STATE OF NORTH DAKOTA **Case No. PU-05-205**
BEFORE THE PUBLIC SERVICE COMMISSION

AMENDED APPLICATION
for
A WAIVER OF PROCEDURES AND TIME SCHEDULES
and
CONSOLIDATED APPLICATIONS
for
A CERTIFICATE OF CORRIDOR COMPATIBILITY AND ROUTE PERMIT
for
SITING OF A 230kV TRANSMISSION FACILITY
IN
BURLEIGH COUNTY



Submitted JUNE 2005

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June 22, 2005

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Re: In the matter of FPL Energy Burleigh County Wind, LLC (Burleigh County Wind) and Central Power Electric Cooperative Inc. (Central Power)'s Amended Application for a Waver of Procedures and Time Schedules and Consolidated Applications for a Certificate of Corridor Compatibility and Route Permit for a 230-kV Transmission Facility in Burleigh County, North Dakota.
Case Number PU-05-205

Pursuant to §§ 49-22-08 of the North Dakota Century Code, the Energy Conversion and Transmission Facility Siting Act, and rules promulgated thereunder, enclosed for filing please find:

1. An original and ten (10) copies of an Amended Application for a Waiver of Procedures and Time Schedules and Consolidated Applications for a Certificate of Corridor Compatibility and Route Permit for a 230 kV Transmission Line and associated facilities in Burleigh County, with exhibits.

Should you have any questions with respect to this filing, please contact me at (701) 223-6585.

Very truly yours,

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1. An original and ten (10) copies of an Amended Application for a Waiver of Procedures and Time Schedules and Consolidated Applications for a Certificate of Corridor Compatibility and Route Permit for a 230 kV Transmission Facility in Burleigh County, with exhibits.

Should you have any questions with respect to this filing, please contact Brian Bjella at (701) 223-6585.

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STATE OF NORTH DAKOTA
BEFORE THE PUBLIC SERVICE COMMISSION

Case No. PU-05-205

In The Matter of FPL Energy Burleigh County Wind, LLC and Central Power Electric Cooperative Inc.'s Amended Application for a Waiver of Procedures and Time Schedule, and a Combined Certificate of Corridor Compatibility and a Transmission Facility Route Permit for a 230 kV Transmission Facility.

AMENDED APPLICATION OF FPL ENERGY BURLEIGH COUNTY WIND AND CENTRAL POWER ELECTRIC COOPERATIVE, INC. FOR A WAIVER OF PROCEDURES AND TIME SCHEDULES AND CONSOLIDATED APPLICATIONS FOR A CERTIFICATE OF CORRIDOR COMPATIBILITY AND ROUTE PERMIT

WHEREAS, by Application dated April 20, 2005, FPL Energy Burleigh County Wind, LLC, a Delaware limited liability company (herein Burleigh County Wind), requested a waiver of procedures and time schedules and consolidated applications for a certificate of corridor compatibility and route permit for an approximate 26.3 mile, 230 kV transmission facility, in both Burleigh and Oliver Counties of North Dakota.

WHEREAS, Burleigh County Wind is about to enter into an agreement with Central Power Electric Cooperative, Inc. ("Central Power") of Minot, North Dakota, regarding ownership and operation of the proposed transmission line.

WHEREAS, Burleigh County Wind and Central Power have determined that it would be in the best interest of the parties to shorten the transmission line from 26.3 miles to the initial eastern most 4.4 miles originating in Burleigh County. While the corridor for the 4.4-mile transmission line remains the same, Burleigh County Wind and Central Power are proposing minor deviations in the route as previously identified in this matter.

WHEREAS, Burleigh County Wind and Central Power have prepared this Amended Application pursuant to NDCC § 49-22-08.1(5) and North Dakota Administrative Code § 69-06-04-01(4).

NOW, THEREFORE, Burleigh County Wind and Central Power, pursuant to the Energy Conversion and Transmission Facility Siting Act, NDCC Chapter 49-22 (Act), hereby submit this Amended Application for a Waiver of Procedures and Time Schedules ("Waiver Request") and Consolidated Applications for a Certificate of Corridor Compatibility and Route Permit ("Amended Application") for the purposes of siting and constructing a 4.4-mile, 230 kV transmission line and associated facilities.

Burleigh County Wind, as joined in by Central Power, state that there are no changes to the Waiver Requests set forth in the original Application; and hereby restate such request by reference thereto.

The Commission's Application Guidelines for Waiver of Procedures and Time Schedules require a facility description, need for, cost of, and justification for the request for waiver, together with evidence that the project will produce minimal adverse effects. As demonstrated in this Amended Application, and as summarized below, Burleigh County Wind's and Central Power's Waiver Request, and the issuance of a Corridor Certificate and Route Permit are justified, as the proposed facility is of such design, location and purpose that it will produce minimal adverse effects.

DESCRIPTION

Burleigh County Wind and Central Power propose to construct, own and operate a 4.4-mile long 230kV radial electric transmission line in Burleigh County, North Dakota, near the City of Wilton. The proposed radial electric transmission line will allow the proposed Burleigh County Wind Energy Center to supply a maximum of 49.5 megawatts (MW) of renewable energy to the power grid. This 4.4-mile transmission line is within the same corridor as considered by the Public Service Commission ("Commission") in Burleigh County Wind's original Application, with only minor deviations to the route. Rather than connecting to a substation in Oliver County, North Dakota, this proposed transmission line will connect to a substation owned by the Western Area Power Administration in Burleigh County, North Dakota. Also to be constructed as an associated facility is a collection substation; whereby the power from the wind turbines is collected before being placed on the transmission line.

NEED

North Dakota offers tremendous renewable energy potential to the state and regional power system. Renewable energy has numerous benefits to the citizens of the region including minimizing emissions from fossil fuel burning power plants. Wind energy also benefits local economies during construction and operation of both the transmission line and the wind energy center. The energy generated at the wind energy facility and transmitted to the regional electric system will be supplied to a regional power customer. The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid.

COST

The estimated cost of constructing the proposed transmission line is approximately $900,000. The estimated cost of constructing the proposed collection substation is approximately $2.3 M. Thus, the total estimated cost is $3.2M.

JUSTIFICATION FOR WAIVER

Waivers of timelines and procedures are needed in order to meet the construction schedule which is scheduled to start September 2005. The reason for this request is that the transmission line must be in-service by December 31, 2005 in order for the Burleigh County Wind Energy Center to qualify for the federal Production Tax Credit (PTC). As a result, this project is subject to significant time constraints that are not within the control of Burleigh County Wind or Central Power.

Section 49-22-07.2 of the Act provides that the Commission may waive procedures and time schedules upon a finding that "the proposed facility is of such length, design, location, or purpose that it will supply minimal adverse effects." Based upon the investigations and analysis set forth in the original Application and incorporated herein by reference, and this Amended Application, waivers are appropriate because the proposed facility will produce minimal adverse effects.

In determining whether the proposed facility will have any adverse impacts on the environment, Burleigh County Wind and Central Power evaluated the project using the criteria set forth in the Act, the Commission's regulations, and the Commission's Guidelines for Energy Conversion and Transmission Facility Siting ("Guidelines"), and considered, among other things, the following:

1. Whether resources that may be impacted were rare, unique, endangered or have historical significance;

2. Whether the impacted resource is easily replaceable – for example by replanting or re-vegetation – and any likely recovery period;

3. Whether the proposed facility will have any significant consequential effect on other natural resources – for example whether wildlife will be negatively impacted if its habitat is impacted; and

4. Whether the direct or consequential impact on animals or vegetation will affect a critical number, considering its nature and location.

Based upon these factors and those set forth in the Act and Guidelines, Burleigh County Wind and Central Power believe that the proposed facility will result in minimal adverse effects.

When considering a proposed route and corridor, Burleigh County Wind and Central Power took into consideration federal and state agency concerns (identified in preliminary consultation) in order to further mitigate any adverse effects associated with the project.

As set forth more fully in this Amended Application, the proposed corridor contains a small number of sensitive species and habitats which have been avoided to the maximum extent possible by this proposed corridor and route. Environmental protection measures will also be employed as agreed to in consultation with the US Fish and Wildlife Service Ecological Services office and the North Dakota Game and Fish Department located in Bismarck, North Dakota.

With respect to archaeological/ cultural resource, Burleigh County Wind's and Central Power's consultant has initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Wilton Wind and Central Power's consultant has completed a Class I review of historic and archeological records through the North Dakota State Historic Preservation Office (SHPO). This revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Also, a Class III pedestrian survey of the proposed transmission route and project wind energy center is underway. In addition, Burleigh County Wind and Central Power have (in consultation with the Indian Affairs Commission) invited the following Tribes to help identify and avoid Traditional Cultural Properties potential located along the project route.

- Three Affiliated Tribes
- Standing Rock Sioux Tribe
- Spirit Lake Sioux Tribe
- Turtle Mountain Tribe
- Sisseton Wahpeton Sioux Tribe
- Northern Cheyenne Tribe
- Crow Tribe

Consistent with the Act and the Guidelines, archaeological, cultural, and historic resources will be avoided by the construction team to the maximum extent practical.

Impacts to wetlands and woodlands resulting from the proposed transmission route will also be minimal. The presence of wetlands along the route will require surveys prior to initiation of construction activities. Where unavoidable wetlands are identified within the transmission route or other areas proposed for

disturbance, the appropriate agencies (i.e., United States Army Corps of Engineers and State Water Commission) will be consulted and necessary permitting will be completed. Construction will not begin until all necessary permits are secured. Mitigation measures will be implemented as required by these agencies. Although the presence of wetlands is common within the lowlands throughout the transmission corridor, project facilities will not be placed in wetlands. Burleigh County Wind has contacted the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, North Dakota State Water Commission and the North Dakota Game and Fish Department. Each of these agencies is aware of the proposed facility and Burleigh County Wind will follow all conditions that may be applied by these agencies.

Any impacts stemming from the project will be insignificant and temporary. For instance, construction activities will cause some temporary disturbance and Burleigh County Wind and Central Power are committed to reclaiming and/or re-seeding any areas, as well as taking any other appropriate mitigative measures. Impacts to irrigated land, surface drainage and/or groundwater flow, aesthetics, and noise will be minimal. Impacts to agriculture, family farms, land suitable for irrigation, and livestock will also be minimal.

Burleigh County Wind and Central Power submit, and believe they have demonstrated that they have taken all feasible and prudent actions to minimize and mitigate to the greatest extent possible all known or potential adverse impacts. As a result, the proposed facility will produce minimal adverse effects. Accordingly, Burleigh County Wind and Central Power respectfully request that the Commission grant the requested waivers and to render an expeditious decision by issuance of a corridor certificate and a route permit for this project.

Respectfully submitted,

Burleigh County Wind

By: _____

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Application for Corridor Certificate

AMENDED APPLICATION FOR CERTIFICATE OF CORRIDOR COMPATIBILITY

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(2) Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands. (See Exhibit 4, Criteria Map 3). 11

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I. INTRODUCTION

This is an Amended Application for a Certificate of Corridor Compatibility filed jointly by FPL Energy Burleigh County Wind, LLC (Burleigh County Wind) and Central Power Electric Cooperative Inc. (Central Power) (collectively Burleigh County Wind and Central Power). Although separate and apart from, it is to be reviewed in conjunction with Burleigh County Wind and Central Power's Amended Route Permit Application. Burleigh County Wind and Central Power are seeking siting approval for a 230,000 Volt (230 kV) transmission line corridor approximately 3 miles south and 2 miles east of the town of Wilton, North Dakota. (See Exhibit 1)

The proposed facility is a 230 kV transmission line that will extend approximately 4.4 miles between the proposed Burleigh County Wind Energy Center and Western Area Power Administration's (Western) existing Garrison to Bismarck transmission line and a collection substation located on the Burleigh County Wind Energy Center site. The point of interconnection with Western's transmission line would be located west of Highway 83, about 3-miles south of the town of Wilton, North Dakota. The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 megawatts (MW) of renewable energy to the power grid.

II. ANALYSIS ACCORDING TO PSC GUIDELINES

This Amended Application follows the format set forth in the North Dakota Public Service Commission Application Guidelines for a Certificate of Corridor Compatibility ("PSC Guidelines"), promulgated pursuant to the North Dakota Energy Conversion and Transmission Facility Siting Act, N.D.C.C. Chapter 49-22.

SECTION A. DESCRIPTION OF FACILITY

1. Type

Describe the type of transmission facility addressed in this application. The description shall include the purpose of the facility and the technology to be employed.

The proposed transmission facility is a 230,000 volt (230 kV), electric transmission line, approximately 4-miles long, and a collection substation (referred to as "the proposed facility" from here on).

The proposed radial electric transmission line is located approximately 10-miles east of the Missouri River and extends approximately 4.4 miles between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and a collection substation located on the Burleigh County Wind Energy Center site. The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid, and provide additional reliability and regulation to the system. The conductors and shield wires will be supported above ground by steel poles, as further described throughout this Amended Application.

2. Product

Describe the type, source, and final destination of the product to be transmitted by the proposed facility.

The proposed facility is intended to carry 230 kV, electrical energy. It will have an expected operating level of 200,000 Kilovolt-amperes (kVA).

The proposed radial electric transmission line is located approximately 10-miles east of the Missouri River and extends approximately 4.4 miles between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and a collection substation located on the Burleigh County Wind Energy Center site. The proposed radial electric transmission line

will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid, and provide additional reliability and regulation to the system.

3. Size and Design

a. Provide a description of the size and design of the ELECTRICAL facility including, but not limited to, the following:

(1) Width of right-of-way
(2) Estimated span lengths
(3) Anticipated type of structure
(4) Approximate length of facility
(5) Voltage
(6) The requirement for and general location of any new associated facilities

The final design for the proposed facility will not be completed until July 20, 2005 (see Section II.A-4, Time Schedule, below).

(1) Width of right-of-way

The new transmission line would be sited along existing roads to the extent possible, to minimize impacts to farming operations. It is anticipated that the right of way will be up to 133'. This right-of-way will be acquired throughout the length of the proposed facility. Additional temporary work space, staging and laydown areas may be necessary during construction. Burleigh County Wind's collection substation site may be used for a temporary laydown area with no site work or grading, just temporary cribbing. This area totals approximately 17 acres. Two acres will be used for the collection substation and the remaining area will be used as a laydown area.

(2) Estimated span lengths

The span between structures will be approximately 500 feet.

The conductor ground clearance will vary depending on terrain. A minimum ground clearance of 26.2 feet, at a conductor temperature of 212 degrees Fahrenheit, will be maintained over cultivated or range land. At lower conductor temperatures, the ground clearance will be greater.

(3) Anticipated type of structures

A steel pole single shaft structures will be used as illustrated in Exhibit 2. In addition to the fact that wood poles were not readily available to meet the required strength and height requirements, some other advantages of steel poles include; nearly unlimited life expectancy and they can be installed using simple construction techniques.

The line will be constructed on a single tubular weathering steel pole (forms a brown "wood looking" rust coating). Exhibit 2 shows a typical single steel-pole 230-kV transmission structure. Typical structure height will be 75' above ground. A typical tangent structure will consist of three staggered "davit" arms with polymer suspension insulators attached to the end of the arm and hanging vertically with the phase conductor attached to the bottom of the insulator (see structure TUS-1 on the enclosed RUS drawing TUS). Tangent structures will be 30" in diameter and will be directly imbedded in a 48" augered hole and rock backfilled. For small angles from 3 degrees to approximately 15 degrees, the structure will be TUS-1B/C. This type of structure will be placed on an approximately 4' diameter drilled pier concrete foundation via anchor bolts. For large angles and full tension dead-ends, the structure will be TUS-3, TUS-4, or TUS-5, respectively. These structures will be mounted on a 6' diameter drilled pier foundation via anchor bolts.

- Estimated number of full tension dead-ends - 2
- Estimated number of running angles- 10

- Estimated number of tangents – 39

New poles are typically buried 10 percent of the pole length plus 2 feet (i.e., an 80 foot pole would be buried 10 feet) and spaced approximately 450-500 feet apart. Using these spacing standards would require approximately 11-12 structures per mile. Disturbance at each pole site would likely average 50 feet by 50 feet confined to the 133-foot ROW.

Electrical conductors provide the medium for flow of electrical energy. The conductor consists of strands of reinforced steel cable encased by aluminum strands. The steel cable provides the tensile strength to support the conductor; the aluminum conducts the electrical current. The line will be strung with three 795kcmil ACSR 26/7 "Drake" phase wires and one over-head galvanized steel ground wire with enclosed 24 fiber, fiber optic wire, referred to as OPGW, approximately 3/8-inch diameter, would be installed on one side of the top of the structure to provide lightning protection. The fiber optics would be used for utility data communications.

Insulators and hardware used on the line would be standard design to provide nearly corona free operation, as well as reduce audible noise and radio and television interference. The typical suspension structure would be configured with three vertical stacks of polymer insulators.

The line will start at the collection substation in the SE corner of section 17, emanating from a horizontal dead-end structure just inside the collection substation fence. The line will be several feet off the 33' township right-of-way with span lengths of approximately 450'-500'. The line will travel west from the collection substation on the north side of 279 for approximately one mile. From here, it will make a diagonal road crossing to the south side of the road. The line will then travel approximately 1.5 miles on the south side of the road. The line will then cross in the middle of section 13 again to the north on the diagonal and run west for one half of a mile. It will then travel back to the south side in section 23 and then to section 22 and remain there until the WAPA interconnection. The only significant jog in the line will be to stay at 250' from the resident at the southwest corner of 279 and US Highway 83.

(4) Approximate length of the facility

The proposed facility is a 230 kV transmission line that will extend approximately 4.4 miles between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and a collection substation located on the Burleigh County Wind Energy Center site.

(5) Voltage

The proposed facility is intended to carry 230,000 volts phase to phase, or 133,000 volts from any phase to ground.

(6) The requirement for and general location of any new associated facilities

The proposed facility is a 230 kV transmission line that will extend approximately 4.4 miles between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and is located approximately 3 miles south and 2 miles east of the town of Wilton, North Dakota, west of Highway 83.

Western Area Power Administration is planning to construct a 230-kV switching station to accommodate the interconnection of the Burleigh County Wind Farm to the Garrison-Bismarck 230-kV transmission line. An area of land approximately 470' by 750' will be disturbed to construct a fenced yard and its associated drainage areas. The fenced area of approximately 300' by 600' will contain the proposed switching station equipment. The 230-kV equipment within the yard will consist of power circuit breakers and associated disconnect switches and instrument transformers. A bus system on steel structures will link the 230-kV equipment to each other and to the existing transmission line. The yard will also contain a control building.

4. Time Schedule

The proposed time schedule for the proposed facility is shown below:

Major Events Schedule

Amended Certificate of Corridor Compatibility Application Filed	June 2005
Amended Route Permit Application Filed	June 2005
Corridor Certificate and Route Permit (obtained from PSC)	August 2005
Easement acquisition	Completed
Begin staking structures	August 2005
Complete line design	July 20, 2005
Begin vegetation clearing	September 2005
Construction start date	September 2005
Complete clearing*	September/October 2005
Construction Complete	December 2005
In service date	December 1, 2005
Retirement of facility	Unknown

*This activity may be completed as necessary in conjunction with construction activities.

SECTION B. SPECIAL STUDIES

Provide a copy of any evaluative studies or assessments of the environmental impact of the proposed facility submitted to any federal, regional, state, or local agency.

Burleigh County Wind and Central Power conducted several studies before selecting the proposed corridor. Overall review of environmental and cultural/archeological resource issues with respect to selection of the proposed corridor was conducted. Burleigh County Wind and Central Power performed additional studies and analysis before selecting a proposed route. The general study process included, but was not limited to: (1) selection and general evaluation of the study area, (2) a Class I Archeological/Cultural records search, (3) open house with North Dakota tribal interests, (4) agency consultations, (5) collection and evaluation of criteria data, (6) Class III pedestrian survey, (7) Stick-Nest Surveys, and (8) Wetland Surveys. The methods used to conduct these studies are described below. The results of the studies are included in appropriate sections of this Amended Application.

1. Selection and Evaluation of Study Area

Burleigh County Wind and Central Power selected a study area which follows the proposed route, approximately 4.4 miles long. In their evaluation of the study area, Burleigh County Wind and Central Power considered among other things: topography, location of existing transmission facilities (lines and substations), location of communities and airfields, location of lakes too large to span, land ownership, and economics. Further evaluation of the factors addressed in N.D.C.C. §49-22-09 are set forth in Section D.1 below.

2. Historic and Archeological Site Evaluation

Burleigh County Wind and Central Power have initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Burleigh County Wind and Central Power's consultant has completed a Class I review of historic and archeological records through the North Dakota State Historic Preservation Office (SHPO). This revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Refer to Exhibit 3 for copies of letters from SHPO indicating they found the Class I review acceptable and recommended that a Class III Survey be conducted. A Class III pedestrian survey of the proposed transmission route and project wind energy center is underway and the results will be used to determine avoidance areas. To date, no obvious issues were identified. Once this survey is complete, a letter report and a letter of concurrence from SHPO will be submitted under separate cover.

Burleigh County Wind and Central Power, (in consultation with the North Dakota Indian Affairs Commission) invited the following Tribes to a meeting on April 27, 2005 at the North Dakota Heritage Center in Bismarck North Dakota. The purpose of the meeting was to gather input from tribal representatives and help identify and avoid Traditional Cultural Properties potential located along the project route and within the wind energy center.

- Three Affiliated Tribes
- Standing Rock Sioux Tribe
- Spirit Lake Sioux Tribe
- Turtle Mountain Tribe
- Sisseton Wahpeton Sioux Tribe
- Northern Cheyenne Tribe
- Crow Tribe

While not all tribes chose to attend the meeting – the consensus of the attendees was that the current path of identifying sensitive cultural areas and avoiding is the best means of avoiding potential conflict. Attendees expressed appreciation that Burleigh County Wind and Central Power had made the effort to consult with tribal representatives at such an early stage in the project.

