

Agenda

2021 Reliability Leadership Summit

January 26, 2021 | 1:00-5:00 p.m. Eastern

January 27, 2021 | 1:00-5:00 p.m. Eastern

January 26, 2021 | [Panelist WebEx Link](#)

Welcome Remarks

1:00–1:15 p.m.

Nelson Peeler, Senior Vice President, Transmission and Fuels Strategy and Policy, Duke Energy, and RISC
Chair

Mark Lauby, Senior Vice President and Chief Engineer, NERC

Opening Keynote

1:15–1:45 p.m.

Cheryl LaFleur, Former Commissioner and Chairman, FERC

Panel 1 – Grid Transformation

1:45–2:45 p.m. - Panel

2:45–3:00 p.m. - Q&A

Panelists

Patricia Hoffman, Principal Deputy Assistant Secretary, Office of Electricity, DOE

Elliot Mainzer, CEO, CAISO

Julia Matevosyan, Lead Planning Engineering, ERCOT

Jesse Jenkins, Assistant Professor, Princeton University

Moderator

Mark Ahlstrom

Public inputs along with the influence of regulatory and socioeconomic policies are continuing to drive a significant evolution in the mix of power resources. The shift away from conventional synchronous central-station generators toward a new mix of resources continues to challenge generation and grid planners and operators. This new paradigm of the resource mix includes natural-gas-fired generation; unprecedented proportions of non-synchronous resources, including renewables and battery storage; demand response; smart- and micro-grids; and other emerging technologies. The transformation of generating resources and fuel sources along with changes in load characteristics are creating new reliability risks from long and short-term planning to real-time operations. Impacts and considerations include: 1) Bulk Power System planning; 2) Resource adequacy and performance; 3) Increased complexity in protection and control systems; 4) Situational Awareness challenges; 5) Human performance and skilled workforce; and 6) Changing resource mix.

This panel will discuss the transformation of the grid, the challenges that they pose for their integration, and reliability and security impacts and considerations.

Break

3:00–3:15 p.m.

Panel 2 – Extreme Natural Events

3:15–4:15 p.m. – Panel

4:15–4:30 p.m. – Q&A

Would Extreme natural events be a good place holder for providing further emphasis on the pandemic?

Panelists

Carla Peterman, Senior Vice President Regulatory Affairs, Southern California Edison

Ken Peterson, CEO, BC Hydro

Nicholas Andersen, Principal Deputy Assistant Secretary, CESER, DOE

Jim Schott, VP of Transmission, Entergy Corporation

Moderator

Priti Patel

Some extreme natural events (e.g., storms, wildfire) cause a significant proportion of major Bulk Power System impacts. Other extreme events (e.g. pandemics) are “people” events where staff availability can impact essential functions of system operations, maintenance, testing and construction, while at the same time creating uncertainty in load patterns and generation requirements. Natural events may affect BES equipment, resources, or infrastructure required to operate the BES. Certain events are unique to areas that they impact while others may have widespread impacts. Each type of event brings unique challenges from supply sufficiency, spare-parts availability, delivery, and restoration perspectives. Preparation and proactive planning of procedures and protocols are critical for utilities to assess and determine appropriate steps for both reliability and resiliency.

This panel will discuss any lessons learned and unique challenges posed by extreme natural events, and ways to prepare for them.

Open Discussion

4:30–4:45 p.m.

Moderators

Jennifer Sterling and Maury Galbraith

In this open-format discussion, Summit attendees will share thoughts and ideas on the priority and significance of BPS reliability risks. This discussion will concentrate on distilling the observations and themes discussed in the earlier panels, identifying potential blind spots or risks not revealed during the Summit panels or from general industry experience, and outlining strategic approaches for consideration by the ERO Enterprise, industry, policy makers, regulators, and other stakeholders in addressing significant emerging reliability risks. Discussion items can be, but are not limited to, practical BPS operations and planning, policy development at the FERC, NERC, or Regional Entity level (e.g., standards and requirements), critical infrastructure protection, etc. See reference material: [2019 ERO Reliability Risk Priorities Report](#).

Wrap-up - Nelson (include look ahead for next day)

4:45–5:00 p.m.

