



Western Electricity Coordinating Council

WECC Planning Update

Northwest Wind Integration Forum

October 29, 2009

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Renewable Integration and Planning Director

TEPPC 2009 Study Plan

● 2019 Scenarios

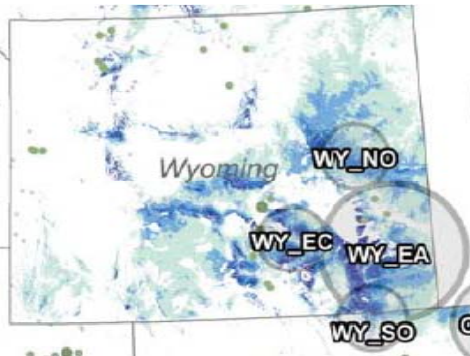
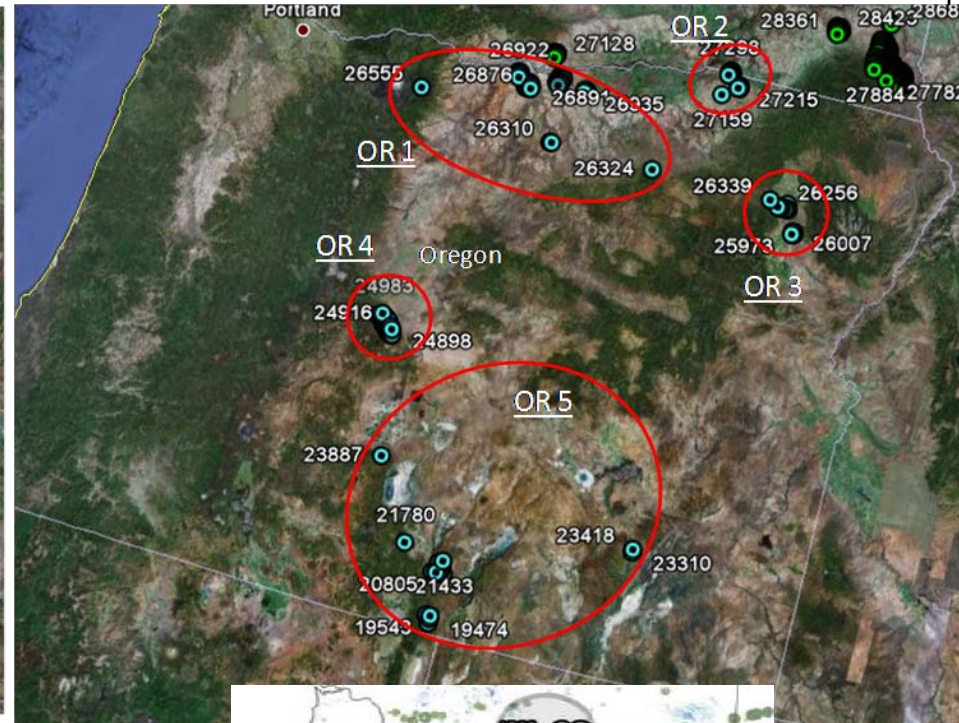
- 2019 PC1 – Statutory RPS Base Case
 - Renewable resources added to meet state statutory RPS requirements in 2019
 - Studying a 15% penetration of renewables WECC-wide (1,054,468 GWh)
- 2019 PC2 – Additional 3,000 MW of wind added in MT/WY
- 2019 PC3 – Additional 3,000 MW of wind added in WA/OR
- 2019 PC4 – Additional 3,000 MW of wind added AB/BC
- 2019 PC5 – Once-Through-Cooling (OTC) and Endangered Species Act (ESA) issues
- 2019 PC6 – 3,000 MW of CA solar replaced with NM wind and NV geothermal

TEPPC 2009 Study Plan

- 2029 Scenarios
 - 2029 PC1 – Long-term 33% Renewables Case
 - 2029 EC1-1 – Add transmission reinforcements to address identified congestion
 - 2029 EC1-2 – Add transmission overlay (500kV / 765 kV)
- Transmission Expansion Cases will be run on 2019/2029 scenarios as time permits

