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May 26, 2010

MEMORANDUM

TO: Power Committee

FROM: Wally Gibson

SUBJECT: Transmission Planning and Implementation Update

The staff will present a status report on the major transmission proposals affecting the Northwest. The projects are driven in part by Northwest load service requirements, but most strongly by renewable generation developers hoping to supply RPS requirements, in the Northwest and especially in California.

The staff will also review the current structure of transmission planning in the region and in WECC. This has become more complex over the past year with DOE having awarded substantial funding to WECC and the states, acting through the Western Governors' Association and the Western Interconnection Regional Advisory Body (WIRAB). WIRAB was created by the Western governors under Energy Policy Act amendments to Section 215 of the Federal Power Act. The staff will also review some highlights of the TEPPC 2010 study program, which is currently underway.

Transmission Planning and Proposals - Update

Northwest Power and Conservation Council
Power Committee
June 8, 2010



Summary

- Specific projects: much ongoing transmission planning and development activity
 - Main drivers of all proposals – load service and especially, RPS requirements (current and expected) in NW and in California
 - Some construction but siting difficulties are showing up
- New overall WECC-wide planning process – DOE funding under ARRA
 - Regional Transmission Expansion Planning (RTEP) process
 - Wider group of stakeholders, more formalized input
 - Plans, not just studies





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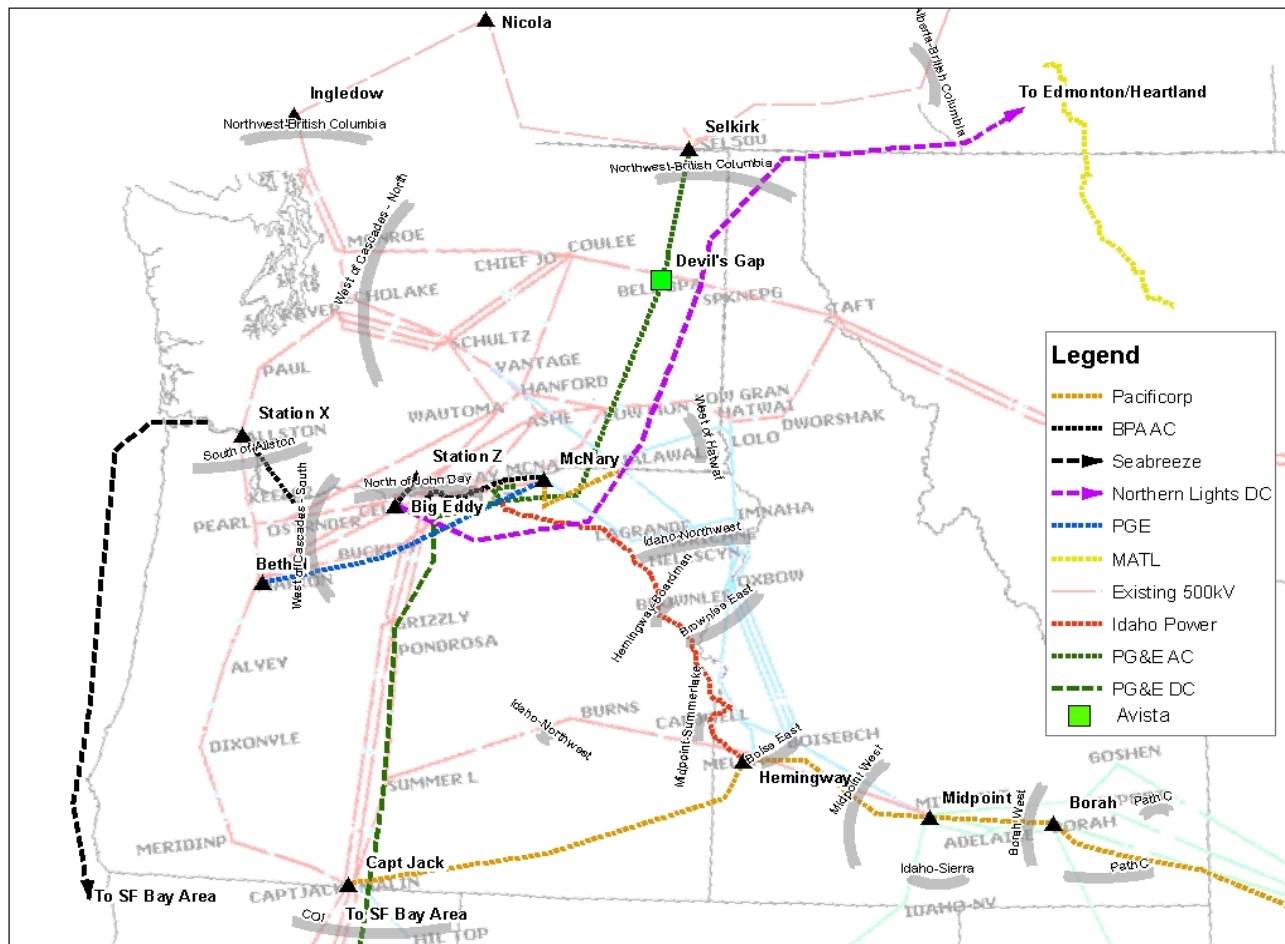


