

Owl Feather War Bonnet Wind Farm

Rosebud Sioux Tribe

Resource Development Office/Tribal Utilities Commission

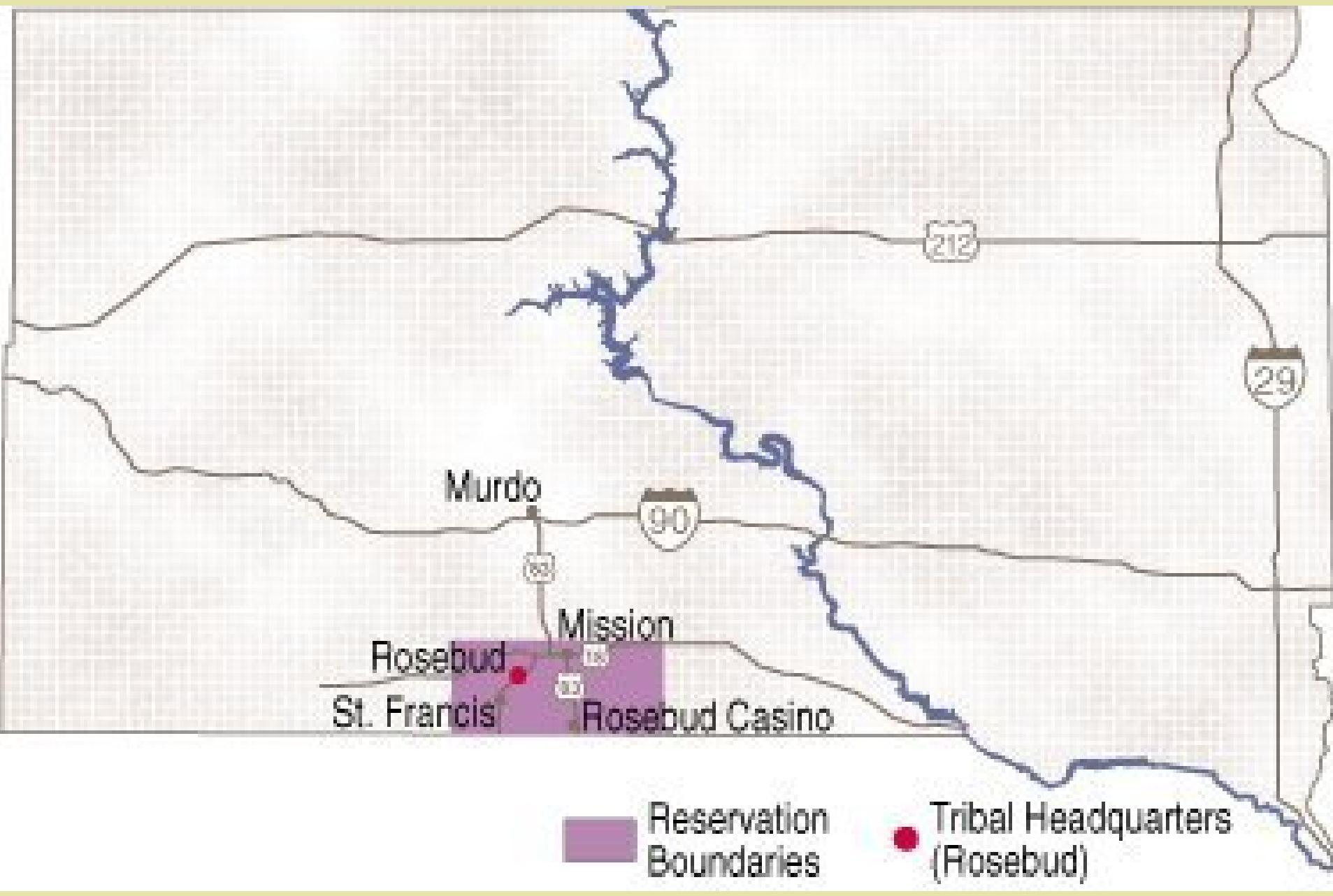
Distributed Generation Systems, Inc. (Disgen)