Consistent with the Act and the Guidelines, archaeological, cultural, and historic resources will be avoided by the Burleigh County Wind and Central Power construction team to the maximum extent practical.

3. Agency Consultation

North Dakota Administrative Code § 69-06-01-05 lists 21 state agencies that are entitled to notice of Burleigh County Wind and Central Power's proposed action. A subset of these agencies was notified several times. The subset represents those agencies that Burleigh County Wind and Central Power believes has a material interest in the project. Several of the agencies participated in a meeting held at the US Army Corps of Engineers (USACE) Omaha District office in Bismarck North Dakota March 7, 2005. The following agencies attended that meeting:

- United States Army Corp of Engineers (USACE),
- United States Fish and Wildlife Service (USFWS),
- North Dakota State Water Commission (NDSWC),
- North Dakota Game and Fish Department (NDGFD), and
- North Dakota Historic Preservation Office (NDSHPO).

Email notifications were sent on April 11, 2004 to other agencies on the list that Burleigh County Wind and Central Power believe could have a material interest in the project. A copy of the email notifications are provided as Exhibit 3. The following agencies were emailed:

• Department of Transportation	Tom Freier (Director)
• State Historic Preservation Office	Paul Picha
• Indian Affairs Commission	Cheryl Kulas
• Land Department	Michael Haupt
• State Water Commission	Jim Lindseth
• Game and Fish Department	John Schumacher
• Aeronautics Commission	General Office
• Department of Health	Dave Glatt (Chief)
• Parks and Recreation Department	Christine Dirk

On June 15, 2005 another round of email notifications were sent to all of the agencies listed above identifying the fact that each of the agencies has been consulted previously and although Burleigh County Wind and Central Power feels to know their concerns, Burleigh County Wind and Central Power requested a list of issues to best accommodate their concerns. A copy of the email notifications and any responses are also provided in Exhibit 3.

Results of the March 7, 2005 USACE-coordinated meeting are summarized below:

US Army Corps of Engineers (USACE) Representatives at the meeting were Daniel Cimarosti, and Jason Renschler.

The USACE will coordinate with the other agencies in reviewing any USACE permits applications.

USFWS Representative - Terry Ellsworth

USFWS expressed an interest in sharptail grouse leks, bird collisions (migratory birds and raptors) native prairie and wetlands.

ND State Water Commission Representative - Jim Lindseth

The ND Water Commission's authority includes the Missouri River up to the ordinary high water mark, waters which were meandered out of homestead parcels, wetland with drainages greater than 80 acres, and other designated waters of statewide significance. None of these areas are located along the proposed route.

Based on a preliminary review of the regulations and subsequent discussions with Mr. Lindseth, it appears that ND Water Commission jurisdiction will not be triggered. See Exhibit 3 for correspondence.

ND Game and Fish Department Representative - John Schumacher

The ND Game and Fish is interested in ensuring that impacts to woody habitats, native prairies habitats, avian collisions with line and towers and impacts to sharptail grouse lek sites are minimized. See Exhibit 3 for correspondence.

ND Historic Preservation Representative - Paul Picha

The NDSHPO representative expressed concern for known Historic sites, ground disturbance, and visual effects and indicated that a Class I and Class III cultural resources inventory should be performed for those areas with ground disturbance. See Exhibit 3 for correspondence.

Meeting Summary

The comments and information that have been received to date have been incorporated into this Amended Corridor Application and are referenced where applicable. Refer to the Exhibit 4 for the Criteria Maps.

4. Collected and Evaluation of Criteria Data

North Dakota Administrative Code §69-06-08-02 sets forth certain transmission facility corridor and route criteria an applicant must present. They include exclusion, avoidance, selection, and policy criteria. Exclusion and avoidance criteria encompass specific land designations (such as parks and historic sties), human dwellings, water developments, and habitat for state or federal

threatened and rare species. Selection criteria relate to the effects from construction on agriculture, noise, and other general environmental conditions. Policy criteria relate to the applicant's policies regarding health, safety, labor relations, and coordination with other interests.

Burleigh County Wind and Central Power gathered data from several sources to identify the locations of exclusion and avoidance areas and to determine the potential impact of its proposed facility on selection criteria. A computerized geographic information system (GIS) was utilized to compile and analyze most of the data. GIS was also used to produce the criteria maps. Specific sources of data included:

- North Dakota Natural Heritage Program dataset on sensitive species and habitats and state parks.
- U.S. Fish and Wildlife Service's National Wetland Inventory maps, obtained in GIS format.
- Residences, Homesteads, Federal and State wildlife areas and land currently irrigated or with notable potential for irrigation, within the corridor were located by aerial photograph interpretation and structures have been inspected and verified for occupancy.
- Structures (including extractable resources, cemeteries, and communication towers) were derived from data obtained from the North Dakota GIS Hub.
- Woodlands were derived from USGS 7.5 minute topographic quadrangle maps.

SECTION C. NEED FOR FACILITY

1. An analysis of the need for the proposed facility based on present and projected demand for the product or products to be produced by the proposed facility, including the most recent system studies supporting the analysis of the need.

The permit would authorize the construction of an approximately 4.4-mile long 230kV radial electric transmission line in the State of North Dakota. The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid.

2. A description of any feasible alternative methods of serving the need.

The route and corridor were selected using the PSC criteria in addition to other constraints such as engineering, cost, and landowner participation. As described above, feasible and prudent alternatives were examined throughout the planning process. An application dated April 20, 2005, was submitted for an approximate 26.3 mile, 230 kV transmission facility, in both Burleigh and Oliver Counties of North Dakota. Burleigh County Wind and Central Power have determined that it would be in the best interest of the parties to shorten the transmission line from 26.3 miles to the initial eastern most 4.4-miles originating in Burleigh County. While the corridor for the 4.4-mile transmission line remains the same, Burleigh County Wind and Central Power are proposing minor deviations in the route as previously identified in this matter.

3. A statement justifying any deviation from the most recent Ten-Year Plan which the proposed facility may present.

Burleigh County Wind and Central Power will file a 10-year plan according to PSC Regulations.

SECTION D. LOCATION.

This section includes the justification for selecting the proposed corridor. It describes the general environment and factors that are important from an environmental and human health standpoint. General impacts and mitigation measures are also covered, as are the PSC's Corridor Application Criteria. Policies affecting the manner in which Burleigh County Wind and Central Power addressed environmental, human safety, and economic issues are also discussed.

1. Selection of Study Area and Proposed Corridor

Select a study area, which includes the proposed corridor, of sufficient width to enable the Commission to evaluate the factors addressed in N.D.C.C. § 49-22-09.

This section describes how Burleigh County Wind and Central Power chose the study area and the proposed corridor. Burleigh County Wind and Central Power selected a study area approximately 4.4 miles long.

Burleigh County Wind and Central Power used some general criteria to select a proposed corridor within this study area: location of existing transmission facilities (lines and substations), location of communities, land ownership and ecologically sensitive areas.

Location of existing transmission facilities –The proposed facility is a 230 kV transmission line that will extend approximately 4.4 miles between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and approximately 10-miles east of the Missouri River. The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid.

Location of community(ies)– There is one town near the proposed project: Wilton (242 – incorporated as South Wilton). The northern portion of the city of Wilton (565 – incorporated as North Wilton) is actually in McLean County which lies approximately one mile northwest of the proposed turbine array. The town of Regan is located approximately three miles from the northeast corner of the project area buffer. Burleigh County also hosts the capital city of Bismarck (55,532) located approximately 20 miles south of the proposed project area.

Land ownership – The proposed corridor and route avoids lands within the study area owned by the federal government, lands operated as state wildlife areas and tribal lands.

Ecologically Sensitive Areas – There are no rare or endangered species located in the area. However, Whooping Cranes are known to transiently use the area. USFWS Ecological Services, Bismarck, ND has been consulted and indicated that no further action is deemed necessary at this time.

Raptor use is somewhat high in the vicinity of the area encompassed by the turbine array and the transmission line. Significant numbers of a variety of raptor species migrate through the project area during the spring and fall migrational periods. Numerous raptor species are also known to reside within the project area during the nesting season.

Potential perches and nest sites are present on the poles of the existing high voltage power lines, forested shelterbelts, and within forested drainages. Snag and tree density are low to non-existent near that portion of the transmission line near the turbine array, thereby increasing the attractiveness of transmission line towers as perches to raptors. Most existing perch and nesting opportunities are located within shelterbelts adjacent to farmsteads.

Based on the available cover present within the Project Area, prey densities are expected to be highest in unfragmented areas of native grassland. However, cropped areas may also be attractive to rodent prey species utilizing waste grain as a food resource.

Survey Activities

A survey focused on identifying raptor stick-nests along the transmission route (tree nests) was conducted during the first week of May 2005. No nests were identified within the transmission route. One nest was observed in Township 142 North, Range 79 West, Southwest ¼ - Northwest ¼ Section 22. No activity was observed at this nest during the survey.

A survey focused on identifying sharp-tailed grouse leks was also conducted during the first week of May 2005. One lek was observed in the Township 142 North, Range 79 West, Northwest ¼ - Northeast ¼ Section 20. This lek was located more than 500ft from the transmission line and on the opposite side of the road.

The project area was surveyed for the presence of raptors and other bird species during two separate site visits. The surveys consisted of qualitative visual encounter surveys whereby observed raptors were identified to species and the occurrence raptor species were noted. The first site visit occurred during March, 2005 with a second site visit during May, 2005. As part of the May 2005 site visit, a raptor nest survey was also conducted during the May 2005 site visit. The nest survey consisted of visually observing likely nesting areas for raptor nests and identifying nests. Found nests were observed over the survey period and raptors using the nests were identified to species. Surveys for ground nests were not conducted.

The most numerous raptor species within the project area was the northern harrier. Other species encountered in significant numbers included the red-tail hawk, ferruginous hawk, rough-leg hawk and turkey vulture. One nesting great horned owl was also observed nesting in a wooded drainage west of the proposed substation location. Raptor species observed in the project area are listed in following table.

Table 1

Observed Raptor Species

Common Name	***Scientific Name***
Northern harrier	*Circus cyaneus*
Sharp-shinned hawk	*Accipiter striatus*
Red-tailed hawk	*Buteo jamaicensus*
Swainson's hawk	*Buteo swainsoni*
Rough-legged hawk	*Buteo lagopus*
Ferruginous hawk	*Buteo regalis*
American kestrel	*Falco sparverius*
Osprey	*Pandion haliaetus*
Turkey Vulture	*Cathartes aura*
Great horned owl	*Bubo virginianus*

2. Criteria Maps

Identify and map the criteria that led to the proposed corridor location within the study area.

All criteria that can be mapped are provided in Exhibit 4. The maps all include the location of the proposed corridor, and are organized as follows:

- General overview map, showing location of proposed corridor and route
- Exclusion areas – Threatened and endangered species, state rare species and parks
- Avoidance areas – Federal and state wildlife areas, reservoirs, and irrigated land
- Avoidance areas – Occupied residences and archeological sites
- Selection areas – Gravel pits, communication towers, woodlands
- Selection areas – Wetlands
- Selection areas – Wetland easements of U.S. Fish and Wildlife Service
- Additional criteria cannot be mapped but are described throughout the next section.

3. Description of Criteria in the Proposed Corridor

Discuss the relative value of each criteria and how the proposed corridor location was selected giving consideration to all criteria.

The Public Service Commission has established criteria that guides and governs the siting of a transmission line corridor and route, N.D.A.C. § 69-06-08-02. These criteria are divided into four general areas: exclusion areas, avoidance areas, selection criteria, and policy criteria. All were given weight in selection of the proposed corridor.

The proposed corridor was also selected based on the factors identified in Section II.D.1., and consideration was given to the efficiencies created by placing the line along a route as straight as possible. An overview map of the proposed corridor is provided in Exhibit 4. Criteria listed by the Public Service Commission as exclusion, avoidance, selection and policy will be used to select the most appropriate route within the proposed corridor.

a. Exclusion Area

The following geographical areas shall be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width to protect the integrity of the area shall be included. Natural screening may be considered in determining the width of the buffer zone. (N.D.A.C. § 69-06-08-02)

(1) Designated or registered national areas

None of these areas are found in the proposed corridor (or route).

(2) Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves areas

Burleigh County Wind and Central Power have initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Burleigh County Wind and Central Power's consultant has completed a Class I review of historic and archeological records through the North Dakota State Historic Preservation Office (SHPO). This revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Refer to Exhibit 3 for copies of letters from SHPO indicating they found the Class I review acceptable and recommended that a Class III Survey be conducted. A Class III pedestrian survey of the proposed transmission route and project wind energy center is underway and the results will be used to determine exclusion/avoidance areas. To date, no obvious issues were identified. Once this survey is complete, a letter report and a letter of concurrence from SHPO will be submitted under separate cover.

(3) County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions. (See Exhibit 4, Criteria Map 2)

None of these areas are found in the proposed corridor (or route).

(4) Areas critical to the life stages of threatened or endangered animal or plant species. (See Exhibit 4, Criteria Map 2).

Although the N.D. Natural Heritage Program (NDNHP) database query did not identify federally listed threatened or endangered animal/plant species previously documented within the corridor (or route), the whooping crane may occur within the proposed corridor. The total population of whooping cranes in the wild is 188. As such, observations are infrequent and in North Dakota they occur during migration. Spring migration occurs from late-April to mid-June and fall migration occurs from late-August to mid-October. Surveys of whooping crane activity in North Dakota note that most sightings are in the western two thirds of the state and along the Missouri River.

The ND Game and Fish Department also published a list of 100 species of conservation priority. A review of those species potentially present in the vicinity of the project is presented in the Table 1 along with a description of their habitats. Obligate aquatic species (e.g.; fish) are not included.

(5) Areas where animal or plant species that are unique or rare to this state that would be irreversibly damaged. (See Exhibit 4, Criteria Map 2).

As set forth more fully in this Amended Application, the proposed corridor contains a small number of sensitive species and habitats which have been avoided to the maximum extent possible by this proposed corridor and route. Environmental protection measures will also be employed as agreed to in consultation with the US Fish and Wildlife Service Ecological Services office and the North Dakota Game and Fish Department located in Bismarck, North Dakota.

b. Avoidance Areas

The following geographical areas shall not be considered in the routing of a transmission facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility the commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. Economic considerations alone shall not justify approval of these areas. A buffer zone of a reasonable width to protect the integrity of the area shall be included unless a distance is specified in the criteria. Natural screening may be considered in determining the width of the buffer zone. (N.D.A.C. § 69-06-08-02)

(1) Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands. (See Exhibit 4, Criteria Map 3).

There are no areas in the corridor that meet this criterion.

(2) Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands. (See Exhibit 4, Criteria Map 3).

There are no areas in the proposed corridor that meet this criterion.

(3) Historical resources which are not specifically designated as exclusion or avoidance areas. (See Exhibit 4, Criteria Map 4).

No areas in the proposed corridor meet this criterion. The results of the Class I revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Refer to Exhibit 3 for copies of letters from SHPO indicating they found the Class I review acceptable and recommended that a Class III Survey be conducted. A Class III pedestrian survey of the proposed transmission route and project wind energy center is underway and the results will be used to determine exclusion/avoidance areas. To date, no obvious issues were identified. Once this survey is complete, a letter report and a letter of concurrence from SHPO will be submitted under separate cover.

TABLE 1
Federally-Listed Species[1,2] and North Dakota Game and Fish Department Priority Species[3] Potentially Present in Project Area
Proposed Transmission Line Project
(Note: None of these species have been observed within the Corridor)

Common Name	*Scientific Name*	Federal	State	Preferred Habitat / Range
American Avocet	*Recurvirostra americana*		II	Statewide, found on ponds or lakes with exposed, sparsely vegetated shorelines; nest in open near water.
American Bittern	*Botaurus lentiginosus*		I	East of Missouri River; wetland cattails & bullrushes; next in uplands.
American White Pelican	*Pelecanus erythrorhynchos*		I	Primarily Missouri Coteau & drift prairie.
Baird's Sparrow	*Ammodramus bairdii*	FC	I	Upland prairies of mixed-grass or tall grass habitat types; not heavily grazed areas.
Bald Eagle	*Haliaeetus leucocephalus*	T	I	Forested habitat near bodies of water.
Black Billed Cuckoo	*Coccyzus erythropthalmus*		I	Statewide, woodlands, thickets, prairieshrubs, shelterbeltds & wooded areas of towns.
Black Tern	*Chlidonias niger*	FC	I	Inland marshes & sloughs with dense emergent vegetation.
Black-footed Ferret	*Mustela nigripes*	E	II	An obligate of prairie dog towns. No recorded observations in recent years, potential exists for reintroductions.
Blue Sucker	*Cycleptus elongatus*	FD	I	Found in the Missouri River, prefers swift current of large, turbid rivers in areas with rocky or gravel bottoms.
Bobolink	*Dolichonyx oryzivorus*		II	Statewide; uses a variety of grasslands.
Canvasback	*Aythya Valisineria*		II	East of Missouri River, semipermanent wetlands; nests over water in dense vegetation.
Chestnut-Collared Longspur	*Calcarius ornatus*		I	Grazed or hayed mixed-grass prairie.
Dickcissel	*Spiza americana*		II	Statewide, mainly southern portion of state; alfalfa, sweet clover, & other brushy grasslands.
Ferruginous Hawk	*Buteo regalis*	FC	I	Dry unbroken prairie with little cultivated land.
Franklin's Gull	*Larus pipixcan*		I	East of Missouri River. Build nests in dead marsh plants.
Grey Wolf	*Canis lupus*	T	III	Not known to be in state except in extreme NE corner.
Grasshopper Sparrow	*Ammodramus savannarum*		I	Statewide; uses idle or lightly-grazed mixed-grass prairie, meadows & hayfields.
Horned Grebe	*Podiceps auritus*		I	East of Missouri River, wetlands & lakes with open water.
Interior Least Tern	*Sterna antillarum*	E	II	Habitat confined to the Missouri River; nests on sparsely vegetated sandbards. Critical habitat designated.
Lark Bunting	*Calamospiza melanocorys*		I	Statewide; sagebrush or sage prairie preferred.
Le Conte's Sparrow	*Ammodramus leconteii*		II	High densities in Missouri Coteau; fens, wet meadows & marshes.
Loggerhead Shrike	*Lanius ludovicianus*	FC		Open country with patches of trees or shrubs presnent; wooded coulees & shelterbelts with native prairie or cropland nearby.
Long-billed Curlew	*Numenius americanus*		I	High densities in Missouri Coteau; uses wetlands, streams & lakes, nests in often heavily grazed prairie.
Marbled Godwit	*Limosa fedoa*		I	High densities in Missouri Coteau; uses wetlands, streams & lakes, nests in often heavily grazed prairie.
McCown's Longspur	*Calcarius mccownii*		I	West of Missouri River. Prefers arid, short-grass prairie or heavily grazed mixed-grass prairie.
Nelson's Sharp-Tailed Sparrow	*Ammodramus nelsoni*		I	East of Missouri river, fens & shallow marsh zones of wetlands & lakes.
Northern Harrier	*Circus cyaneus*		II	Statewide, but primarily in Missouri Coteau & drift prairie. Nests inupland grasses near water.
Northern Pintail	*Anas acuta*		II	East of Missouri River; wetalnds for food; nests in uplands.
Pallid Sturgeon	*Scaphirhynchusalbus*	T	II	Missouri River. Loss of habitat attributed to damming and channelization of Missouri River.
Perigrine Falcon	*Falco peregrinus anatum*	FE	III	Any habitat with suitable prey; cliffs for nesting.
Piping Plover	*Charandrius melodus*	T	II	Barren sand & gravel shores of rivers & lakes; avoid dense vegetation; alkaline wetlands with salt encrusted beaches & sandbars.
Redhead	*Aythya americana*		II	East of Missouri River, semipermanent wetlands; nests over water in emergent vegetation.
Red-headed Woodpekcer	*Melanerpes erythrocephalus*		II	Found in natural stands of mature deciduous trees along the Missouri River, shelterbelts, wooded areas. Nests in snags.
Sedge Wren	*Cistothorus platensis*		II	East of Missouri River; prefers wet meadows of tall grasses & sedges.
Sharp Tailed Grouse	*Tympanuchus phasianellus*		II	Statewide on prairies that contain scattered patches of small trees or shrubs.
Short-Eared Owl	*Asio flammeus*		II	Statewide, prairies, marshes, & fields; nests on ground in pariries, hayfields, & stubble fields.
Sprague's Pipit	*Anthus spragueii*		I	Statewide, extensive tracts of ungrazed or lightly-grazed prairie.
Swainson's Hawk	*Buteo swainsoni*		I	Statewide, nest in lone praire trees.
Upland Sandpiper	*Bartramia longicauda*		I	Statewide, most common in dry, open mixed-grass prairie.
Western Burrrowing Owl	*Athene cunicularia hypugea*	FC	II	Heavily grazed tracts of mixed-grass prairie.
Whooping Crane	*Grus americanus*	E	III	Shallow wetlands that are characterized by cattails, bulrushes, & sedges; upland areas during migration.
Willet	*Catoptrophorus semipalmatus*		I	Heavy Densities on the Missouri Coteau; prefer wetlands; nests in uplands in native prairies away from water.
Wilson's Phalarope	*Phalaropus tricolor*		I	Statewide in shallow wetlands & mudflats, nests in grass on the margins of wetlands.
Yellow Rail	*Coturnicops noveboracensis*		I	East of Missouri river, fens or groundwater-fed wetlands.

Federal

E	Endangered
T	Threatened
FC	Former Candidate

North Dakota Game & Fish Department

I	Species having a high level of conservation priority because of declining status either in North Dakota or across their range; or a high rate of occurrence in North Dakota
II	Species having a moderate level of conservation priority or a high level of conservation priority, but a substantial amount of non-State Wildlife Grant funding is available to
III	North Dakota's species having a moderate level of conservation priority, but are believed to be peripheral or do not breed in North Dakota.

1 USGS, 1995
2 FWS, 2004b
3 NDGFD, 2004

(4) Areas which are geologically unstable.

