



Presentation to:

The Washington State Legislative  
Joint Committee on Energy Supply and Energy Conservation

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# What is ColumbiaGrid?

- Non-profit membership corporation, formed in 2006
- Purposes:
  - Improve reliability and efficiency of regional transmission grid
  - Cost-effective regional transmission planning and expansion
  - Develop solutions to transmission-related issues
- Charges in performing these tasks:
  - Carry out work consistent with the public interest
  - Consider environmental concerns
  - Provide cost-effective solutions



# Who is ColumbiaGrid?

- Current Members include:
  - Avista
  - Bonneville Power Administration
  - Chelan County PUD
  - Grant County PUD
  - Puget Sound Energy
  - Seattle City Light
  - Tacoma Power
- Membership invitation open to other Northwest control areas



# Who is ColumbiaGrid? (cont'd.)

- Members can amend bylaws, elect Board and determine future Programs to be performed by ColumbiaGrid
- Participation is open to non-members through becoming parties to a particular Functional Agreement. E.g.:
  - Snohomish County PUD
  - Cowlitz County PUD



# Broad Regional Focus

- ColumbiaGrid is a member of WECC and NWPP
  - Operating Committees
  - Planning Committees
  - Market Interface Committee (WECC)
  - Various subcommittees



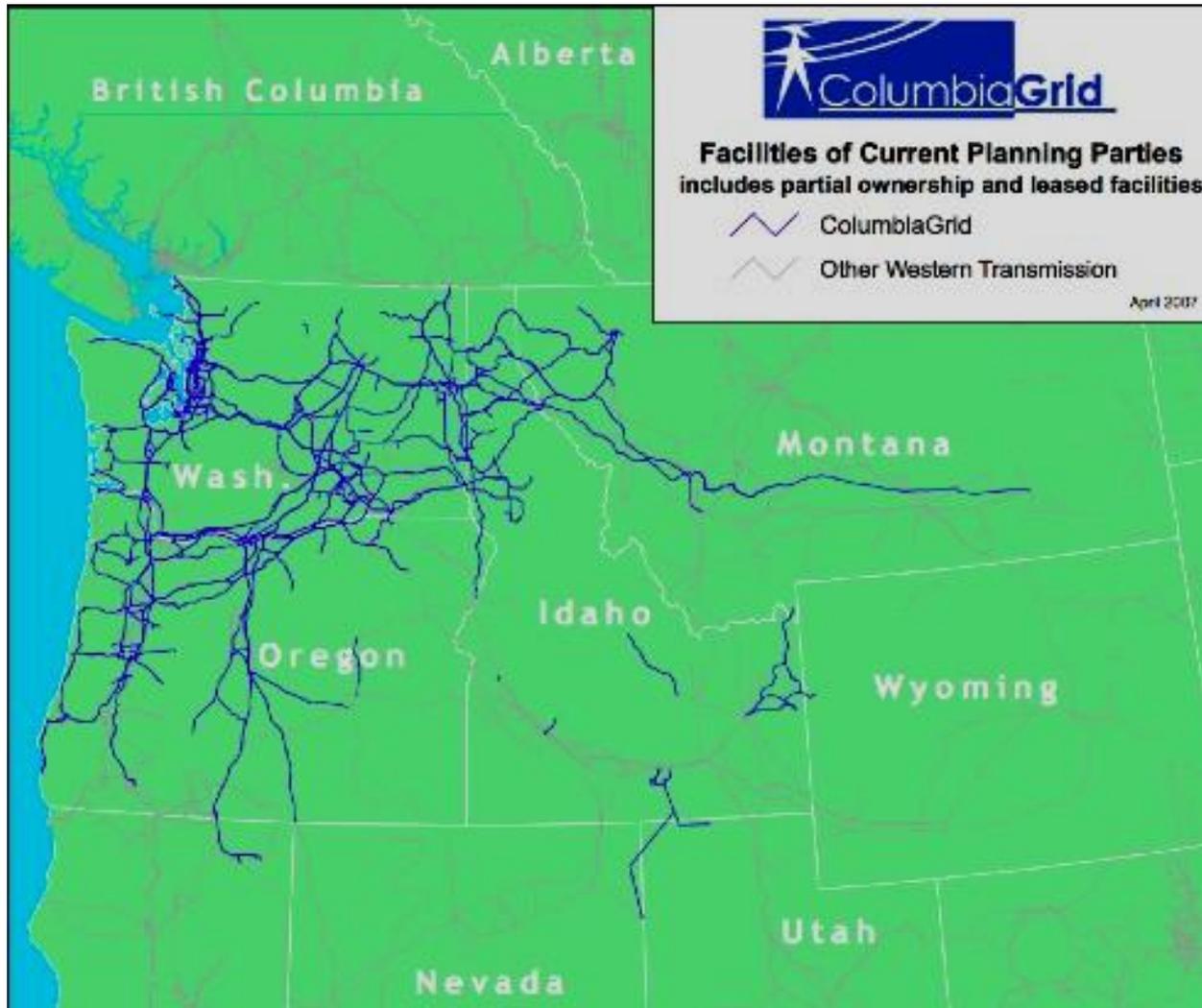
# Providing Planning, OASIS and Reliability Services

## **Now and future:**

- ✓ Planning and Expansion Functional Agreement
- ✓ Reliability – Operational improvements of transmission grid
- ✓ Common Northwest OASIS



# Planning Agreement Parties' Combined Footprint





# Planning and Expansion Functional Agreement

## ColumbiaGrid Transmission Planning:

- Independent planning staff to perform system analyses
- Single-utility concept using power-flow modeling
- Open stakeholder process
- Steps to encourage construction to ensure reliability
- First draft Biennial Plan now posted and open for public comment: [www.columbiagrid.org](http://www.columbiagrid.org)



# OASIS\* Functional Agreement

\*Open Access Same-time Information System  
(Ensures equitable information access for transmission customers)

- Provides common web portal for one-stop transmission shopping
- Provides common calculation methodologies

Parties to the OASIS Agreement include:

Avista, BPA, Chelan PUD, Puget, Seattle, Grant PUD, Tacoma, Snohomish PUD



# Operational Reliability

- Performed independent analysis and report on BPA's 2007 Reliability Redispatch pilot program
  - Relieve imminent transmission overloads by swapping generation across the problem area.
- Investigated future improvements in that program and may be closer to a broader, more regional application.



# Wind Integration Efforts

- 2008: Opened dialogue with 2 other regional groups: Northern Tier transmission Group and WestConnect – Most major western utilities outside of Canada.
- Dialogue lead to a “Joint Initiative” working on solutions to ease operational impacts of hard-to-predict and variable wind generation.
  - Accommodate further renewable development while ensuring system reliability
  - May provide for expansion of redispatch solutions to transmission operators beyond just BPA.



# In Summary

- ColumbiaGrid's approach is:
  - Regional
  - Independent
  - Collaborative
  - Creative
- Issues:
  - More direct participation – need more players
  - Funding is limited to current members/participants
- More information: [www.columbiagrid.org](http://www.columbiagrid.org)