
TODAY'S WESTERN

Crisis or Renaissance?

The State of America's Energy

Sioux Falls, SD

May 12, 2009



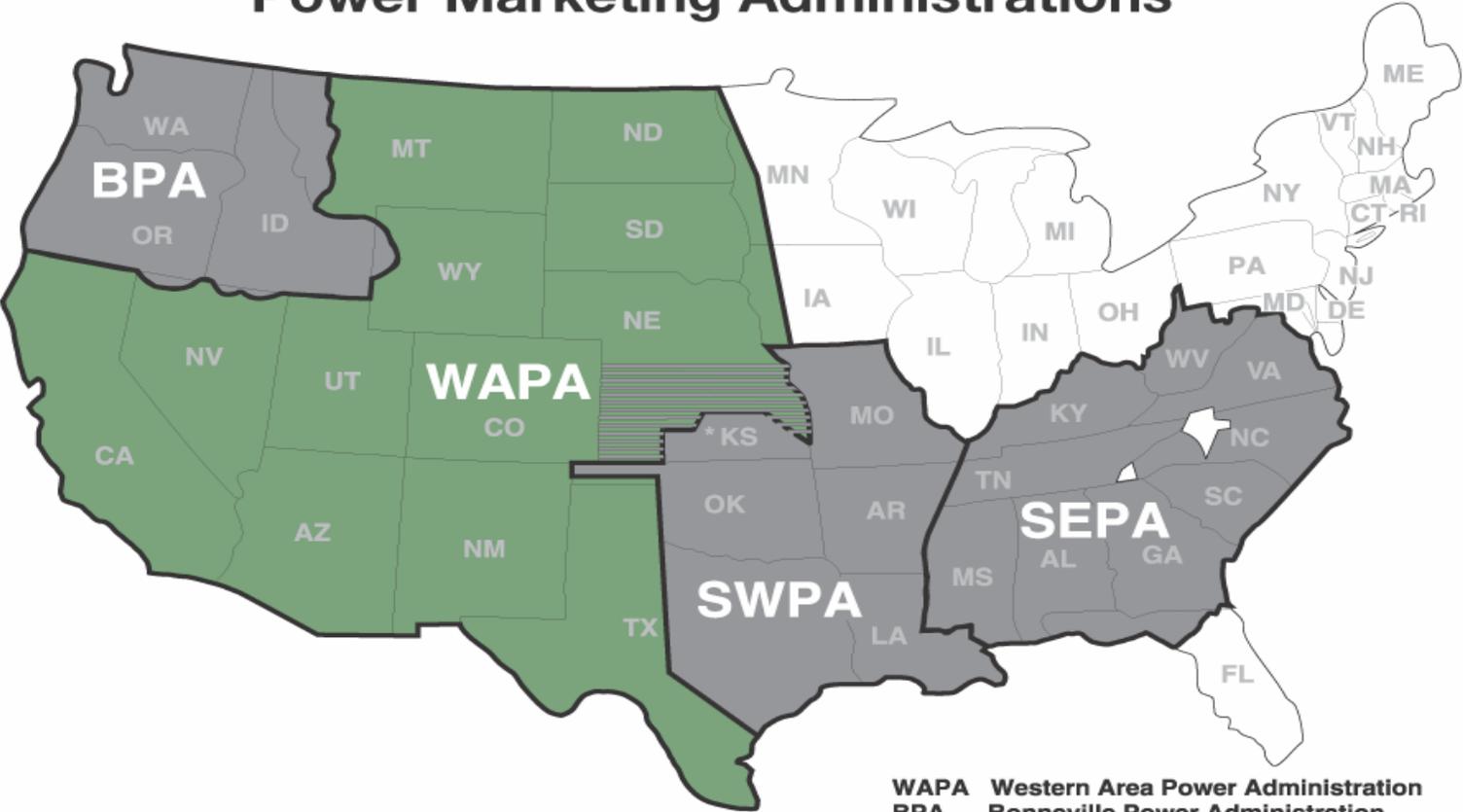
Topics

- **Western Area Power Administration Overview**
- **Wind Hydro Integration Feasibility Study**
- **Upper Great Plains Wind Energy Programmatic EIS**
- **American Recovery & Reinvestment Act**
- **Questions/Comments**