No areas along the route meet this criterion. A geotechnical investigation will be completed prior to the start of construction. Measures required to avoid or mitigate unstable areas will be incorporated into the engineering design.

(5) Within five hundred feet of a farmhouse, rural residence, or place of business. This criterion shall not apply to a water pipeline transmission facility (See Exhibit 4, Criteria Map 4).

There are 19 rural structures within the proposed corridor. Only two of these occupied residences are located within 500 feet of the proposed route. Three of the structures are abandoned. Structures located closer than 500 feet of the proposed route were investigated in the field to determine their precise nature.

There are two waivers from landowners to encroach on the 500' avoidance distance from occupied residences. One is located in the southeast quarter section of section 18. At this location, the line will actually be on the opposite side of the road and poles will be set such that they will not be visible from the residence. They are hidden from view by his shelterbelts on both sides of his home. The other is located in the southeast corner of section 14. In this case, the line will be located 250' from the residence and on the other side of the section line at the owner's request. The line here will span the field to avoid the landowner having to farm around any structures. See Exhibit 3 for copies of these waivers.

(6) Reservoirs and municipal water supplies (See Exhibit 4, Criteria Map 3).

There are no reservoirs or municipal water supplies within the corridor.

(7) Water sources for organized rural water districts

There are no rural water districts within the proposed corridor.

(8) Irrigated land (See Exhibit 4, Criteria Map 3).

No areas in the proposed corridor meet this criterion.

(9) Areas of recreational significance not designated as exclusion areas

No areas in the proposed corridor meet this criterion.

c. Selection Criteria

A corridor or route shall be designated only when it is demonstrated to the commission by the applicant that any significant adverse effects which will result from the location, construction, and maintenance of the facility as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum. (N.D.A.C. § 69-06-08-02).

(1) Impact upon agriculture

(a) Agricultural production.

During construction, agricultural production within the proposed corridor will not be affected except within certain areas along the route and at selected staging locations. Staging location will be placed on previously disturbed areas where they are available. Areas disturbed for industrial uses such as the substation site will be utilized whenever

practicable, but other disturbed areas such as cropland may also be utilized. Given the small size of these staging areas and the short term of construction, impacts from staging are expected to be localized and minimal.

Following construction, any disturbed area, either in the right-of-way or in these staging areas, will be restored as close as practicable to their original condition. The degree of impact to any area will depend upon the extent of construction activities and soil conditions of the particular area. Normal construction should only temporarily affect native rangeland vegetation along the route. Where rangeland and cropland is disturbed and doesn't regrow naturally in the next growing season, Burleigh County Wind and Central Power will replant the area with a native grass seed mixture or crop and the area will be reclaimed to conditions compatible with the surrounding area. Staging areas and other sites receiving heavy use will be tilled following to the extent necessary to alleviate compaction and prepare a seed bed.

After construction, agricultural production will be unrestricted throughout the bulk of the right-of-way. Placement of structures for the proposed facility will displace small areas of cropland and hay land, and machinery will need to maneuver around structures. Production and harvesting machinery will otherwise be able to operate without hindrance under the proposed facility. Occasionally, maintenance of the line will require additional construction-type activities along the route. Landowners will be compensated through an easement payment for any potential loss of land and crop production.

Livestock production will not be affected by construction of operation of the proposed facility. Construction crews will work with landowners to ensure that fenced pastureland will remain secure for cattle. Following construction, cattle will be free to graze below the proposed facility and virtually all land will be available for grazing along the route.

(b) Family farms and ranches.

The main impact to family farms and ranches would be temporary and minimal disturbance to pastureland and hay land as noted above. Landowners will be compensated through an easement payment for any potential loss of land and crop production.

(c) Land which the owner can demonstrate has soil, topography, drainage, and an available water supply that can cause the land to be economically suitable for irrigation.

Burleigh County Wind and Central Power are not aware of any land that is planned for irrigation, but Burleigh County Wind and Central Power will discuss irrigation plans with landowners when discussing easement arrangements.

(d) Surface drainage and groundwater flow patterns.

The project area is approximately 10-miles east of the Missouri River. The proposed transmission line would cross various drainages including Burnt Creek and the Burleigh County Wind Energy Center is located adjacent to the West Branch of Apple Creek.

The surface drainage and ground water flow patterns within the proposed corridor will not be affected along the route, and there is expected to be no effect upon spring run-off drainage patters. Existing field approaches will be used to access construction sites, and it is anticipated that no new field approached will be required. The erection of structures will affect land contours so minimally that there will be no effect on drainage.

(2) Impact Upon

(a) Noise sensitive land uses.

Construction will create very temporary sound disturbances. Because of the rural location of the proposed route, construction should create only a temporary and minimal impact near those few residences and places of business located along the route.

At a distance of 50 feet, construction noise will only occasionally exceed 80 dB (during operation of augers, tampers and impact wrenches). By comparison, a busy street has a typical noise level of about 80 dB, and agricultural machinery often operates at higher levels. When construction machines are not operated, noise levels will be well under 80 dB. In order to minimize noise impacts, all construction equipment will be equipped with a recommended muffler in good working order, and construction activities near homes and places of business will be limited to normal working hours.

Following construction, there will be a minimal amount of sound from the proposed facility as the result of corona effects. Insulators and hardware used on the line would be standard design to provide nearly corona free operation. Corona effects occur when air molecules near conducting wire are ionized due to changes in the electric field intensity at the conductor surface, producing audible noise, radio noise, small amounts of ozone, and corona-related energy loss. Corona-generated audible noise from transmission lines and substations is generally described as a crackling or hissing noise. This noise is most noticeable when conductors are wet (as a result of precipitation). During dry weather, noise is barely perceptible, creating only a sporadic crackling sound.

(b) The visual effect on the adjacent area.

The proposed facility will be visible to landowners and community residents who live near the proposed facility. The line will be constructed on a single tubular weathering steel pole (forms a brown "wood looking" rust coating).

(c) Extractive and storage resources. (See Exhibit 4, Criteria Map 5).

No areas in the proposed corridor meet this criterion. Burleigh County Wind and Central Power avoided all active gravel and sand pits and mine shafts when siting the route.

(d) Wetlands, woodlands, and wooded areas. (See Exhibit 4, Criteria Maps 5 and 6)

There are approximately 245 acres of wetlands within the proposed corridor (see Table 2). The wetlands are located at various sites along the proposed route. Prior to construction, wetlands in the immediate vicinity of the proposed route will be surveyed in compliance with USACE requirements. The presence of wetlands may require permitting as a result of construction activities. Burleigh County Wind and Central Power will not construct facilities within the wetlands.

There are approximately 260 acres of woodlands and shelterbelts within the proposed corridor ranging in size from less than one acre to approximately 20 acres. (See Exhibit 4, Criteria Map 5). Approximately 1.28 acres are located within the proposed route.

Burleigh County Wind and Central Power will attempt to minimize impacts to woodlands and will incorporate a tree replacement policy based on consultation with the North Dakota Game and Fish Department.

(e) Radio and television reception, and other communication or electronic control facilities. (See Exhibit 4, Criteria Map 5).

No areas in the proposed corridor meet this criterion.

(f) Human health and safety.

Burleigh County Wind and Central Power will employ proper construction methods to ensure the project will result in minimal impacts to human health and safety.

Human health and safety will be Burleigh County Wind and Central Power's paramount concern during construction and operation of the proposed facility. Appropriate standards will be met for construction and installation, and all applicable safety procedures will be followed after installation. The proposed facility will be designed and constructed to meet or exceed the standards of the National Electrical Safety Code.

Safety precautions will be taken during construction and line installation. Conductors will be installed by establishing stringing setup areas within the right-of-way approximately every two miles along the route. Conductors will be installed between setup areas using a "controlled tension method," which ensures that the cable comes off the reel at a constant tension without backlashes. Conductor stringing operations will also require brief access to each structure to secure the conductor wires to the insulators or shield wire clamps once final line sag is established. Heavy, truck-mounted winches that also carry reels of conductor and cable would be used for pulling and tensioning work.

Stringing equipment generally consists of wire pullers, tensioners, conductor reels, shield wire reels, and sheave blocks. Stringing operations consist of pulling lightweight cables or ropes through the stringing sheaves located at every structure site. This cable or rope will be used to pull the conductors through the sheaves under sufficient tension to keep the conductor from coming into contact with the ground. Temporary guard or clearance poles will be installed over existing distribution or communication lines, streets, roads, highways, railways, or other obstructions after any necessary notifications are made and/or permits obtained. This ensures that conductors will not obstruct traffic or come into contact with existing energized conductors or other cables, and protects the conductors from damage.

Regular maintenance and inspections will be performed during the life of the facility to ensure its continued integrity. Periodic inspections will be performed by ground personnel on snowmobile or ATV, or by aerial means. Inspections will be limited to the right-of-way. If problems are found during inspection, repairs will be assigned to construction crews. If damages to crops are incurred during maintenance and repairs, reimbursement will be made to the landowner, consistent with the terms of the easement.

The proposed facility will generate electromagnetic fields (EMFs) once energized. The effect of EMF exposure on human health has been a matter of public concern over the past few years. The National Institute of Environmental Health Sciences (NIEHS) issued its final report on June 15, 1999, following six years of intensive research. It concluded that the scientific evidence that extra low frequency EMF exposures pose any health risk is weak. The NIEHS was the lead government agency in directing and carrying out a Congressionally mandated research program on EMF. The EMF levels of the proposed facility are explained below.

The EMF level is related to the power carried by the line, the configuration and sag of the conductors, span length, and location of measurement relative to the line. EMF levels are inversely proportional to the distance from the conductors.

For example, operating at 200,000 kVA (the potential future operating level of the project) at a point 3.5 feet above ground at mid-span of an 800 foot span with the conductor height of 27 feet and 70 foot poles, the annual maximum level of EMF will measure approximately 128 mG (milliGauss). At a point 3.5 feet above ground at the base of one of the structures, the annual maximum EMF level will measure approximately 70 mG. At a point 100 feet in transverse direction from the line at a point 3.5 feet above ground at mid-span, the annual maximum EMF will measure approximately 11 mG. At 500 feet in a transverse direction from the line, the annual maximum EMF will measure approximately 0.07 mG.

The EMF levels stated in the above example would be annual maximums. The minimum level would be about zero, and an annual time-weighted average would be about 45 percent of the annual maximum.

Burleigh County Wind and Central Power will continue to closely monitor this issue and will respond to any new research on EMF as the circumstances require.

(g) Animal health and safety

Livestock impacts will be avoided as discussed in Section D.3.c.1. above.

(h) Plant life

Impacts of the proposed facility on agricultural plant life will be minimal as discussed above, and landowners will be compensated for any losses. Native prairie disturbed by construction will be reseeded with a native grass seed mixture and unavoidable losses of trees and shrubs will be restored to as close as practicable to pre-existing conditions. Wetland vegetation will be avoided to the extent practicable and unavoidable disturbances will be mitigated as required by applicable USACE permits.

d. Policy criteria

The following have been adopted by the commission to give preference to an applicant that will maximize benefits that result from the adoption of the policies and practices, N.D.A.C. § 69-06-08-02.

Because Burleigh County Wind and Central Power's proposed facility has taken the Commission's policy criteria into consideration, and because the proposed facility adopts and reinforces these policy considerations and maximizes the benefits resulting from the adoption of these policies, this Amended Application should be given preference.

(1) Location and design.

Burleigh County Wind and Central Power have numerous policies that guide the location and design of electric transmission lines. (Examples for Central Power's and Burleigh County Wind's policies are provided in Exhibit 6). These policies include minimizing and mitigating impacts, following the National Electric Safety Code requirements and policies, U.S. Department of Labor Occupational Safety and Health Standards, Central Power's Power System Safety Manual for maximum safety and protection of property, and designing the system to efficiently transfer electricity.

(2) Training and utilization of available labor in this state for the general and specialized skills required.

Burleigh County Wind and Central Power will use available and qualified contractors to construct the proposed facility. All personnel involved in the construction of the proposed facility must follow the bid specifications in order to meet applicable safety requirements.

(3) Economies of construction and operation.

The transmission line easements have been acquired by Burleigh County Wind, but will be assigned at a later date to Central Power. Central Power will construct, own, and operate the transmission line. Burleigh County Wind will construct, own and operate the collection substation. Thus, Central Power and Burleigh County Wind join in this amended application in order secure approval of these coordinated facilities.

(4) Use of citizen coordinating committees.

No citizen coordinating committees were used for the proposed route or proposed corridor. However, Burleigh County Wind and Central Power have held meetings with local government officials and the public to inform them of the proposed facility and to get valued input.

(5) A commitment of a portion of the transmitted product for use in this state.

The proposed radial electric transmission line will allow the Burleigh County Wind Energy Center to supply a maximum of 49.5 MW of renewable energy to the power grid. This project will benefit the state and local economy.

(6) Labor relations.

Labor relations will not be affected.

(7) The coordination of facilities.

The proposed facility will interconnect with Western's existing Garrison to Bismarck transmission line. A temporary tap will be constructed to allow electricity to flow from the Burleigh County Wind Center. The temporary tap will consist of one manually operated disconnect switch. The tap will only be used temporarily until the switching station can be constructed. The switching station will provide reliability to the existing power system that the tap will not provide by utilizing power circuit breakers and protection relays to perform high-speed fault clearing. The disconnect switch does not provide any fault clearing protection for the new wind farm 230-kV transmission line. A fault occurring on the wind farm line will have to be cleared by opening breakers at the Garrison, Bismarck, and Burleigh County Wind Farm Substations, thus there is a possibility of de-energizing a major transmission line for a fault on the wind farm line. Once the switching station is in use a fault on the wind farm line will be cleared by a breaker at the new switching station without interfering with the operation of the Garrison-Bismarck transmission line.

The temporary tap will be replaced by a 230-kV switching station by Fall of 2006. The 230-kV switching station will accommodate the interconnection of the Burleigh County Wind Farm to the Garrison-Bismarck 230-kV transmission line. An area of land approximately 470' by 750' will be disturbed to construct a fenced yard and its associated drainage areas. The fenced area of approximately 300' by 600' will contain the proposed switching station equipment. The 230-kV equipment within the yard will consist of power circuit breakers and associated disconnect switches and instrument

transformers. A bus system on steel structures will link the 230-kV equipment to each other and to the existing transmission line. The yard will also contain a control building.

(8) Monitoring of impacts.

The impacts of the construction and operation of the proposed facility are discussed in section D.3.c., above. Burleigh County Wind and Central Power will monitor revegetation success following construction along the route consistent with applicable Stormwater Pollution Prevention Plans required for construction. Any concerns raised by agencies, landowners, or the Public Serve Commission will be addressed immediately. Impacts to wetland and woodlands will be avoided to the maximum extent possible.

(9) Utilization of existing and proposed rights-of-way and corridors.

Burleigh County Wind and Central Power do not own any existing facilities within the corridor. The proposed route passes through one existing Department of Transportation (DOT) right-of-way. Refer to Exhibit 7 for the utilities permit application.

(10) Other existing or proposed transmission facilities.

Coordination of the proposed facility with existing and proposed transmission facilities is discussed above.

e. Summary of Criteria in Proposed Corridor and Route.

Table 2

Criteria	Acres or Number within Corridor[a]	Acres or Number within Route[b]	% of Corridor occupied by Criteria	% of Route occupied by Criteria
Exclusion: Community Parks	0	0	0	0
Exclusion: Habitat for Threatened, Rare species	0	0	NA	NA
Avoidance: Federal Waterfowl Production Areas	0	0	0	0
Avoidance: State Wildlife Management Areas	0	0	0	0
Avoidance: Irrigated land	0	0	0	0
Avoidance: Reservoirs	0	0	0	0
Avoidance: Occupied residences	16	2	NA	NA
Avoidance: Other historic resources	Unknown	Unknown	NA	NA
Selection: Extractive Resources	0	0	NA	NA
Selection: Wetlands	245 acres	2.62 acres	1.7%	3.7%
Selection: Woodlands	260 acres	1.28 acres	1.8%	1.8%
Selection: Communication Towers	0	0	NA	NA
Other: Wetland Easements	61	0	0.4%	0

[a] corridor size is estimated at 14,071 acres
[b] Route with 100- ft. buffer is estimated at 71 acres

f. Design and construction limitations.

In order to satisfy the need expressed in section II.C of this Amended Application, it was necessary to locate the transmission line between the proposed Burleigh County Wind and Western's existing Garrison to Bismarck transmission line and a collection substation located on the Burleigh County Wind Energy Center site.

g. Economic considerations.

Burleigh County Wind and Central Power have strived and will continue to strive to minimize any economic damage this proposed facility might create. Landowners will be compensated for land within the right-of-way along the proposed route. The new transmission line would be sited along existing roads to the extent possible, to minimize impacts to farming operations.

4. General Mitigative Measures to Minimize Adverse Impacts.

Discuss the general mitigative measures that will be taken to minimize adverse impacts which result from a route location in the proposed corridor.

Burleigh County Wind and Central Power will avoid potential impacts to sensitive resources, which includes exclusion, avoidance and selection criteria, as noted above in the criteria sections above. (See Section II.D.3). Specific impacts that would be caused by the proposed facility and mitigation for those impacts are provided in the Amended Route Permit Application. Generally, Burleigh County Wind and Central Power will follow the philosophy of avoiding impacts to sensitive criteria first and foremost. When avoidance is not possible, efforts are made to compensate or mitigate for those impacts. Possible impacts include damage to and small loss of agricultural land, where Burleigh County Wind will compensate landowners; impacts to woodlands and wetlands, where Burleigh County Wind and Central Power will develop and follow mitigation plans as required by the Commission; and minimizing impacts to soil erosion, noise, and water quality by following certain specifications during construction.

5. Qualifications of People Involved in the Corridor Study

List the qualifications of the people in the various disciplines that contributed to the corridor location study.

Name	Educational and Professional Experience	Project Responsibility
Tom Meland	Manager of Operations and Engineering Central Power Electric Cooperative, Inc. Electrical and Electronics Engineering, North Dakota State University Registered PE in states of ND and MO	230kV Transmission Line Management
John DiDonato	Director , Project Development Burleigh County Wind Bachelor's degree, Kent State University. Master's degree, Florida Atlantic University	Project developer representing Burleigh County Wind in all commercial and regulatory aspects of the project.
Kenneth Stein	Principal Environmental Specialist Burleigh County Wind J.D University of Oregon, Environmental Law B.S University of Michigan, Environmental Science	Project environmental manager.
Kurt Beichel	Construction Project Manager Burleigh County Wind	Provided input on route from a "constructability" perspective
John Wergin	Construction Project Leader Burleigh County Wind	Representing Burleigh County Wind on landowner discussions and selection of corridor.
Mark Sherman	Chief Engineer Central Power Electrical and Electronics Engineering, North Dakota State University, Registered PE in ND	230kV Transmission Line Management
Dave Martian	Consultant KBM, Inc. BS Electrical & Electronics Engineering, North Dakota State University; PE In State of ND, MN, and IA	Transmission Line Design Consultant for Central Power
Tom Factor	Land Easement Specialist/Route Mapping Burleigh County Wind	Representing Burleigh County Wind on landowner discussions and selection of corridor.
Ted Weissman	Land Easement Specialist Burleigh County Wind	Representing Burleigh County Wind on landowner discussions and selection of corridor.
Brian Bjella	Attorney for applicants Fleck, Mather & Strutz, Ltd. J.D. degree, University of North Dakota	Applicant's counsel.
Don Negaard	Attorney for Co-Applicant Central Power Pringle & Herigstad, J.D. Degree	Co-Applicant's counsel.

6. Maps

Map the criteria within the designated corridor showing the proposed route and location of any new associated facilities.

See Section II.D.2 of the Certificate of Corridor Compatibility Application.

REFERENCES

North Dakota Game and Fish Department (NDGFD). 2004. North Dakota's 100 Species of Conservation Priority. North Dakota Outdoors. July, 2004.

United States Fish and Wildlife Service (FWS). Threatened and Endangered Species System. North Dakota Listings. Downloaded December 15, 2004. Online at: http://ecos.fws.gov/tess_public/TESSWebpageUsaLists?state=all

Application for Route Permit

AMENDED APPLICATION FOR ROUTE PERMIT

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i. The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites. 6

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(2) Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves. 7
(3) County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions. (See Exhibit 4, Criteria Map 2) 7
(4) Areas critical to the life stages of threatened or endangered animal or plant species. (See Exhibit 4, Criteria Map 2). 7
(5) Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged. (See Exhibit 4, Criteria Map 2). 7
b. Avoidance Areas 8
(1) Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands. (See Exhibit 4, Criteria Map 3). 8
(2) Designated of registered state: wild, scenic or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands (See Exhibit 4, Criteria Map 3). 8
(3) Historical resources which are not specifically designated as exclusion or avoidance areas. (See Exhibit 4, Criteria Map 4). 8
(4) Areas which are geologically unstable. 8
(5) Within five hundred feet of a farmhouse, rural residence, or place of business. This criterion shall not apply to a water pipeline transmission facility (See Exhibit 4, Criteria Map 4). . 8
(6) Reservoirs and municipal water supplies. (See Exhibit 4, Criteria Map 3). 8
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I. INTRODUCTION

This is an Amended Application for a Route Permit by FPL Energy Burleigh County Wind, LLC (Burleigh County Wind) and Central Power Electric Cooperative Inc. (Central Power). Although separate and apart from, it is to be reviewed in conjunction with Burleigh County Wind and Central Power's Amended Certificate of Corridor Compatibility Application. In these Amended Applications, Burleigh County Wind and Central Power are seeking siting approval for a 230,000 Volt (230 kV) transmission line in Burleigh County (See Exhibit 1), and construction of a collection substation. Because the two Applications have been consolidated for filing, and in order to avoid redundancies, many sections of this Amended Route Permit Application refer back to the Amended Certificate of Corridor Compatibility Application for analysis.