Wind Placement Examples

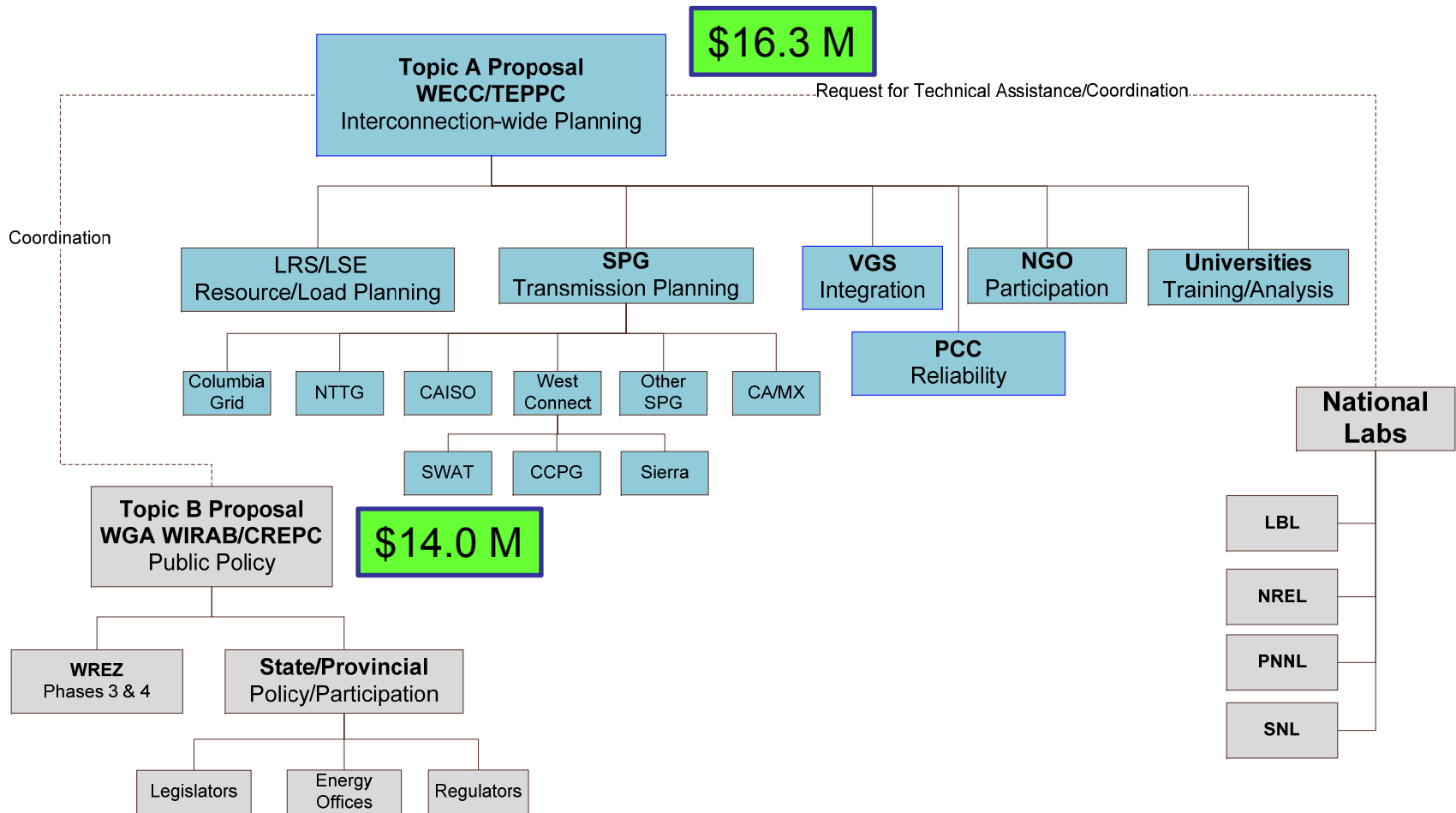
Red Circles indicate TEPPC Wind Profile Locations



WREZ Map



Overview of WECC Response to DOE Funding Diagram



Overview of WECC Response to DOE Planning Activities (new activities in Red)

| | Short Term 0-5 Years | Medium Term 5-10 Years | Long Term 20 Years |
|----------------------|---|---|--|
| Regional (WECC) | <ul style="list-style-type: none"> • OTC, TTC • Rating Process • TEPPC (5yr) | <ul style="list-style-type: none"> • TEPPC Congestion Analysis • <u>10yr Regional Plan</u> • Project Planning & Rating Process • Reliability Assessment | <ul style="list-style-type: none"> • <u>20yr Regional Trans Target Plan</u> • <u>LSE Planning Coordination (WIRPF)</u> |
| Subregional (SPG) | <ul style="list-style-type: none"> • OTC, ATC • Short-term Assessment • Short-term Design Planning | <ul style="list-style-type: none"> • Sub-Reg Trans Biennial Cap • Annual Econ Study • SPG 10yr Att K Plan • <u>10yr SPG Coordinated Reliability Plan</u> | |
| Local (Utilities) | <ul style="list-style-type: none"> • OATT studies • Operating Studies • Compliance Studies | <ul style="list-style-type: none"> • Attachment K or equivalent • Compliance Studies | <ul style="list-style-type: none"> • Long-range studies |

Questions