Western Area Power Administration

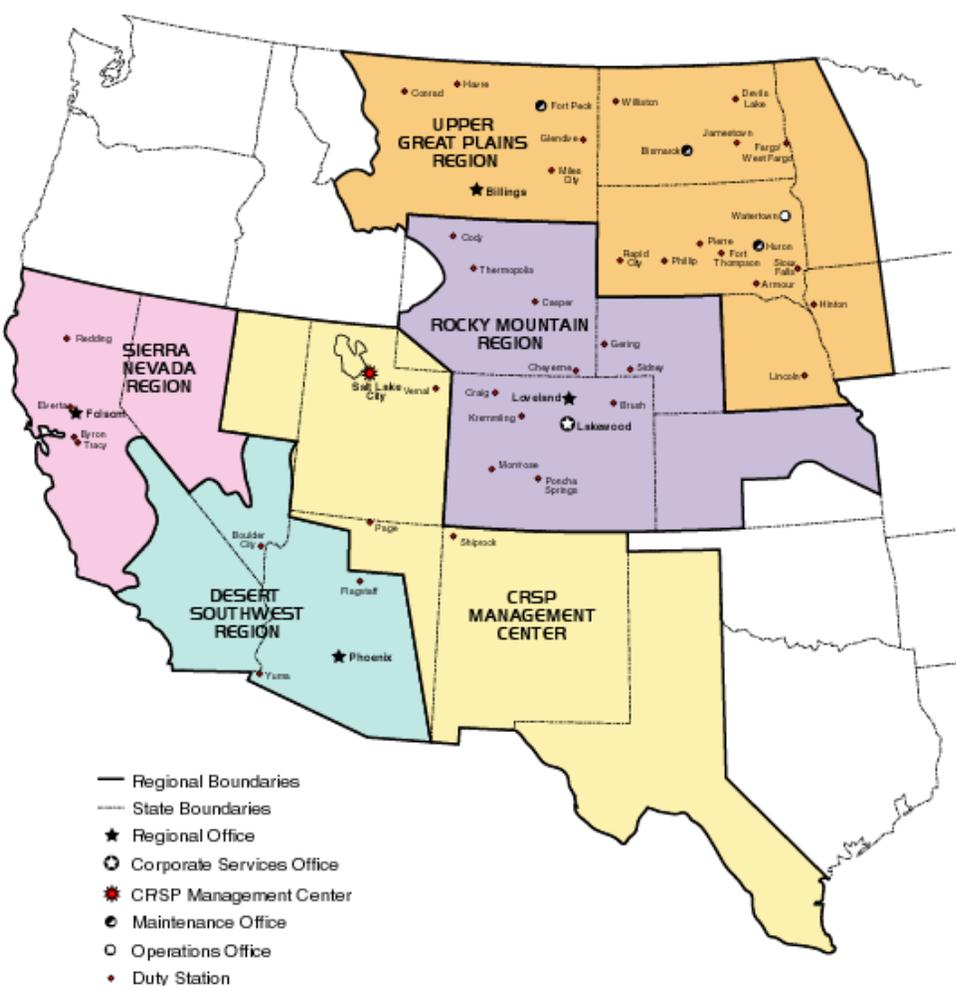
Power Marketing Administrations



WAPA Western Area Power Administration
BPA Bonneville Power Administration
SEPA Southeastern Power Administration
SWPA Southwestern Power Administration

* Note: Both Western and Southwestern market power in Kansas.

Western Area Power Administration



- 15 States
- 56 Federal Power Plants
- Market & Deliver 10,395 MW
- 17,000+ circuit miles
- 270 subs



