

ColumbiaGrid Update

October 28, 2010





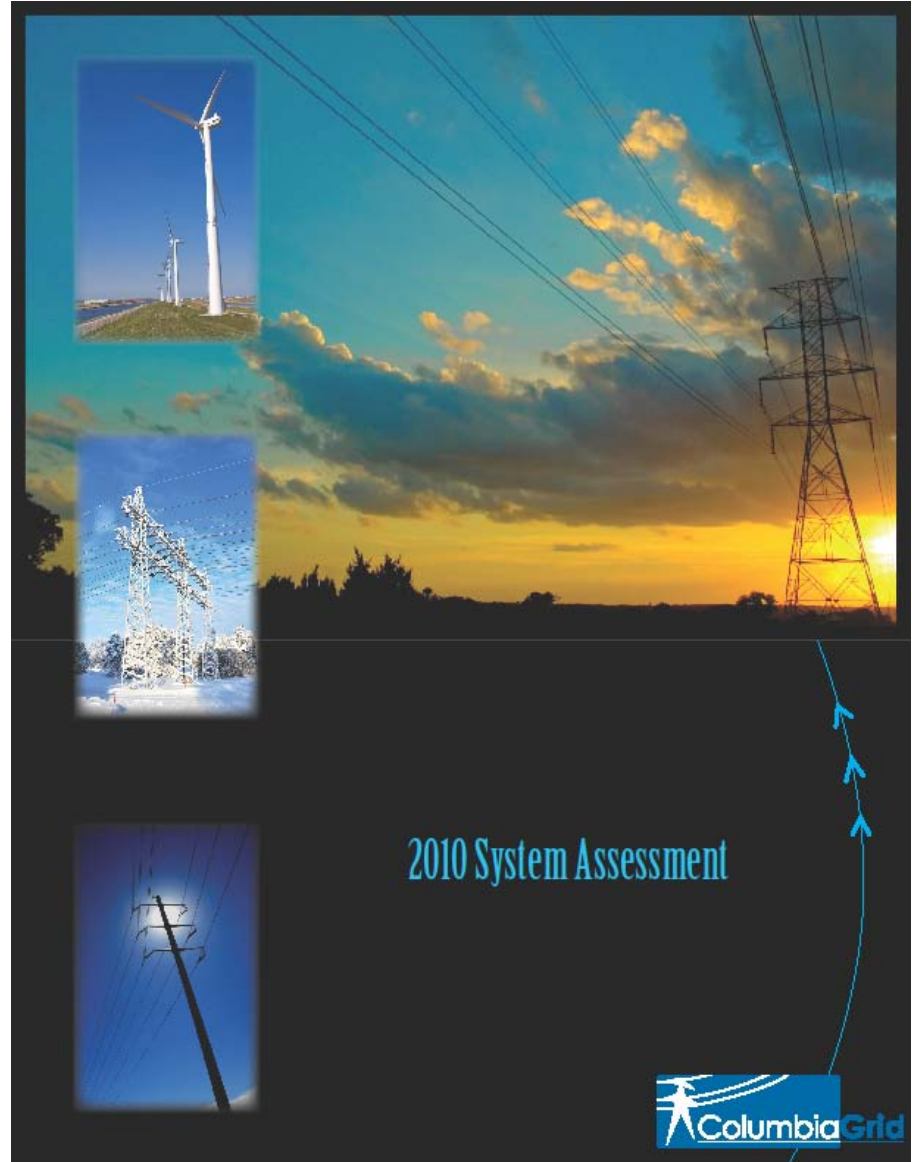
ColumbiaGrid

- Mission: Improve the reliability of the NW transmission grid and efficiency in its use, and to provide sustainable benefits for its Members and the region.
- Eight Members: Avista, Bonneville Power Administration, Chelan County PUD, Grant County PUD, Puget Sound Energy, Seattle City Light, Snohomish County PUD, Tacoma Power
- Non-profit corporation with 12 Employees and a 3 member Independent Board
- Main Activities
 - Transmission Planning
 - Common Open Access Same-time Information System (OASIS)