II. ANALYSIS ACCORDING TO PSC GUIDELINES

This Amended Application follows the format set forth in the North Dakota Public Service Commission Application Guidelines for a Route Permit ("PSC Guidelines"), promulgated pursuant to the North Dakota Energy Conversion and Transmission Facility Siting Act, N.D.C.C. Chapter 49-22.

SECTION A. DESCRIPTION OF FACILITY

1. Type

See Section II.A.1. of the Certificate of Corridor Compatibility Application.

2. Product

See Section II.A.2. of the Certificate of Corridor Compatibility Application.

3. Size and Design

See Section II.A.3. of the Certificate of Corridor Compatibility Application. A Design Data Report will be included at a later date.

4. Time Schedule

See Section II.A.3. of the Certificate of Corridor Compatibility Application.

5. Right-of-way Preparation, Construction, and Reclamation Procedures

(This section is not specifically called for in the PSC Guidelines, but it is included to provide additional relevant information as contemplated under the Energy Conversion and Transmission Facility Siting Act, N.D.C.C. § 49-22-08.1, Subd.e.)

The proposed route passes primarily through agricultural land and range land. Because there are very few obstructions within the proposed route, minimal right-of-way preparations will be necessary. In those few areas where there is tree and shrub growth, right-of-way clearing may include cutting and removal. Where practicable, trees and low-growing vegetation will not be removed if future growth will not interfere with the operation or maintenance of the line. There may be limited use of herbicides to remove or control the growth of vegetation in some areas. Herbaceous and smaller woody plants will not be disturbed, except for those that will be crushed unavoidable during structure installation. No critical threatened or endangered species habitat or otherwise sensitive vegetation will be permanently disturbed.

Some structure locations may require soil analysis. Soil borings will be taken for the purpose of determining the soil properties for engineering analysis. These borings will be taken by an experienced geotechnical testing laboratory using a 2-inch outside diameter split barrel sampler. Access to the test sites will be needed by the geotechnical lab drill rig.

The structures will be designed for installation at existing grades. Therefore, structure sites will not be graded or leveled, unless it is necessary to provide a reasonably level area for construction access and activities. Once construction is completed, any graded area will be restored to its original contour to the extent practicable.

After the right-of-way is prepared, structures will be framed and erected at the structure site. Each structure site will need to be accessed several times. This access will include construction crews and equipment, such as digger/derrick trucks to auger holes for the structures, a crane for structure setting, and crew vehicles and bucket trucks for wire stringing and clipping operations.

New poles are typically buried 10 percent of the pole length plus 2 feet (i.e., an 80 foot pole would be buried 10 feet) and spaced approximately 450-500 feet apart. Using these spacing standards would require approximately 11-12 structures per mile. Disturbance at each pole site would likely average 50 feet by 50 feet confined to the 133-foot ROW. This type of structure will be placed on an approximately 4' diameter drilled pier concrete foundation via anchor bolts. Spoil removed during boring activities will be removed to adjacent upland areas.

In addition to the right-of-way along the route, temporary construction easements will be obtained from landowners for the duration of construction. These construction easements will be limited to any additional staging or laydown areas required outside of the transmission line right-of-way. Where possible, staging and laydown areas will be located within the right-of-way and limited to previously disturbed or developed areas. Burleigh County Wind's collection substation site may be used for a temporary laydown area with no site work or grading, just temporary cribbing. This area totals approximately 17 acres. Two acres will be used for the collection substation and the remaining area will be used as a laydown area.

After structures have been erected, conductors will be installed by establishing stringing setup areas within the right-of-way. These stringing setup areas will be located approximately every two miles along the route. Conductors will be installed between setup areas using a "controlled tension method," which ensures that the cable comes off the reel at a constant tension without backlashes. Conductor stringing operations will also require brief access to each structure to secure the conductor wires to the insulators or shield wire clamps once final line sag is established.

Stringing equipment generally consists of wire pullers, tensioners, conductor reels, shield wire reels, and sheave blocks. Stringing operations consist of pulling lightweight cables or ropes through the stringing sheaves located at every structure site. This cable or rope will be used to pull the conductors through the sheaves under sufficient tension to keep the conductor from coming into contact with the ground. Temporary guard or clearance poles will be installed over existing distribution or communication lines, streets, roads, highways, railways, or other obstructions after any necessary notifications are made and/or permits obtained. This ensures that conductors will not obstruct traffic or come into contact with existing energized conductors or other cables, and protects the conductors from damage. Once a section of a line has been installed, temporary structures will be removed, holes backfilled and the area of disturbance reseeded to produce the same cover that was removed.

Debris associated with the transmission line construction may include construction materials such as packaging material, insulator crates, conductor reels, and wrapping. This debris may also include excess excavated soil and removed vegetation. Materials with salvage value, including conductor reels, unused conductor and hardware, poles, and other materials, will be removed from the site for reuse. Excess soil and vegetation will be distributed along the transmission right-of-way, but will not be placed in wetlands or other aquatic resources. Solid waste will be temporarily stored within the right-of-way or within the temporary construction easements, and

then transported to appropriate disposal facilities. Debris will be disposed of in accordance with federal, state, and local regulations.

Limited ground disturbance at the structure sites is anticipated during construction. A main marshaling yard for secure, temporary storage of materials and equipment will be established by the construction contractor in a previously disturbed or developed area, and will include sufficient space to laydown material and assemble structures or hardware. Other staging areas will be located within the right-of-way, and will be limited to the structure site areas for structure laydown and framing prior to structure installation. Disturbed areas will be restored to their original condition to the maximum extent practicable. Construction tasks would include the following:

- *Pre-Construction*: Includes activities such as environmental, geotechnical, cultural, avian, micro-siting, engineering, design, land procurement, various utility studies, and major procurement.

- *Surveying*: Initial line-survey work, consisting of aerial photography, survey control, route centerline location, profile surveys, and access surveys.

- *Steel-Pole Structures:* Vegetation would be removed from a limited area at structure locations. Once any vegetation is removed, holes would be drilled for structures using a truck-mounted auger.

- *Delivery and Assembly:* The slip-fit steel-pole structures would be transported to the erection sites on flatbed trucks and assembled. The footings of each would be backfilled with one and a half inch rock and tamped into place to prevent structure movement or settling. Final structure assembly and hardware placement would be completed using man lift trucks. It is anticipated there will be no guy wires or anchors.

- *Conductor Installation:* Following erection of all wood-pole structures, conductor and ground wires would be installed. Conductor would be pulled and tensioned from several locations (approximately every two miles) along with the transmission line route. Heavy, truck-mounted winches that also carry reels of conductor and cable would be used for pulling and tensioning work.

- *Post-construction reclamation activities*:
  - Cleaning up all construction sites, including removing and disposing of debris.
  - Removing all temporary facilities, including access trains, and staging and laydown areas.
  - Employing appropriate erosion control measures.

- *Restoration:* Finally, all disturbed areas associated with transmission line construction would be restored to preconstruction condition. Burleigh County Wind and Central Power will incorporate a tree replacement policy based on consultation with the North Dakota Game and Fish Department.

6. Easement Acquisition

(This section is not specifically called for in the PSC Guidelines, but it is included to provide additional relevant information as contemplated under the Energy Conversion and Transmission Facility Siting Act, N.D.C.C. § 49-22-08.1, Subd.f.)

Burleigh County Wind will compensate landowners for easements based on the strip area of land actually encumbered and also for facilities (structures) placed in the encumbered strip.

SECTION B. LOCATION

This section explains the considerations that contributed to Burleigh County Wind and Central Power's selection of the proposed route. It describes the justification for Burleigh County Wind and Central Power's location of the proposed route within the proposed corridor. FPL Energy LLC and Central Power's environmental policies are discussed in Section II.B.1. The factors set forth in N.D.C.C. § 49-22-09 are examined in Section II.B.2., and environmental and human health criteria are discussed and analyzed in Section II.B.4. Specific impacts of the proposed facility and mitigation of those impacts are provided in Section II.B.5.

1. Central Power Electric Cooperative Inc. (Central Power) and FPL Energy Burleigh County Wind LLC Company (Burleigh County Wind) Polices

Discuss the utility's policies and commitments to limit the environmental impact of its facilities, including copies of board resolutions and management directives.

Both companies have strong corporate environmental commitments. Both companies have policies designed to avoid and minimize environmental impacts from facilities. FPLE (Burleigh County Wind) was ranked #1 by Innovest (an independent environmental ranking firm) for its environmental commitment. Please refer to the http://www.fplenergy.com for more information on this and other environmental awards. Other policies ensure adherence to the National Electric Safety Code, efficient transfer of electricity, worker and public health and safety, and economical construction facilities to minimize rate increases to its customers. Relevant policies are discussed throughout this Amended Application and examples are provided in Exhibit 6.

2. Factors listed in N.D.C.C. § 49-22-09

Discuss the factors listed in § 49-22-09, N.D.C.C. to aid the Commission's evaluation of the proposed route.

The Energy Conversion and Transmission Facility Siting Act (N.D.C.C. § 49-22-09) lists 11 factors designed to aid the Commission in its evaluation and designation of corridors and routes. This section discusses the actions Burleigh County Wind and Central Power have taken or will take to address these factors. Specific information is also provided in later sections that describes the location and consideration of exclusion and avoidance areas, impacts to the environment, and mitigative measures.

a. Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.

Research and investigations relating to the effects of the location, construction and operation of the proposed facility are referenced throughout this Amended Application and the Amended Certificate of Corridor Compatibility Application.

b. The effects on new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.

Burleigh County Wind and Central Power will follow the most current standards of the National Electric Safety Code (NESC). These state-of-the-art design standards help minimize adverse effects to the environment and ensure the safety and health of the public, as well as the employees and contractors who construct, operate and maintain the facilities. Burleigh County Wind and Central Power will also follow safety policies that are even more stringent than the NESC. These policies further minimize environmental impacts, and ensure the safety of both the public and Burleigh County Wind and Central Power's employees.

Burleigh County Wind and Central Power have also followed their policies that require them to practice and promote environmental stewardship. (See Exhibit 6). Burleigh County Wind and Central Power's policies were developed and are constantly revised to incorporate the most recent scientific and technological information available for electric transmission facilities.

c. The potential for beneficial uses of waste energy from a proposed energy conversion facility.

This factor is not applicable to this transmission facility project.

d. Adverse direct and indirect environmental effects which cannot be avoided should the proposed site or route be designated.

The presence of wetlands may require USACE permitting as a result of construction activities. Burleigh County Wind and Central Power will not construct facilities within the wetlands.

There are approximately 1.5 acres of woodlands that will also be unavoidably impacted during project construction and these will not be allowed to regrow. Burleigh County Wind and Central Power will incorporate a tree replacement policy based on consultation with the North Dakota Game and Fish Department.

Other unavoidable direct and indirect effects to agricultural lands along the route are described more fully in Section II.D.3.c.1.a. of this Amended Application.

e. Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.

Although there was an alternative to the proposed route, the proposed route identified in this application minimizes adverse effects drastically since the length of the route has decreased from 26.3 miles to approximately 4.4 miles and does not cross the Missouri River.

f. Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated.

There are no irreversible or irretrievable commitments of natural resources created by the siting of the proposed facility, corridor, or route. Environmental protection measures will also be employed as agreed to in consultation with the US Fish and Wildlife Service Ecological Services office and the North Dakota Game and Fish Department located in Bismarck, North Dakota.

g. The direct and indirect economic impacts of the proposed facility.

The proposed facility will provide direct and indirect positive economic impacts within the State of North Dakota. Local businesses are likely to experience positive impact from

construction activities along the route. Construction materials and supplies for the proposed facility will be purchased from local suppliers whenever feasible.

Landowners along the proposed route may experience minor negative impacts because of the loss of land for agricultural production. Those landowners will be compensated for losses through easement payments.

h. Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.

Burleigh County Wind and Central Power are not aware of any existing plans for other development in the vicinity of the proposed route and corridor. Local governments and private entities have expressed an interest in developing food processing cooperatives and other processing facilities as a way of adding value to agricultural commodities produced within or near the proposed corridor. The proposed facility will enhance the electric system, to the benefit of industrial and non-industrial customers alike.

i. The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.

Burleigh County Wind and Central Power have initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Burleigh County Wind and Central Power's consultant has completed a Class I review of historic and archeological records through the North Dakota State Historic Preservation Office (SHPO). This revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Refer to Exhibit 3 for copies of letters from SHPO indicating they found the Class I review acceptable and recommended that a Class III Survey be conducted. A Class III pedestrian survey of the proposed transmission route and project wind energy center is underway and the results will be used to determine avoidance areas. To date, no obvious issues were identified. Once this survey is complete, a letter report and a letter of concurrence from SHPO will be submitted under separate cover. (See also the analysis in Section II.D.3.b.(3) of the Certificate of Corridor Compatibility Application).

j. The effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.

There will be minimal effect on areas that are unique or provide habitat for rare or endangered species. (See analysis in Section II.D.2.a.(4) of the Certificate of Corridor Compatibility Application).

k. Problems raised by federal agencies, other state agencies, and local entities.

Each of these agencies is aware of the proposed facility. Federal and state agencies raised very few issues for consideration during the March 2005 agency consultation meeting. Additional notifications were sent to the agencies inquiring about their issues in June 2005. (See Exhibit 3). Those issues have been addressed throughout this Amended Application and the Amended Certificate of Corridor Compatibility Application. Burleigh County Wind and Central Power will follow all conditions that may be imposed by these agencies.

3. Criteria maps

Identify and map the criteria that led to the proposed route location within the designated corridor.

See Section II.D.2. of the Certificate of Corridor Compatibility Application and Exhibit 4.

4. Description of PSC criteria found along the proposed route

Discuss in detail the relative value of each criteria and how the location, construction, and operation of the facility will affect each criteria.

See Section II.D.3. of the Certificate of Corridor Compatibility Application and Exhibit 4.

5. Evaluation of criteria found along the proposed route

The criteria to be evaluated shall include at a minimum all of the following which are within the designated corridor:

a. Exclusion area;

b. Avoidance areas;

c. Selection criteria;

d. Policy criteria;

e. Design and construction limitations; and

f. Economic considerations.

The proposed transmission line route avoids the exclusion areas and avoidance areas to the maximum extent practical within the corridor.

a. Exclusion areas

(1) Designated or registered national: parks, memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas.

None located along the proposed route. See Section II.D.3.a.(1) of the Certificate of Corridor Compatibility Application.

(2) Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves.

None located along the proposed route. See Section II.D.3.a.(2) of the Certificate of Corridor Compatibility Application.

(3) County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions. (See Exhibit 4, Criteria Map 2)

None located along the proposed route. See Section II.D.3.a.(3) of the Certificate of Corridor Compatibility Application.

(4) Areas critical to the life stages of threatened or endangered animal or plant species. (See Exhibit 4, Criteria Map 2).

None located along the proposed route. See Section II.D.3.a.(4) of the Certificate of Corridor Compatibility Application.

(5) Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged. (See Exhibit 4, Criteria Map 2).

None located along the proposed route. See Section II.D.3.a.(5) of the Certificate of Corridor Compatibility Application.

b. Avoidance Areas

(1) Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands. (See Exhibit 4, Criteria Map 3).

None located along the proposed route. See Section II.D.3.b.(1) of the Certificate of Corridor Compatibility Application.

(2) Designated of registered state: wild, scenic or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands (See Exhibit 4, Criteria Map 3).

None located along the proposed route. See Section II.D.3.b.(2) of the Certificate of Corridor Compatibility Application.

(3) Historical resources which are not specifically designated as exclusion or avoidance areas. (See Exhibit 4, Criteria Map 4).

Burleigh County Wind and Central Power have initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Historic/cultural resources will be avoided to the maximum extent practical. See Section II.D.3.b.(3) of the Certificate of Corridor Compatibility Application.

(4) Areas which are geologically unstable.

None located along the proposed route. See Section II.D.3.b.(4) of the Certificate of Corridor Compatibility Application.

(5) Within five hundred feet of a farmhouse, rural residence, or place of business. This criterion shall not apply to a water pipeline transmission facility (See Exhibit 4, Criteria Map 4).

The route avoids residences located within the corridor by 500 feet with the exception of two. See Exhibit 3 for copies of these waivers. See Section II.D.3.b.(5) of the Certificate of Corridor Compatibility Application.

(6) Reservoirs and municipal water supplies. (See Exhibit 4, Criteria Map 3).

None located along the proposed route. See Section II.D.3.b.(6) of the Certificate of Corridor Compatibility Application.

(7) Water resources for organized rural water districts.

None located along the proposed route. See Section II.D.3.b.(7) of the Certificate of Corridor Compatibility Application.

(8) Irrigated land. (See Exhibit 4, Criteria Map 3).

None located along the proposed route. See Section II.D.3.b.(8) of the Certificate of Corridor Compatibility Application.

(9) Areas of recreational significance which are not designated as exclusion areas.

None located along the proposed route. See Section II.D.3.b.(9) of the Certificate of Corridor Compatibility Application.

c. Selection Criteria

(1) The impact upon agriculture:

(a) Agricultural production.

The route does cross some agricultural lands. Landowners will be compensated through an easement payment for any potential loss of land and crop production. See Section II.D.3.c.(1)(a) of the Certificate of Corridor Compatibility Application.

(b) Family farms and ranches.

The route does cross some family farm/ranch land. The route does cross some agricultural lands. Landowners will be compensated through an easement payment for any potential loss of land and crop production. See Section II.D.3.c.(1)(b) of the Certificate of Corridor Compatibility Application.

(c) Land which the owner can demonstrate has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.

None located along the proposed route. See Section II.D.3.c.(1)(c) of the Certificate of Corridor Compatibility Application.

(d) Surface drainage patterns and ground water flow patterns.

See Section II.D.3.c.(1)(d) of the Certificate of Corridor Compatibility Application.

(2) The impact upon:

(a) Noise sensitive land uses.

None located along the proposed route. See Section II.D.3.c.(2)(a) of the Certificate of Corridor Compatibility Application.

(b) The visual effect on the adjacent area.

The proposed facility will be visible to landowners and community residents who live near the proposed facility. The line will be constructed on a single tubular weathering steel pole (forms a brown "wood looking" rust coating). See Section II.D.3.c.(2)(b) of the Certificate of Corridor Compatibility Application.

(c) Extractive and storage resources. (See Exhibit 4, Criteria Map 5).

None located along the proposed route. See Section II.D.3.c.(2)(c) of the Certificate of Corridor Compatibility Application.

(d) Wetlands, woodlands, and wooded areas. (See Exhibit 4, Criteria Maps 5 and 6).

Pole locations will be micro-sited in the field to avoid wetlands, woodlands and wooded areas to the maximum extent practical. See Section II.D.3.c.(2)(d) of the Certificate of Corridor Compatibility Application.

(e) Radio and television reception, and other communication or electronic control facilities. (See Exhibit 4, Criteria Map 5).

None located along the proposed route. See Section II.D.3.c.(2)(e) of the Certificate of Corridor Compatibility Application.

(f) Human health and safety.

Burleigh County Wind and Central Power will employ proper construction methods to ensure the project will result in minimal impacts to human health and safety. See Section II.D.3.c.(2)(f) of the Certificate of Corridor Compatibility Application.

(g) Animal health and safety.

None located along the proposed route, livestock impacts will be avoided. See Section II.D.3.c.(2)(g) of the Certificate of Corridor Compatibility Application.

(h) Plant life.

Impacts of the proposed facility on agricultural plant life will be minimal as discussed above, and landowners will be compensated for any losses. See Section II.D.3.c.(2)(h) of the Certificate of Corridor Compatibility Application.

d. Policy Criteria

See Section II.D.3.d of the Certificate of Corridor Compatibility Application.

e. Summary of Criteria in Proposed Corridor and Route

See Section II.D.3.e of the Certificate of Corridor Compatibility Application.

f. Design and Construction Limitations

See Section II.D.3.f of the Certificate of Corridor Compatibility Application.

g. Economic Considerations

See Section II.D.3.g of the Certificate of Corridor Compatibility Application.

6. Environmental Impacts and Mitigation

Discuss the mitigative measures that will be taken to minimize adverse impacts which result from the location, construction, and operation of the facility.

This section summarizes potential environmental impacts of the proposed facility, especially those that are not covered in the above listed criteria, and details mitigation measures.

a. Physical environment

(1) Topography and geology

Topography and geology will not be affected along the route.

(2) Mineable resources

There are no active sand or gravel pits along the route. Burleigh County Wind and Central Power avoided all active gravel and sand pits and mine shafts when siting the route.

(3) Water resources

Burleigh County Wind and Central Power will follow construction guidelines and recommendations of the Department of Health. This includes the use of mesh or burlap to hold soil during construction; establishing vegetative cover on disturbed or newly constructed areas; and following safe storage and handling procedures to prevent contamination of water from fuel spillage, lubricants, and chemicals.

(4) Soils

To minimize the amount of soil compaction during construction, access trails will be kept to the minimum necessary for construction equipment. When soils are exposed, Burleigh County Wind and Central Power will employ appropriate erosion control measures. Practices will include placement of sediment barriers downstream of construction and revegetation as soon as possible after construction. Compaction will be alleviated by tilling as necessary following construction. However, such measures are not expected to be necessary to reestablish vegetation.

(5) Atmospheric conditions

There are two potential atmospheric impacts from the proposed facility construction: (1) excess dust from construction, and (2) noise. Dust levels will be monitored during the construction process and if excess dust is noted, water will be sprayed to suppress it. Also, ensuring that heavy equipment has proper muffling systems will minimize noise during construction. Construction near farm and city residence will be limited to normal working hours to minimize impact of residents.

b. Biological environment

(1) Vegetation

Construction will affect six main types of vegetation: (1) hay land, (2) cropland, (3) native rangeland, (4) wetlands, (5) conservation set-aside land, and (6) woodlands. In a few areas, right-of-way clearing will consist of the removal of trees and brush within the right-of-way. Where practicable, trees and low-growing vegetation will be left uncleared if their future growth will not interfere with the operation or maintenance of the line. In some areas there will be limited use of herbicides to remove or control the growth of vegetation. Herbaceous and smaller woody plants will not be disturbed, except for those that will be disturbed unavoidably during structure installation. Tree removal will be minimized to the extent practicable to allow for safe and efficient management of the tower construction activities.

