



# *Regional Outlook on Reliability*

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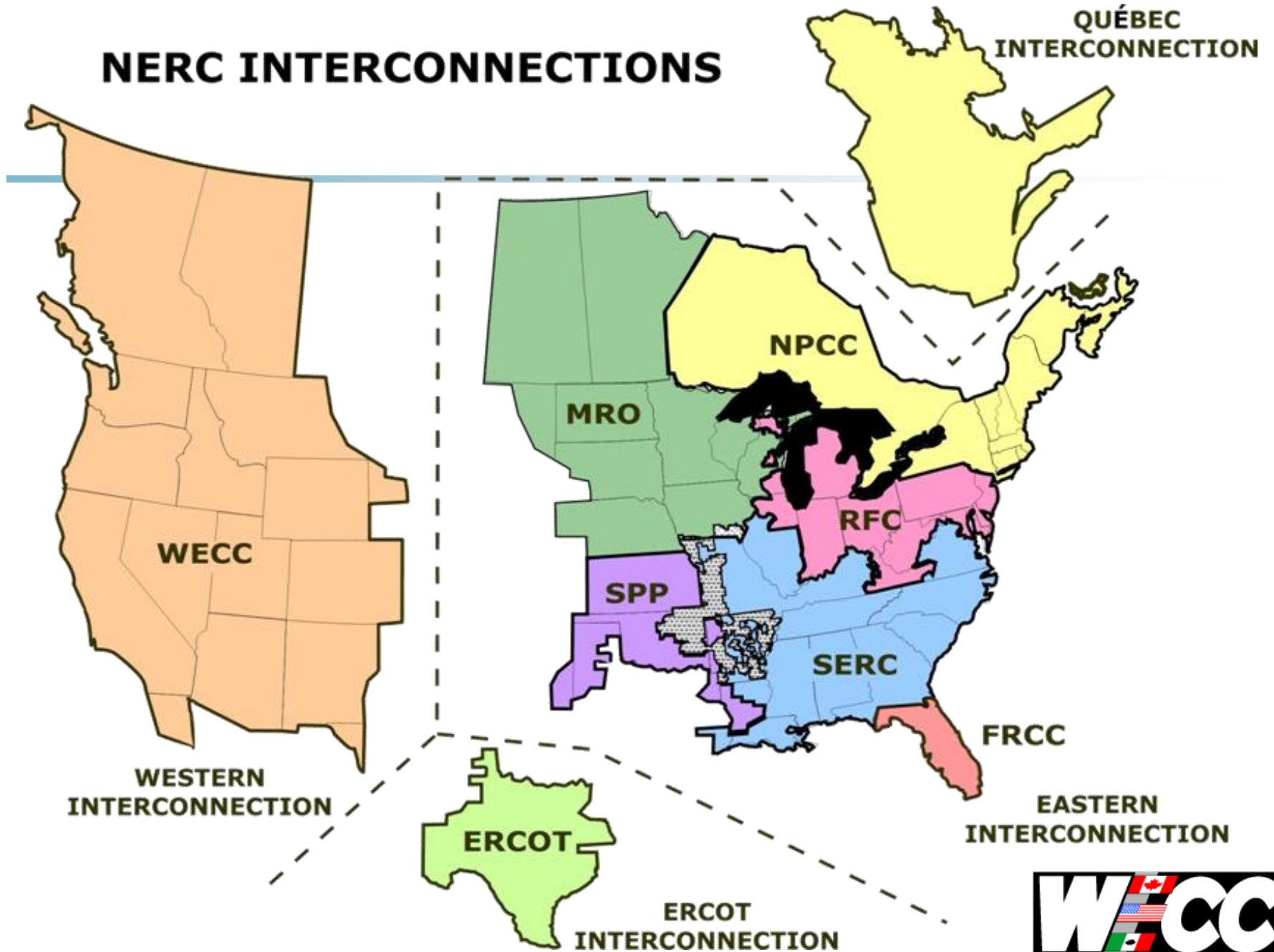
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Chief Executive Officer  
May 14, 2009

