

Ft Peck Assiniboine & Sioux Tribes Poplar, Montana



DOE Grant Projects Status Report:

1. Wind Development Project
2. Energy Options Analysis

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Wind Project



- Two 50KW wind turbines erected July 2006 near tribal headquarters complex
- \$354,000 grant from DOE (2003)
 - Original plan for a single 600KW wind turbine
 - Revised plan for two smaller turbines to meet State of Montana Public Services Commission requirements for net bill metering

Wind Project

- Two 50 KW Turbines
- 80 ft SSV Towers
- 363,000 KW-Hr annually
- \$30,000 annual savings
- > 15 mph avg wind
- Capacity factor ~ .4
- Complies with MT PSC requirements for net bill metering



Wind Project



- Wind resource assessment and planning began in 1995
- FT Peck reservation has class “4” to “6” winds (some sites with > 21 mpg avg winds)
- “Best” sites have over 5 years of 40 meter tower wind data
- Utility scale wind farms in planning stages

Energy Options Analysis



- DOE grant for \$95,000 (2005)
 - Task 1 Develop Energy Strategic Plan
 - Task 2 Energy Options Analysis
- Leveraging of Funds
 - HUD grant for \$300,000 for tribal staff capacity building
 - HUD grant for \$300,000 for demonstrating innovative “green housing” in two to four homes for low-income families

Energy Strategic Planning



- Planning efforts led by Economic Development Committee of Tribal Executive Board
 - Supporting Tribal departments:
 - Water Resource Office
 - Planning Office
 - Municipal, Rural, & Industrial Water Project
 - Natural Resources
 - Environmental Protection

Strategic Energy Plan



- Priority Goals & Objectives
 - Economic Development
 - Job Creation
 - Resource Development with Sustainability
 - Respect for the Environment
- Recent Planning Results
 - Created Tribal Energy Office
 - Interim Director is Lee Abbott

Energy Options Analysis



- Ongoing Analysis
 - Evaluating response to State of MT utility scale wind development opportunity
 - Reviewing energy support for a regional irrigation water project development
 - Developing options for utilization of unused portion of WAPA hydropower allocation
 - Monitoring western MT demonstration feasibility study for a coal to liquids fuel facility

Energy Options Analysis



- Developing library of past energy resource assessment studies and energy project proposals on Ft Peck reservation:
 - Solar, Wind, Geothermal, Coal, and Oil & Gas
- Future Analysis Topics:
 - Impacts of national rights-of-way study
 - Security of energy infrastructure

Conclusions



- Energy Strategic Plan nearly finished
- Energy Options Analysis Study is a good start, but much is left to be done
- Grant Successes:
 - Two wind turbines now in operation
 - Tribal Energy Department started
 - DOE grants leveraged for follow-on actions