

# Regional Electricity Decision-making

Report of the Reliability Work Group

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# What is Reliability?

- To the average voter, it is no blackouts.
- To the power system operator, it is no cascading outages or uncontrolled separations of interconnected systems.
  - Ability of the system to withstand reasonably anticipated failures of system elements
  - Ability of operators to take appropriate action when things go wrong so that damage is limited and when service is interrupted, it is restored quickly

# Kinds of Blackouts

- Distribution system failures
  - Most common cause of service interruption
  - Limited impact; usually a relatively small area
  - Cost/benefit analysis of taking steps to avoid any potential blackout of this nature is appropriately handled at the local level because there are rarely external effects

# Kinds of Blackouts

- Failures due to inadequate planning or erroneous operation of the interconnected system
  - Has the potential to affect multiple control areas
  - Can cascade through systems without warning, leaving operators unable to respond
  - Higher potential to cause harm
  - Requires regional decision-making

# Kinds of Blackouts

- Inadequate generation, transmission, or fuel to run generators to meet demand
  - Industry restructuring means some LSEs no longer have a duty to serve
  - May cause interruption in service when demand exceeds supply due to severe weather or unanticipated retirements of resources
  - Problem not covered by reliability legislation

# Adequacy Affects Reliability

- To maintain reliability, operators must have operating reserves to allow them to recover when “stuff happens”
- As we saw in 2000-2001, when a control area operator cannot obtain adequate operating reserves (because they do not exist or cost too much), the operator must choose between blacking out customers and maintaining those reserves—Operating reserve violations often result under these circumstances.

# Regional Advisory Body

- Authorized by sub-section (j) of the reliability section.
- Gives each state a direct role in making recommendations related to reliability.
- FERC may defer to advice if RAB formed on an interconnection-wide basis.
- Prior to enactment, CREPC's current four member representation on the WECC Board is probably sufficient.