



NCEP 2021 Annual Meeting

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WECC



§215 Federal Power Act—
FERC certifies an Electric
Reliability Organization (ERO)

NERC

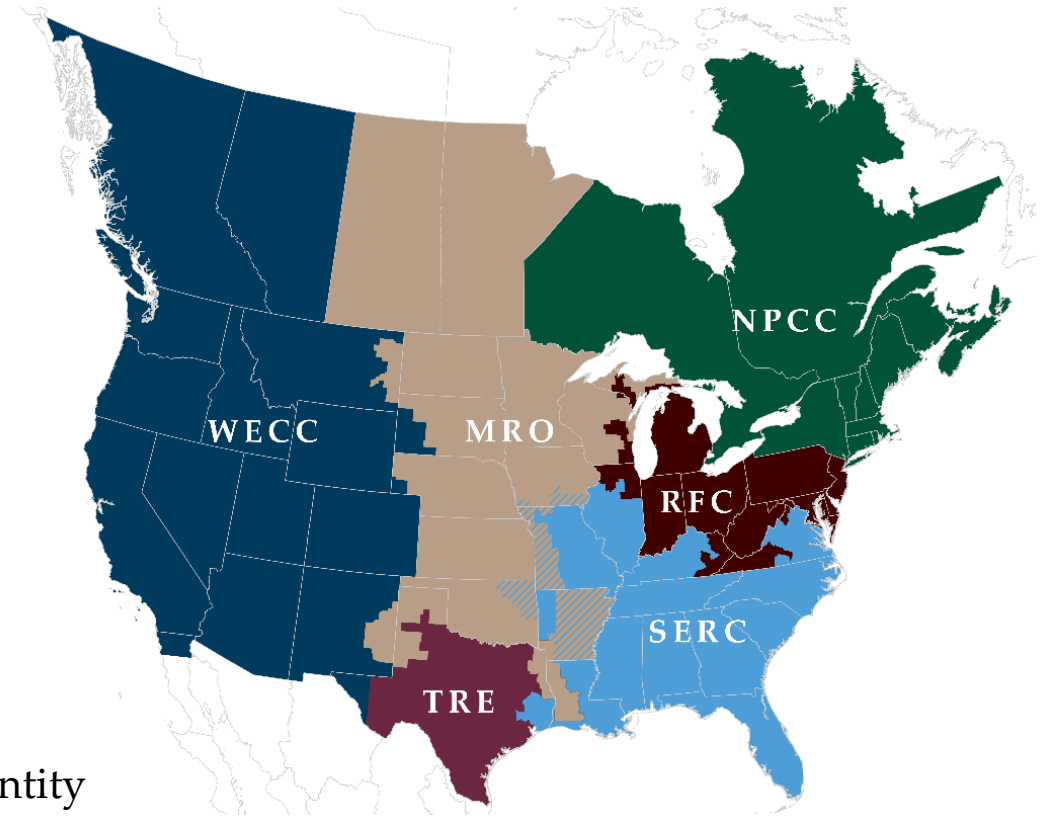
NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

The ERO may delegate
authority to Regional
Entities



WECC

The Regional Entity
carries out delegated
responsibilities



WECC's Mission



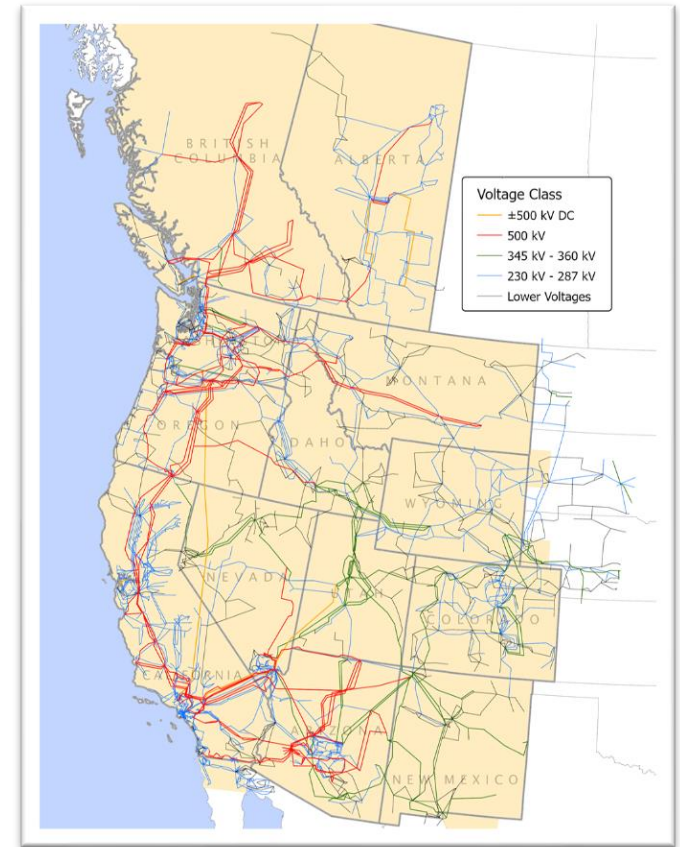
**To effectively and efficiently mitigate risks to
the reliability and security of the Western
Interconnection's Bulk Power System.**