New Projects Planned for the Northwest 2010 – 2015

- The projects on the next slide are currently being studied to examine interactions among them for rating purposes
 - Transmission Coordination Work Group (TCWG) process sponsored by ColumbiaGrid, NTTG, and NW Power Pool
- Currently most are in coordinated WECC Phase 2 rating process, examining interactions among proposed and existing projects, getting to final ratings
- Rating process does not guarantee construction but is significant step forward – commercial viability is biggest hurdle
- McNary – John Day under construction
- BPA scoping expansion of Intertie to California

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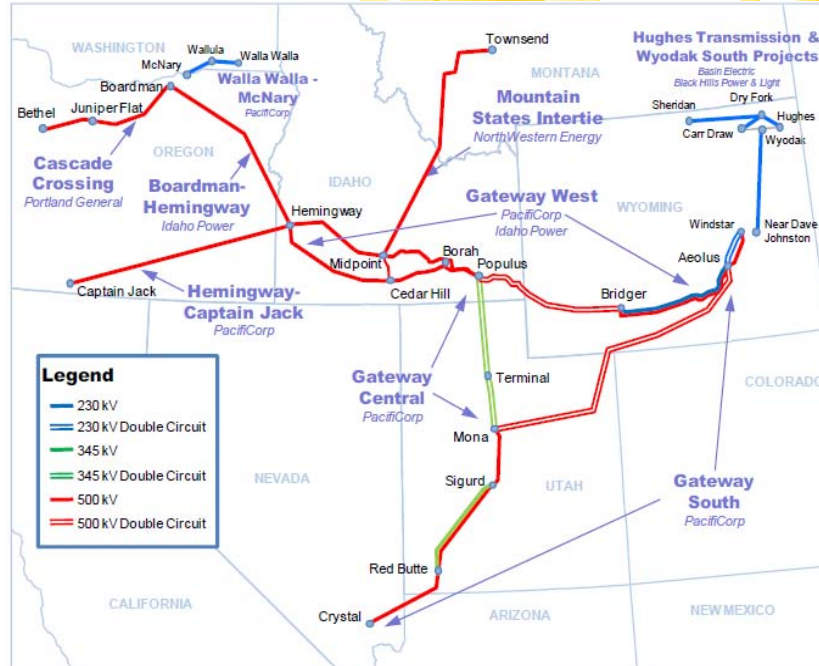




New Projects Planned for the East Side 2010 – 2015

- Projects shown on the next slide overlap partly with those on previous slide
 - Hemmingway – Boardman (Idaho) – siting difficulties
 - Hemmingway – Captain Jack (PacifiCorp, date uncertain)
 - Part of Gateway West (Hemmingway – Borah, PacifiCorp)
- Additional Projects in Phase 2 or 3
 - Gateway South and Gateway Central (PacifiCorp)
 - Section of Gateway Central recently completed
 - Mountain States Transmission Intertie (NWE)
- Zephyr and Chinook merchant lines (500 kV DC) - Phase 1
 - Zephyr recently announced 3,000 MW shipper agreements

