



Western Renewable Energy Zone (WREZ) Project

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Oregon Public Utility Commission



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WREZ at a Glance

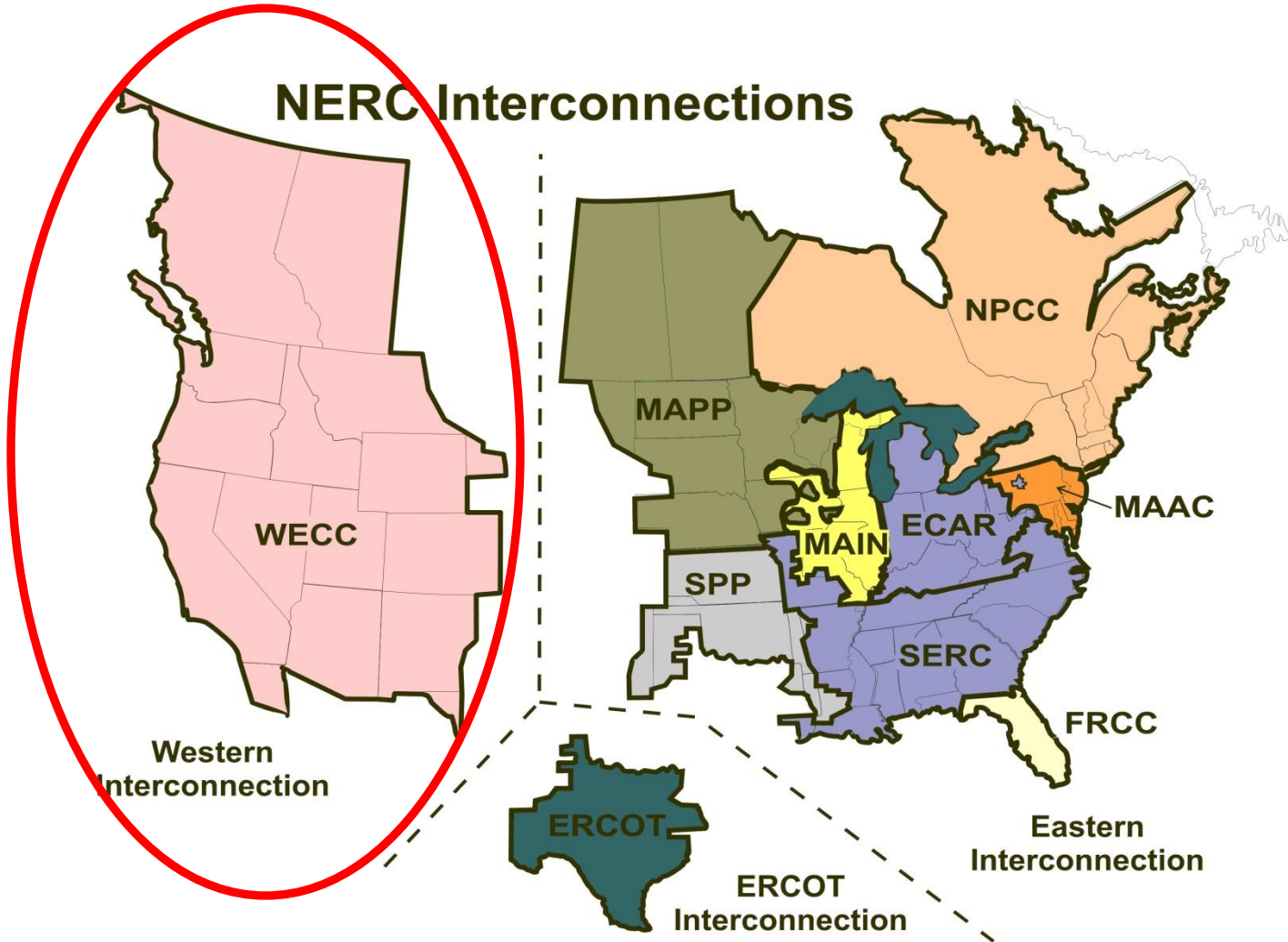
- **Western Governors' Association Initiative**
 - Identify and map renewable resource-rich areas
 - Build transmission to ship electricity from renewable zones to load centers.

“Unprecedented challenges face the West in meeting the growing demand for electricity while achieving local and global environmental goals. The WREZ Project will help us tap our vast renewable resources and develop transmission that considers communities, environmental impacts and costs.”