Western Area Power Administration

Long standing mission to market and deliver energy from Federal hydro

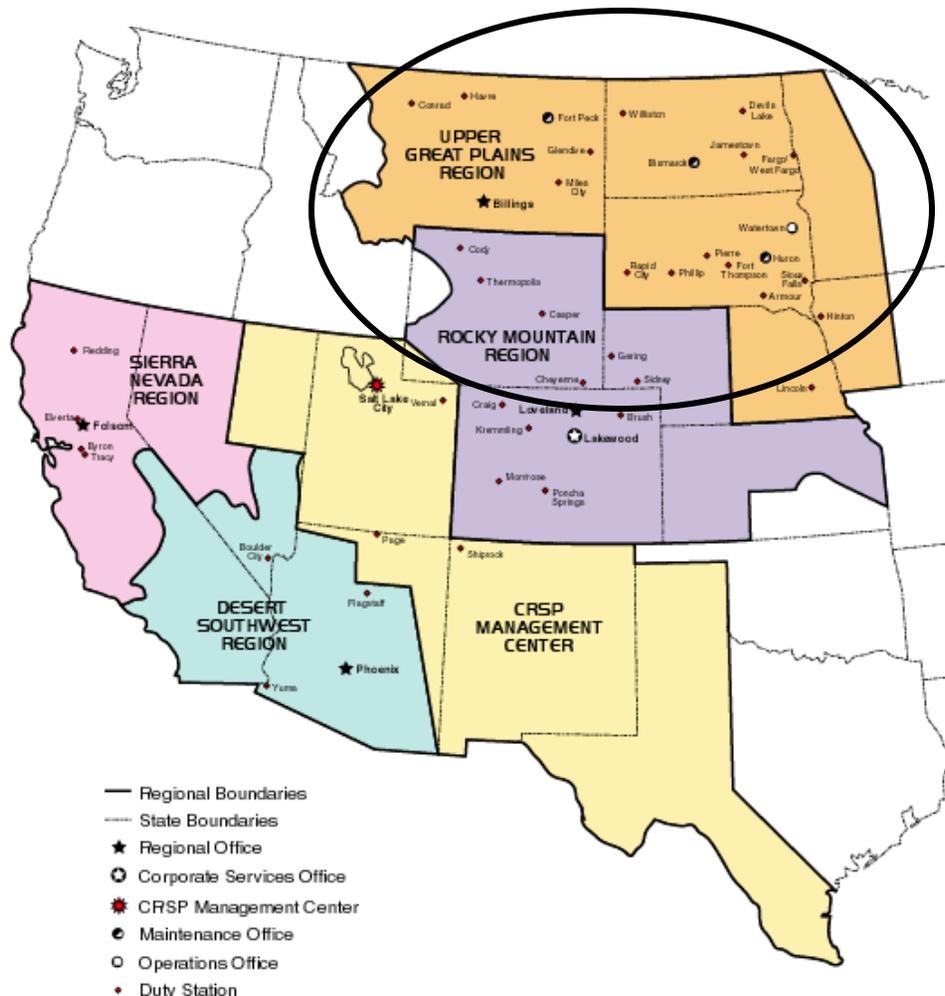
- Rates are cost-based to repay all associated expenses with interest
- Western's 670 preference customers include municipal utilities, rural electric cooperatives, public utility districts, Federal agencies, State agencies, irrigation districts, and Native American tribes.

Transmission historically limited by Federal statute:

- Deliver Federal hydroelectric energy
- Provide open access on unused capacity
- Until now, no authority to build solely to facilitate other transmission needs