System Assessments



2009 System Assessment
July 31, 2009



2010 System Assessment



Transmission Expansion Plans



2009 Biennial Transmission Expansion Plan



Approved by the ColumbiaGrid
Board of Directors
on February 18, 2009

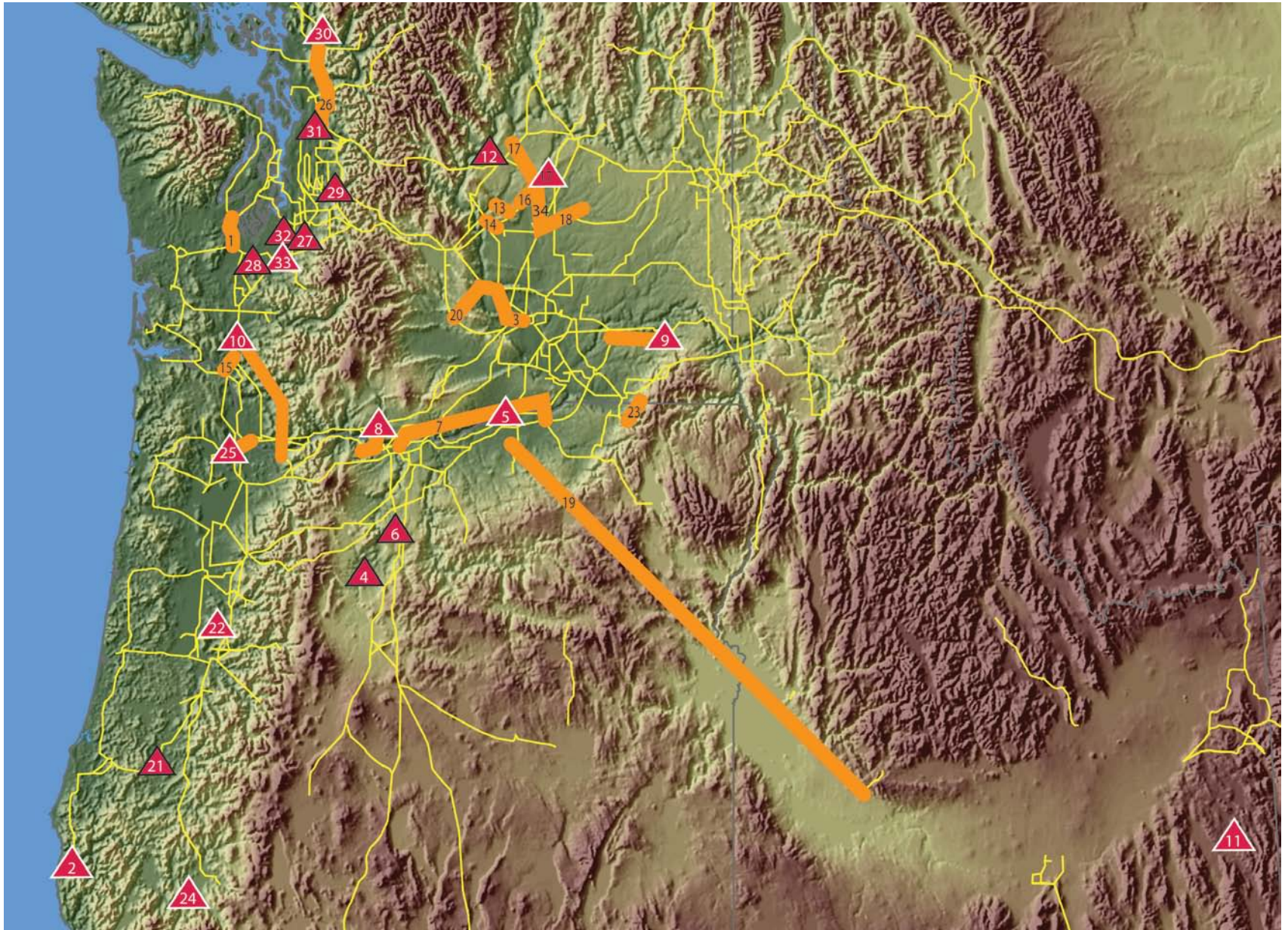


2010 Update to 2009 Biennial Transmission Expansion Plan

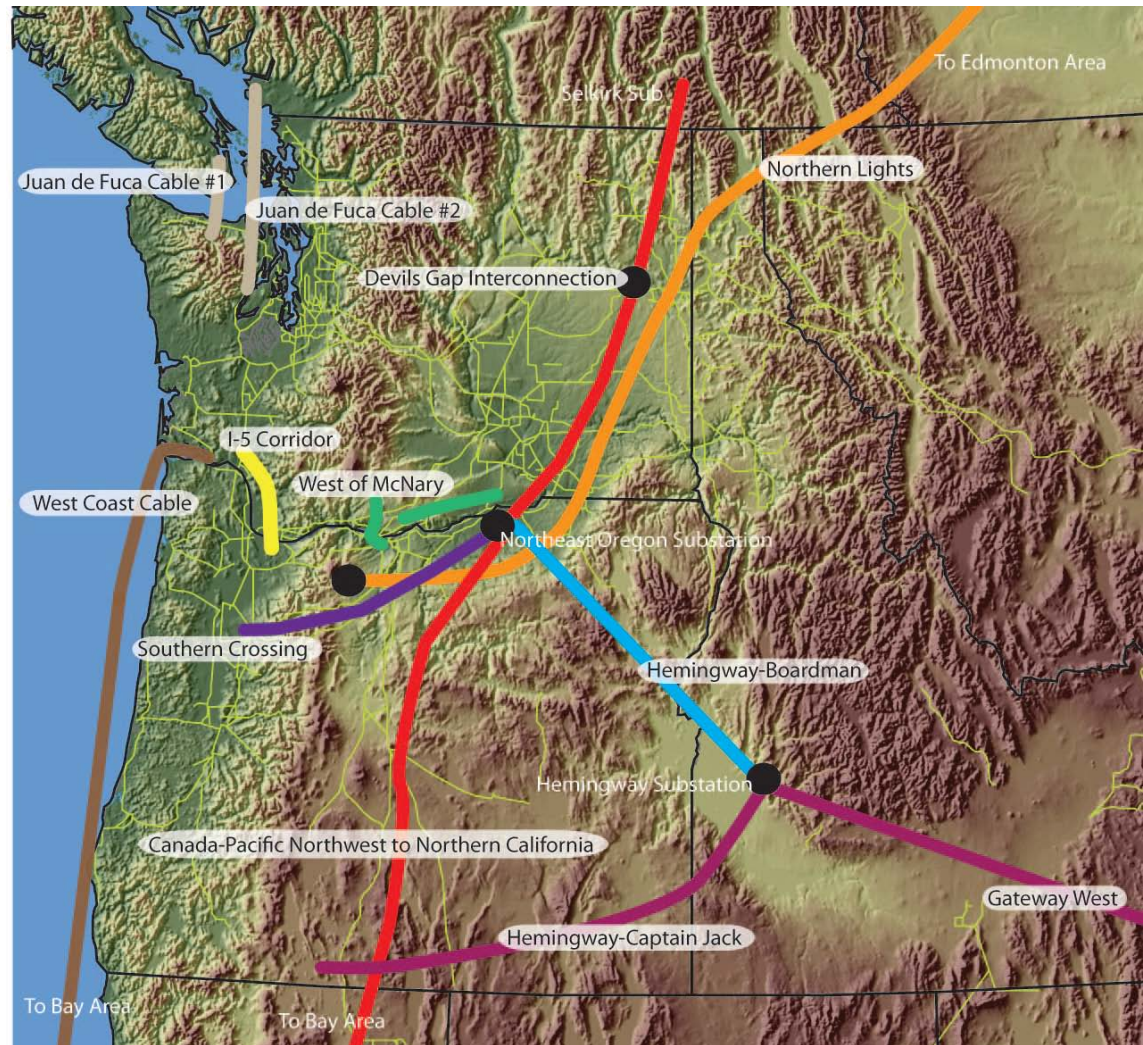