Areas that are disturbed to the point that vegetation is removed will be reseeded using similar vegetation that was removed, to the extent possible.

The end forty feet of one shelterbelt will be removed during construction and will not be allowed to naturally regrow. Several of the trees at this end of this shelterbelt are dead. Disturbed areas will be restored to their original condition to the maximum extent practicable. Burleigh County Wind and Central Power will incorporate a tree replacement policy based on consultation with the North Dakota Game and Fish Department.

Disturbance to wetlands will be kept to a minimum. Where disturbance takes place from structure assembly, vegetation will be allowed to grow back naturally. If applicable, Burleigh County Wind and Central Power will abide by any applicable permit from the U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service.

(2) Fish and wildlife

In order to examine potential fish and wildlife impacts of the proposed facility, representatives of Burleigh County Wind and Central Power obtained comments from and met with U.S. Fish and Wildlife Service and the North Dakota Game and Fish Department.

There are two main impacts to fish and wildlife: (1) displacement of habitat by structure placement, and (2) migratory and resident bird collision of or electrocution

with the power line. An examination of these impacts and Burleigh County Wind and Central Power's proposed mitigation plans is outlined below.

Habitat loss

Habitat displacement caused by construction of structures for grassland-type habitats will be short-term only. Once the structures are in place, grassland habitat should naturally regrow, and where it does not, Burleigh County Wind and Central Power will replant the area with cover compatible with soils and existing land use.

Habitat loss of woodlands will be permanent in those wooded areas that will be cleared. Disturbed areas will be restored to their original condition to the maximum extent practicable. Burleigh County Wind and Central Power will incorporate a tree replacement policy based on consultation with the North Dakota Game and Fish Department.

Electrocution

Electrocution of birds by power lines is a concern mostly for raptor species, such as golden eagles and red-tailed hawks. Birds are electrocuted when they come in contact with more than one conductor wires at once. This can occur on smaller distribution lines that have short distances between conductors (Olendorff et al. 1981 and Avian Power Line Interaction Committee 1996). The proposed facility has sufficient distance between conductors (about 15 to 20 feet) to make electrocution very unlikely.

Bird collision

Bird collision is a concern mostly for large, heavy bodied, flocking birds that make daily flight between adjacent habitats for roosting and feeding, and those with nocturnal feeding flights. Therefore, migratory waterfowl (e.g., tundra swans, snow geese, Canada geese, and dabbling ducks) and large waterbirds (e.g., sandhill cranes, pelicans, and gulls) have the greatest risk for collision, specifically where the proposed facility crosses large bodies of water and wetlands (Avian Power Line Interaction Committee 1994).

The proposed route crosses numerous wetlands that may be utilized by migratory waterfowl and waterbirds. To minimize impacts associated with bird collisions, Burleigh County Wind and Central Power are coordinating with local wildlife officials of the North Dakota Game and Fish Department to determine traditional roosting areas for migratory flocks.

(3) Rare and endangered species

There are no rare or endangered species located in the area. However, Whooping Cranes are known to transiently use the area. USFWS Ecological Services, Bismarck, ND has been consulted and no further action is deemed necessary at this time. (See discussion in Section II.D.1 of the Corridor Certificate Application).

Environmental protection measures will also be employed as agreed to in consultation with the US Fish and Wildlife Service Ecological Services office and the North Dakota Game and Fish Department located in Bismarck, North Dakota.

c. Cultural environment

(1) Land use

The proposed facility will have both short-term and long-term impacts to agricultural land use. (See discussion in Section II.D.3.c.(1) of the Corridor Certificate Application). Short-term impacts will take place during construction. With the proper construction and reclamation methods mentioned above for cropland, rangeland and hay land, most land use will return to normal. Long-term impacts, if any, will be minimal and are likely only to affect crop and hay land. Landowners will be compensated for these losses.

(2) Agriculture

Because agriculture is the dominant land use in the area, it will be important to monitor any potential impacts. Landowners will be compensated for crops or other assets damaged during construction. The proposed facility should not affect long-term productivity of the soil. The original contours will be maintained to keep existing drainage patterns intact. (See also the discussion in Section II.D.3.c(1) of the Corridor Certificate Application).

(3) Community services

The impact to community services will be a result of construction activity and influx of contractor employees. Burleigh County Wind and Central Power's personnel and contractors will be utilized for all construction activities. The communities along the proposed route have sufficient hotels and other services to handle the influx of workers.

(4) Transportation

The proposed facility crosses U.S. Highway 83. The construction, placement, or maintenance of the proposed facility will temporarily affect transportation on this highway. Burleigh County Wind and Central Power will coordinate with the state, county, and township officials to obtain acceptable crossing design methods and any necessary permits.

During wire stringing operations, temporary guard or clearance poles will be installed over existing distribution or communication lines, streets, roads, highways, railways, or other obstructions after any necessary notifications are made or permits obtained. This ensures that conductors will not obstruct traffic or come into contact with existing energized conductors or other cables, and protects the conductor from damage.

(5) Population and economy

Central Power will construct, own, operate, and maintain the transmission line. All workers will be either Central Power's employees or contract employees. It is possible that a contractor may hire a small number of local workers. No additional permanent jobs will be created by this action. The construction activities will provide a seasonal influx of additional dollars into the local communities during the construction phase, and materials will be purchased from local vendors where feasible.

The transmission line easements have been acquired by Burleigh County Wind, but will be assigned at a later date to Central Power. Burleigh County Wind will construct, own and operate the collection substation. Thus, Central Power and

Burleigh County Wind join in this amended application in order secure approval of these coordinated facilities.

(6) Archaeological and Historical sites

Burleigh County Wind and Central Power have initiated cultural resources investigations along the proposed project transmission line and wind energy center facilities. Burleigh County Wind and Central Power's consultant has completed a Class I review of historic and archeological records through the North Dakota State Historic Preservation Office (SHPO). This revealed that the proposed facilities would avoid sensitive areas by adjusting the locations of proposed project facilities. Refer to Exhibit 3 for copies of letters from SHPO indicating they found the Class I review acceptable and recommended that a Class III Survey be conducted. A Class III pedestrian survey of the proposed transmission route and project wind energy center is underway and the results will be used to determine avoidance areas. To date, no obvious issues were identified. Once this survey is complete, a letter report and a letter of concurrence from SHPO will be submitted under separate cover. (See Section II.D.3.b.(3).)

7. Qualifications of People Involved in the Facility Route Location Study

See Section II.D.5 of the Certificate of Corridor Compatibility Application.

8. Maps

See Section II.D.2 of the Certificate of Corridor Compatibility Application and the Waiver of Procedures.

REFERENCES

North Dakota Game and Fish Department (NDGFD). 2004. North Dakota's 100 Species of Conservation Priority. North Dakota Outdoors. July, 2004.

United States Fish and Wildlife Service (FWS). Threatened and Endangered Species System. North Dakota Listings. Downloaded December 15, 2004. Online at: http://ecos.fws.gov/tess_public/TESSWebpageUsaLists?state=all

Indexes to Statutory Requirements

Application for Certificate of Corridor Compatibility
INDEX FOR REQUIREMENTS OF N.D.C.C. §49-22-08

1.

a. A description of the size and type of facility…… …..Section II.A. Corridor Application

b. A summary of any studies which have been made of the environmental impact of the facility…….…..…..Section II.B. Corridor Application

c. A statement explaining the need for the facility……..Section II.C. Corridor Application

d. An identification of the location of the preferred site for any energy conversion facility…….....NA

e. An identification of the location of the preferred corridor for any transmission facility……....Section II.D. Corridor Application and Exhibit 1

f. A description of the merits and detriments of any location identified, and a comprehensive analysis with supporting data showing the reasons why the preferred location is beset suited for the facility……...Section II.D. Corridor Application

g. A description of mitigative measures that will be taken to minimize all foreseen adverse impact resulting from location, construction, and operation of the proposed facility……..…....Section II.B.6. Corridor Application

h. An evaluation of the proposed site or corridor with regard to the application considerations set out in section 49-22-09……...Section II.D.1. Corridor Application and the Criteria established pursuant to section 49-22-05.01……....….....Section II.D.3. Corridor Application

i. Such other information as the applicant may consider relevant or the commission may require……....Throughout Applications

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INDEX FOR REQUIREMENTS OF N.D.C.C. §49-22-08.1, Section 1

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b. Description of the location of the proposed facility..…….…..Section II.B. Route Application

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d. A description of mitigative measures that will be taken to minimize all foreseen adverse impact resulting from location, construction, and operation of the proposed facility……...Section II.B.6. Route Application

e. A description of the right-of-way preparation and construction and reclamation procedures…….....Section II.A.5. Route Application

f. A statement setting forth the manner in which: (1) the Utility will inform affected landowners of easement acquisition, and necessary easement conditions and restrictions. (2) The utility will compensate the landowners for easements, without reference to the actual consideration to be paid …….....Section II.A.6. Route Application

g. Such other information as utility may consider relevant or the commission may require……....Throughout Applications

Exhibits

Exhibits

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Exhibit 1

TETRA TECH, INC.

1:20,000

0 1,000 2,000

Feet

Transmission Towers

Proposed Transmission Route

Substation

EXHIBIT 1
PROJECT AREA OVERVIEW
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Exhibit 2

Exhibit 2a
Guide for Steel Pole Structure Dimensions

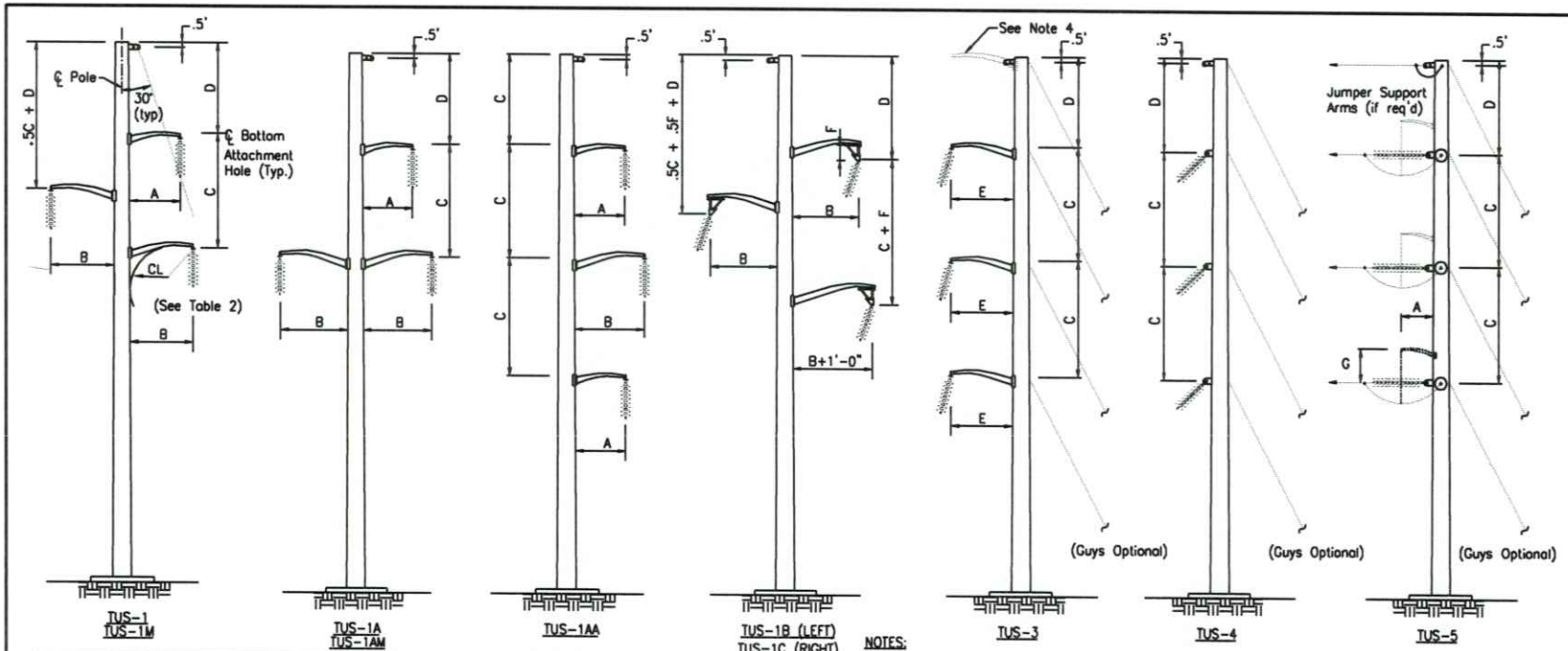


TABLE 1 – MINIMUM DIMENSIONS (FEET)								
VOLTAGE	115 KV		138 KV		161 KV		230 KV	
NUMBER OF INSULATORS	7	8	8	9	10	11	12	13
A	6.0	7.0	7.0	7.5	8.5	9.0	10.0	10.5
B	7.0	8.0	8.0	8.5	9.5	10.0	11.0	11.5
C	8.0	9.0	9.0	10.0	11.0	12.0	13.0	14.0
D	5.5	6.5	6.5	7.5	8.0	9.0	10.0	11.0
E	AS REQUIRED (BY ENGINEER)							
F	AS REQUIRED (BY ENGINEER)							
G	AS REQUIRED (BY ENGINEER)							

TABLE 2 – MINIMUM CLEARANCES (INCHES)								
VOLTAGE	115 KV		138 KV		161 KV		230 KV	
NUMBER OF INSULATORS	7	8	8	9	10	11	12	13
NO WIND	42	48	48	54	60	65	71	77
6 PSF WIND	26	26	30	30	35	35	52	52
EXTREME WIND	10	10	12	12	14	14	20	20

NOTES:

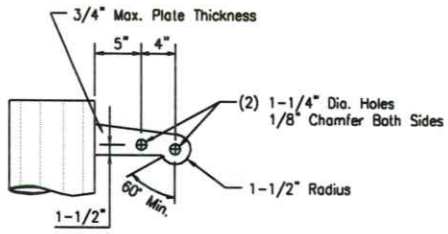
1. Dimensions and clearances in tables are minimums and based on the use of porcelain bells. Greater dimensions may be required to improve insulator swing, galloping performance, or separation requirements. A 30 degree shielding angle in assumed. For structures of heights greater than 75 feet, the shield angle should be decreased. For high isokeraunic levels, high contamination areas,or high ground resistance, use the larger number of insulators (second column for each voltage).
2. A maximum altitude of 3300 feet above M.S.L. is assumed. For higher altitudes, clearances in Table 2 should be increased.
3. The number of insulators in Table 2 are for tangent and small angle structures. For angle structures (TUS-3 and 4), one additional insulator bell should be used. For the deadend structures (TUS-5, TUS-1M, and TUS-1AM), two additional bells should be used.
4. If crossarms are used for OHGW support, dimension "D" may be reduced as long as an adequate shielding angle is maintained.
5. Arm length is from face of pole to end of arm shaft. Vertical dimensions between arms are from centerline to centerline of bottom attachment holes.
6. Type 1 end plates for crossarms are to be used with TUS-1 and TUS-1A. Type 2 plates are to be used with TUS-1M and TUS-1AM. See drawing TM-S1, detail "C".
7. For structures TUS-1B and TUS-1C, the length of the crossarms to the inside of the line angle may be less than the indicated minimum dimensions in Table 1.

TRANSMISSION LINE STRUCTURE

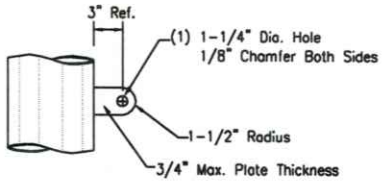
GUIDE FOR STEEL POLE STRUCTURE DIMENSIONS
(115 KV – 230 KV)

SCALE:		DATE: JANUARY '97
N.T.S.		TUS (Series)

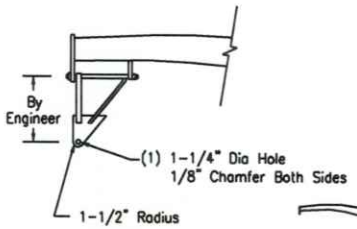
Exhibit 2b
Guide for Steel Pole Structure Details 1



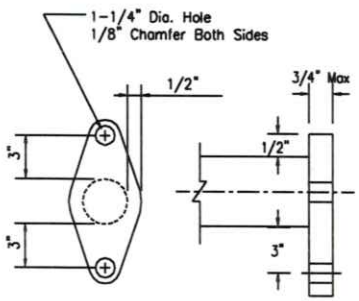
STANDARD DETAIL "A"
OHGW SUSPENSION
VANG DETAILS

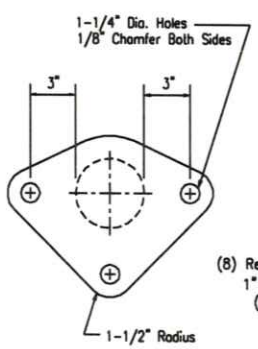


STANDARD DETAIL "B"
CONDUCTOR OR OHGW
STRAIN VANG
(OR GUYING VANG)
DETAILS

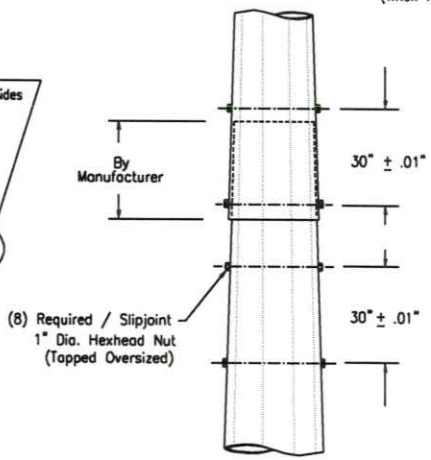


TYPICAL DETAIL "D"
SWINGING ANGLE
BRACKET DETAILS
(When Required)

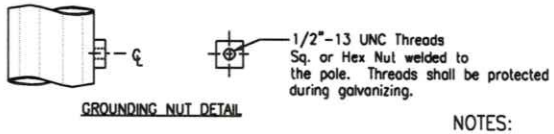




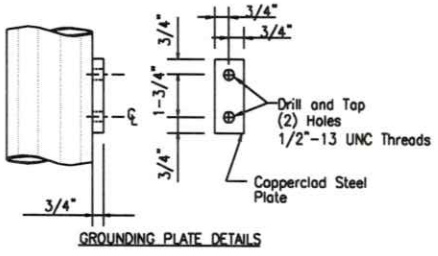
STANDARD DETAIL "C"
CONDUCTOR OR OHGW
END PLATES DETAILS



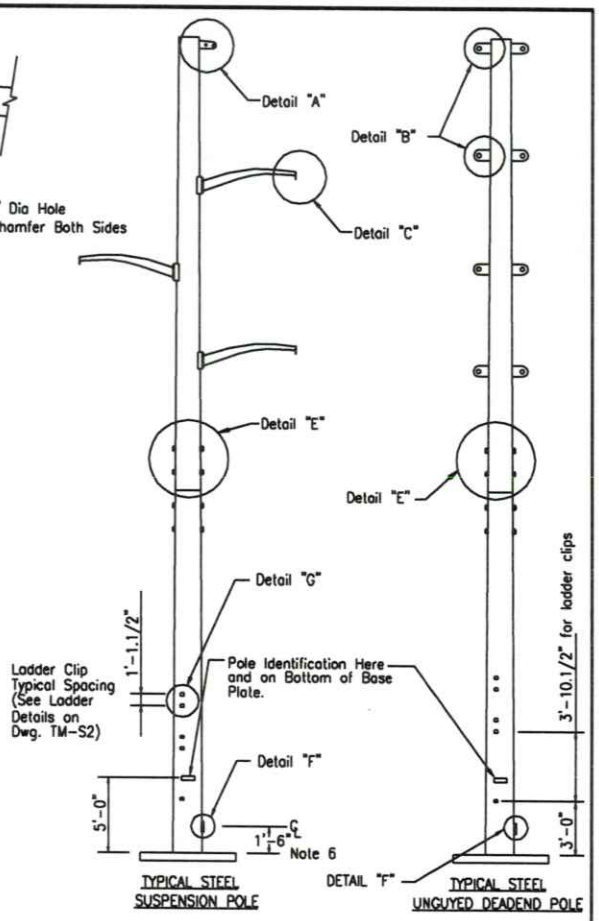
STANDARD DETAIL "E"
JACKING NUT DETAIL
FOR SLIP JOINTS



GROUNDING NUT DETAIL



GROUNDING PLATE DETAILS
STANDARD DETAIL "F"



TYPICAL STEEL
SUSPENSION POLE

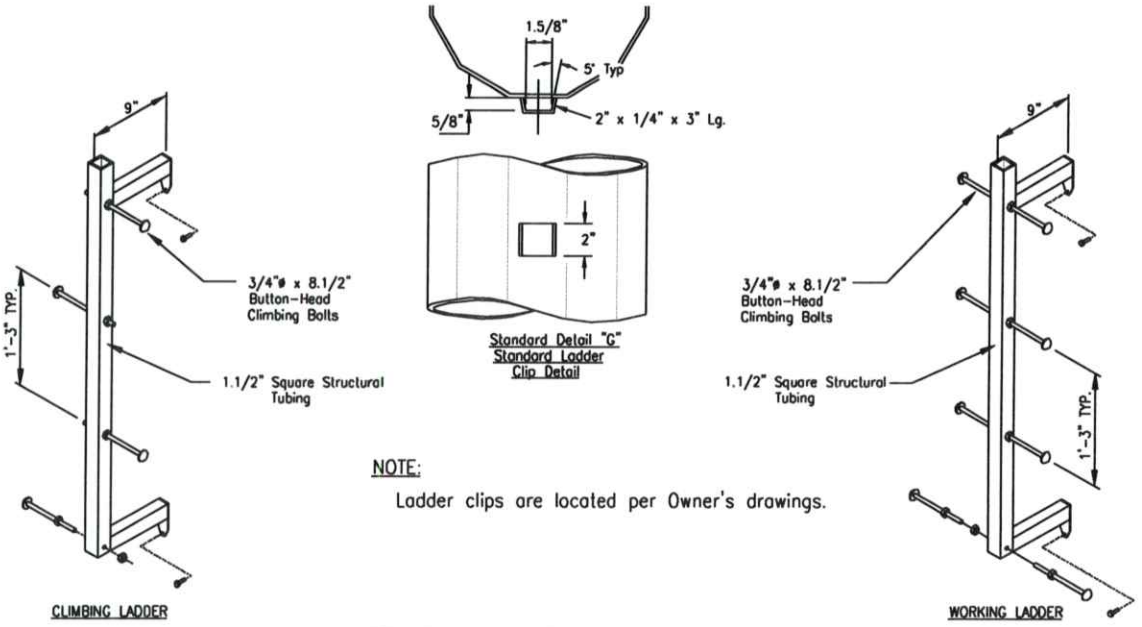
TYPICAL STEEL
UNGUYED DEADEND POLE

NOTES:

1. Connection design and detailing to be by fabricator. Details shown hereon are only typical of the shapes and dimensions desired. Fabricator shall be responsible for the structural adequacy and proper fit-up of all parts of the structures without damage to protective coatings.
2. Additional or alternate attachments not shown hereon (such as grounding connections, permanent climbing devices, etc.) may be required; these shall be shown by the engineer on a separate drawing.
3. Type 1 end plates are to be used for TUS-1 and TUS-1A structures. Type 2 are for TUS-1M and TUS-1AM structures.
4. Engineer to specify the type of ground connection (Detail F).
5. Engineer to specify the length of the swinging angle bracket (Detail D).
6. For direct embedded steel poles, locate grounding nut or grounding plate 6" above groundsleeve.