Dept. of Energy Pre-construction Activity Grant

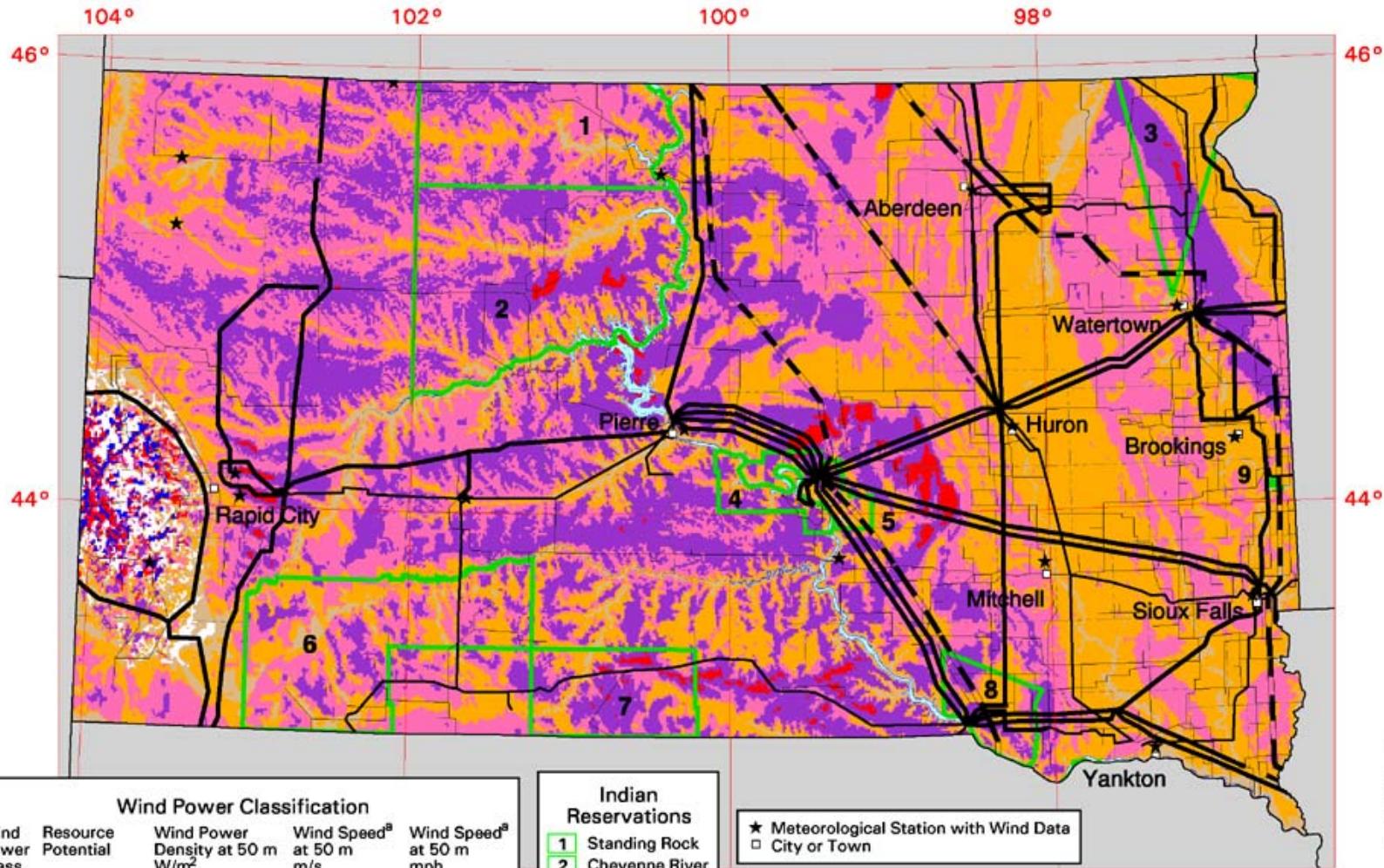
DOE Funding \$448,551.00

DISGEN Cost share/in-kind \$78,750.00

RST/TUC Cost share/in-kind \$27,272.00



South Dakota - Wind Resource Map



Wind Power Classification

Wind Power Class	Resource Potential	Wind Power Density at 50 m W/m ²	Wind Speed ^a at 50 m m/s	Wind Speed ^a at 50 m mph
2	Marginal	200 - 300	5.6 - 6.4	12.5 - 14.3
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7
7	Superb	800 - 1600	8.8 - 11.1	19.7 - 24.8

