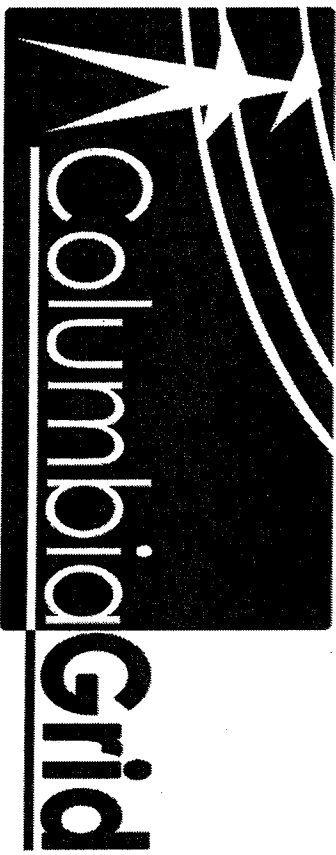


ME 072296



Washington Utilities and Transportation
Commission

Update Meeting

December 18, 2007



ColumbiaGrid: A Regional Transmission Entity

- ColumbiaGrid seeks to coordinate use and expansion of participating transmission networks through transparent processes.
- A nonprofit membership corporation with operationally independent board designed to provide integration and coordination services to its members and other participants.



Board of Directors

- **Operational independence**
 - Directors elected to work on behalf of the collective membership, not individual members.
 - ColumbiaGrid acts as an independently-governed contractor for multi-party services, as provided in bylaws and functional agreements.



Members

- Avista
- Bonneville Power Administration
- Chelan County PUD
- Grant County PUD
- Puget Sound Energy
- Seattle City Light
- Tacoma Power
- Standing invitation to other Northwest control areas.



Means

- Members have funded corporate start-up and overheads in the early-years .
- Individual multi-party Functional Agreements define programs that ColumbiaGrid operates.
- Parties to each Functional Agreement receive defined services and have obligation to fund the cost of that program in proportional manner.
- Program participants not limited to members. New participants can join at any time.
- Recognized value for the input of Interested Persons



Scope of Services

- Members, in open process, determine future services and roles for ColumbiaGrid to perform.
- ColumbiaGrid empowered to develop and bring ideas to members for potential future services.
- Current services:
 - Planning and Expansion of Transmission
 - Reliability investigative work
 - OASIS (pending signatures)



Where We are Now

- First year of operation:
 - Grew company to ten full-time employees plus half-dozen consultants.
 - Permanent office space plus adding on.
 - New website.
 - Two programs in operation (Planning & Expansion and developmental Reliability)
 - Another program, OASIS, about to activate.



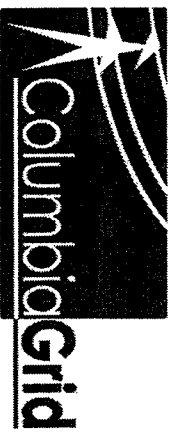
Planning Agreement Overview

- Open, inclusive process produces Biennial Plan that assesses reliability and identifies needed expansion of participating transmission systems.
- Emphasis on solving issues relating to firm load service and other firm obligations.
- Staff will actively seek to involve other entities when it appears that they might be impacted.



Planning Program Benefits

- “Single Utility” planning approach across utility boundaries
- Biennial transmission plan in region’s “best interest”
- Transparency and stakeholder participation
- Independent facilitation and approval with mechanism to “push” construction of needed projects.
- Consistent with and supportive of traditional Northwest approach of cooperation and collaboration
- Improves NW ability to integrate renewable resources across multiple systems



Planning Activities

- Biennial Plan
- West of McNary Project
- I-5 Corridor Project
- Major Northwest Project Interaction
- Wind Generation Integration
- Puget Sound Area Study Team



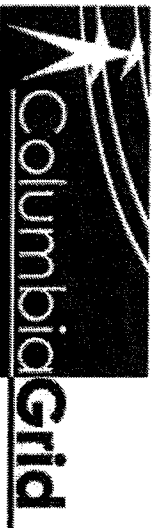
Biennial Plan

- Goal is a coordinated northwest-wide transmission expansion plan.
- Covers the next 10 years
- Developed a consolidated list and model of all individual transmission projects
- Currently analyzing the model to identify reliability issues. Additional projects will be developed as needed to address any identified reliability issues.
- Draft Biennial Plan to be submitted to Board in December of 2008