Utah Governor Jon Huntsman

WGA Chairman

Project Footprint



WREZ Phases

■ Phase 1 and Phase 2

- Identify developable renewable energy zones
- Develop renewable resource supply curves for each zone
- Develop model to estimate delivered price of power from renewable energy zones to load centers
- Develop conceptual transmission plans

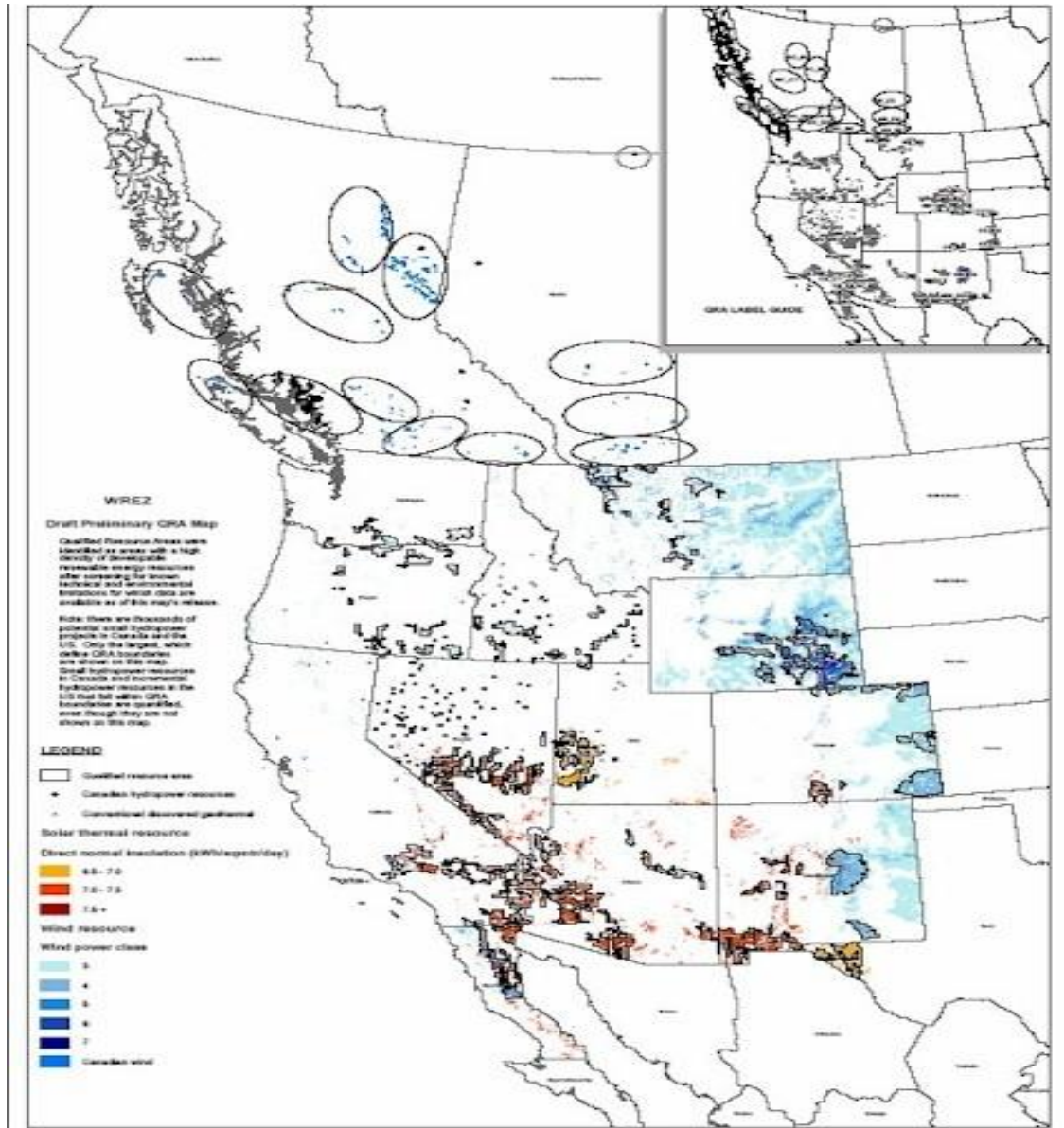
■ Phase 3 and Phase 4

- Foster coordinated renewable resource acquisition
- Facilitate interstate transmission for renewables

Phase 1 Public Comment Package

- Qualifying Resource Areas
 - Quality of Resource Criteria
 - Environmental and Land-Use Screens
 - Other Resource Area Criteria
- Supply Curve Assumptions
- Delivered Power Price Model Assumptions

Qualified Resource Areas



Transmission Planning Request

Case 1. Transmission needed to move power from preferred renewable energy zones to load centers:

10 year analysis

Meet renewable portfolio standard targets throughout the west

Case 2. Transmission needed to move power from preferred zones to loads: 20 year analysis

33% Renewable Portfolio Standard Target

50% reduction in CO² emissions

Case 3. Case 1 with higher renewable resource penetration and 25 to 40 % CO² emission reductions

Case 4. Superhighway Network Overlay

Phase 1 and Phase 2 Schedule

- February, 2009
 - Public comment period
 - Western Resource Planner Forum
- April, 2009
 - Refine “exclusion” area and “sensitive” area designations based on Wildlife Corridor Study results
- May – June, 2009
 - Adopt final renewable energy zones
 - Submit Phase 1 report to Western Governors
- Fall – Winter, 2009
 - Transmission scenario analyses completed

WREZ Generation and Transmission Model

- WREZ Model is used to estimate the delivered price of power from a zone to a load center.
- The user can change assumptions.
- Early versions released to allow users to learn how model works and to provide feedback.