^a Wind speeds are based on a Weibull k value of 2.0

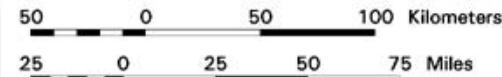
Indian Reservations

- 1 Standing Rock
- 2 Cheyenne River
- 3 Lake Traverse
- 4 Lower Brule
- 5 Crow Creek
- 6 Pine Ridge
- 7 Rosebud
- 8 Yankton
- 9 Flandreau

- ★ Meteorological Station with Wind Data
- City or Town

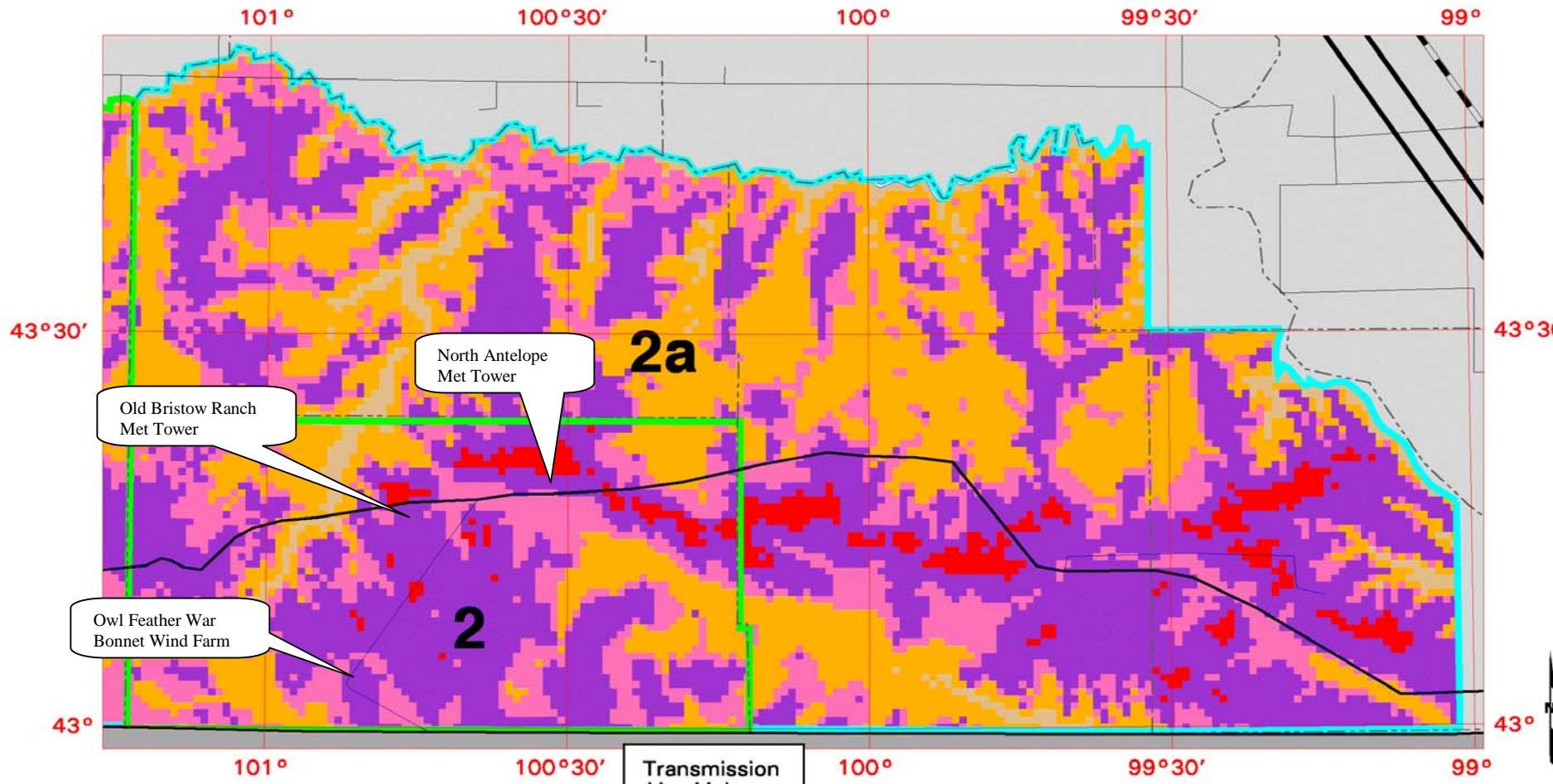
Transmission Line Voltage

- 69 Kilovolts
- 115 Kilovolts
- 230 Kilovolts
- 345 Kilovolts



U.S. Department of Energy
National Renewable Energy Laboratory

South Dakota - Rosebud Reservation Wind Resource Map and Capacity



U.S. Department of Energy
National Renewable Energy Laboratory



The Participants:

Rosebud Sioux Tribe, Resource Development

Phil Two Eagle, Resource Dev. Dir.

Ken Haukaas, Wind Farm Coordinator

Dr. Bill Akard, Sinte Gleska University, Cultural Resources

RST Tribal Utilities

Tony Rogers, Director

Distributed Generation Systems, Inc (DISGEN)

Dale Osborn, President

Chris Bergen, Project Manager (NEPA)

Bureau of Indian Affairs: Lead Agency, Aberdeen Area Office

Dianne Mann-Klager, Lead/Wildlife Biologist

Dr. Carson Murdy, BIA Archaeologist

RST Game Fish and Parks/Natural Resources

Stephanie Middlebrooks, Wildlife Biologist

U.S. Fish and Wildlife Service, Consulting Agency

Western EcoSystem Technology, Inc. (WEST)