Proposed West of McNary Project

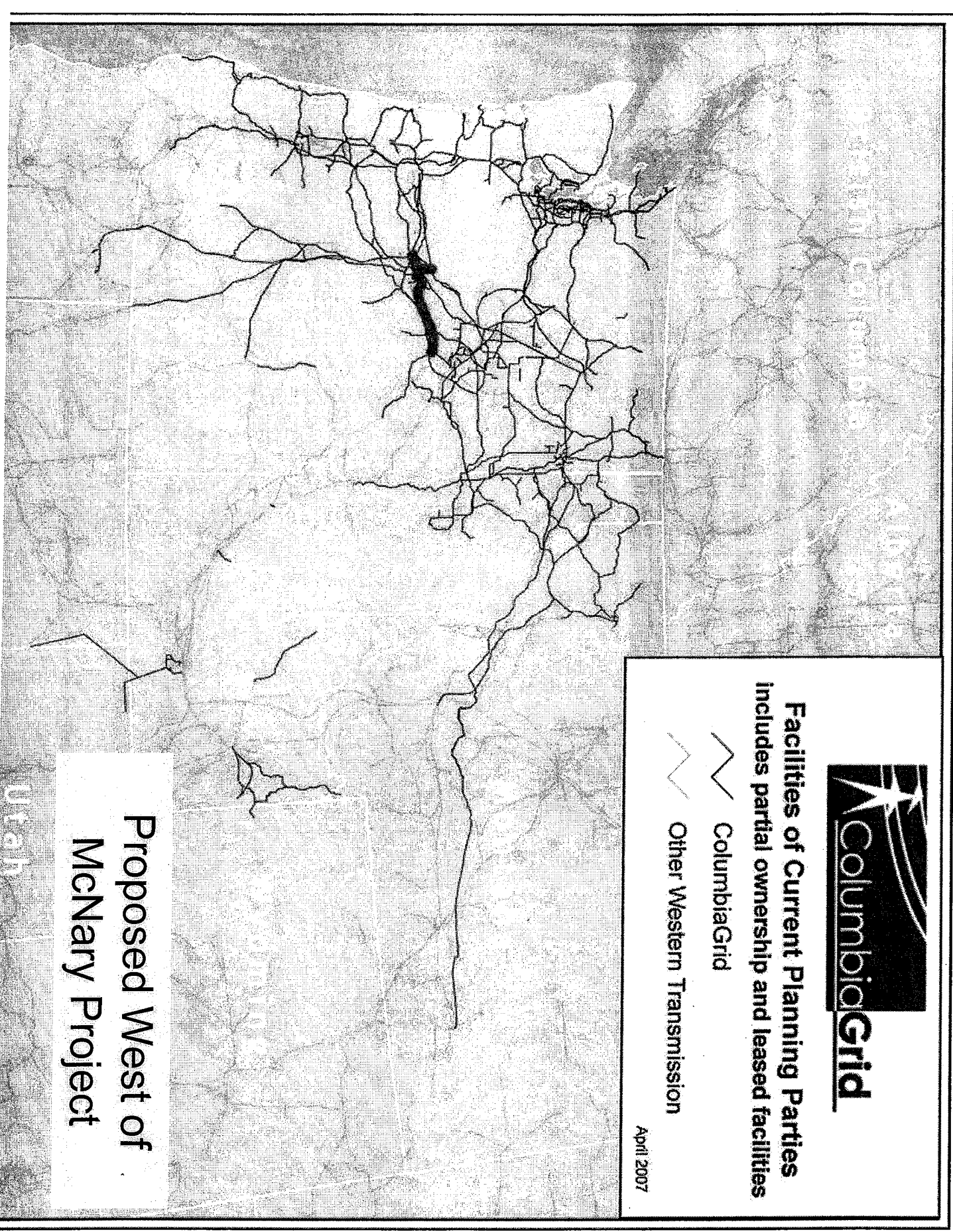
- McNary-John Day 500 kV line (75 miles) and Big Eddy-Station Z 500 kV line (28 miles)
- Will integrate additional generation (primarily wind) into the grid
- ColumbiaGrid is completing the Western Electricity Coordinating Council Regional Planning Process
 - Plan to submit the report to WECC by end of December.
 - ColumbiaGrid will request that WECC approve the report at their March Planning Coordination Committee meeting
- McNary-John Day could be in-service in 2012 and Big Eddy-Station Z could be in-service in 2013-14



