

## Agenda

# 2021 Reliability Leadership Summit

January XX, 2021 | 8:30 a.m. – 4:30 p.m. Eastern

(Determine in-person or virtual and if virtual one full day or split over two)

Dial-in information with pre-registered participants

### Welcome Remarks

8:30–8:45 a.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

### Morning Keynote

8:45–9:15 a.m.

One or two regulators such as FERC Commissioner and/or State Regulator to discuss “Regulatory and Policymaking during Unprecedented Change?”

*Conduct real-time poll on risks, relative rankings, any risks not accounted for.*

### Panel 1 – Grid Transformation

9:15–10:30 a.m.

#### Panelists

A **diverse** bunch of cool people

#### Moderator

RISC Member

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.

*Conduct real-time poll on potential mitigations.*

### Break

10:30–10:45 a.m.

**Panel 2 – Extreme Natural Events**

**10:45 a.m.–12:00 p.m.**

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

Panelists

A **diverse** bunch of cool people

Moderator

**RISC Member**

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.

**Conduct real-time poll on potential mitigations.**

**Lunch**

**12:00–1:00 p.m.**

**Afternoon Keynote**

**1:00–1:30 p.m.**

**A potential speaker: She started life as a Stanford grad pushing forth a 100% renewables agenda but later learned the value of fossil fuels for grid reliability and also global economic development. She ran the Colorado Fossil Fuel Association and has a very balanced approach to incorporating renewables while not discounting the value of synchronous resources.**

**Panel 3 – Security Risks**

**1:30–2:45 p.m.**

Panelists

A **diverse** bunch of cool people

Moderator

**RISC Member**

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 sectors 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.

***Conduct real-time poll on potential mitigations.***

**Break** **2:45–3:00 p.m.**

**Panel 4 – Critical Infrastructure Interdependencies** **3:00–4:15 p.m.**

Panelists

A ***diverse*** bunch of cool people

Moderator

**RISC Member**

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.

***Conduct real-time poll on potential mitigations.***

**Panel 5 – Open Discussion** **3:00–4:15 p.m.**

Moderators

**Two RISC Members**

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

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](#).

**Closing Remarks**

Jim Robb, President and CEO, NERC

**4:15–4:30 p.m.**