Rhett Good, Environmental Consultant

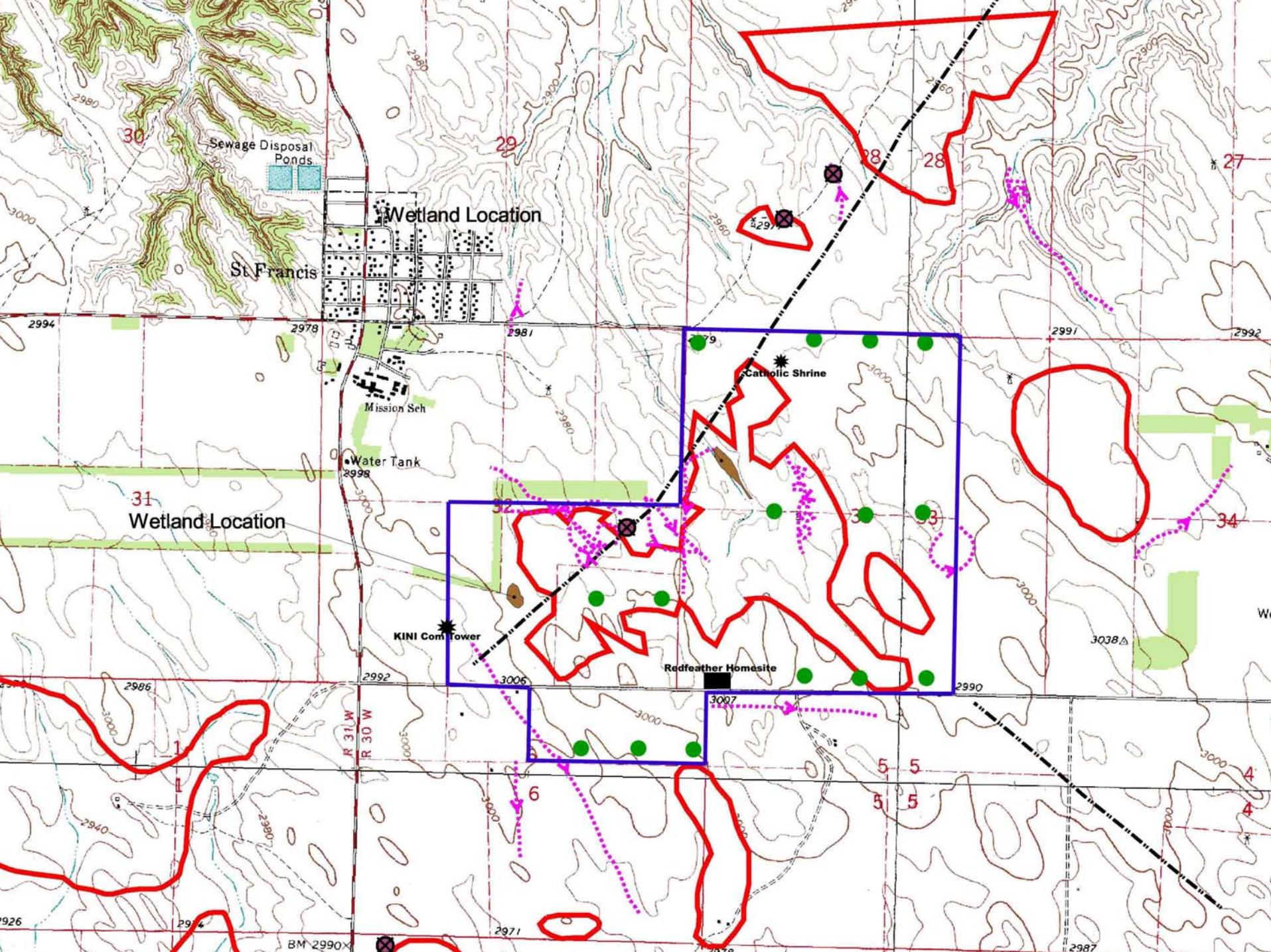
Photo Aerial of Project Area



Sections 32, 33, T37N R30W 680 acres

Source: Ken Haukaas RST Resource Development Office

DISGEN

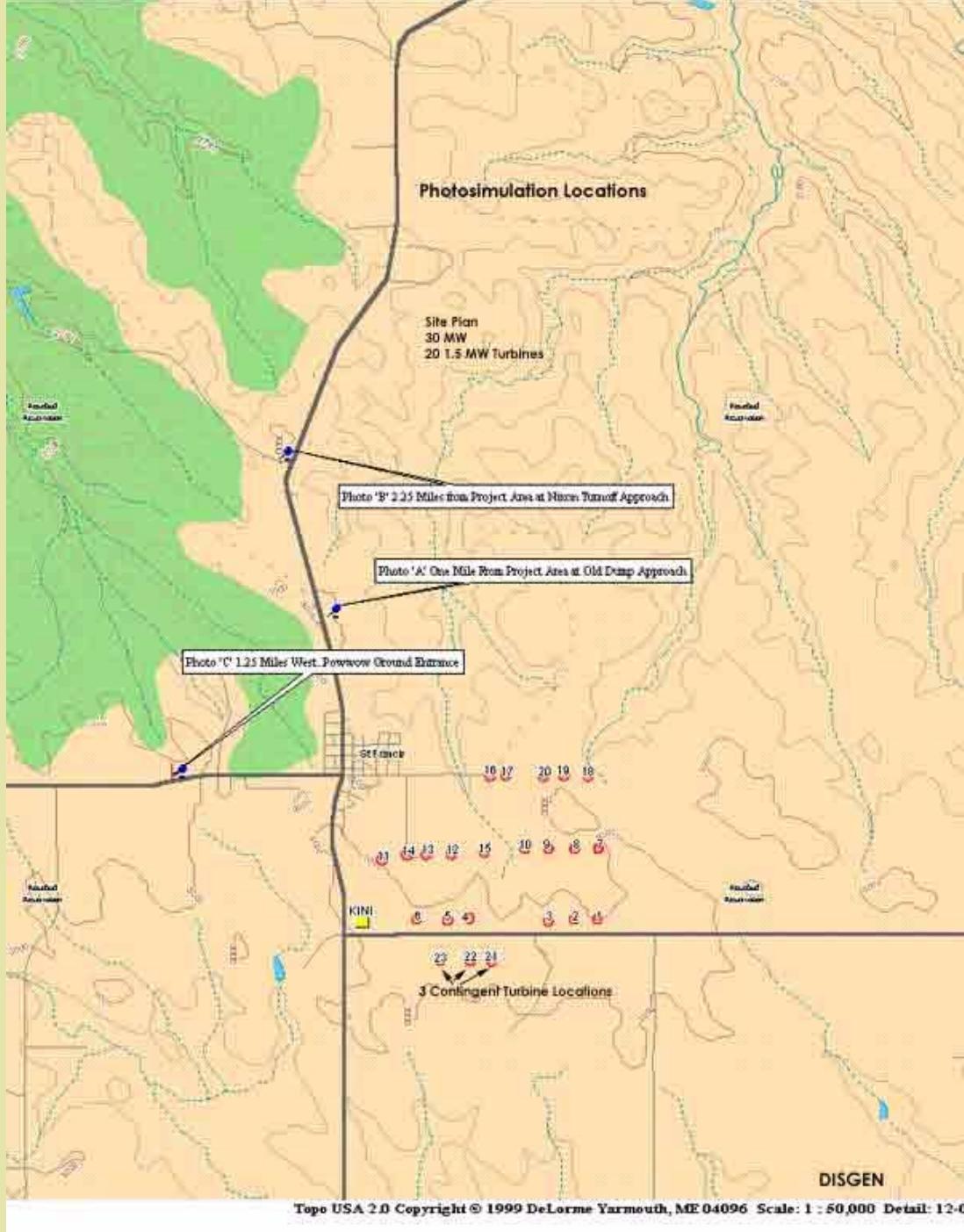


Wind Farm Site, looking East



Wind Farm Site, looking West





3 photo simulation locations

DISGEN

Photo from 1 Mile North of Project Area and St. Francis, at Old Dump Approach; Facing South by Southeast



Photo from 2.25 miles North of Project Area and St. Francis, at Eric Nixon turn off Approach; Facing South by South East

Note: 5 extra turbines



Photo from 1.25 Miles West of Project Area at Powwow Grounds Entrance Approach, Facing East by Southeast. St. Francis in Foreground.



Ecological Baseline study

Western EcoSystems Technology Inc.

1. A detailed avian study

Complete

2. Mapping of prairie dog towns

Complete

3. Grasslands bird survey

Complete

4. American Burying Beetle survey

Complete

5. Greater Prairie Chicken Lek Monitoring

Complete

