

**Northern Cheyenne Tribe
30 MW Wind Energy
Development Grant**

**Renewable Energy Development
on
Tribal lands**

Joe Little Coyote, Sr., Tribal Planner

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

Northern Cheyenne Tribe 30 MW Wind Energy Development Grant

Discussion Outline

Project Overview

Objectives

Project Location

Project Participants

Requested Technical Support



10-18-04

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Project Overview

- Northern Cheyenne adopted a “Comprehensive Economic Development Strategy (CEDS) Planning Document” in 2001.
- CEDS mission is “To attain socio-economic independence through the development of a diversified and self-sustaining culturally appropriate reservation economy.”
- Northern Cheyenne Tribe has completed a wind energy feasibility study funded in 2002.
- The NCT Tribal Council passed a resolution to support a 30Mw wind facility and authorized the development grant application.

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Project Objectives

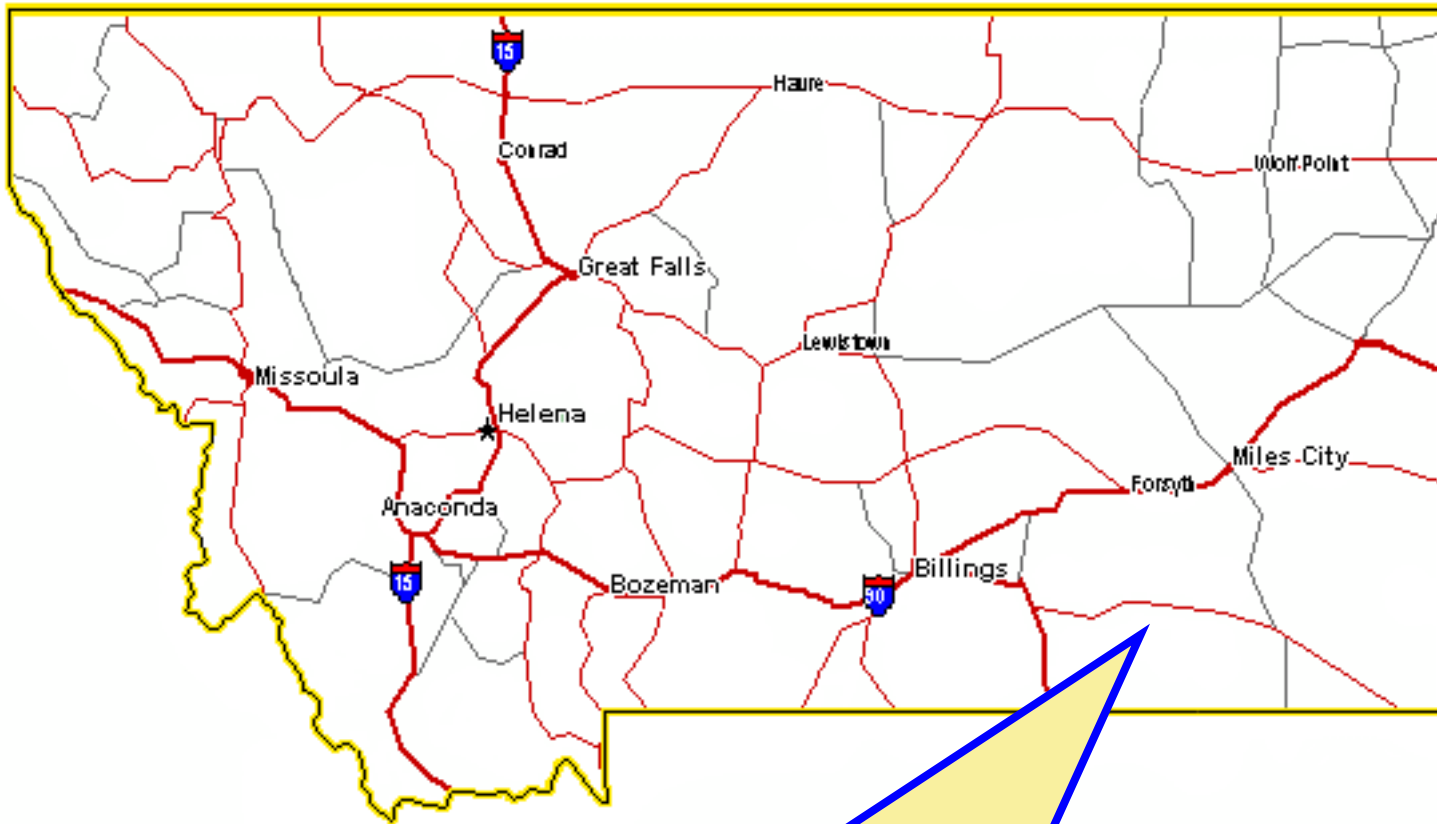
- 1. Complete all the development steps and contracts necessary to finance, construct and operate and maintain a 30 Mw wind facility on Tribal Trust Lands.**
- 2. Create maximum economic development through Tribal Ownership, if possible, of resulting projects.**

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Project Location

- **The Northern Cheyenne Reservation is located in southeastern Montana in Big Horn and Rosebud Counties.**
- **Tribal headquarters is located in Lame Deer, Montana.**
- **The wind site is a north-south plateau with an area of approximately 120 square miles.**
- **Meteorological studies have been conducted for ten years.**
- **A wind energy feasibility (DOE funded) has been completed.**

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Northern Cheyenne Reservation

