Renewable Energy Development
on
Tribal Lands

Andrew Elkshoulder, Tribal Planner

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Distributed Generation Systems, Inc. (Disgen)
Contractor

Discussion Outline

Project Overview

Objectives

Project Location

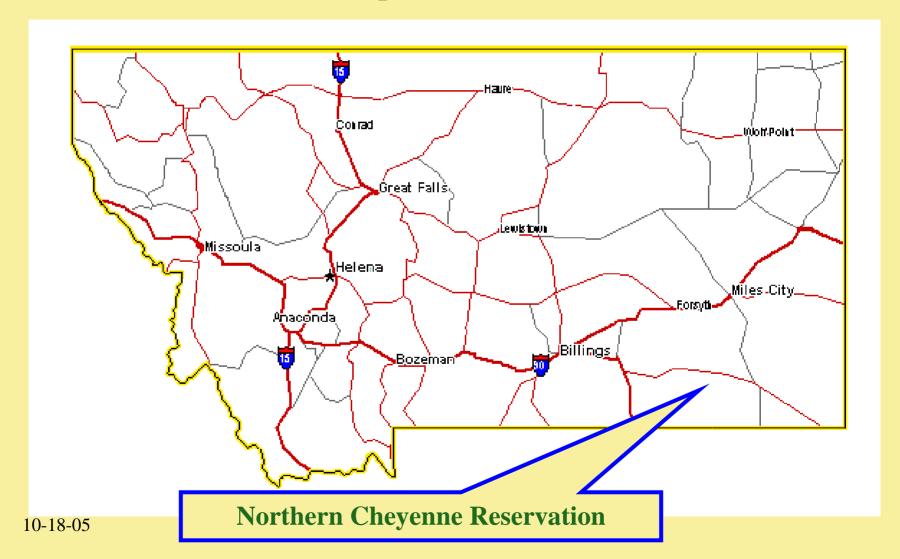
Project Participants

Status



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.
- <u>Create maximum economic development</u> through <u>Tribal Ownership, if possible, of resulting projects.</u>



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.

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

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

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 nonrecourse debt
- •Identified potential tax investor partners

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.

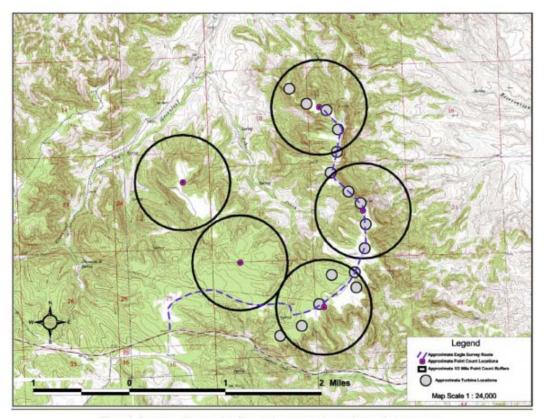
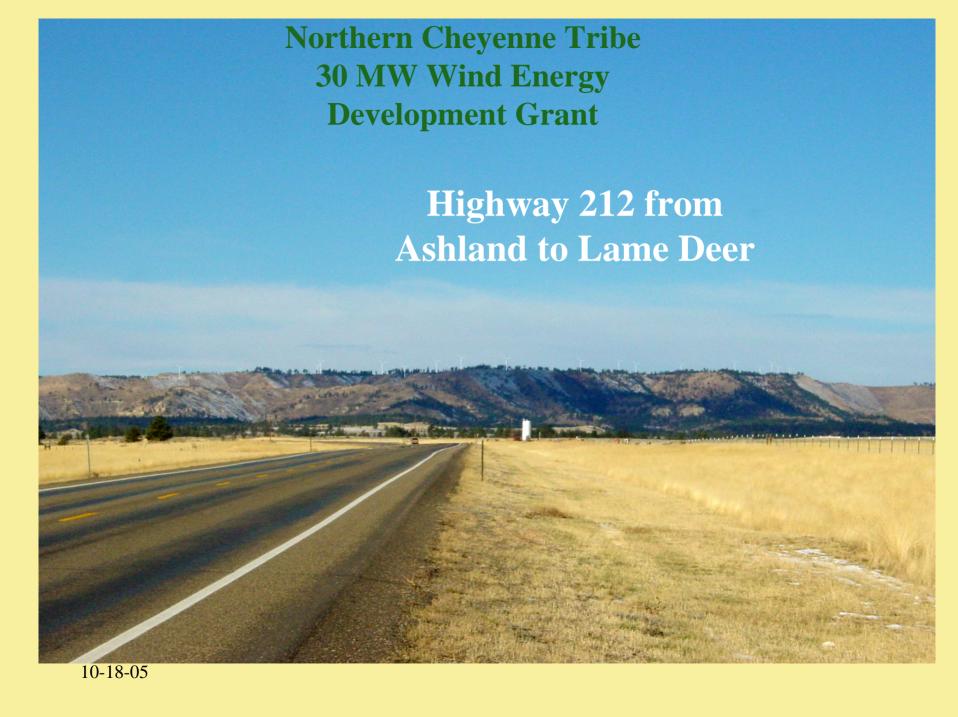


Figure 1. Locations of proposed turbines, point count stations and the eagle survey route.



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

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

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