6. Raptor nest Search

Complete

7. General wildlife observations

Complete

8. Bat survey

Complete

9. Flora survey

Complete



A Detailed Cultural Assessment

- Class I. File and literature search
(NEPA Requirement)

Requires a review of any and all records on the site through research of state and local records concerning investigations gathered in the past. *Conducted and completed by Dr. Carson Murdy BIA Archaeologist.*

Cultural Assessment Cont:

- Class III, Site Review
(NEPA Requirement)

A 100% intensive site surface review, which consists of walking over the whole 680 acres of area foot by foot.

140 acres completed by Dr. Carson Murdy BIA Arch., the other 540 acres, has been completed by Dr. Bill Akard along with staff and students of Sinte Gleska University 100% Complete

Cultural Assessment Cont: Ethnographic Interviews

- Interview elderly familiar with the area
- Gather oral history relevant on the site
- Insure to all that no culturally significant area will be disturbed
- Conducted by Lakota speakers with cultural resource management degrees and conducted in a confidential manner
- Not required by NEPA, but was felt it was quite appropriate and necessary to insure success

Ethnographic Findings & Recommendations

- Native language use area by school children
- Recommend 100% intensive survey of all 680 acres
- Identify, map and classify all medicinal plants and replant/reseed as much as possible those plants affected during construction
- Hire a qualified Cultural Resource Management specialist during all excavation work

Systems Impact and Interconnection Study

- Examines the local system to determine if the proposed project can be physically interconnected technically and if the local infrastructure can absorb the energy and capacity being proposed.

Develop the substation requirements for upgrading of the substation.



Conducted by Nebraska Public Power District, green light has been given to continue on process for interconnection, study now needs to know where power will be purchased. Power Purchase Agreement.