OUR MISSION



The Changing Backdrop

- Challenges to system reliability are more intense, frequent, and widespread
 - Wildfire, drought, extreme weather
- Resource margins are shrinking
- Many organizations are addressing challenges
 - State commissions, utilities, regional programs, legislatures, national labs, etc.



Planning a Reliable System: Resource Adequacy

- High reliance on the ability to import and export power
- Margins are shrinking, making imports more scarce
- Variability of resources and loads makes planning more complex
- Weather is the biggest driver of variability in the West
- Need to develop planning methods that account for variability
 - E.g., probabilistic analyses

Planning a Reliable System: Transmission

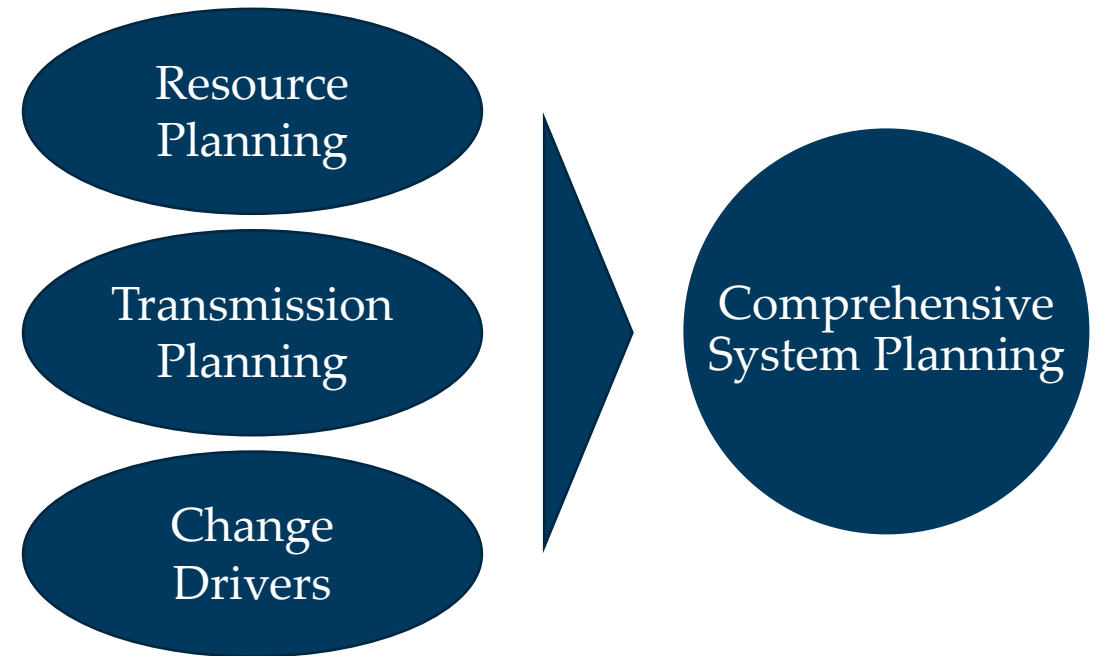
- Long transmission lines connecting generation to remote load; built to move bulk generation
- Challenge is planning the transmission system with different resource and load landscape
 - E.g., increased distributed energy resources
- Reliability assessments help identify potential reliability concerns on the planned transmission system
 - System adequacy and stability (essential reliability services)

Planning a Reliable System: Uncertainty

- We are now planning a system for an unknown future
- The past is no longer a reliable indicator of the future
- This requires a fundamental shift in how we plan the system to account for:
 - Variability as the norm
 - High impact events to become more common
 - Increased amounts of distributed energy resources
 - Impacts to load from electrification
 - New technology

Comprehensive System Planning

- Do resource planning and transmission planning in tandem
- Develop ways to account for change drivers and how they may shape the future
 - E.g., drought impacts over next 10 years
- Develop better ways to—
 - Predict potential futures
 - Account for the uncertainty of our predictions in our planning



WECC's Role

- WECC's value
 - Independence: Sole focus is reliability
 - Partnership: Work with a range of stakeholders and experts
 - Perspective: Interconnection-wide footprint
- WECC's role
 - Facilitator
 - Coordinator
 - Translator

Contact:

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