TRANSMISSION LINE STRUCTURE		
GUIDE FOR STEEL POLE STRUCTURE DETAILS		
SCALE: N.T.S.		DATE: JANUARY '97 TM-S1

Exhibit 2c
Guide for Steel Pole Structure Details 2



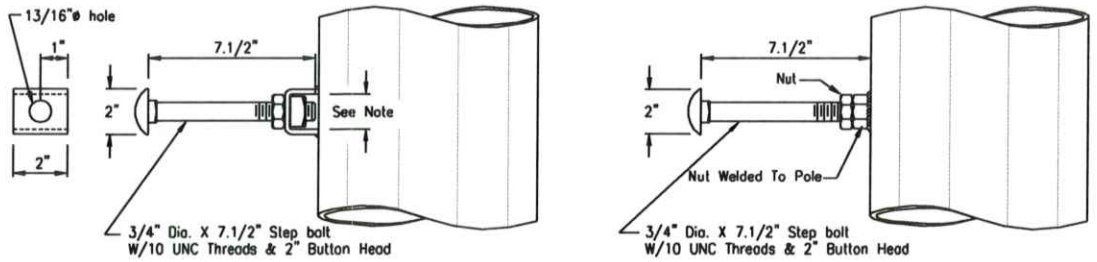
NOTE:

Ladder clips are located per Owner's drawings.

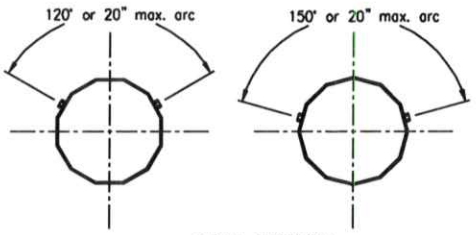
STANDARD LADDER DETAILS

NOTE:

1. Step bolt clip shall be designed and fabricated to prevent square nut rotation while step bolt is installed.
2. Step bolts are located per owner's drawings.



STANDARD STEP BOLT DETAILS



TRANSMISSION LINE STRUCTURE		
GUIDE FOR STEEL POLE STRUCTURE DETAILS		
SCALE: N.T.S.		DATE: JANUARY '97 TM-S2

Exhibit 2d
Photographs of typical structures


17 12:14 PM


17 12:05 PM


17 12:04 PM




17 12:08 PM


JUN 16 2005


JUN 16 2005

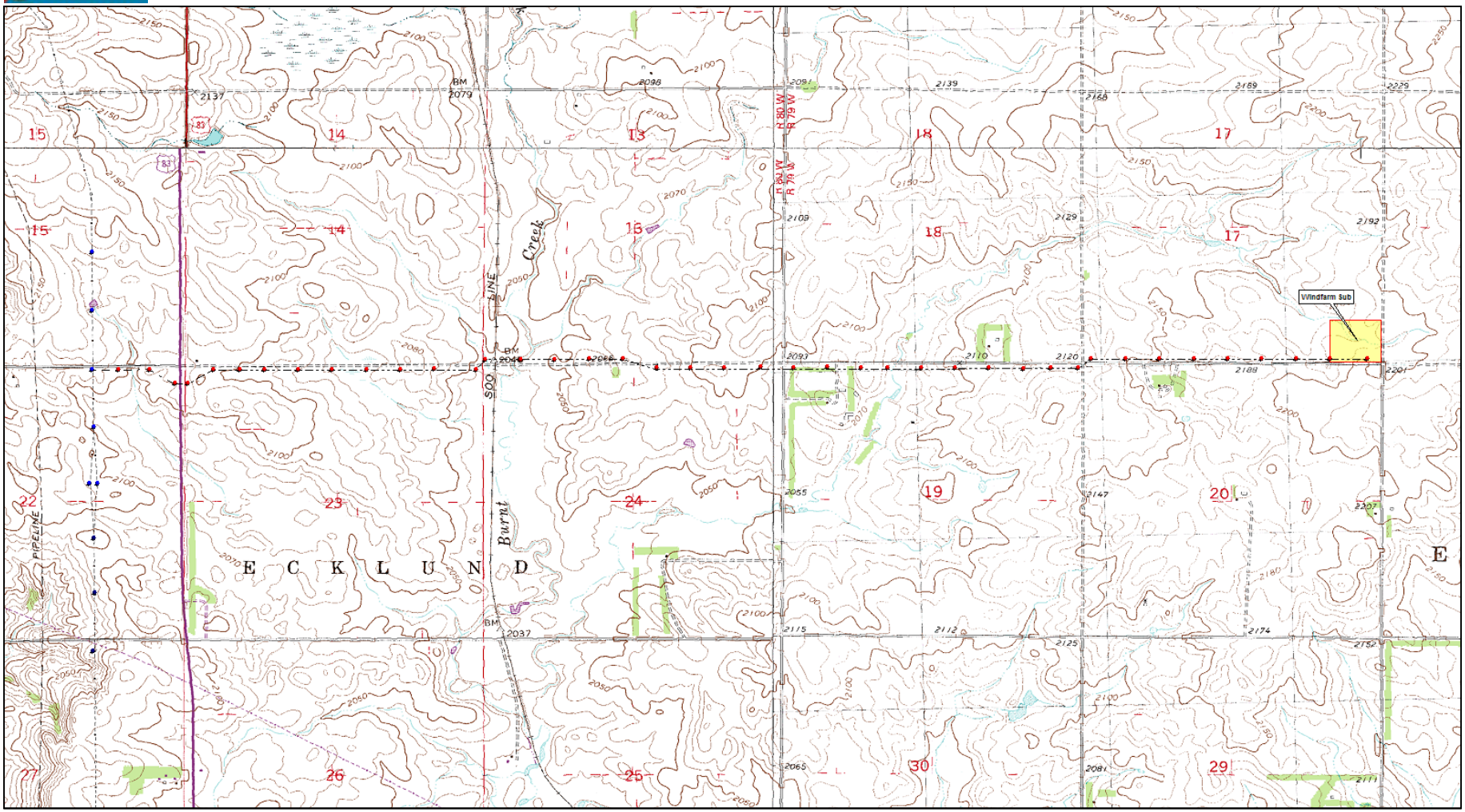

JUN 16 2005


JUN 16 2005

Exhibit 2e
Substation Drawings

DeLORME

XMap® 4.0

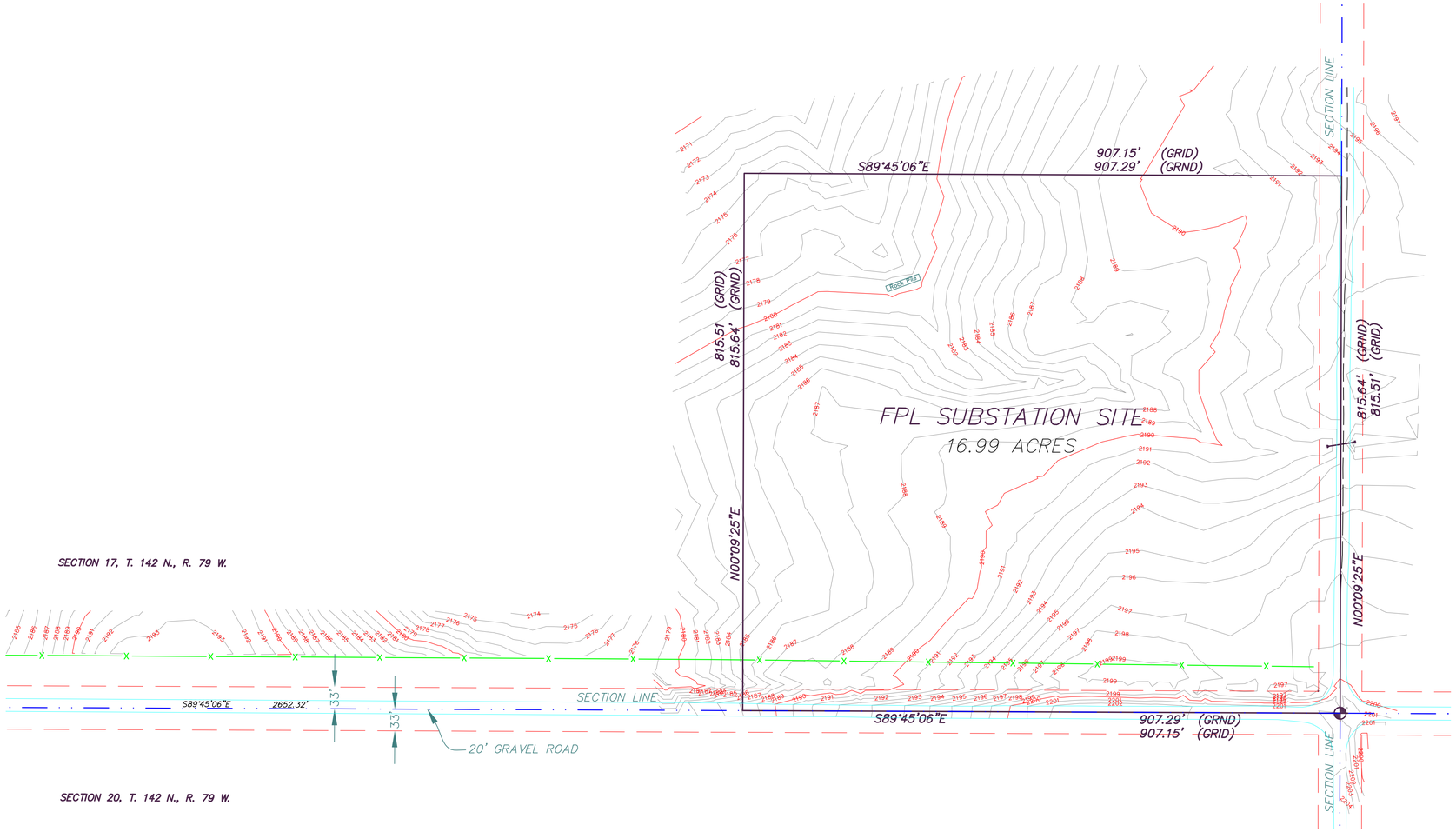


© 2003 DeLorme. XMap®.
www.delorme.com

TN
MN (8.2°E)

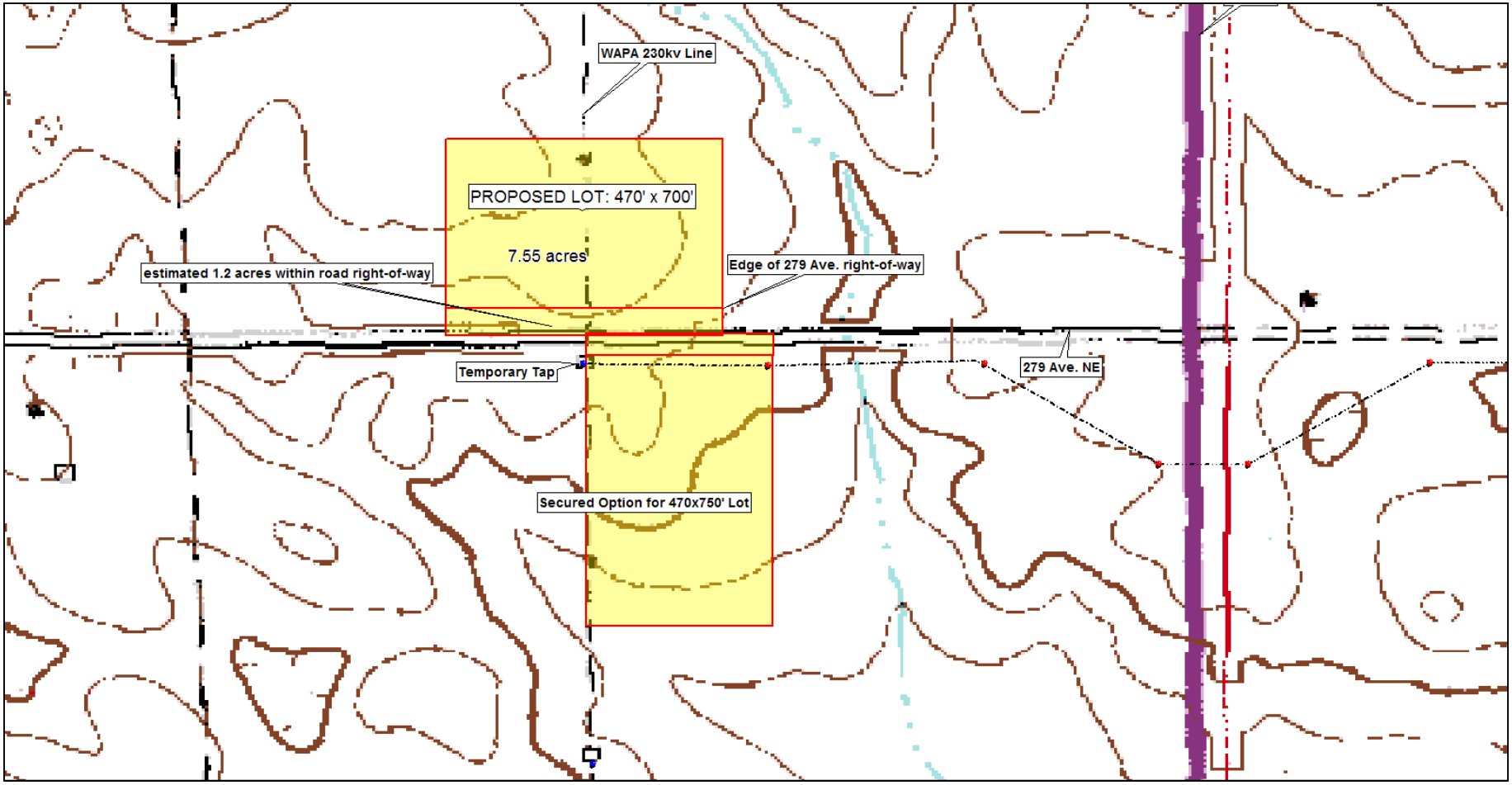
0 ¼ ½ ¾ 1 mi
0 ¼ ½ ¾ 1 km

Data Zoom 13-7


S89°45'06"E
907.15' (GRID)
907.29' (GRND)
SECTION LINE
815.51' (GRID)
815.64' (GRND)
Rock Pile
FPL SUBSTATION SITE
16.99 ACRES
N00°09'25"E
815.64' (GRND)
815.51' (GRID)
SECTION 17, T. 142 N., R. 79 W.
S89°45'06"E
2652.32'
33'
33'
SECTION LINE
20' GRAVEL ROAD
S89°45'06"E
907.29' (GRND)
907.15' (GRID)
SECTION LINE
SECTION 20, T. 142 N., R. 79 W.

DeLORME

XMap® 4.0



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www.delorme.com

TN
MN (8.2°E)

0 160 320 480 640 800 ft
0 40 80 120 160 200 m

Data Zoom 16-0

Exhibit 3

Exhibit 3a
Agency Consultations (Email Notifications)

Tracey Martorano /ENG/CSQ
06/15/2005 12:18 PM

To Matthew Kearns/ENGY/CSQ@CSQ
cc
bcc
Subject Fw: PSC Application - Your Timely Response is Appreciated!

Here is the list of agencies that this email was submitted to:

- United States Army Corp of Engineers (USACE) — Daniel Cimarosti
- United States Fish and Wildlife Service (USFWS) — Terry Ellsworth
- Department of Transportation — Tom Freier (Director)
- State Historic Preservation Office — Paul Picha
- Indian Affairs Commission — Cheryl Kulas
- Land Department — Michael Haupt
- North Dakota State Water Commission (NDSWC) — Jim Lindseth
- North Dakota Game and Fish Department (NDGFD) — John Schumacher
- Aeronautics Commission — General Office
- Department of Health — Dave Glatt (Chief)
- Parks and Recreation Department — Christine Dirk

Thanks
~~~~~~

Tracey Martorano, P.E.
Civil Engineer
Tetra Tech EC, Inc.
133 Federal Street
6th Floor
Boston, MA 02110
office: (617) 457-8272
fax: (617) 457-8498
Email: Tracey.Martorano@tteci.com

----- Forwarded by Tracey Martorano/ENG/CSQ on 06/15/2005 12:19 PM -----

Tracey Martorano /ENG/CSQ
06/15/2005 12:05 PM

To Matthew Kearns/ENGY/CSQ
cc
Subject PSC Application - Your Timely Response is Appreciated!

Ladies and Gentlemen,

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~~~~~~

This application would replace the proposed approximately 28-mile route proposed earlier this spring.

Please provide any comments that you have on this proposed transmission line by letter or email by Friday June 24, 2005. If you do not have comments on this project please send an email or letter to that affect. The proposed project has incorporated the agency comments received during consultation on the previous application before the PSC.

Thank you for your prompt reply,
Matthew Kearns



public_involvement_figure_cln.jpg

Tracey Martorano /ENG/CSQ
06/15/2005 12:05 PM

To Matthew Kearns/ENGY/CSQ@CSQ

cc

bcc tfreier@state.nd.us; ppicha@state.nd.us; ckulas@state.nd.us; mhaupt@state.nd.us; jlindset@water.swc.state.nd.us; jschumac@state.nd.us; ndaero@state.nd.us; dglatt@state.nd.us; cdirk@state.nd.us; terry_ellsworth@fws.gov; Daniel.E.Cimarosti@nwo02.usace.army

Subject PSC Application - Your Timely Response is Appreciated!

Ladies and Gentlemen,

An amended application to the ND Public Service Commission (PSC) will be filed jointly by Central Power Electric Cooperative and FPL Energy Wilton Wind LLC (Wilton Wind) to construct an approximately four-mile, 230kV transmission line between the proposed Wilton Wind Energy Center and Western's existing Garrison-Bismarck Transmission Line. The point of interconnection with Western's existing Garrison-Bismarck Transmission Line, would be west of Highway 83, about three miles south of the town of Wilton.

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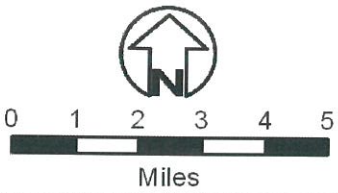
Thank you for your prompt reply,
Matthew Kearns



public_involvement_figure_cln.jpg

Proposed Facilities Including Turbine Array, Substations, and Transmission Route to Point of Western Area Power Administration Interconnect





New Substations

New Transmission Line

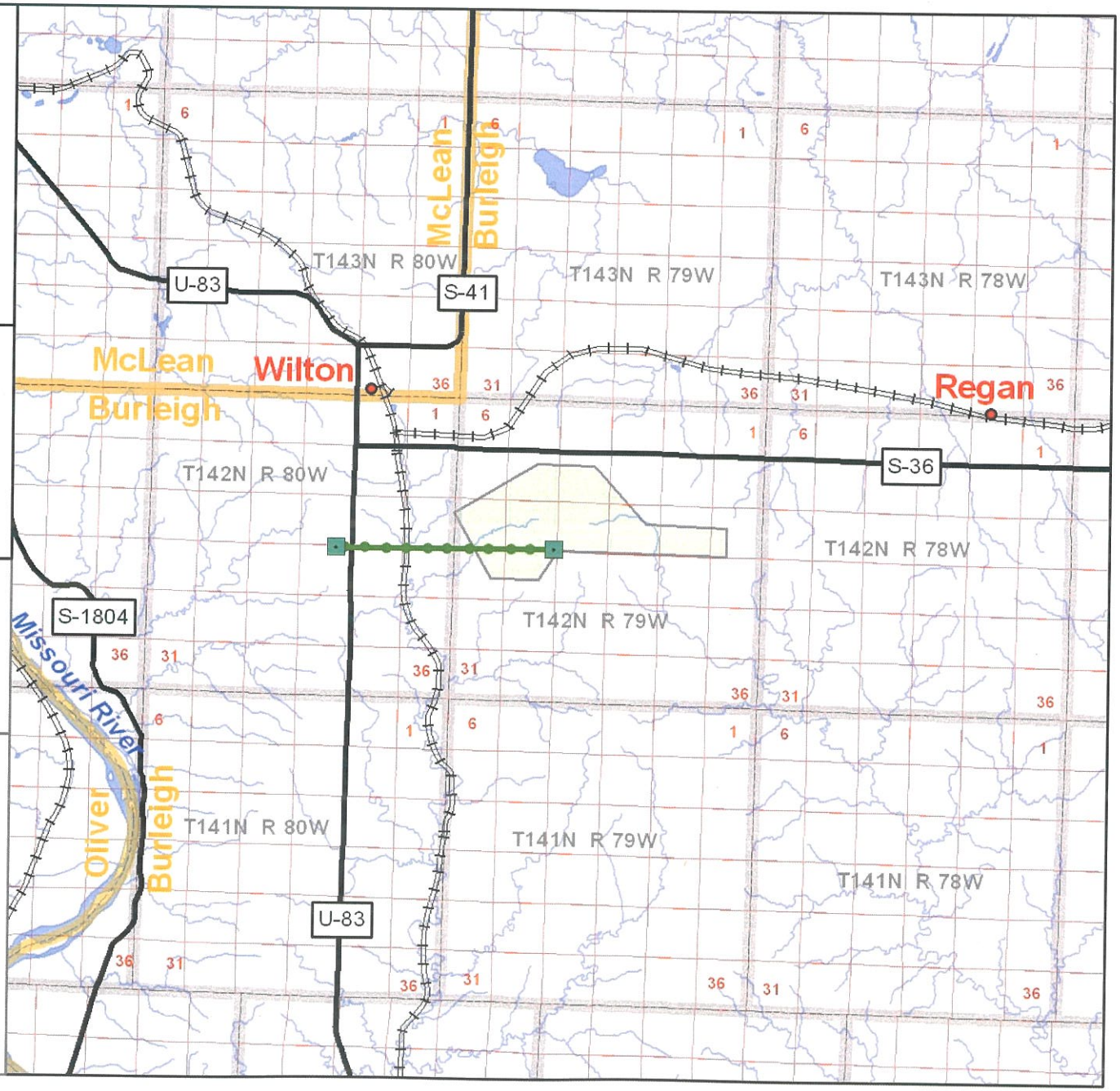
Wind Energy Center

Cities and Towns

Highways

Townships

Sections





Tracey Martorano/ENG/CSQ
06/22/2005 10:20 AM

To Jennifer Ghiloni/SCI/CSQ@CSQ
cc
bcc
Subject Fw: PSC Application - Your Timely Response is Appreciated!