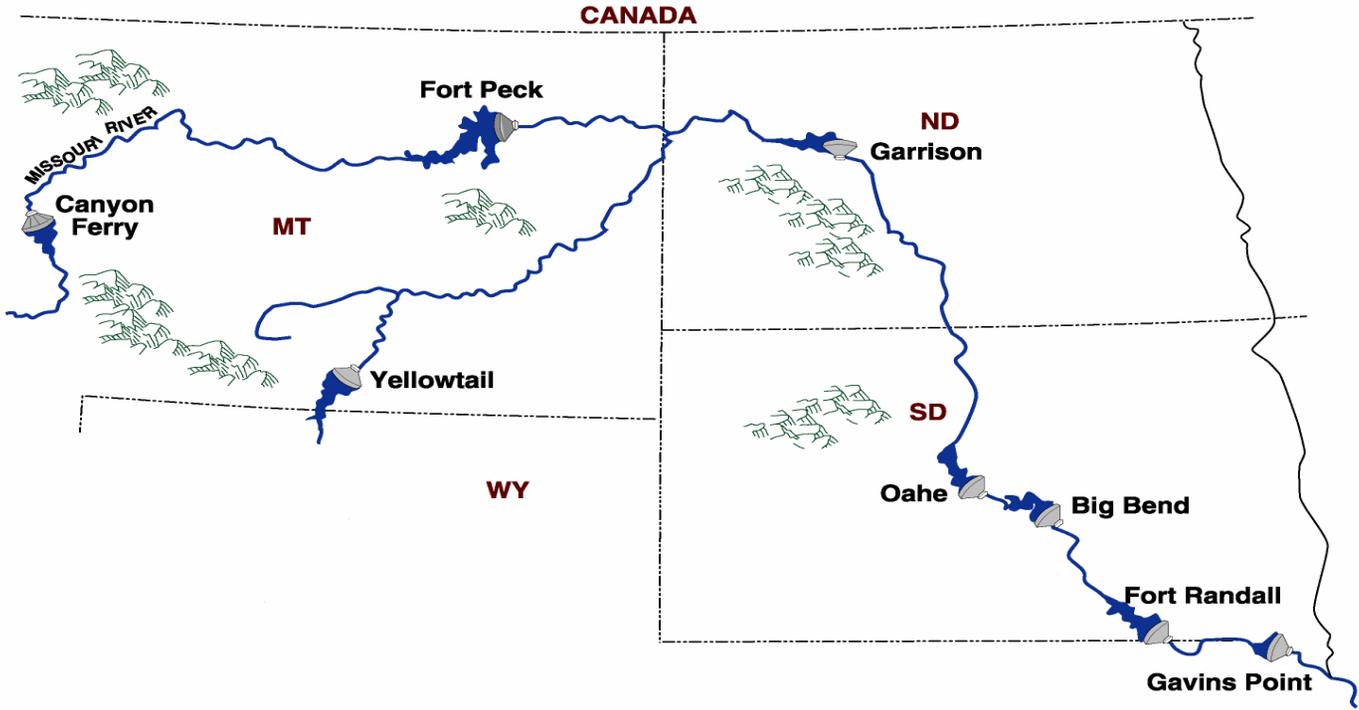
Upper Great Plains Region



- 6 States
- 8 Federal Power Plants
- Approx. 2000 MW
- 300+ Customers
- 8000 miles
- 105 subs



Hydro Facilities



Wind Hydro Integration Feasibility Study



Wind Hydro Integration Feasibility Study

- EPA Act 2005, Section 2606
- Objective – “Study the cost and feasibility of developing a demonstration project...”
- Three components
 - Physical Integration
 - Operational Integration
 - Economics



Wind Hydro Integration Feasibility Study

- **Formation of Project Team**
 - **March 2007 – Invitation to all Tribal and non-Tribal customers**
 - **May 2007 – Project Team formed**
 - **Blackfeet Tribe, Fort Peck Tribes, Santee Sioux Tribe**
 - **Intertribal Council on Utility Policy**
 - **HCPD, NPPD, Rushmore Electric**
 - **BOR, COE, NREL**



Wind Hydro Integration Feasibility Study

Work Plan

- **Six Work Elements (WE)**
 - WE1, Work plan development
 - WE2, Analysis of historical operations
 - WE3, Wind project identification
 - WE4, Transmission system evaluation
 - WE5, Assessment of impacts (economics)
 - WE6, WHFS Draft and Final report preparation



Wind Hydro Integration Feasibility Study

- **Draft Feasibility Study Report**
 - **Public comment Period Dec 15, 2008 - Feb13, 2009**
 - **Public Information forum held on Jan 13, 2009, Rapid City, SD**
- **Recommendations include:**
 - **Demonstration Project not to exceed 50MW nameplate capacity, if authorized and funded**
 - **Any costs of the demonstration project beyond what Western have paid for like energy should not be borne by Western's ratepayers**
 - **Additional study is required to refine the economic saturation point for wind to serve Western load**



Wind Hydro Integration Feasibility Study

Benefits of a Demonstration Project

- **A 50 MW Tribal Wind project would:**
 - **Provide an opportunity to develop and test standards and terms for mutually beneficial Federal/Tribal/Customer partnerships**
 - **Provide long term benefits from a source of renewable energy**
 - **Mitigate a portion of the uncertainty of future energy costs**
 - **Produce economic benefits of renewable development on tribal lands**
 - **Enhance energy security through reduction of dependency on fossil fuel energy**



Wind Hydro Integration Feasibility Study

- Project Team is working to address the comments received during comment period.
- Prepare, approve, submit final report to Congress.

For more information:

- <http://www.wapa.gov/ugp/PowerMarketing/WindHydro/Default.htm>



Upper Great Plains Region Wind Energy Programmatic EIS



Upper Great Plains Region Wind Energy Programmatic EIS

**Notice of Intent published in the Federal
Register on Sept. 11, 2008**

Lead Federal Agencies

- **Western Area Power Administration**
- **US Fish and Wildlife Service**



Upper Great Plains Region Wind Energy Programmatic EIS



Upper Great Plains Region Wind Energy Programmatic EIS

Why is this EIS being prepared?