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Project Location

- Colstrip coal fired power plant is 25 miles to the north.
- Transmission and interconnection study has been completed by Electrical Consultants Inc. (ECI).
 - 30MW to Tongue River can be achieved.
- 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 Nation**
 - **Program Director, Joe Little Coyote, Sr.**

- **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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Key Environmental Studies (I)

Completed Phase I Environmental Assessment:

No show-stoppers

Baseline Studies:

Avian Point Counts for Raptors

Raptor Nest Survey

Breeding Bird Survey

Vegetation Survey

Preparing Reports:

Baseline Study Report

Environmental Assessment (EA)

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**Key Environmental Studies (II)
Cultural Review**

Ethnographic Study:

Interviews with Elders conducted by NCT Members

Class I File and Literature Search

Class III Inventory and Report:

Archeological Survey

Paleontological Survey

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Transmission Analysis

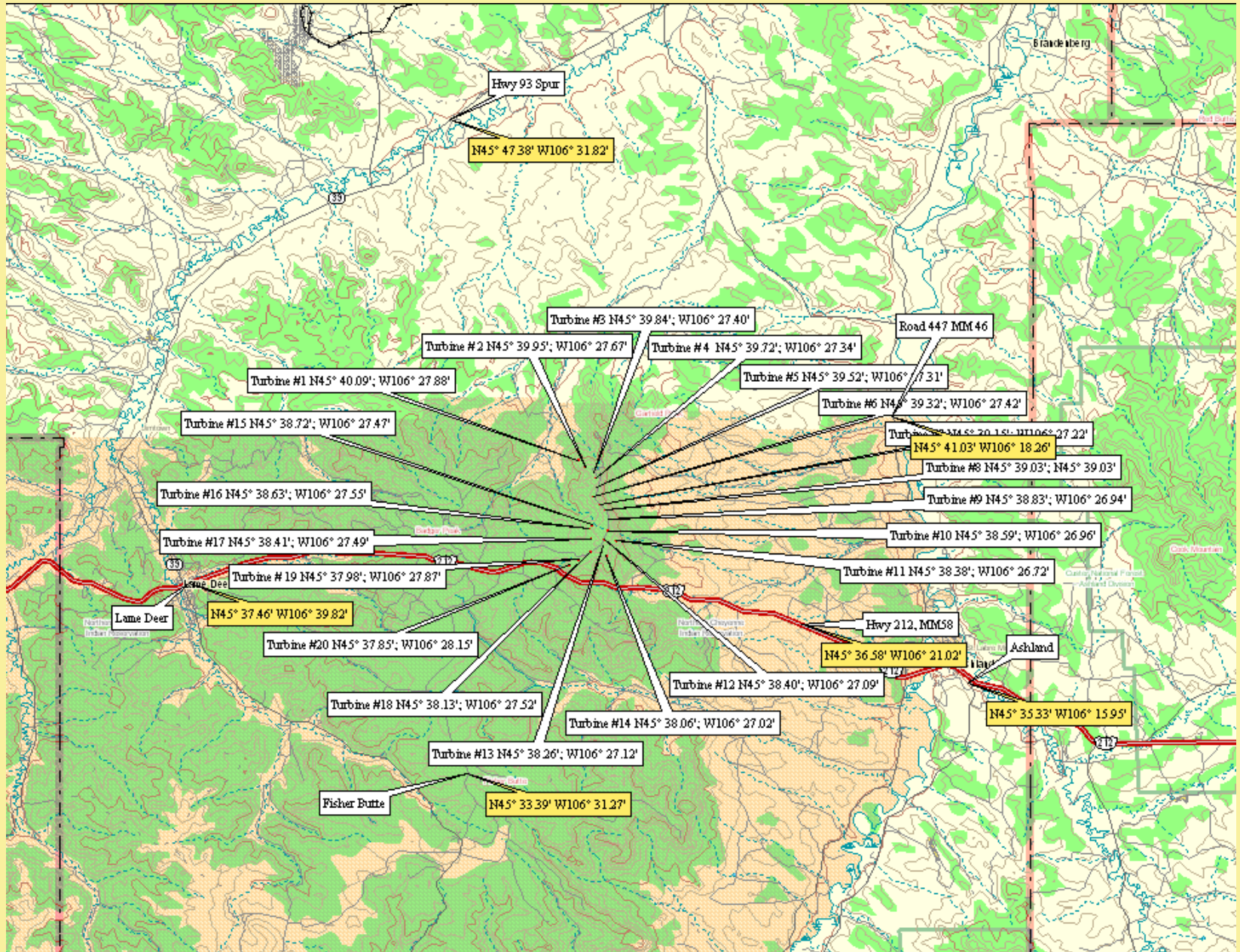
Interconnection analysis completed by Electrical Consultants Inc. (ECI).

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.

Photo-sim Locations



Facing West on HW 212 from Ashland



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Fisher Butte Road



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Required Contracts**

- **NCT land agreements**
- **NCT permits**
- **BIA permits**
- **Interconnection
agreement**
- **Taxation agreements**
- **Power sales agreement**
- **Financing agreements**

Northern Cheyenne Tribe 30 MW Wind Energy Development Grant Status

- **Completed Avian Studies with NCT, USF&WS and BIA**
- **Conducted several Scoping Meetings**
- **Completed Interconnection Studies**
- **Bid into two solicitations, not selected**
- **Project could be constructed in 2005**

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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**