~~~~~~

Tracey Martorano, P.E.
Civil Engineer
Tetra Tech EC, Inc.
133 Federal Street
6th Floor
Boston, MA 02110
office: (617) 457-8272
fax: (617) 457-8498
Email: Tracey.Martorano@tteci.com

----- Forwarded by Tracey Martorano/ENG/CSQ on 06/22/2005 10:24 AM -----



"Cain, Cindy C." <ccain@state.nd.us>
06/21/2005 01:01 PM

To "'Tracey.Martorano@tteci.com'" <Tracey.Martorano@tteci.com>
cc
Subject RE: PSC Application - Your Timely Response is Appreciated!

Thanks Tracey,

Mr. Glatt is out of the office until June 29th, so I can't get his signature on our letter until then. I don't anticipate that he will make any changes to our reviewer's comments though, so I will fax a copy of the letter to Mr. Kearns' attention today.

Cindy Cain, Administrative Assistant
North Dakota Department of Health
Environmental Health Section Chief's Office
P.O. Box 5520
Bismarck, ND 58506-5520
Phone: 701.328.5150
Fax: 701.328.5200

-----Original Message-----
From: Tracey.Martorano@tteci.com [mailto:Tracey.Martorano@tteci.com]
Sent: Tuesday, June 21, 2005 11:33 AM
To: Cain, Cindy C.
Cc: Matthew.Kearns@tteci.com; Kenneth_Stein@fpl.com
~~~~~~

Subject: Re: PSC Application - Your Timely Response is Appreciated!

Cindy,

You can send a hard copy to:

Tetra Tech EC, Inc.
133 Federal Street
6th Floor
Boston, MA 02110
Attn: Matt Kearns

If at all possible, could you also fax them to the # below so that we can incorporate your letter into the PSC Application? Thanks

Thank you.

~~~~~~

Tracey Martorano, P.E.
Civil Engineer
Tetra Tech EC, Inc.
133 Federal Street
6th Floor
Boston, MA 02110
office: (617) 457-8272
fax: (617) 457-8498
Email: Tracey.Martorano@tteci.com

"Cain, Cindy C." <ccain@state.nd.us>
06/21/2005 12:06 PM

To: "'Tracey.Martorano@tteci.com'" <Tracey.Martorano@tteci.com>
cc:

