



## Reliability Risk Committee

### Reliability Risk Strike Team Update

February 28, 2024

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# Reliability Risk Strike Team (RRST) Members

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Margaret Albright—BPA

Grace Anderson—CEC

CJ Ingersoll—Grid Force LLC

Brett Hallborg—BC Hydro

Greg Park—WPP/WECC

Kevin Conway—POPD/WPP

Chris Hofmann—SRP

Tim Beach—RC West

# RRST Scope

- Identify strategic initiatives for extreme natural events
  - 1) Identify specific risk areas within the broader topic of “extreme natural events” that pose unique risks to the reliability of the Western Interconnection Bulk Power System (BPS) that, if addressed, would be most valuable to stakeholders. Determine the best way to collaborate with the RAC on this initiative.
  - 2) Determine whether and how these specific risk areas are being addressed in the industry and determine how to share these lessons most effectively with stakeholders.
  - 3) Based on this research, determine one or more specific risks the RRC should address via the RRC Risk Management Process.
  - 4) Develop a strike team by February 2023, followed by developing a plan to identify specific tasks that can be completed within 12 months.

# Extreme Natural Events

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## Factors to consider

1. What reliability impacts of extreme natural events exist for system operations?
2. What best practices already exist or are needed to address extreme natural events?
3. What types of system characteristics and conditions expose the interconnection to the greatest risk from natural events?

# Extreme Natural Events

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- Category A—Events Related to Changing Climate
  - Extreme temperatures—heat domes/waves and cold snaps
  - Haboobs/extreme dust storms
  - Wildfire events
  - Drought/aridification (climate change causing higher average temperature)
  - Atmospheric rivers and flooding
  - Rising oceans and coastal erosion
  - Extreme winds

# Extreme Natural Events

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- Category B—Physical Forces in Earth and Space Causing Disruptions
  - Earthquakes
  - Tsunamis
  - Volcanic eruptions
  - Geomagnetic disturbances

# Extreme Natural Events, Associated Risks, and Mitigation Activities White Paper

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- Extreme Natural Event description
  - Category A—Events Related to Changing Climate
  - Category B—Physical Forces in Earth and Space Causing Disruptions
- Risks caused by these events that may disrupt grid operations
- Mitigation activities
  - WECC and external mitigation activities

# RRC Risk Register (ENE)

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- Large and prolonged heat waves
  - Weighting Score—24.0
  - Weighting Value—Extreme
- Cold-weather preparedness
  - Weighting Score—22.0
  - Weighting Value—High



# RRC Risk Registry (ENE)

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- Wildfires
  - Weighting Score—22.0
  - Weighting Value—High
- Drought (aridification)
  - Weighting Score—22.0
  - Weighting Value—High
- Geomagnetic disturbance
  - Evaluating

# Risk Mitigation Decision (RRST Discussion)

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- Large and prolonged heat waves
  - Further reduction action needs to happen
- Cold-weather preparedness
  - Further reduction action needs to happen
- Wildfire
  - Further reduction needs to happen
- Drought (aridification)
  - Further reduction needs to happen
- Geomagnetic disturbance
  - In evaluation

# RRST Tasks and Recommendations

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- Seek review and comment of the RRST white paper and socialize with the RRC
- Ensure all Category A and B Event Risks are incorporated in the Risk Registry
- Provide RRST perspective on Risk Register Column V, Risk Mitigation Decision



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