the potential effects that a projected increase in renewables and distributed energy resources will have on reliability. How is NERC tracking these effects as they develop? What strategies has NERC developed to maintain reliability as the deployment of distributed energy resources increases?

b. How can system operators maximize/leverage potential reliability benefits associated with the increase in renewables and distributed energy resources?

c. The Aliso Canyon natural gas leak highlights the value of grid planning that considers the possible loss of a major natural gas facility or pipeline. How is industry considering and addressing this risk in various regions? Should the Commission or NERC take additional actions to encourage or assist performance of such studies?

d. What are the reliability considerations for microgrids? Are they significant for purposes of the Bulk-Power System?

Panelists:

- Dr. Mohammad Shahidehpour, Professor, Illinois Institute of Technology
- Chantal Hendrzak, Executive Director of Market Evolution, PJM Interconnection
- Mark Lauby, Senior Vice President and Chief Reliability Officer, North American Electric Reliability Corporation
- Mark Rothleder, Vice President, Market Quality and Renewable Integration, California ISO
- Lorraine H. Akiba, Commissioner, Hawaii Public Utilities Commission
- Chris Murray, Project Support Lead, Renewable Energy Program Office Department of the Navy (FERC Detailee)
- Allen Mosher, Vice President of Policy Analysis, American Public Power Association

2:45 p.m. Break

3:00 p.m. Panel III: Grid Security

Presentations: The nation's critical infrastructure provides the essential services that serve as the backbone of our nation's economy, security, and health. The need for a strong, ongoing effort to secure critical infrastructure, both physical and cyber, is critical in order to manage risks, enhance resilience, and promote preparedness for all hazards. This includes mandatory reliability standards, information sharing and collaboration to safeguarding the nation's critical infrastructure. Panelists will be asked the following questions:

a. The Cybersecurity Information Sharing Act of 2015 (CISA 2015) and the Fixing America's Surface Transportation (FAST) Act both addressed cybersecurity. Discuss how government, NERC and industry can use these new authorities to address cybersecurity risks and enhance information sharing.

b. What can we learn from recent attacks, and what should we do in response? Are there ways to reduce risk by "simplifying" or even non-digitizing the technology used at certain critical points or locations? Are there reasonable ways to further reduce the risk of lengthy outages from hostile actions, and can new standards or changes to standards help?

c. How effectively does the current standards process address emerging or rapidly evolving reliability issues? Can Reliability Standards be structured to change quickly for newly-identified security risks or new scientific or engineering analyses (e.g., of geomagnetic disturbances)? If so, how?

d. Is progress being made on standardization and transportation of transformers to facilitate timely replacements after an emergency? Are there actions the Commission should consider to encourage progress?

e. What is the status of research on whether or how electromagnetic pulses might affect the grid? What additional research would help address any uncertainties?

f. The CIP and PRC standards continue to be among the most-often violated Reliability Standards. What efforts are being made, or should be made, to improve compliance with these particular standards?

Panelists:

- Devon Streit, Deputy Assistant Secretary, Infrastructure Security and Energy Restoration, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy
- Donna Dodson, Director, NCCoE and Chief Cybersecurity Advisor, National Institute of Standards and Technology
- Greg Ford, President and CEO, Georgia System Operations Corporation, on behalf of NRECA
- Marcus Sachs, Senior Vice President and Chief Security Officer, North American Electric Reliability Corporation
- Professor Anna Scaglione, Professor, Arizona State University
- Paul Stockton, Managing Director, Sonecon, LLC
- Thomas S. Popik, Chairman, Foundation for Resilient Societies
- Francis Bradley, Chief Operating Officer and Vice President, Policy Development, Canadian Electricity Association

5:00 p.m. Commissioners' Closing Remarks