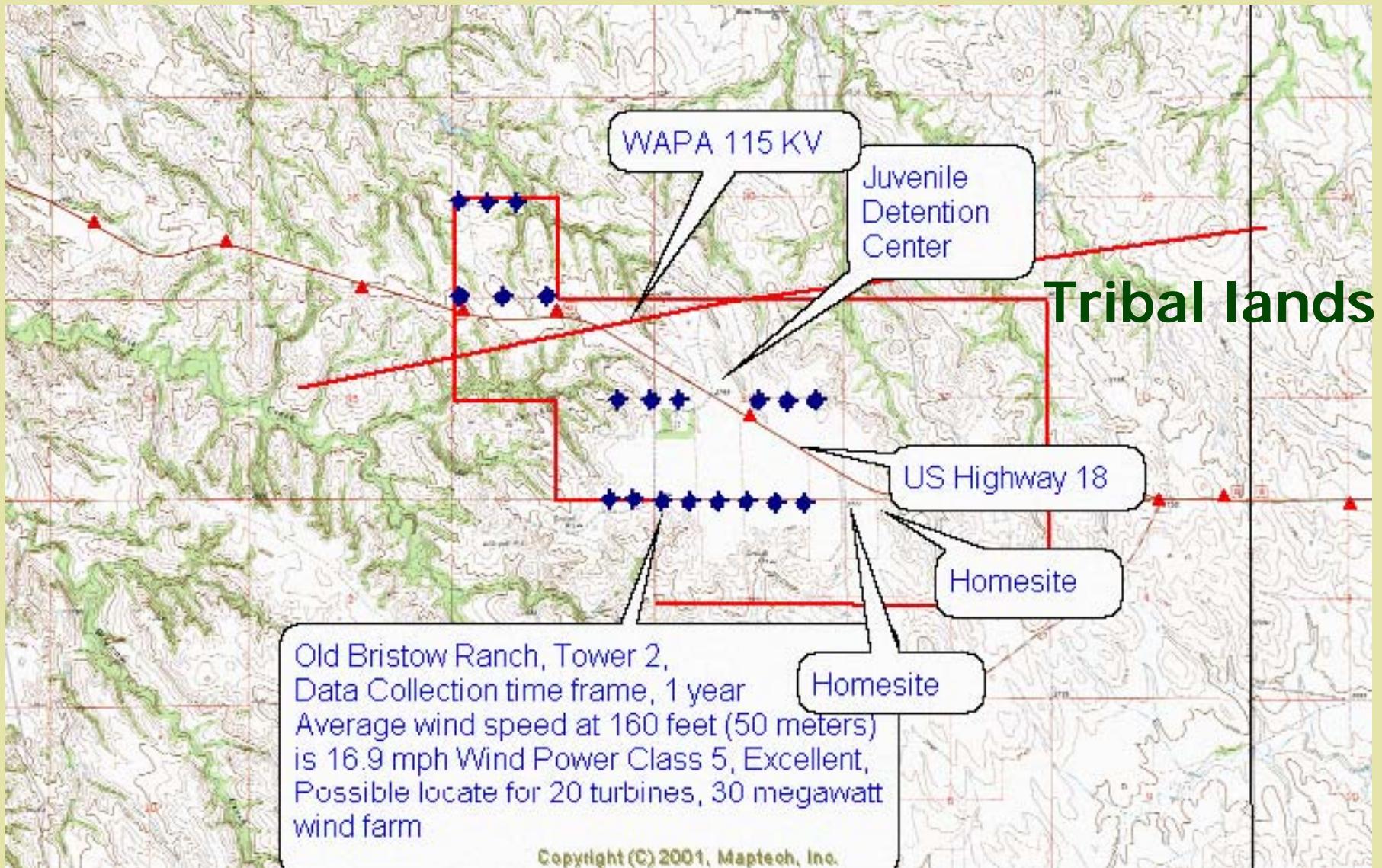
Power Purchase Agreement

- Will be proposed on a best effort basis to several potential markets:
 1. Nebraska Public Power District
 2. Basin Electric
 3. Western Area Power Administration
 4. Omaha Public Power District
 5. Lincoln Electric System
 6. Xcel Energy