**Facilities of Current Planning Parties
includes partial ownership and leased facilities**

-  ColumbiaGrid
-  Other Western Transmission

April 2007



**Proposed West of
McNary Project**

Utah



Proposed I-5 Corridor Project

- Paul-Troutdale 500-kV line (70 miles)
- Addresses congestion that occurs between the Seattle and Portland areas by increasing transmission capability by 600 MW to 1000 MW.
- ColumbiaGrid is completing the Western Electricity Coordinating Council Regional Planning Process
 - Plan to submit the report to WECC by end of January 2008.
 - ColumbiaGrid will request that WECC approve the report at their March Planning Coordination Committee meeting
- Will require 5+ years to permit and build (2013)

Alberta
Saskatchewan
Columbia
British Columbia

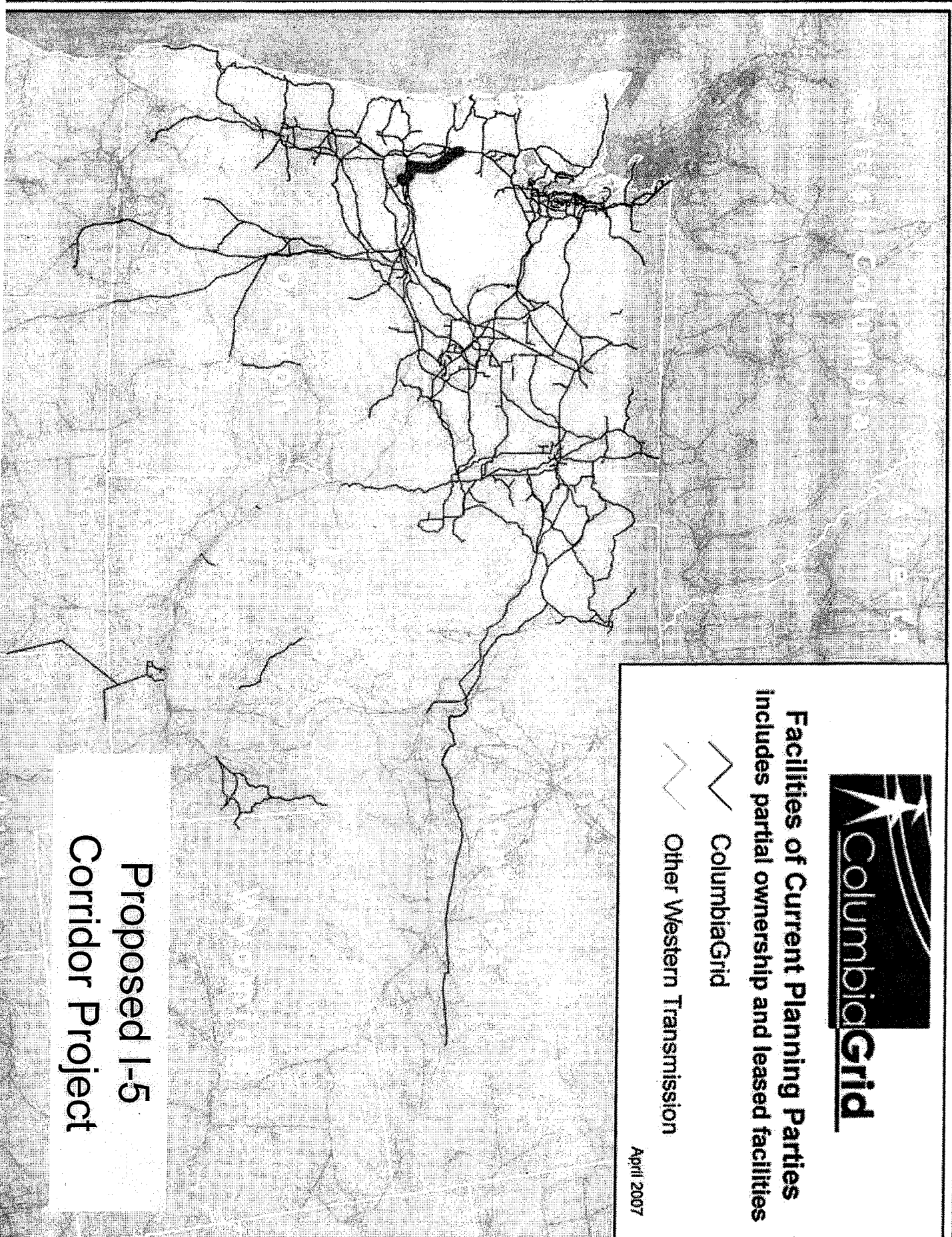


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-  ColumbiaGrid
-  Other Western Transmission

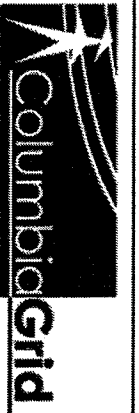
April 2007

**Proposed I-5
Corridor Project**



Grid Integration Assessment – Northwest Transmission Projects (GIANT Projects)

- Potential new study effort to Investigate the interaction of the following major transmission Projects:
 - I-5 Corridor Project
 - West of McNary Generation Integration Project
 - Northern Lights Project
 - Southern Crossing Project
 - Canada to Northern California Project
 - Hemmingway to McNary Project
 - Hemmingway to Captain Jack Project
- ColumbiaGrid will work with others to determine how best to integrate these projects into the Northwest power grid.