NTTG Projects

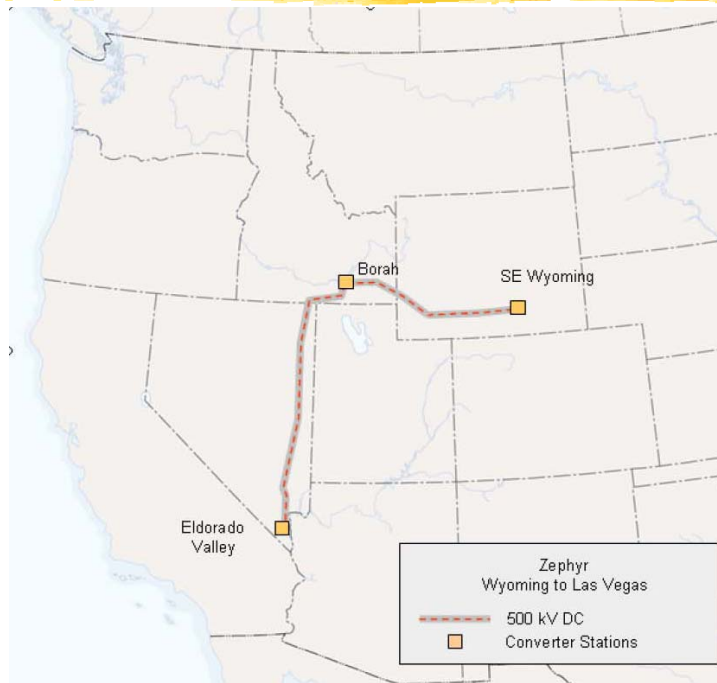


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Zephyr - TransCanada

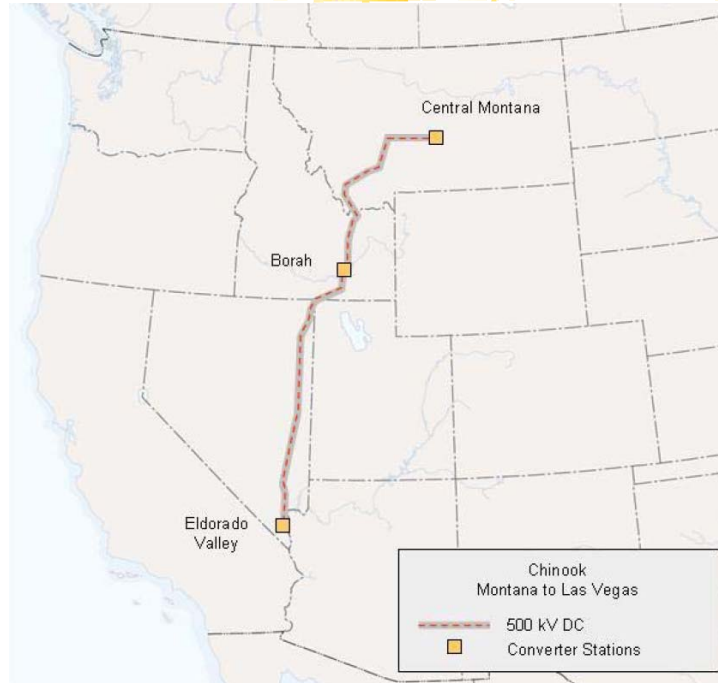


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Chinook - TransCanada



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Transmission Planning – Process Overview

- Three level expansion planning framework
 - Individual transmission providers acting under FERC tariff
 - Subregional Planning Groups (SPGs)
 - WECC RTEP led by Transmission Expansion Policy Planning Committee (TEPPC)
 - New input – states and other stakeholders
 - Scenario Planning Steering Group (SPSG)
 - State/Provincial Steering Committee (SPSC)
 - New products – 10 and 20 plans, not just studies
- WECC path rating process – establishes overall reliability limits for new lines

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Planning – Individual Providers

- Individual transmission provider acting largely under FERC Open Access Transmission Tariff (OATT) and other FERC orders
- Regional coordination required by FERC Order 890
 - Mostly through subregional groups and WECC, especially the required economic and congestion studies
- Order 890 allows stakeholders to request limited number of generic economic/congestion studies
 - Studies of impact of transmission system changes on generation operating costs, focused on larger resource-development issues, not tied to specific service requests

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Planning – Subregional Planning Groups

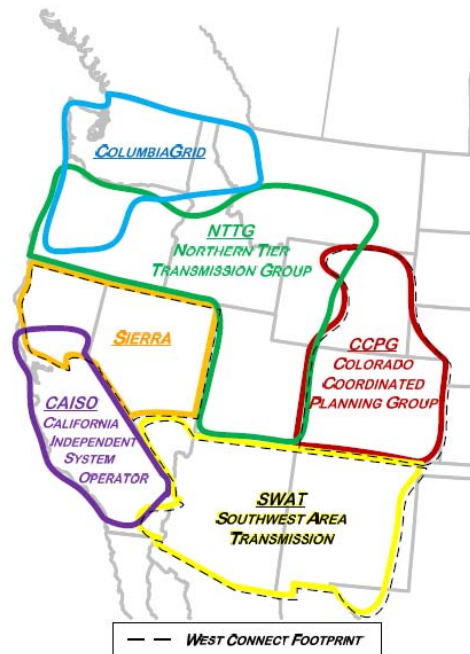
- Subregional planning groups
 - Northwest Power Pool area – ColumbiaGrid, NTTG
- Primary umbrella entities for detailed study of larger projects
 - Address congestion and resource development issues
 - Coordinate for projects crossing seams, both among member providers and with adjacent SPGs
 - Lead to transmission investment decisions
- Provide coordinated 10-year foundational project lists to TEPPC (high likelihood of completion)
 - Base for biennial TEPPC 10-Year Regional Transmission Plan

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Subregional Planning Groups – Rough Boundaries



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Planning – WECC and TEPPC

- 10-Year Regional Transmission Plan
 - SPG input, open-season study requests, SPSG input
- 20-Year Regional Transmission Target Plan
 - More open scope – try to find expansion plans robust across multiple long-term scenarios
 - More driven by long-term uncertainties
 - More input from SPSG
 - 26 stakeholder representatives from specified sectors
 - Three of seven state representatives from NW
 - John Savage, Marsha Smith, Howard Schwartz
 - SPSC – input to state SPSG representatives – Tom Karier a member

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TEPPC 2010 Study Program Highlights

- 2019 / 2020 cases – transmission impacts of:
 - Intensive renewables development scenarios – different areas of the West substituting for renewables in California
 - High conservation and DSM scenario across West
 - Carbon reduction targets (Waxman-Markey 17%)
 - Very high wind development in Montana and in Wyoming
- 2029 / 2030 cases – transmission impacts of:
 - Higher carbon reduction targets (Waxman-Markey 42%)
 - 33% RPS requirements across the West
 - 765 kV overlay system across the West

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