# *Creation of WECC as Regional Entity*

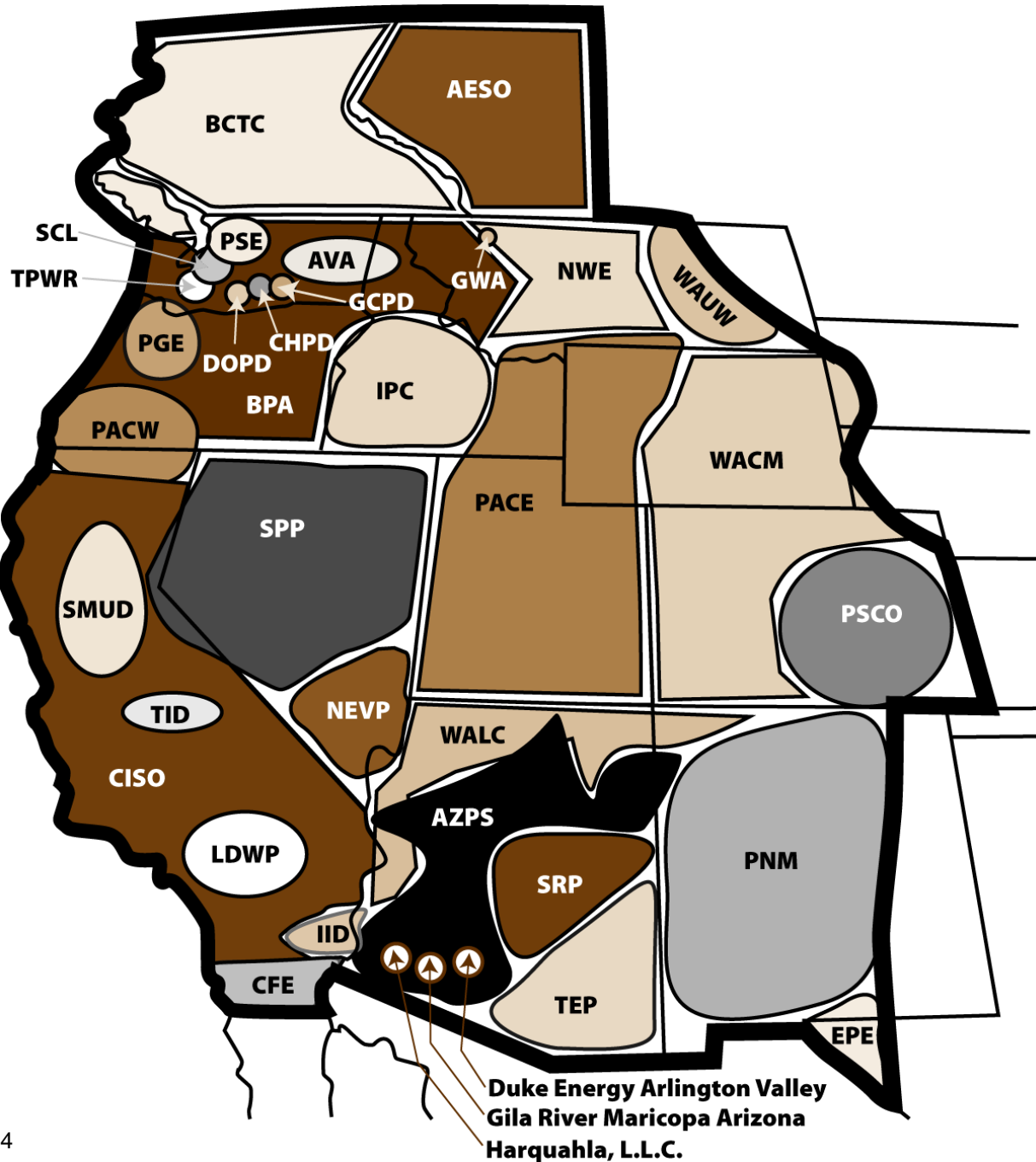
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- Formed in 2002 through merger of the Western Systems Coordinating Council, the Western Regional Transmission Association, and the Southwestern Regional Transmission Association
- Largest geographic area of the eight Regional Entities
  - The Western Interconnection (1.8 million square miles) includes all or part of 14 U.S. states, two Canadian provinces, and a portion of Baja California Norte, Mexico
- 250 members divided into seven membership classes

# NERC INTERCONNECTIONS



# WECC Balancing Authorities



# *WECC Functions as Regional Entity*

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- Compliance Monitoring
- Reliability Standards Enforcement
- Reliability Coordination
- Standards Development
- Transmission Expansion Planning

# *WECC Functions as Regional Entity*

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- Studies
- Market Operations Interface
- Loads and Resources Assessment
- Operator Training
- Western Renewable Energy Generation Information System (WREGIS)\*

\* Non-statutory

# *A Common Goal*

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## **“Improve Reliability of the Bulk Electric System”**

