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