Approved by the ColumbiaGrid
Board of Directors on
February 17, 2010

ColumbiaGrid 10-year Plan

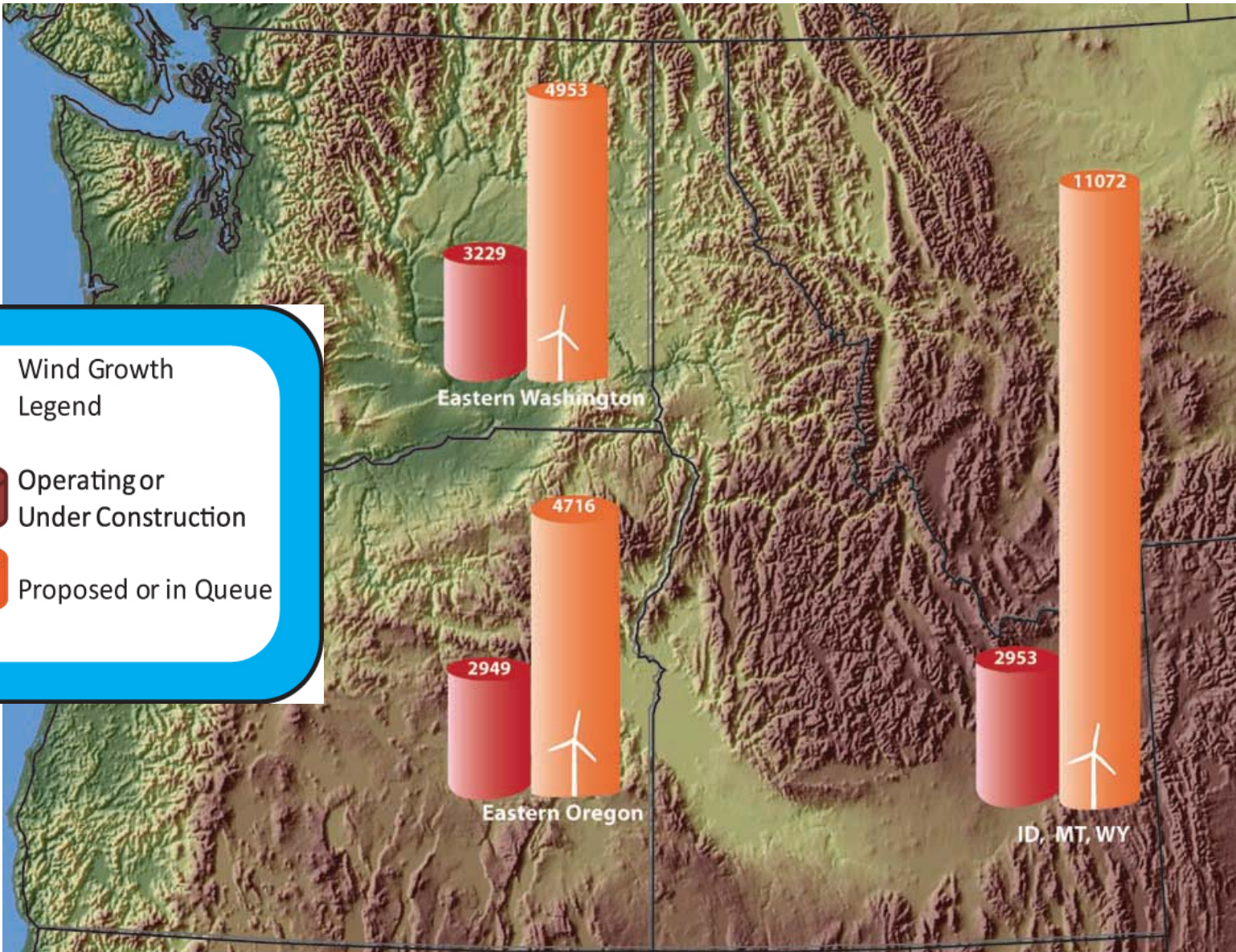


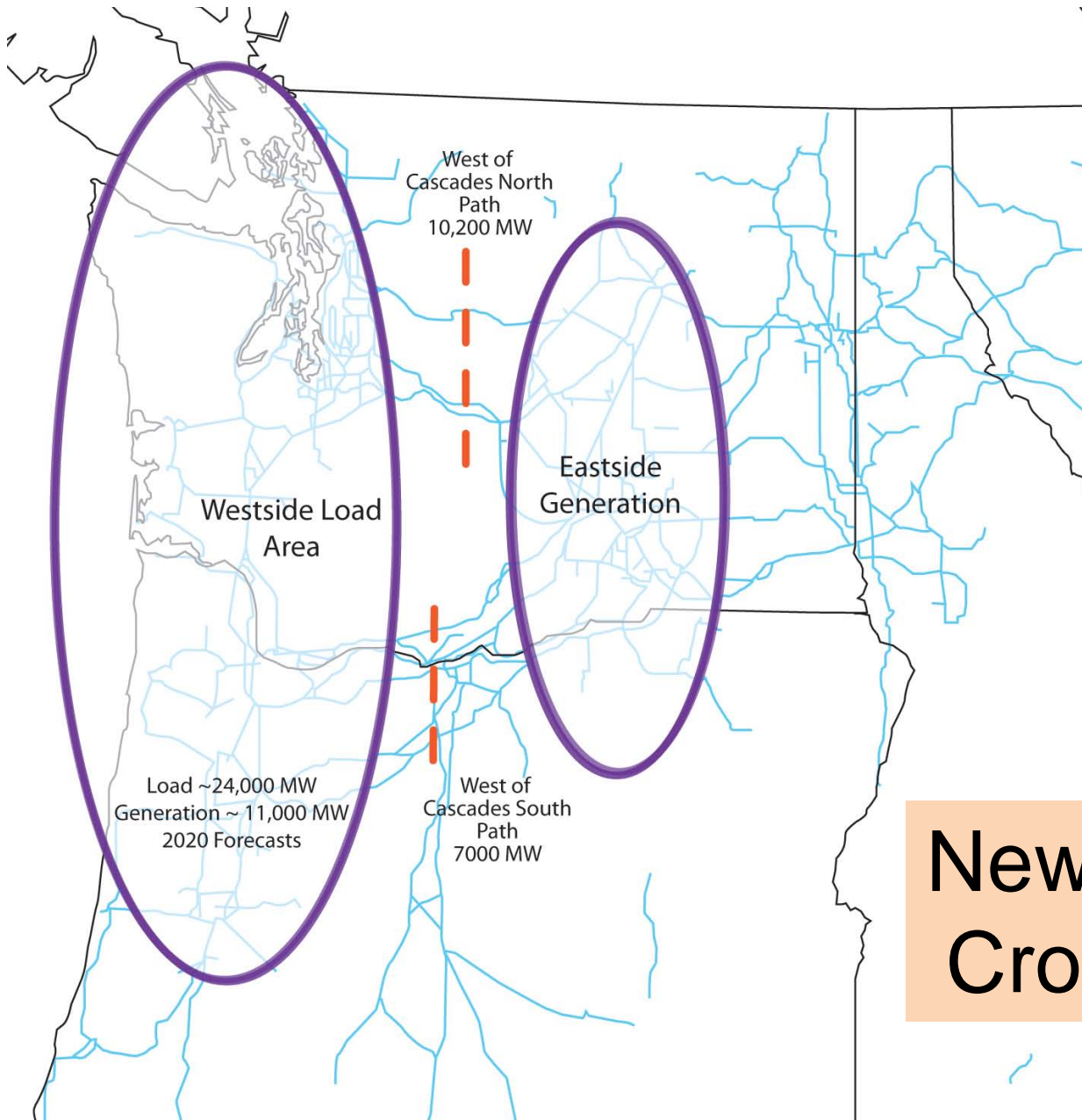
Information on Potential Major Regional Projects



Wind Growth Legend

- Operating or Under Construction
- Proposed or in Queue





New Study Team Cross Cascades

Regional Transmission Expansion Planning Project (RTEP)