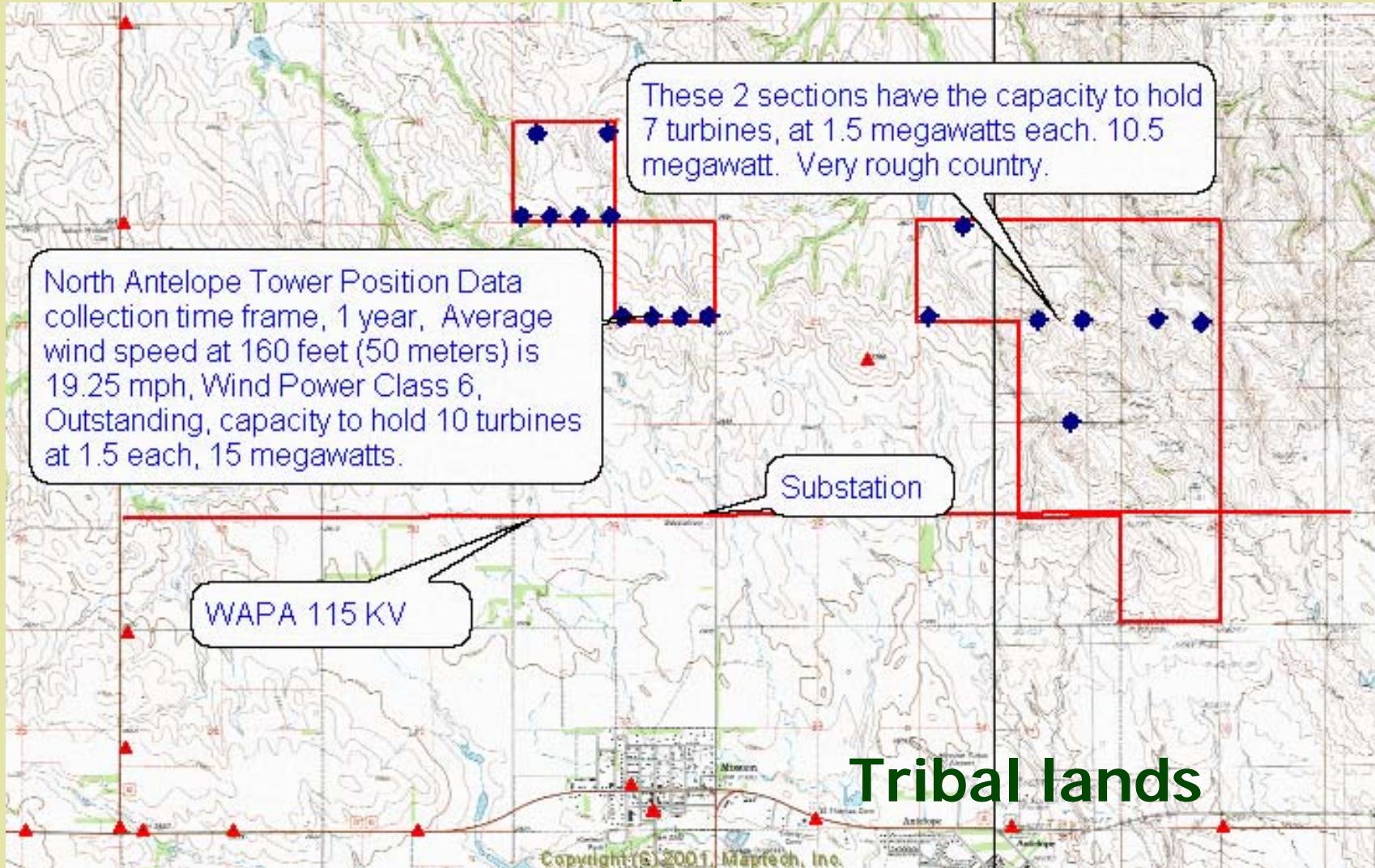
Anticipated Time Lines

- Nov. 2005, Complete NEPA and Submit to BIA
- Dec. 2005 Obtain Power Purchase Agreement
- Jan 2006, BIA issues FONSI
- Nov. 05- Jan 2006, Dev. financial structure, LLC and secure RST Tribal approval
- Dec.05- Feb 2006, Engage Investors/Rural Utilities Service, USDA, Secure Loan, Est. Proj. Costs 46 million
- July 2006 Construction underway
- Dec 2006 Wind farm on line

Old Bristow Ranch Met tower



North Antelope Met Tower



Honor The Earth

112

CERTIFICATE OF DEPOSIT AND INTEREST PAID REGISTER

1990 - Missouri First - General Banks, Inc.

When Paid	TO WHOM PAID	NUMBER	AMOUNT	CK	TOTALS	Interest Paid	Total Interest	TIME AT INTEREST
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Years Mo's Days

Brought Forward

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When Paid	TO WHOM PAID	NUMBER	AMOUNT	CK	TOTALS	Interest Paid	Total Interest	TIME AT INTEREST
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Years Mo's Days



Artist: Donald Montileaux

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