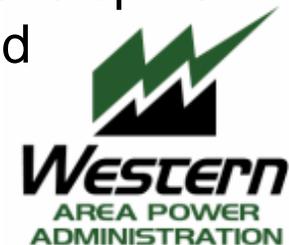
- NEPA requires that an EIS be prepared for major Federal actions with a potential for significant impacts on the environment.
- Western and USFWS have determined that a programmatic EIS is appropriate to evaluate establishing specific programs and policies related to wind energy within the UGPR.
- Increasing wind development.



Upper Great Plains Region Wind Energy Programmatic EIS

What is a Programmatic EIS?

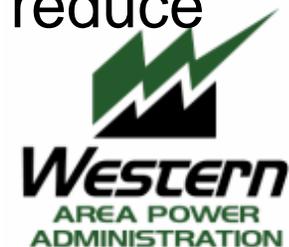
- A programmatic EIS evaluates the environmental impacts of broad agency actions, such as the development of programs or the setting of nation policies.
- Does not evaluate specific project.
- Instead, it considers:
 - Generic impacts of actions – i.e. wind energy development and interconnection to the transmission grid, and
 - Identifies applicable mitigation measures.



Upper Great Plains Region Wind Energy Programmatic EIS

Proposed Action (Objective)

- Establish a comprehensive environmental program for evaluating proposed wind-energy projects that would connect to Western's transmission system and/or that would be placed on Fish and Wildlife Service wetland or grassland easements in the Upper Great Plains Region.
- Identify mitigation strategies, standard construction practices, and best management practices to reduce potential environmental impacts.



Upper Great Plains Region Wind Energy Programmatic EIS

Process

- **Public Scoping Meetings – Completed Fall 2008**
 - Sioux Falls, Bismarck, and Billings
- **Consultation and involvement with Federal, State, and local agencies, and Tribal governments**
- **Publication of draft PEIS – Summer 2009**
 - Public review and hearings
- **Publication of final PEIS – 2010**
- **Publication of agency-specific Record of Decisions – 2010**



Upper Great Plains Region Wind Energy Programmatic EIS

For more information:

- <http://plainswindeis.anl.gov>



American Recovery & Reinvestment Act – Section 402

Proposed Transmission Infrastructure Program



ARRA – Section 402

Two New Authorities for Western

- Signed into law Feb. 17, 2009
- Permanent authority
- Build or participate in transmission projects to facilitate delivery of energy generated by renewable energy resources.
- Borrow up to \$3.25B from U.S. treasury.



ARRA – Section 402

Administrator's Message -

“It is clear there is a need for new transmission in the West, and I am incredibly proud of the role Western is being asked to play to help strengthen our nation’s infrastructure and support energy independence.”

- From Western’s 2/18/09 Press Release...



ARRA – Section 402

Purpose:

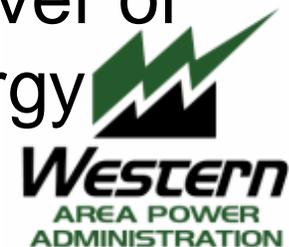
“Constructing, financing, facilitating, planning, operating, maintaining, or studying construction of new or upgraded electric power transmission lines and related facilities with at least one terminus within the area served by Western Area Power Administration” (Section 402)



ARRA – Section 402

Specific Requirements:

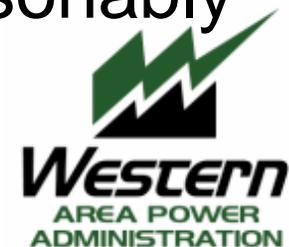
- Repay treasury loans with interest
- For repayment, keep projects under new authority separate from existing projects
- Western may partner with other transmission developers
- Facilities built or financed must deliver or facilitate delivery of renewable energy resources



ARRA – Section 402

Prior to committing funds, Western must certify:

- The project is in the public interest
- The project does not adversely impact reliability or operations, or other statutory obligations
- Revenue from the project is reasonably expected to repay the loan.



ARRA – Section 402

Two Federal Register Notices - March 4, 2009

1. Transmission Infrastructure Program (TIP)
Develop policies and practices.
2. Request for Interest (RFI)
Identify proposed transmission projects.

Public consultation and comments invited.

- Public meeting held March 23, 2009 in Denver, CO



ARRA – Section 402

Consultation and Comment Period
ended April 3, 2009.

Western received:

- Over 40 comments on the proposed Transmission Infrastructure Program.
- Over 100 proposed transmission projects.



ARRA – Section 402

For more information:
www.wapa.gov/recovery



Thank You

