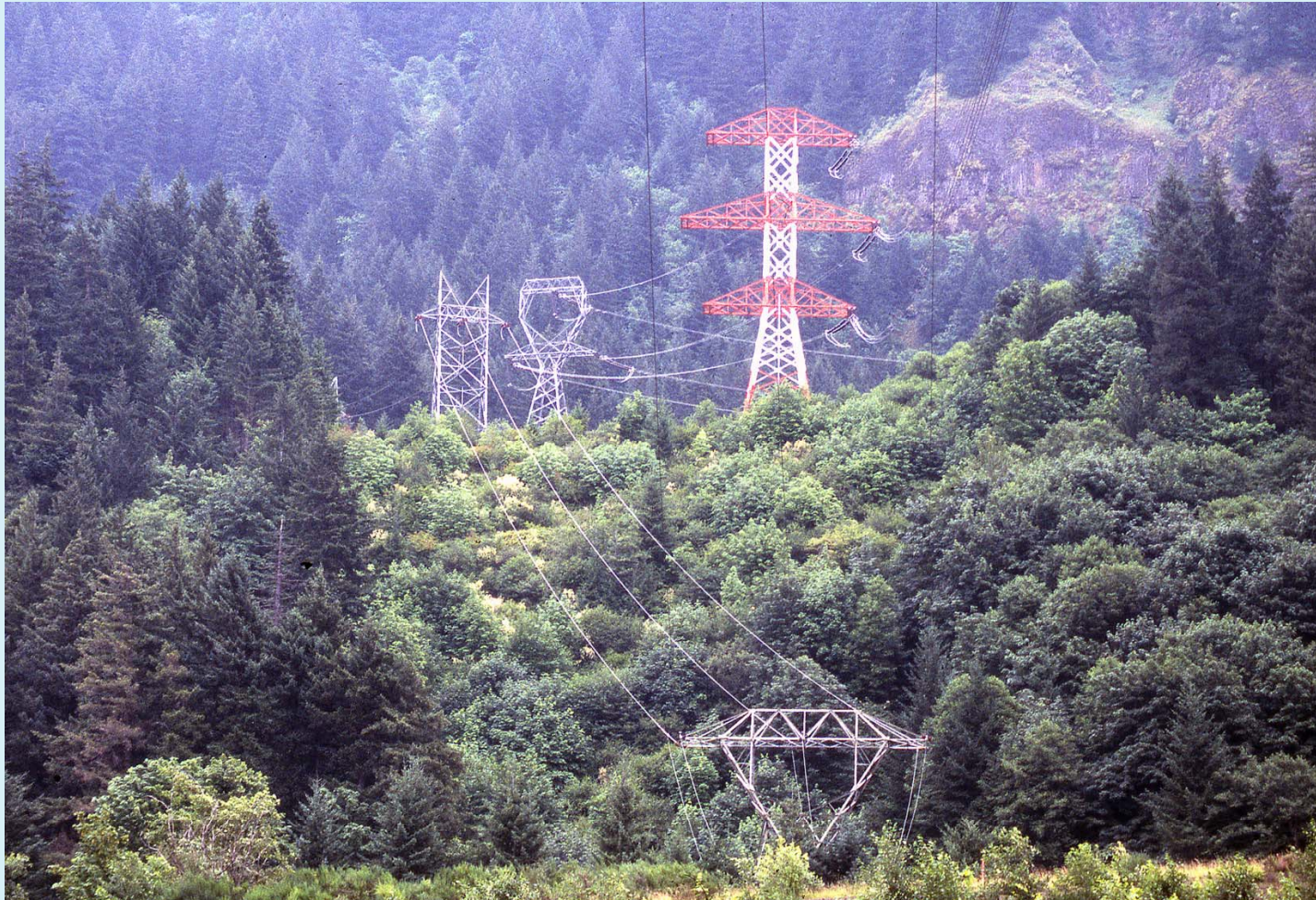




## BPA and NERC, WECC, ERO

March 2006



## Reliability Organizations

BPA has relationship with two reliability organizations:

1. North American Electric Reliability Council (NERC)
2. Western Electric Coordinating Council (WECC)

Electric industry also regulated by Federal Energy Regulatory Commission (FERC). With passage of recent Energy Policy Act, FERC has greater role in reliability.