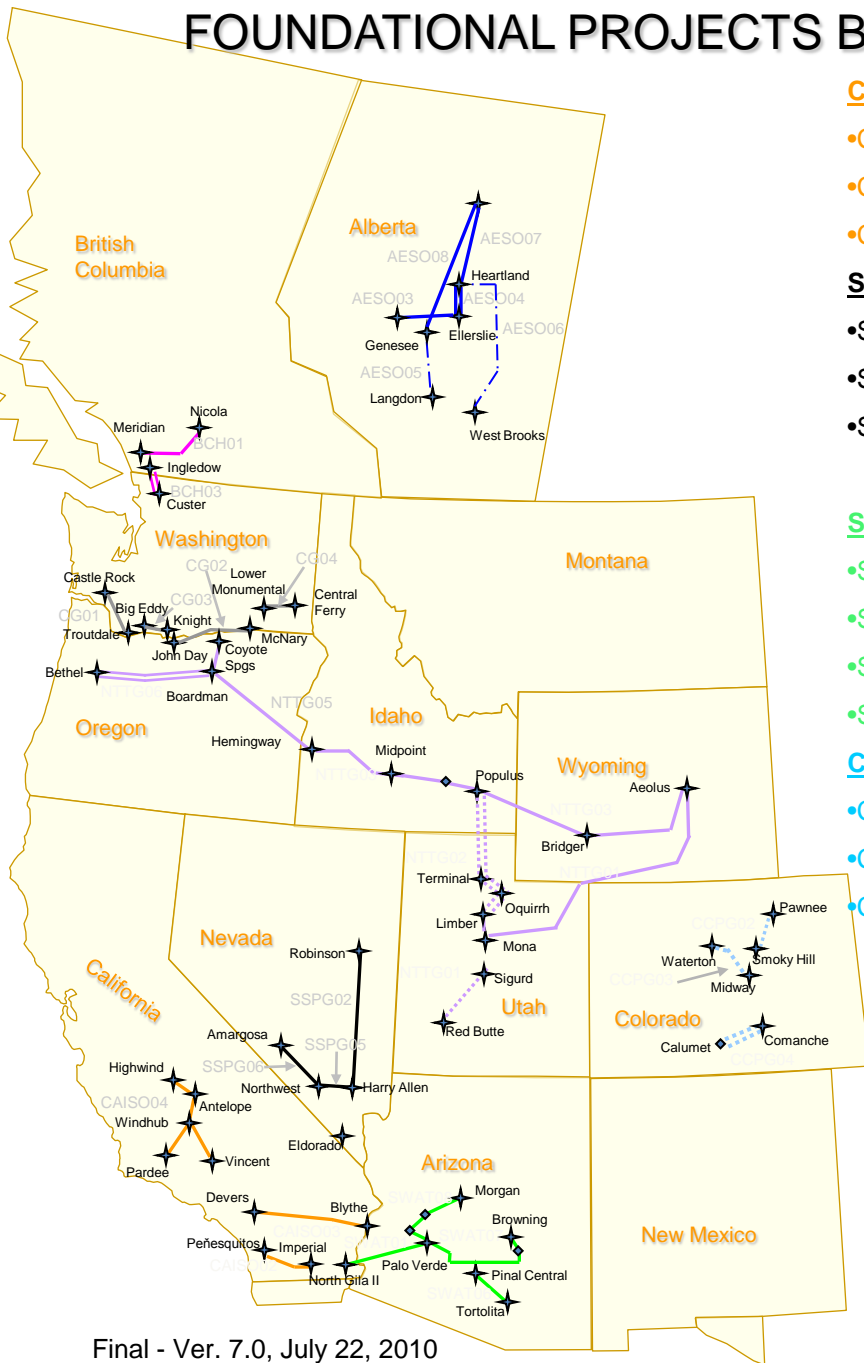
- 10-year Plan in 2011
- 20-year Plan in 2013

Western Interconnection
Sub-Regional Planning Groups (SPGs)
July 2010



Subregional Planning Group Coordination Group (SCG)

FOUNDATIONAL PROJECTS BY 2020



Final - Ver. 7.0, July 22, 2010

CAISO

- CAISO02 Sunrise
- CAISO03 Blythe-Devers
- CAISO04 Tehachapi Upgrade

SSPG

- SSPG02 SWIP South
- SSPG05 TCP Harry Allen - Northwest
- SSPG06 TCP Northwest – Amargosa

SWAT

- SWAT01 PV-NG#2
- SWAT06 Pinal Central – Tortolita
- SWAT07 Southeast Valley (SEV)
- SWAT08 PV - Morgan

CCPG

- CCPG02 Pawnee – Smoky Hill
- CCPG03 Waterton- Midway
- CCPG04 San Luis Valley

NTTG

- NTTG01 Gateway South Phase 1
- NTTG02 Gateway Central Phase 1
- NTTG03 Gateway West Phase 1
- NTTG05 Hemingway – Boardman
- NTTG06 Cascade Crossing