- Seems simple but .....
- Each stakeholder has a different set of expectations:
  - FERC
  - NERC (Electric Reliability Organization)
  - Eight Regional Entities (WECC largest geographically)
  - Companies (Registered Entities)

# *Improving Reliability*

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- Three areas of significant improvement:
  - Reliability Coordination
  - Transmission Planning
  - Compliance and Enforcement

# *Reliability Coordination*

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- Completion of consolidation into two centers on time and on budget: Vancouver, Washington and Loveland, Colorado
- West-wide System Model
- Improved data collection and monitoring
- More robust and disciplined coordination

# *Transmission Planning*

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- TEPPC is facilitating transmission planning from a “bottom up” approach throughout the Western Interconnection
  - Encourage wide stakeholder involvement
  - Support companies to meet obligations in FERC Order 890
  - Run congestion studies for the Western Interconnection as required under the Energy Policy Act
  - Provide high quality, credible analysis for policy makers in the Western Interconnection

# *Transmission Planning*

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- Challenges
- Western Interconnection cost recovery and siting
- Intermittent resources
- DOE stimulus money
- New federal legislation

# *Compliance and Enforcement*

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## **WOW! This IS bigger than a bread box....**

- Underestimated the size and scope of the project
  - Number of Registered Entities – more than 1800 Registered Entities across continental North America (470 in WECC with 1256 registered functions)
  - Self-reported violations (3,359 pre-June 2007 and 1,820 post-June 2007 in WECC)
  - Overall violations: 5,179
  - 104 off-site and 36 on-site audits

# *Compliance and Enforcement*

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- Evolution or Revolution?
- Roles and Responsibilities continue to evolve
- Iterative process - forms, evidence, processes, and interpretations changing and developing real-time
- Confusion and frustration created for **all** stakeholders

# *Compliance and Enforcement*

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- Sounded good at the time but:
  - Standards written in another era
  - Standards written by committees consequently:
    - Standards (some) lack clarity and are subject to more than one interpretation
    - Others should be business practices
  - Far too many standards and requirements

# *Compliance and Enforcement*

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- Penalty Determination
- Determinations require expertise and judgment
  - Guidance given – “Must reflect the seriousness of the violation”
  - But – all cases are different
  - Limited precedent – need to gather multiple data points using the FERC/NERC guidelines

# *Compliance and Enforcement*

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- Consistency is Key .....or is it?

**“A foolish consistency is the hobgoblin of little minds”** – *Ralph Waldo Emerson*

- Exact sameness may be a false paradigm
- Not a simple fix – will take time to get enough data points
- Goal is to treat all fairly

# *Compliance and Enforcement*

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## **“Come to find out” that this is a regulatory gig, not an engineering gig**

- All started out thinking that smart, talented engineers were all that was needed
- Now all involved realize the complex work of evidence, interpretation, and regulatory balance

# *Compliance and Enforcement*

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- Moving in the right direction
- Greater awareness, knowledge, and understanding of compliance throughout the industry
- Compliance culture more evident
- Identification and monitoring of ‘most commonly violated standards’ (i.e., sabotage reporting, relay maintenance, vegetation management, training) allows WECC to provide more targeted outreach and education in these areas. Progress evidenced by relay maintenance, vegetation management, and training moving from the top of that list

# *Compliance and Enforcement*

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- Registration
  - Work in progress
- Backlog Reduction
- Settlement Process

# Compliance and Enforcement – Top 10 Violations

Standard	Standard Name	Requirement	'Total Violatons'
PRC-005-1	Transmission and Generation Protection System Maintenance and Testing	1	56
PRC-005-1	Transmission and Generation Protection System Maintenance and Testing	2	48
CIP-001-1	Sabotage Reporting	4	42
CIP-001-1	Sabotage Reporting	1	40
CIP-001-1	Sabotage Reporting	2	37
CIP-001-1	Sabotage Reporting	3	37
FAC-008-1	Facility Ratings Methodology	1	23
FAC-009-1	Establish and Communicate Facility Ratings	1	21
IRO-STD-006-0	Qualified Path Unscheduled Flow Relief	WR1	19
TOP-002-2	Normal Operations Planning	18	19

# *WECC Goals*

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- Transparency – not just in WECC but across the Regions
- Consistency – through training, process standardization, sharing best practices with other Regions
- Professionalism – experience, knowledge, and commitment
- Communications – continuous dialogue with stakeholders

# Questions

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