Renewable Resources:
Supporting Customer Energy Choices

DOE Tribal Energy Program Review

LaVerne Kyriss
Western Area Power Administration
November 17, 2008
Western overview

- Markets 10,000 MW of hydropower
- 15 states
- 671 wholesale power customers
  - 87 tribes
- Marketing plans, rates are project-specific
- Power rates are cost-based and lower than other generation sources
- No load growth responsibility—but we purchase energy to firm up hydro contractual commitments
Western’s Service Territory

Project Marketing Areas

Tribal customers
CVP 2
PD 4
LAP 5
P-S 28
SLCA/IP 54
Services for Tribes

- Power customers
  - LAP, P-S resource pool allocations
- Transmission service
- Rights of way
- Renewable energy
  - Tribal energy development
- Energy Services
  - Tribal wind equipment loans
Transmission Overview

- 17,000+ miles of transmission
- $201 M transmission revenue
- 300 substations
- 444 comm sites
- 3 balancing authorities/4 primary, 4 back-up control centers
- $1 B annual revenue
Open Transmission Access

- Always had open access
- Open Access Transmission Tariff adopted voluntarily
- OATT amended to incorporate large generator procedures, small generator procedures, wind interconnection technical standards
Western and Renewables

- Primary goal: Assist customers in meeting their needs
- DOE partnership/Tribal support
- REC purchases
- Use IRP for long-term purchases
- Study participant
- 300+ MW wind interconnected
- 69 wind interconnection requests/14,000+ MW
Sucesses with Renewables

• Assist with Rosebud Sioux wind project
• ICOUP Tribal energy interest solicitation
• Promote customer renewables
• 496,000 MWh of RECs in 2007
• WGA energy initiatives
• ES Website: www.wapa.gov/es
• REpartners: www.repartners.org
  – Technology transfer workshops
  – Webinars
Renewables for Federal Agencies

- Western acts as agent for other Federal agencies in acquiring renewable energy and certificates/green tags
  - Annual call to agencies (spring), RFP for RECs (summer)
- EPA, DOE, Air Force, Army
- More than 439,000 MWh of tags acquired by Western in 2007
- Could help agencies meet EPAct purchase goals
EPAct 2005: Sections 503 and 2605

• Tribal power allocation study
  ➢ to study use of PMA power and barriers
  ➢ recommend ways to improve hydropower delivery

• Report delivered to Congress in 2007
  ➢ Summarizes PMA-specific actions taken to reduce barriers
  ➢ Identifies tribal allocations
EPAct 2005: Section 2606

- Study on the feasibility of a demonstration project to supply tribal wind to firm Missouri River hydro
- Analysis of costs, benefits including energy security
- Joint study by Energy, Corps and Interior
- Draft report expected to be available for public comment end of 2008
**EPAct 2005: Section 203**

- No national portfolio standard enacted
- Federal Purchase Requirement “to the extent economically feasible and technically practicable” of escalating renewable energy amounts (3-7.5%, starting 2007)
- Double credit for renewables produced on Indian land and used at Federal facility
- Could influence transmission needs
Key learnings

• Improved ability to work with developers
• Staff better understand tariff, interconnection issues
• Continuing partnerships with customers, trade associations, DOE, industry, states, others
Renewable Initiatives

• Potential initiatives identified
• Continuing conversation about Western’s role
• Agency prioritization completed; incorporated into Western’s strategic plan
• Adequate resources needed
• Goal: No adverse impact on existing customers
Current initiatives

- UGP programmatic wind EIS
- UGP Tribal wind study
- NPA wind study
- Wind Interconnection Workshop, Webinars
- Tribal lands transmission availability study
- WGA REZ
- 1222 Solicitations of Interest
UGP Wind PEIS

- Joint project with FWS, RUS cooperating
- Scoping ended Nov. 10, 2008
- Western’s UGP service territory
  - IA, MN, MT, NE, ND, SD
- Address “generic” impacts, concerns
- Ongoing government-to-government tribal consultation
- Project info: http://plainswindeis.anl.gov
EPAct 2005: Section 1222

• Western authorized to upgrade or construct new transmission facilities if:
  - In a national interest electric corridor
  - Congestion is reduced
  - Necessary to meet increased demand
  - No duplication of existing or proposed facilities

• Third party financing allowed, but capped at $100,000,000 through 2013

• Complementary to existing construction authority

• Solicitation of Interest planned
Ongoing Renewable Initiatives

• WestConnect wind/solar study
• Consumer-owned Utility Wind Energy Integration cost-share program
• APA wind-hydro integration analysis
• Renewable data provider role for WREGIS, M-RETS
• Wind interconnection workshop, Jan 21-23
  – Some support available for interested tribes
  – Contact Randy Manion, 720-962-7423, manion@wapa.gov
Key Areas of Future Focus

• Alleviate transmission congestion
• Integrate wind into the grid
• Expand partnership with Native American tribes to foster economic development
Actions within existing authority

• Adopt renewables-friendly transmission services: In progress
• Conduct project-specific wind-hydro integration studies: In progress
• Expand our role in acquiring renewable resources/green tags: In progress
• Identify existing and planned tribal generation for purchase or marketing by Western: In progress
Actions: Existing Authority

• Be flexible in allowing use of hydro allocations by tribes

• Encourage regional integrated resource planning: In new IRP rules

• Develop customer tools for IRP public participation: Completed

• Programmatic EIS on wind in Missouri River basin: In progress
Possible Actions with New Authority

- Construction of transmission for delivery of renewables: Reid legislation proposed; AWEA white paper, etc.
- Nonreimbursable funding for purchase of firming energy priced above market
- Renewables revolving fund
- Renewable Energy Fund