# Federal Energy Regulatory Commission

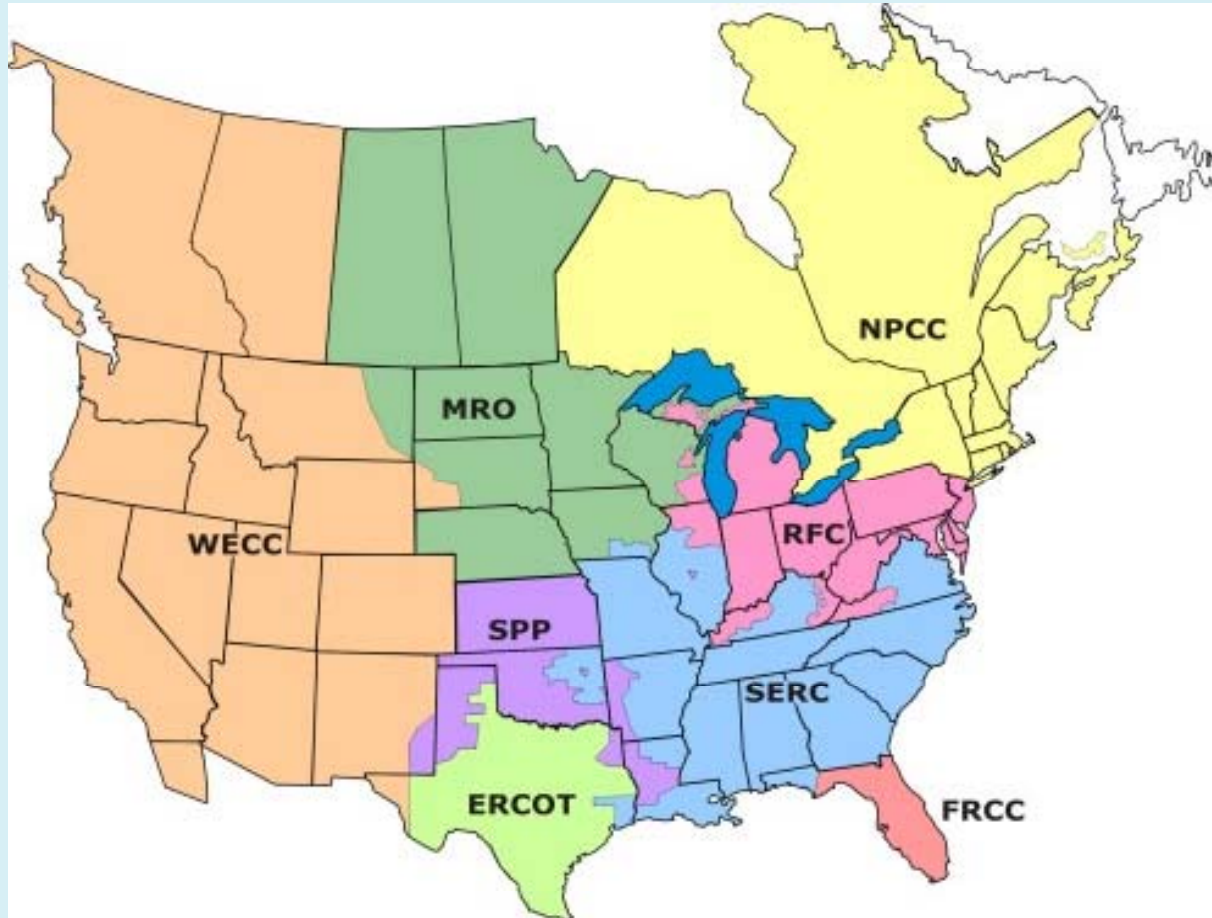
FERC is an independent agency under federal Department of Energy:

- Regulates interstate transmission of electricity, natural gas and oil;
- Reviews proposals to build liquefied natural gas terminals and interstate natural gas pipelines;
- Licenses hydropower projects;
- Ensures the reliability of high voltage interstate transmission systems;
- Monitors and investigates energy markets;
- Uses civil penalties and other means against energy organizations and individuals who violate FERC rules in the energy markets;
- Oversees environmental matters related to natural gas and hydroelectric projects;
- Administers accounting and financial reporting regulations and conduct of regulated companies.

# North American Electric Reliability Council

- Not-for-profit company
- National electric reliability organization formed as a result of the Northeast blackout in 1965 to promote reliability of the bulk electric systems serving North America
- Comprises eight Regional Reliability Councils
  - These councils account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California Norte, Mexico
- National reliability standards. Backstop to reliability criteria/standards of eight subregions.
- Designated as the new electric reliability organization (ERO) by FERC, subject to FERC oversight, established by the passage of the Energy Policy Act of 2005. ERO will make Standards more mandatory in the future.

# NERC Regional Reliability Councils



# North American Electric Reliability Council

- Develops and maintains Reliability Standards for both Planning and Operations.
- Mandatory compliance with Standards, enforcement and sanctions.
- To oversee short term Operation timeframe, North America has 21 reliability coordination offices.
- Reliability coordinators maintain a big picture overview of the piece of interconnected network for which they have responsibility.
- BPA participates in Standards Development Process

# Western Electricity Coordinating Council

- Voluntary Organization funded by member systems
- Largest and most diverse of the eight NERC regional councils. WECC region comprises nearly 1.8 million square miles. 71 million people.
- Only connected asynchronously to Eastern Interconnection through DC ties.
- WECC has unique system issues due to geography and topology. Results in unique challenges that require Operating and Planning criteria/standards in addition to NERC.

## What WECC does through members

- WECC is delegated reliability standard implementation and enforcement from NERC. WECC develops regional standards and regional variances on NERC standards (as necessary).
- In 1999, WECC Implemented it's own reliability enforcement program named Reliability Management System (RMS). This program is voluntary, however if an entity signs the agreement then compliance is mandatory. BPA is a member.
- Powerflow and Dynamics data collection for Annual Study Program to report on adequacy of transmission system into the future. (Reports to NERC)
- Loads and Resources data collection to report on adequacy of resources into the future. (Reports to NERC)
- Rating processes for major paths within the WECC, both Planning and Operations.

## BPA participation in WECC and NERC

- BPA actively participates in roughly 40 of about 55 WECC committees, subcommittees, workgroups and taskforces. Vickie VanZandt, senior vice president of BPA's Transmission Business Line, is a member of the WECC board of directors. (WECC)
- Participate in development/drafting and reviewing of Standards. (NERC/WECC)
- Compliance reporting. (NERC/WECC)
- Data collection and reporting. (NERC/WECC)
- System Modeling and Validation efforts. (WECC)
- Path rating processes. (WECC)
- Operational Transfer Capabilities. (WECC)