Northern Cheyenne Tribe
30 MW Wind Energy Development Grant

Renewable Energy Development on Tribal Lands

Andrew Elkshoulder, Tribal Planner

Dale Osborn, President
Distributed Generation Systems, Inc. (Disgen) Contractor
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Discussion Outline

Project Overview
Objectives
Project Location
Project Participants
Status

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**Project Objectives**

- Complete all the development steps and contracts necessary to finance, construct and operate and maintain a 30 MW wind facility on Tribal Trust Lands.

- **Create maximum economic development through Tribal Ownership, if possible, of resulting projects.**
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Project Location

• Colstrip coal fired power plant is 25 miles to the north.
• Site can accommodate a 30 megawatt wind facility locally and a 150+ megawatt facility for export power.
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Project Participants

• Northern Cheyenne Tribe
  – Program Director, Andrew Elkshoulder, Tribal Planner

• Contractor
  – Distributed Generation Systems, Inc. (Disgen)
    • Dale Osborn, President
    • Ed McCarthy- Meteorological studies
    • Western EcoSystems Technology, Inc.-Avian assessment
    • Krista Gordon- Transmission review
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Completed Pre-Construction Development
• Completed Wind Studies and prepared report
• Completed site layout
• Completed photo-simulations
• Completed environmental field studies
• Completed draft Environmental Assessment
• Completed initial interconnection studies
• Completed initial power purchase agreement form
• Completed initial project economic pro-forma

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**Complete Pre-Construction Development (2)**

- Completed inventory of wind turbine costs
- Identified potential power purchasers
- Negotiated with Southern Montana G&T and TRECO
- Interfaced with Rural Utilities Services (RUS) for non-recourse debt
- Identified potential tax investor partners
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Transmission Analysis

• Interconnection analysis completed by Electrical Consultants Inc. (ECI).

• The 69kV interconnection will result in significant line losses to Colstrip (6%).

• Losses are included in the economic calculations.

• Small substation will be required and is included in the economics.
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Figure 1. Locations of proposed turbines, point count stations and the eagle survey route.
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Highway 212 from
Ashland to Lame Deer
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Power Purchase Agreement

• Expect a negotiated PPA with one of three entities

• Renewable Energy Credits (RECs) may be unbundled from physical energy and sold separately

• Premium pricing may be achieved from tribal RECs

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Project Finance Objectives

• Maximize Tribal Economic Benefits
• Eliminate Tribal Risk
• Avoid Need for Tribal Investment
• Allow No Tribal Debt
• Establish Tribal Employment Preference
• Utilize Production Tax Credits for Wind Energy
• Preserve Tribal Cultural Values
• Minimize Environmental Impacts
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**Action Items**

- Obtain NCT approval for LLC structure
- Find a committed Power Purchaser
- **Complete a Power Purchase Agreement**
  - Complete the facilities study for transmission
  - Obtain RUS approval for non-recourse loan or a debt guarantee from BIA