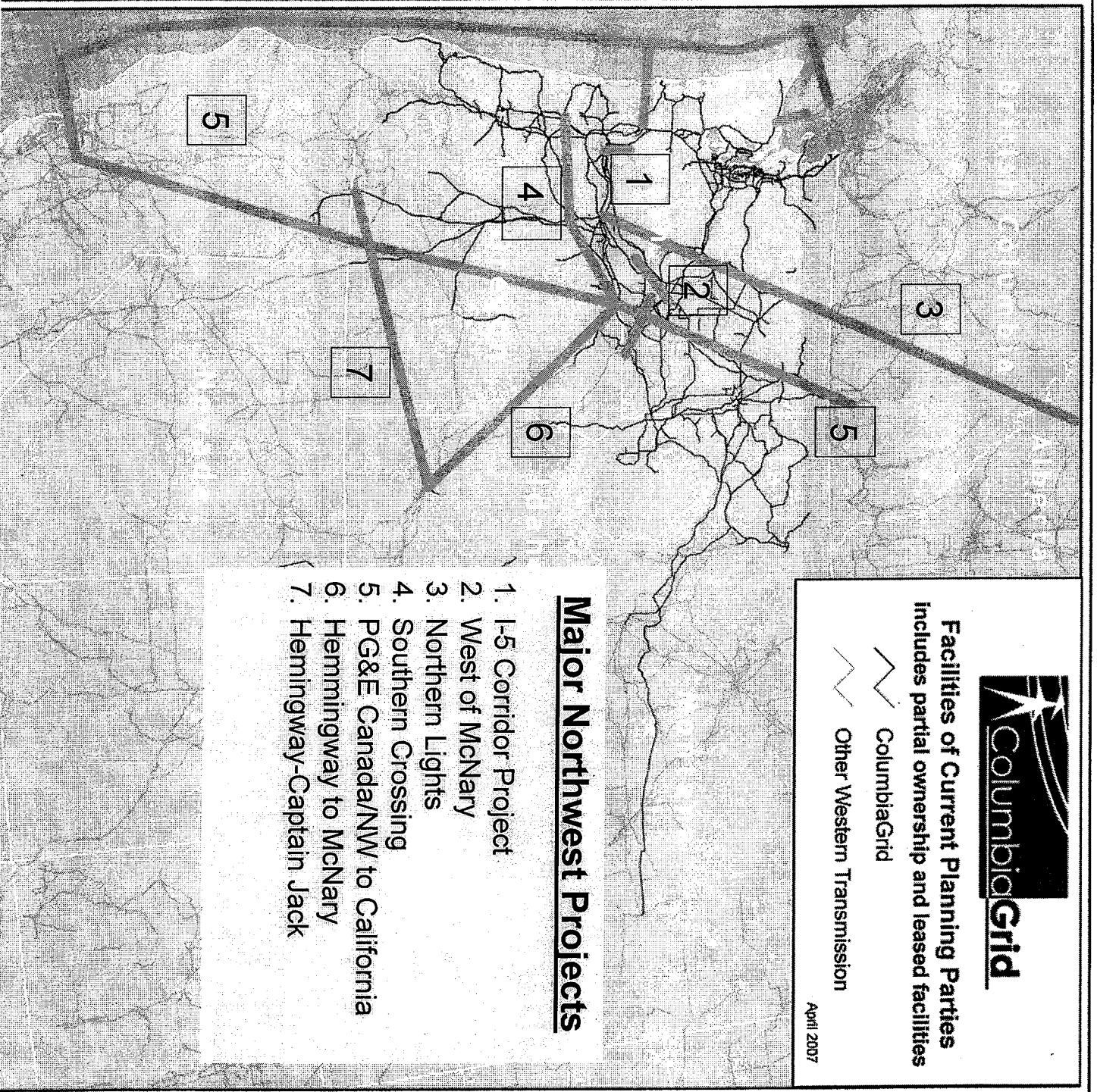


**Facilities of Current Planning Parties
includes partial ownership and leased facilities**

 ColumbiaGrid

 Other Western Transmission

April 2007



Major Northwest Projects

1. I-5 Corridor Project
2. West of McNary
3. Northern Lights
4. Southern Crossing
5. PG&E Canada/NW to California
6. Hemmingway to McNary
7. Hemingway-Captain Jack



Wind Integration Study Plan

- Developing Wind Generation Assumptions for Biennial Plan
 - Working with various entities (Northwest Power and Conservation Council, Transmission Owners, regulatory entities, and generation developers)
- Potential future work as identified in the “Northwest Wind Integration Action Plan”
 - Develop a transmission planning methodology that seeks a balance between the cost of transmission capacity and the value of delivered wind energy.
 - Apply this transmission planning methodology to regional transmission planning.



Puget Sound Area Study Team

- The Puget Sound Area transmission system cannot always meet customer demands. Bulk power transfers may need to be curtailed or customers service can be disrupted.
- Risk is greatest during the Winter with high South-to-North firm transfer conditions
- Transmission system maintenance scheduling problems have become more challenging
- ColumbiaGrid Study Team formed in September 2007 to address Puget Sound Area transmission issues and develop a long-term plan. This work will be integrated into the biennial plan.



Development and Staffing Reliability Functional Agreement (DSRFA)

- Research several reliability-enhancing initiatives as basis for future long-term Reliability Program:
 - NWPP's ACE Diversity Interchange (ADI) program
 - BPA's Redispatch Pilot Project analysis
 - WECC's Westwide System Model (WSM) program
 - NWPP's Transmission Outage Coordination program
- Recommend possible improvements/ applications for ColumbiaGrid footprint. Preliminary reports due this month.
- Final reports due before agreement expires in March 2008.



OASIS Program

- To be signed and effective in January, □2008.
- Very quickly establish single ColumbiaGrid point-of-entry web interface to participants' OASIS and transmission information web pages.
- Begin work towards common ATC methodology and eventually toward a multi-system ATC posting.
- Begin work towards common transmission and interconnection service request queuing methodologies.



Longer-Term Services

- **Regional transmission services:**
 - Centralized scheduling using physical transmission rights (with protection of existing contract rights).
 - Operation of a voluntary flow-based transmission market.
 - Reconfiguration services for the sale of existing contract rights.