CG

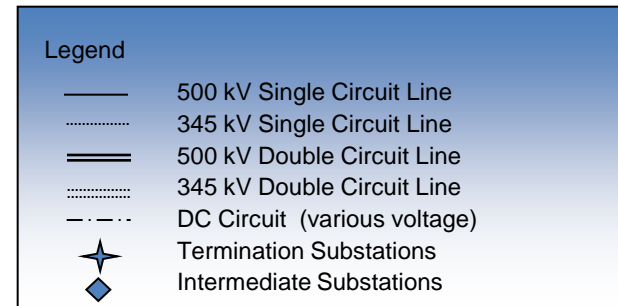
- CG01 I-5 Corridor
- CG02 West McNary
- CG03 Big Eddy – Knight
- CG04 Little Goose Area Reinforcement

BCH

- BCH01 Nicola – Meridian
- BCH03 BC-US Intertie

Alberta AESO

- AESO03 1202L Conversion
- AESO04 Heartland
- AESO05 West HVDC
- AESO06 East HVDC
- AESO07 Fort McMurray - East Line
- AESO08 Fort McMurray - West Line



(1) Map does not reflect 230 or 240 kV lines that are included in the Foundational Transmission Project List.
 (2) Internal reinforcements projects not shown for clarity.
 (3) Lines shown are for illustrative purposes only and may not reflect final line routing.

OASIS: Open Access Same-Time Information System



CG Members that Operate an OASIS

- Avista (AVAT)
- BPA (BPAT)
- Puget (PSEI)

OASIS – Near term enhancements

- Allow for Transmission Service Requests (TSRs) to be submitted through CG's OASIS Portal



The screenshot shows the OASIS portal interface. At the top is a navigation menu with various tabs: Reservations, Sys Data, Offerings, Resale, NITS/NLS, Reductions, Data, Company, Home, Help, Logout, PSEM_cg1, and PSEM. Below this is a secondary menu with tabs: Ancillary, Offerings, Security, Deals, CG Deals, Schedules, Notices, User, Bulletin, Options, and Auction. The main content area features a 'Select Provider' dropdown menu, a 'Documents' section with a search bar, and a 'Documents' list. The main text area contains a notice from ColumbiaGrid stating that it is not a transmission provider and that eligible transmission customers should continue to access individual Transmission Provider OASIS sites. It also includes a 'BACKGROUND' section and links to Avista Corporation and Bonneville Power Administration OASIS and Transmission Services pages.

ColumbiaGrid is not a transmission provider. Eligible Transmission Customers seeking transmission service must continue to access individual Transmission Provider OASIS sites. Avista, BPA, and Puget Sound Energy are Transmission Providers and have their own OASIS sites on WestTrans which can be accessed through the Select Provider box in the upper left corner of this home page.

BACKGROUND
ColumbiaGrid is a non-profit membership corporation formed to improve the operational efficiency, reliability, and planned expansion of the Northwest transmission grid. As part of our goal to improve efficiency, signatories to the OASIS functional agreement have agreed to establish a presence on OASIS. ColumbiaGrid and its OASIS parties will post relevant information on this home page from time to time. ColumbiaGrid will continue to develop a tool whereby transmission customers can access individual transmission providers through a common portal. This tool is under development. Further information about ColumbiaGrid and its OASIS & Transmission Services program can be found at www.columbiagrid.org. Helpful links to transmission related information for OASIS Functional Agreement parties are listed as follows:

Avista Corporation
OASIS: <http://www.oatioasis.com/avat/index.html>
Transmission Services: <http://www.avistautilities.com/inside/resources/pages/transmissionservices.aspx>

Bonneville Power Administration
OASIS: <http://www.oatioasis.com/bpat/index.html>
Transmission Services: <http://www.transmission.boa.gov/>



Other Activities

- Joint Initiatives (ColumbiaGrid, NTTG and WestConnect) – Primary purpose is to facilitate wind generation integration
 - Dynamic Scheduling System (DSS)
 - Intra-hour Scheduling Business Practices between Balancing Authorities
 - Intra-hour Transaction Accelerator Platform (I-TAP)
- Wind Integration Study Team (ColumbiaGrid and NTTG)
 - Addressing technical limits to dynamic transfers
 - Evaluating the benefits of accession of the report “Relative Northwest Benefits of Local vs. Remote Wind Generation”
- Open Season Scoping
 - handle transmission service requests that span several transmission providers
 - Goal is to have a proposal by end of 2010

A photograph of a modern building with a prominent curved glass facade. The building features brick accents and large windows. In the foreground, there is a paved area, a green lawn, and several trees and bushes. The overall scene is bright and clear.

Questions?