Virtual Reception

5:30-6:30 p.m.

Dr. Peter Fox-Penner

Dr. Fox-Penner is a frequent speaker on energy topics and the author of numerous published articles and books, including the highly acclaimed *Smart Power: Climate Change, the Smart Grid, and the Future of*

Electric Utilities (Island Press, 2010) and its sequel *Power After Carbon: Building a Clean, Resilient Grid* (Harvard University Press, 2020). His research has been widely cited, including in one [Supreme Court decision](#).

January 27, 2021 | Panelist WebEx Link

Welcome Remarks

1:00–1:15 p.m.

Brian Slocum, ITC Holdings

Mark Lauby, Senior Vice President and Chief Engineer, NERC

Opening Keynote

1:15–1:45 p.m.

Jacinda B. Woodward, Senior Vice President, Power Operations, Tennessee Valley Authority

Panel 3 – Security Risks

1:45–2:45 p.m. - Panel

2:45–3:00 p.m. - Q&A

Panelists

Michele Guido, Southern Company

Tom Galloway, CEO, NATF

Dr. Marilyn Brown, Georgia Tech

Manny Cancel, CEO, E-ISAC

Michael Russell, Manager Energy, Finance, and Telecommunications Sectors, Canadian Centre for Cyber Security

Moderator

Sylvain Clermont

Operational security is an essential component of a highly reliable Bulk Power System. Cyber and physical security are interdependent aspects as exploitation of either physical or cyber security risks could be used to compromise the other dimension. Resulting impacts could cause asset damage or loss of functionality and situational awareness needed to reliably operate or restore the Bulk Power System. Exploitation could occur directly against equipment used to monitor, protect, and control the Bulk Power System or indirectly through supporting systems, such as voice communications or interdependent critical infrastructure sectors⁸ and subsectors (e.g., water supply and natural gas used for electrical power generation). A coordinated cyber and physical attack scenario that is, potentially targeted to occur simultaneously with an extreme natural event, could further impact reliability and/or complicate recovery activities. A man-made electromagnetic pulse (EMP) event targeted at the Bulk Power System may impact operations and result in damaged equipment that may require an extended period of time to replace.

This panel will focus on these risks, its evolution, and potential mitigations.

Break

3:00–3:15 p.m.

Panel 4 – Critical Infrastructure Interdependencies

3:15–4:15 p.m. – Panel
4:15–4:30 p.m. – Q&A

Panelists

Joy Ditto, CEO, APPA

Bruce Walker, Head of Energy Risk Operations / Energy Chief Risk Officer, ARC

Rod Kalbfleisch, Director Substation Technical Engineering, Eversource

Dena Wiggins, President and CEO, Natural Gas Supply Association

Moderator

Peter Brandien

Significant and evolving critical infrastructure sector (e.g., communications, water/wastewater) and subsector (e.g., oil, natural gas) interdependencies are not fully or accurately characterized, resulting in incomplete information about prospective Bulk Power System response to disruptions originating from or impacting other sectors or subsectors and resultant reliability and security implications.

This panel will explore the implications of the increased interdependencies, and how best to address the jurisdictional issues that need to be tackled to address the risks they present.

Open Discussion

4:30–4:45 p.m.

Moderators

Teresa Mogensen and Woody Rickerson

In this open-format discussion, Summit attendees will share thoughts and ideas on the priority and significance of BPS reliability risks. This discussion will concentrate on distilling the observations and themes discussed in the earlier panels, identifying potential blind spots or risks not revealed during the Summit panels or from general industry experience, and outlining strategic approaches for consideration by the ERO Enterprise, industry, policy makers, regulators, and other stakeholders in addressing significant emerging reliability risks. Discussion items can be, but are not limited to, practical BPS operations and planning, policy development at the FERC, NERC, or Regional Entity level (e.g., standards and requirements), critical infrastructure protection, etc. See reference material: [2019 ERO Reliability Risk Priorities Report](#).

Conduct real-time poll on any missing links, any reprioritization based on discussion from the Summit.

Closing Remarks

4:45–5:00 p.m.

Jim Robb, NERC President and CEO