Subject: Re: PSC Application - Your Timely Response is Appreciated!
~~~~~~

Please provide a mailing address for our comments on this project.

Thank you.

Cindy Cain, Admin. Assistant

For

L. David Glatt, Chief
Environmental Health Section
ND Department of Health
P.O. Box 5520
Bismarck, ND 58506-5520

-----Original Message-----
From: Tracey.Martorano@tteci.com [mailto:Tracey.Martorano@tteci.com]
Sent: Thursday, June 16, 2005 11:55 AM
To: tfreier@STATE.ND.US; ppicha@STATE.ND.US; ckulas@STATE.ND.US; mhaupt@STATE.ND.US; jlindset@water.swc.state.nd.us; jschumac@STATE.ND.US; ndaero@STATE.ND.US; dglatt@STATE.ND.US; cdirk@STATE.ND.US; terry_ellsworth@fws.gov; Daniel.E.Cimarosti@nwo02.usace.army

Subject: PSC Application - Your Timely Response is Appreciated!

Ladies and Gentlemen,

An amended application to the ND Public Service Commission (PSC) will be filed jointly by Central Power Electric Cooperative and FPL Energy Wilton Wind LLC (Wilton Wind) to construct an approximately four-mile, 230kV transmission line between the proposed Wilton Wind Energy Center and Western's existing Garrison-Bismarck Transmission Line. The point of interconnection with Western's existing Garrison-Bismarck Transmission Line, would be west of Highway 83, about three miles south of the town of Wilton.

This application would replace the proposed approximately 28-mile route proposed earlier this spring.

Please provide any comments that you have on this proposed transmission line by letter or email by Friday June 24, 2005. If you do not have comments on this project please send an email or letter to that affect. The proposed project has incorporated the agency comments received during consultation on the previous application before the PSC.

Thank you for your prompt reply,
Matthew Kearns

(See attached file: public_involvement_figure_cln.jpg)

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
1200 Missouri Avenue, Bismarck, ND 58504-5264
P.O. Box 5520, Bismarck, ND 58506-5520
701.328.5200 (fax)
www.ndhealth.gov

June 21, 2005

Mr. Matthew Kearns
Tetra Tech EC, Inc.
133 Federal Street
6th Floor
Boston, MA 02110

Re: New Electrical Transmission Line Between Wilton Wind Energy Center and Western's Garrison-Bismarck Transmission Line, Burleigh County, ND

Dear Mr. Kearns:

This department has reviewed the information concerning the above-referenced project submitted under date of June 16, 2005, with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.

2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance, and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.

3. Projects disturbing one or more acres are required to have a permit to discharge storm water runoff until the site is stabilized by the reestablishment of vegetation or other permanent cover. Also, cities may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local storm water management considerations are addressed.

4. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. Noise effects can also be

minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this department in our determination regarding the issuance of such a certification.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

L. David Glatt, P.E., Chief
Environmental Health Section

LDG:cc
Attach.

NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
1200 Missouri Avenue, Bismarck, ND 58504-5264
P.O. Box 5520, Bismarck, ND 58506-5520
701.328.5200 (fax)
www.ndhealth.gov

Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.

"Lindseth, Jim C."
<jlindseth@state.nd.us>
06/16/2005 06:00 PM

To Jennifer.Ghiloni@tteci.com
cc
bcc
Subject RE: PSC Application - Your Timely Response is Appreciated!

Jennifer,

After a review of quads of the project area there appears to be no meandered bodies nor is the Missouri River corridor within the project area. Therefore, a sovereign land permit does not appear to be required. I did not detect any depressional areas or wetlands indicated so at this time I don't believe there are any drain permits required. A couple of intermittent watercourses were indicated within the project area and along the transmission route. Any impacts to those watercourses may require a permit. The type of permit is unknown with the limited information provided and would need to be determined after additional information is provided. Fill into the watercourse may require a drain permit or may require a dam construction permit if it is able to retain water. If there is not an impact there should be no permits needed form this agency.

I also suggest you confer with the Burleigh County Water Resource District for any permits or concerns they may have on this project.

Jim Lindseth
Water Resource Engineer
Regulatory Section
State Water Commission-Office of the State Engineer

-----Original Message-----
From: Jennifer.Ghiloni@tteci.com [mailto:Jennifer.Ghiloni@tteci.com]
Sent: Wednesday, June 15, 2005 2:09 PM
To: jlindseth@state.nd.us
Subject: PSC Application - Your Timely Response is Appreciated!

Dear Mr. Lindseth,

An amended application to the ND Public Service Commission (PSC) will be filed jointly by Central Power Electric Cooperative and FPL Energy Wilton Wind LLC (Wilton Wind) to construct an approximately four-mile, 230kV transmission line between the proposed Wilton Wind Energy Center and Western's existing Garrison-Bismarck Transmission Line. The point of interconnection with Western's existing Garrison-Bismarck

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Thank you for your prompt reply,
Jennifer Ghiloni

Jennifer A. Ghiloni
Environmental Scientist
Tetra Tech EC, Inc.
133 Federal Street
Boston, MA 02110

Phone: 617-457-8421
Fax: 617-457-8498/8499



"Haupt, Michael L."
<mhaupt@state.nd.us>
06/20/2005 10:49 AM

To "'Tracey.Martorano@tteci.com'"
<Tracey.Martorano@tteci.com>
cc
bcc
Subject RE: PSC Application - Your Timely Response is Appreciated!

Matthew Kearns,

In regards to the amended application listed below there does not appear to be any ND School Trust Land involved in the proposed line. Thanks.

Michael L. Haupt
Range Specialist
North Dakota State Land Dept
mhaupt@state.nd.us

-----Original Message-----
From: Tracey.Martorano@tteci.com [mailto:Tracey.Martorano@tteci.com]
Sent: Thursday, June 16, 2005 11:55 AM
To: tfreier@STATE.ND.US; ppicha@STATE.ND.US; ckulas@STATE.ND.US; mhaupt@STATE.ND.US; jlindset@water.swc.state.nd.us; jschumac@STATE.ND.US; ndaero@STATE.ND.US; dglatt@STATE.ND.US; cdirk@STATE.ND.US; terry_ellsworth@fws.gov; Daniel.E.Cimarosti@nwo02.usace.army

Subject: PSC Application - Your Timely Response is Appreciated!

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Thank you for your prompt reply,
Matthew Kearns

(See attached file: public_involvement_figure_cln.jpg)

Exhibit 3b
Other Correspondence

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

John Hoeven
Governor of North Dakota

North Dakota
State Historical Board

Diane K. Larson
Bismarck - President

Marvin L. Kaiser
Williston - Vice President

Albert I. Berger
Grand Forks - Secretary

Chester E. Nelson, Jr.
Bismarck

Gereld Gerntholz
Valley City

A. Ruric Todd III
Jamestown

Sara Otte Coleman
Director
Tourism Division

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Douglass Prchal
Director
Parks and Recreation Department

David A. Sprynczynatyk
Director
Department of Transportation

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

June 10, 2005

Mr. Joseph Giliberti
Archaeologist
Western Area Power Administration
12155West Alameda Parkway
PO Box 281213
Lakewood, CO 80228-8213

Mr. Daniel E. Cimarosti
Acting State Project Manager
North Dakota Regulatory Office
Corps of Engineers
1513 South 12th Street
Bismarck, ND 58504-6640

NDSHPO REF. : 05- 0657, WAPA and COE Wilton (Burleigh County) Wind Farm
WAPA Burleigh County Wind Farm
COE 200560210 Tetra Tech, Inc., applicant

Dear Joe and Dan:

We have reviewed project: "Burleigh/Oliver County Wind Farm Phase B Survey, Scope-of-Work," prepared by Metcalf Archaeological Consultants, (June 9, 2005) and find it acceptable.

We look forward to further consultation on this project, and reviewing the Management Summary report covering the aforementioned investigations.

Also, we look forward to reviewing the comprehensive Class III Cultural Resources Inventory report covering the complete investigations for the project.

Thank you for the opportunity to review the project. If you have questions please contact Paul Picha at (701) 328-3574.

Sincerely,

Paul R. Picha
[signed for]

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota
c: Matthew Kearns, Senior Energy Consultant, Tetra Tech EC

Accredited by the American Association of Museums

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

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Governor of North Dakota

North Dakota
State Historical Board

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Valley City

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Jamestown

Sara Otte Coleman
Director
Tourism Division

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Douglass Prchal
Director
Parks and Recreation Department

David A. Sprynczynatyk
Director
Department of Transportation

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

April 29, 2005

Mr. Matthew Kearns
Senior Energy Consultant
Tetra Tech EC
133 Federal Street 6th Floor
Boston, MA 02110

NDSHPO REF. : 05- 0645, COE Wilton (Burleigh County) Wind Farm and Center (Oliver County) Transmission Line

Dear Mr. Kerns:

We have reviewed project: "Wilton (Burleigh County) Wind Farm and Center (Oliver County) Transmission Line, North Dakota," and find the Class I CRI (file search) prepared by Metcalf Archaeological Consultants (April 26, 2005) acceptable.

The Area of Potential Effect (APE) has not been previously inventoried for cultural resources, and there is potential for unrecorded properties in a variety of physiographic settings in the Burleigh-Oliver County project area. As a result, we recommend that a Class III Cultural Resources Inventory be conducted of the transmission line corridor and substation, as discussed at the April 27 meeting. Recommendations regarding survey needs for the turbine sightings aspect in Burleigh County are presently being addressed.

Thank you for the opportunity to review the project. If you have questions please contact Paul Picha at (701) 328-3574.

Sincerely,

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota

c: Daniel Cimarosti, COE-Bismarck Regulatory Office
c: Suzanne Nelsen, Metcalf Archaeological Consultants

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David A. Sprynczynatyk
Director
Department of Transportation

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

April 29, 2005

Mr. Jason Renschler
Project Manager
North Dakota Regulatory Office
Corps of Engineers
1513 South 12th Street
Bismarck, ND 58504-6640

NDSHPO REF. : 05- 0657, COE Wilton (Burleigh County) Wind Farm and Center (Oliver County) Transmission Line–Missouri River Crossing 200560210 Tetra Tech, Inc., applicant

Dear Mr. Renschler:

We have reviewed project: "Wilton (Burleigh County) Wind Farm and Center (Oliver County) Transmission Line, North Dakota," and find the Class I CRI (file search) prepared by Metcalf Archaeological Consultants (April 26, 2005) acceptable.

The Area of Potential Effect (APE) has not been previously inventoried for cultural resources, and there is potential for unrecorded properties in a variety of physiographic settings in the Burleigh-Oliver County project area. As a result, we recommend that a Class III Cultural Resources Inventory be conducted of the transmission line corridor and the proposed river crossing corridor as discussed at the April 27 meeting.

Thank you for the opportunity to review the project. If you have questions please contact Paul Picha at (701) 328-3574.

Sincerely,

for

Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota

c: Matthew Kearns, Senior Energy Consultant, Tetra Tech EC

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Chester E. Nelson, Jr.
Bismarck

Gereld Gerntholz
Valley City

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Director
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Secretary of State

Douglass Prchal
Director
Parks and Recreation Department

David A. Sprynczynatyk
Director
Department of Transportation

John E. Von Rueden
Bismarck

Merlan E. Paaverud, Jr.
Director

June 16, 2005

Ms. Mary Barger
Federal Preservation Officer
Western Area Power Administration
12155 West Alameda Parkway
PO Box 281213
Lakewood, CO 80228-8213

Ms. Susan E. Wefald
Commissioner
Public Service Commission
Department 408
600 East Boulevard Avenue
Bismarck, ND 58505-0480

NDSHPO REF. : 05- 0657 WAPA/PSC/COE Wilton Wind Energy Center (Burleigh County, ND)
PSC Application Wilton Wind Energy 230 kV Transmission Line
WAPA Wilton Wind
COE 200560210 Tetra Tech, Inc., applicant

Dear Ms. Barger and Ms. Wefald:

We have reviewed project: "Wilton Wind 230 kV Transmission Line." As indicated in prior consultation and correspondence, we concur with the scope and level of identification efforts for cultural resources. To reiterate, we concur with and we look forward to reviewing the comprehensive Class III Cultural Resources Inventory report covering the complete investigations for the project, including the proposed transmission line corridor and substations.

Also, we look forward to further consultation on this project, and to reviewing the Management Summary report covering the aforementioned investigations.

Thank you for the opportunity to review the project. If you have questions please contact either Paul Picha at (701) 328-3574 or Fern Swenson at (701) 328-3575.

Sincerely,

for Merlan E. Paaverud, Jr.
State Historic Preservation Officer (North Dakota)
and
Director, State Historical Society of North Dakota
c: Matthew Kearns, Senior Energy Consultant, Tetra Tech EC
c: Daniel E. Cimarosti, COE-Bismarck, State Regulatory Office

Accredited by the American Association of Museums

Matthew Kearns/ENGY/CSQ
06/16/2005 08:53 AM

To: jschumac@state.nd.us
cc: Kenneth_Stein@fpl.com, John_DiDonato@fpl.com, bridges@wapa.gov
bcc:
Subject: Revised Transmission Line Project to Connect with Proposed Wilton Wind Energy Center

John
Since we met on March 7, 2005 to discuss the 28-mile transmission line for FPL Energy some things have changed. The line is now 4.4 miles long and goes from the proposed wind project southeast of Wilton, ND over to a point along highway 83 where it connects into Western's existing Garrison Bismarck line.

Do you think any portions of this line should be marked with orange balls or some other devices? There are no big wetland complexes but the transmission route does cross one intermittent stream (no water and cultivated during field observations).

Western Area Power Administration is doing an EA on this project to so stay tuned for that. Any comments you have would be reflected in that analysis.

We are doing some point counts in the field right now and I have attached the protocol we used. We will be sharing the results of the point counts and any habitat maps that we produce. I look forward to keeping in touch with you as this project progresses.

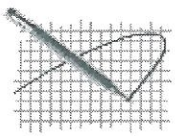
Please call with questions or comments.
Matt
617.457.8205

PS - I know this map is kind of general - more specific maps to follow.



public_involvement_figure_cln.jpg

----- Forwarded by Matthew Kearns/ENGY/CSQ on 06/16/2005 08:42 AM -----



Matthew Kearns/ENGY/CSQ
06/11/2005 10:17 AM

To: "John Bridges" <BRIDGES@wapa.gov>, <Terry_Ellsworth@fws.gov>
cc: "Misti Kae Miller" <MMiller@wapa.gov>, <Kenneth_Stein@fpl.com>, <bmoynahan@maximusa.com>, <jstark@maximusa.com>, "Cathy Cunningham" <CUNNINGH@wapa.gov>, "Dave Swanson" <SWANSON@wapa.gov>
Subject: Avian Species Composition Point Count - Field Protocol

John and Terry
Here is the revised protocol. We expect to develop post construction monitoring methods with you as a part of the EA process.
Matt

-----"John Bridges" <BRIDGES@wapa.gov> wrote: -----

To: <Terry_Ellsworth@fws.gov>, <Matthew.Kearns@tteci.com>, "Misti Kae Miller" <MMiller@wapa.gov>

Exhibit 3c
PSC Landowner List

BURLEIGH COUNTY, ND WIND ENERGY CENTER EA LANDOWNER LIST

First Name	Last Name	Address	Town	St	Zip	Telephone	Alternate	Title
Darwin, Warren, and Grant	Gorden	4401 279th Ave NE	Wilton	ND	58579	701-734-6698	701-471-1862	Eklund Township Board
Wayne	Granfor	1300 266th Ave NE	Wilton	ND	58579	701-734-6370		
Jeff and Jennifer	Heilman	28001 Highway 83	Wilton	ND	58579-9572			
Donald and Bonnie	Holden	25590 Hwy 83	Wilton	ND	58579	701-734-6767	701-471-9968	
Anton	Krush	31501 12th St NE	Wilton	ND	58579			
Mary	Lane	10800 353 St. SE	Moffit	ND	58560			
Lars	Nigrin	4111 State St	Bismarck	ND	58503			Capital Electric Cooperative Director
Bernard	Schafer	PO Box 391	Wilton	ND	85879			
Milo	Schuler	27701 26th St NE	Wilton	ND	85879	701-734-6677		

Exhibit 3d
Landowner Waivers of 500’ Exclusion Area Requirements and Signed Easements

AFTER RECORDING RETURN TO

Orin Shakerdge, Esq.
Florida Power & Light
700 Universe Blvd.
Juno Beach, FL 33408

(This space reserved for recording information)

COLLECTION EASEMENT

THIS COLLECTION EASEMENT ("**Grant**"), is executed effective this 17th. day of June, 2005, by and between Donald I. Holden and Bonnie J. Holden, husband and wife, whose address for notice is: 25590 HWY 83, Wilton, ND 58579; (701) 734-6767 ("**Grantor**") and FPL Energy Burleigh County Wind, a Delaware limited liability company, whose address for notice is: 700 Universe Blvd., Juno Beach, FL 33408 ("**Grantee**").

PREMISES

A. Grantor is the owner of a certain tract of real property located in Burleigh County, North Dakota and more particularly described on the attached **Exhibit A** ("**Property**"); and

B. Grantor desires to grant and convey to Grantee an exclusive easement for the erection, installation and maintenance of an electric power transmission line depicted on the attached **Exhibit B**.

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Grant. Grantor does hereby grant and convey unto Grantee, an exclusive easement ("**Collection Easement**") in and along that portion of the Property depicted on the attached **Exhibit B** ("**Easement Area**") for the purposes of erecting, constructing, replacing, removing, maintaining and utilizing, a line of poles, with such wires, for the transmission of electrical energy, and all necessary and proper foundations, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith (collectively, the "**Collection Facilities**") under, on, along and in the Easement Area; together with the right of ingress to and egress from the Collection Facilities over and along the Property.

2. No Interference. Grantor shall not construct, install, or permit to be constructed or installed, any improvements, fences, structures, buildings, foliage or vegetation, utility lines or other improvements of any type whatsoever upon or near the Easement Area which would impair any of Grantee's rights in this Grant. Grantee shall have the right, without compensation to Grantor, to cut, prune and remove or otherwise dispose of any foliage or vegetation on or near the Easement Area that Grantee deems a threat or potential threat to the Collection Facilities or its rights in this Grant. Grantor shall not grant or permit any person(s) claiming through Grantor, other than Grantee, any right-of-way, encumbrance, easement or other right or interest in, to or

affecting the Easement Area, without the prior written consent of Grantee in each instance, which consent Grantee may grant, withhold or deny in its sole discretion.

3. **Term**. The term of this Grant shall commence on the date this Grant is executed and expire on December 31, 2035 ("**Term**"). Grantee shall have the right to renew this Grant for one additional thirty (30) year Renewal Term, upon the same terms and conditions in this Grant except for consideration to be paid by Grantee for the Collection Easement. For the Renewal Term, consideration for the Collection Easement shall be the then current market rate consideration for similar collection easements affecting similar properties in North Dakota.

4. **Authority**. Grantor hereby represents and warrants to Grantee that it owns the Property in fee simple subject to no liens or encumbrances prior to this Grant and is fully authorized to grant the rights and benefits granted to Grantee in this Grant.

5 **Crop Compensation and Land Restoration**. If, by reason of use, soil is compacted, rutted, or disturbed, Grantee shall till, re-seed or otherwise restore the soil to the condition it was in before Grantee's use. Crop damage that can be reasonably demonstrated to have been caused by Grantee as a result of performing the activities authorized in this Grant, shall be paid for by Grantee according to the established yield per acre as documented at the Farm Service Agency or in crop insurance documentation for this parcel and using the price provided by the local grain elevator or Minneapolis Board of Trade, whichever is higher. Each time Grantee exercises its rights under the Collection Easement, Grantee shall compensate Grantor for all crops lost or damaged by reason of the use. If a use of the Collection Easement causes significant compaction or all or a part of the Easement Area, the compensation paid by Grantee to Grantor for that use shall be the damages for the crops lost or destroyed in the area compacted. Grantee shall be responsible for weed control on those portions of the Collection Easement not actively farmed by Owner.

6. **Indemnification and Insurance.** Grantee shall maintain liability insurance insuring Grantee and Grantor against loss caused by Grantee's use of the Property. The amount of insurance shall be not less than $3,000,000.00 of combined single limit liability coverage. Grantee shall indemnify and at its expense defend Grantor against liability for injuries and claims for direct damage to the extent that they are caused by Grantee's exercise of rights granted in this Grant. This indemnity does not cover losses of rent, business opportunities, crop production, and profits that may result from Grantor's loss of use of the Property.

7. **Assignment; Mortgage Rights**. Grantee may without the need for Grantor's consent, (i) assign this Grant, or any interest herein, or (ii) encumber, by one or more mortgage, security interest or otherwise, Grantee's interest, or any portion thereof, in this Grant or the Collection Facilities (each, a "**Mortgage**") to any mortgagee or secured party of or under any Mortgage (each, a "**Mortgagee**"). Any Mortgagee shall be permitted to exercise or perform any and all of Grantee's rights and obligations in this Grant and Grantor shall accept such exercise and performance by Mortgagee. Any Mortgagee under any Mortgage shall be entitled to assign its interest or enforce its rights thereunder, as permitted by applicable law, without notice to or approval of Grantor.

8. **Legal Fees**. In the event of any controversy, claim or dispute arising out of or relating to the Collection Easement or the enforcement or breach hereof, the prevailing party shall be entitled to recover from the losing party the prevailing party's reasonable costs, expenses and attorneys' fees.

9. **Binding Effect; Governing Law**. This Grant shall be binding upon and shall inure to the benefit of both Grantor and Grantee, and their respective heirs, successors and assigns, and shall be deemed a covenant running with the land for all purposes. The provisions hereof shall be governed by and construed in accordance with the laws of the State of North Dakota.

10. **Removal.** Upon full or partial termination of the Collection Easement, Grantee shall remove all physical material pertaining to the Collection Facilities to a depth of thirty-six inches (36") beneath the soil surface, and restore the area formerly occupied by the Collection Easement to substantially the same physical condition that existed immediately before the installation of the Collection Facilities

EXECUTED effective the day and year first hereinabove written.

Grantor:
Donald I. Holden and Bonnie J. Holden,
Husband and wife

Donald I. Holden

Bonnie J. Holden

Grantee:
FPL Energy Burleigh County Wind,
A Delaware limited liability company

By: _____
Dean R. Gosselin, Vice President

STATE OF NORTH DAKOTA)
McClean)
COUNTY OF ~~BURLEIGH~~) SS:

This instrument was acknowledged before me thi 17 day of June, 2005, by DONALD I. AND BONNIE J. HOLDEN.

KATHLEEN CLAUSEN
NOTARY PUBLIC
STATE OF NORTH DAKOTA
My Commission Expires July 5, 2007.

Kathleen Clausen
Notary Public, Commission No.

My Commission Expires:

(SEAL)

STATE OF FLORIDA)
)
COUNTY OF PALM BEACH) SS:

This instrument was acknowledged before me this ___ ___ day of June, 2005, by Dean R. Gosselin as Vice President of FPL Energy Burleigh County Wind, LLC, a Delaware limited liability company.

Notary Public, Commission No.

My Commission Expires:

(SEAL)

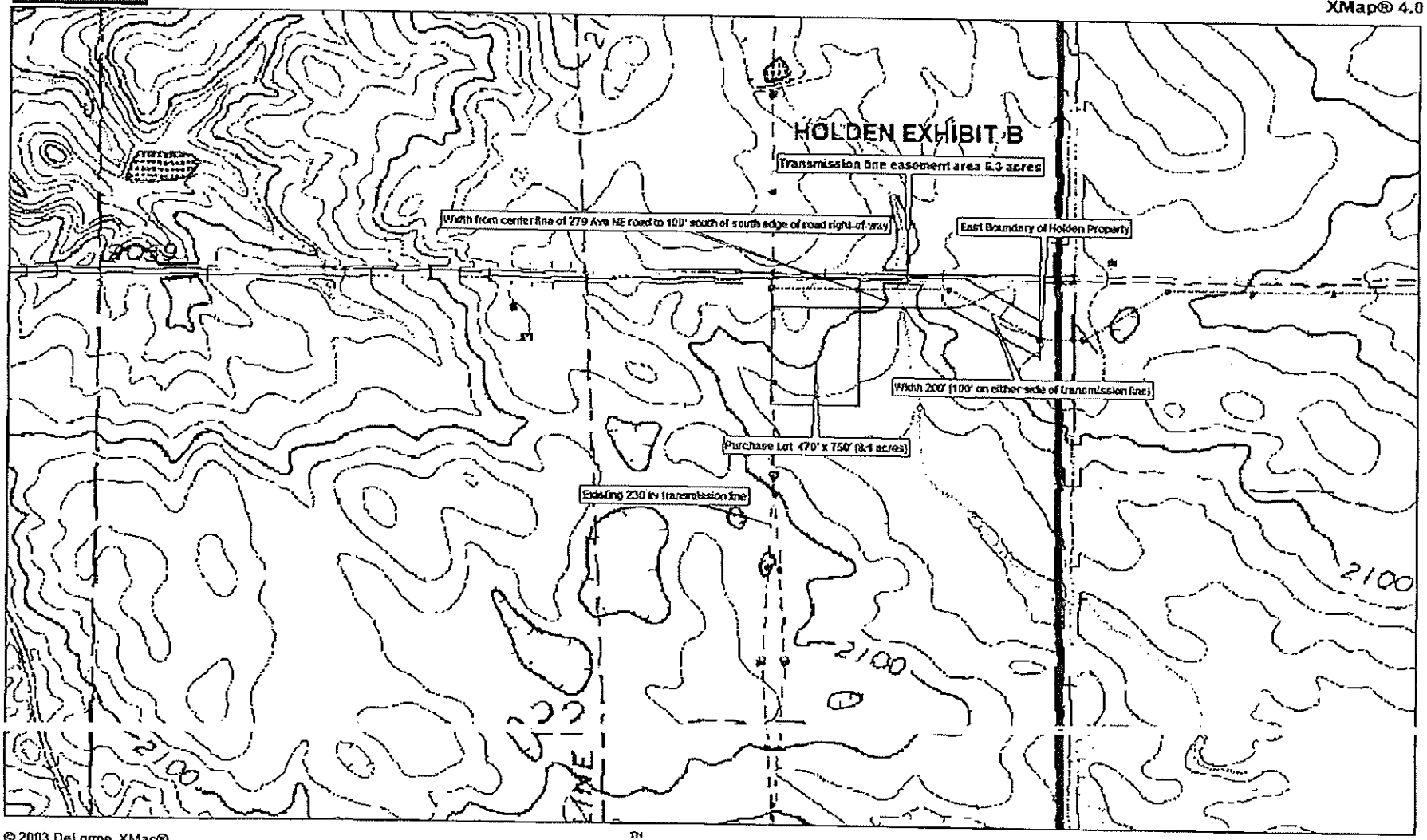
EXHIBIT A

Legal Description of Property

North East ¼ Less 12.22 acres (State of North Dakota – Highway Department) of Section 22, Township 142 North, Range 80 West of the 5th Principal Meridian in Burleigh County, North Dakota.

DeLORME

XMap® 4.0



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www.delorme.com

Data Zoom 15-0

AGREEMENT

THIS AGREEMENT is executed effective this 17th. day of June, 2005 ("**Agreement**"), by and between Jeff Heilman and Jennifer Heilman whose address for notice is 28001 Highway 83, Wilton, ND 58579-9572, (701) 734-6653 ("**Owner**") and FPL Energy Burleigh County Wind, LLC, a Delaware limited liability company whose address for notice is 700 Universe Blvd., Juno Beach, FL 33408 ("**FPLE**").

PREMISES

A. Owner is the owner of a certain tract of real property located in Burleigh County, North Dakota and more particularly described as the Southwest Quarter of the Southwest Quarter of the Southwest Quarter (SW¼ of the SW¼ of the SW¼) of Section 14, Township 142 North, Range 80 West of the 5th Principal Meridian in Burleigh County, North Dakota ("**Property**"); and

B. FPLE intends to construct and operate a wind farm ("**Wind Farm**") in the vicinity of the Property and FPLE desires to install a transmission line on the adjacent property which is located within two hundred fifty (250) feet of Owner's house on the Property;

IN CONSIDERATION of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. **Grant**. Owner does hereby grant to FPLE the right to install a 230-kV transmission line on the adjacent property which is located within two hundred fifty (250) feet of Owner's house on the Property. FPLE shall give Owner at least three (3) days notice prior to installing the transmission line as Owner shall serve as a consultant to FPLE while it installs the transmission line on the adjacent property.

2. **Authority**. Owner hereby represents and warrants to FPLE that it owns the Property and is fully authorized and empowered to grant the rights and benefits granted to FPLE.

3. **Legal Fees; Governing Law**. In the event of any controversy, claim or dispute arising out of or relating to this Agreement or the enforcement or breach hereof, the prevailing party shall be entitled to recover from the losing party the prevailing party's reasonable costs, expenses and attorneys' fees (including but not limited to those incurred at trial, on appeal and on petition for review). The provisions hereof shall be governed by and construed in accordance with the laws of the State of North Dakota.

EXECUTED effective the day and year first hereinabove writt n.

Owner:
Jeff Heilman and Jennifer Heilman
28001 Hwy. 83 , Wilton, ND. 58579
P/H: 701.734.6653

Jeff Heilman

Jennifer Heilman

FPLE:
FPL Energy Burleigh County Wind, LLC
A Delaware limited liability company

By: _____
Name: _____
Title: _____

STATE OF NORTH DAKOTA)
) SS:
COUNTY OF ~~BURLEIGH~~ McLean)

This instrument was acknowledged before me thi 17 day of June, 2005, by Jeff and Jennifer Heilman.

Kathleen Clausen
Notary Public, Commission No._____

KATHLEEN CLAUSEN
NOTARY PUBLIC
STATE OF NORTH DAKOTA
My Commission Expires July 5, 2007

My Commission Expires:

(SEAL)

STATE OF FLORIDA)
) SS:
COUNTY OF PALM BEACH)

This instrument was acknowledged before me this ___ ___ day of June, 2005, by Dean R. Gosselin as Vice President of FPL Energy Burleigh Count / Wind, LLC, a Delaware limited liability company.

Notary Public, Cc nmission No._____

My Commission Expires:

(SEAL)

Jeff Spitzer
112 3rd St N
Wilton, North Dakota 58579

To Whom It May Concern,

I have reviewed the plans prepared by FPL Energy to place power poles for a 230kv transmission line in Eklund Township of Burleigh County just south of the 279th avenue right-of-way. These poles would be approximately 300-feet from the house I own in Section 18-T142N-R79W. As a necessary element in their proposed wind farm, I have no tentative objection to these poles or transmission line placement. Final approval will follow a signed contract between FPL and Jeff and Robyn Spitzer and another contract between FPL and John Spitzer placing a minimum of three wind turbines on land owned by Jeff and Robyn Spitzer and a minimum of three wind turbines on land owned by John Spitzet.

Sincerely,

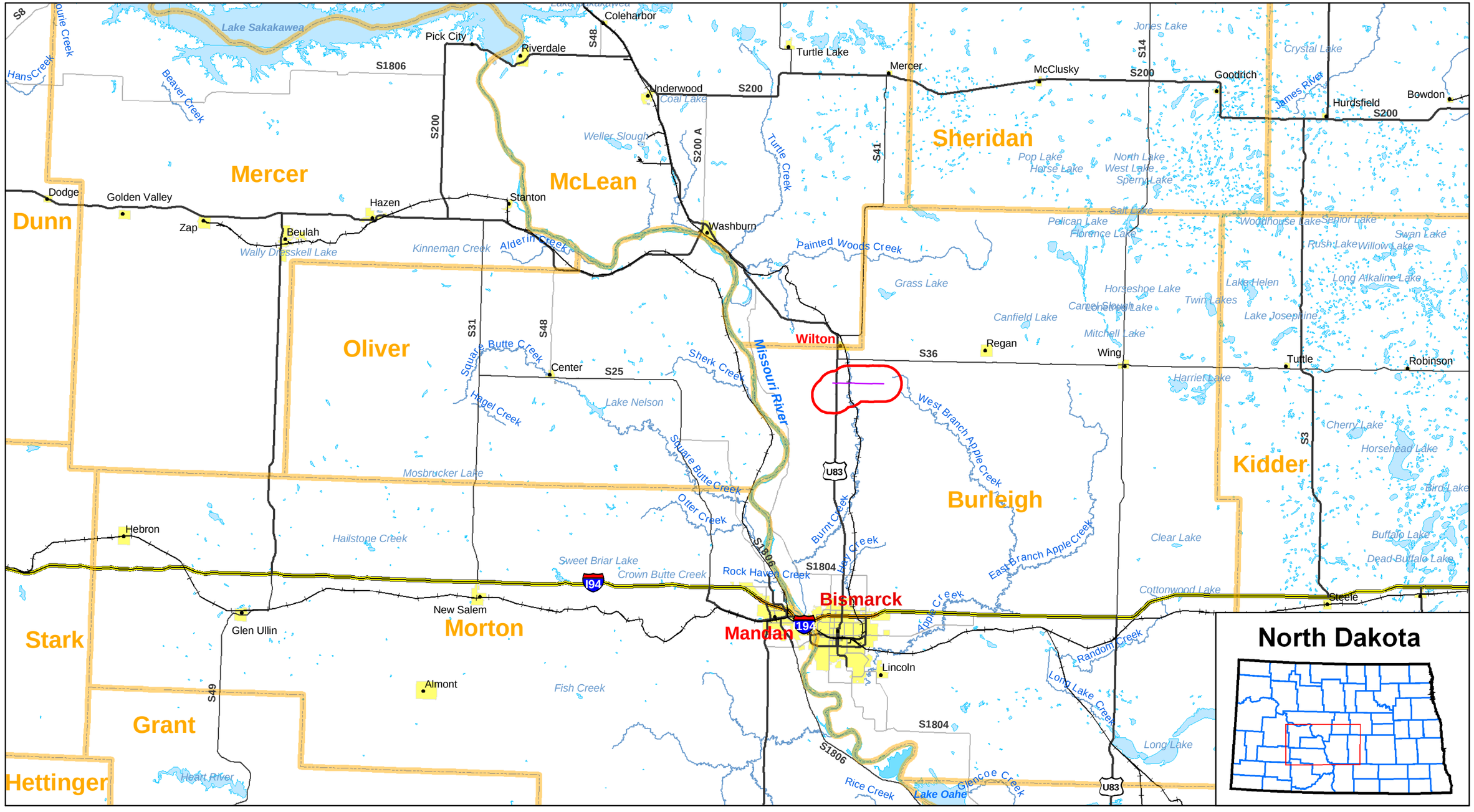
Jeff Spitzer by Robyn Spitzer

Jeff Spitzer

6-20-05

Exhibit 4

Figure 1
General Overview



- Cities and Towns
- Transmission Line
- County Lines
- Transmission Corridor (Study Area)

TETRA TECH, INC.

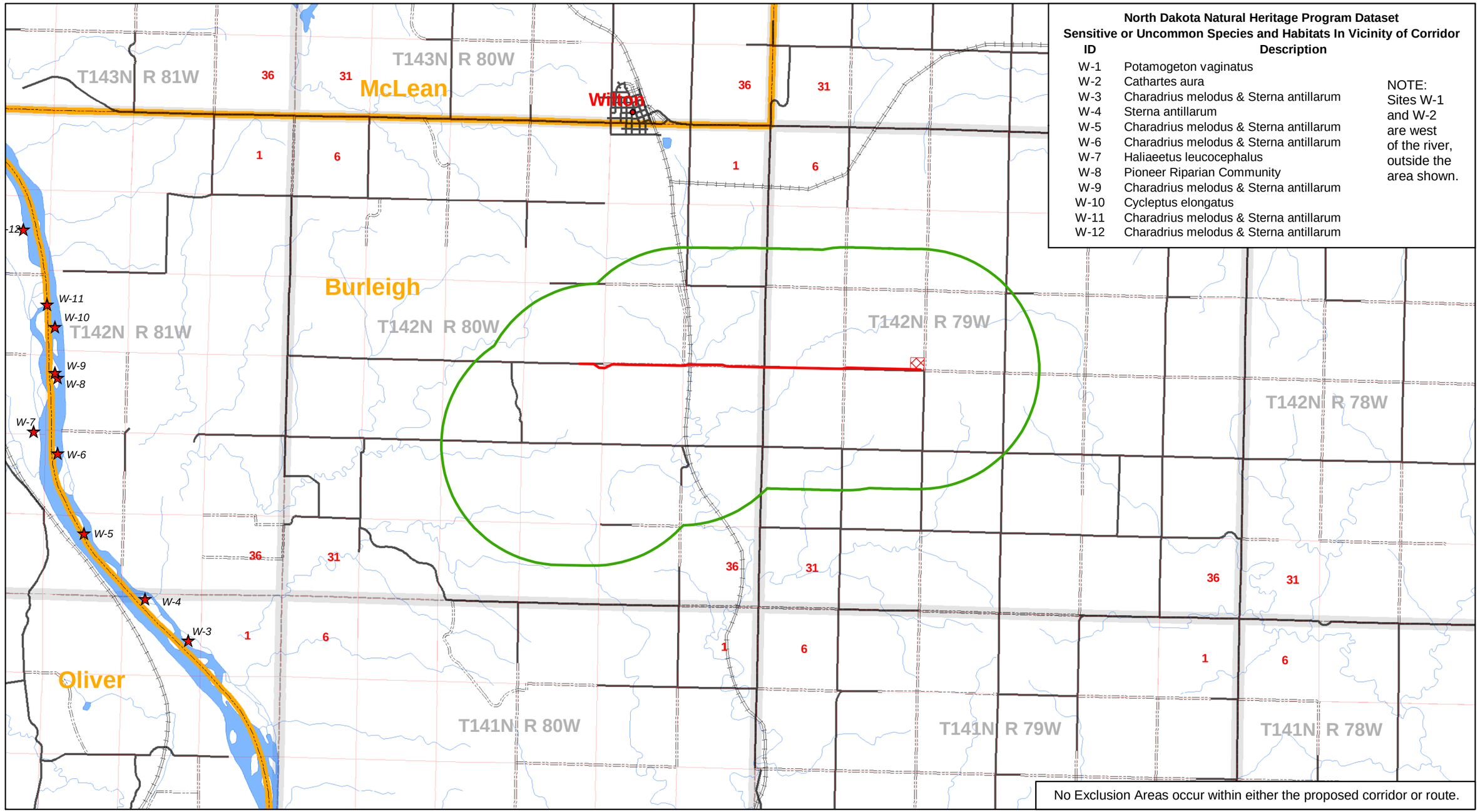
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0 5 10

Miles

FIGURE 1
GENERAL OVERVIEW
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 2
Exclusion Areas



North Dakota Natural Heritage Program Dataset
Sensitive or Uncommon Species and Habitats In Vicinity of Corridor

ID	Description
W-1	Potamogeton vaginatus
W-2	Cathartes aura
W-3	Charadrius melodus & Sterna antillarum
W-4	Sterna antillarum
W-5	Charadrius melodus & Sterna antillarum
W-6	Charadrius melodus & Sterna antillarum
W-7	Haliaeetus leucocephalus
W-8	Pioneer Riparian Community
W-9	Charadrius melodus & Sterna antillarum
W-10	Cycleptus elongatus
W-11	Charadrius melodus & Sterna antillarum
W-12	Charadrius melodus & Sterna antillarum

NOTE: Sites W-1 and W-2 are west of the river, outside the area shown.

No Exclusion Areas occur within either the proposed corridor or route.

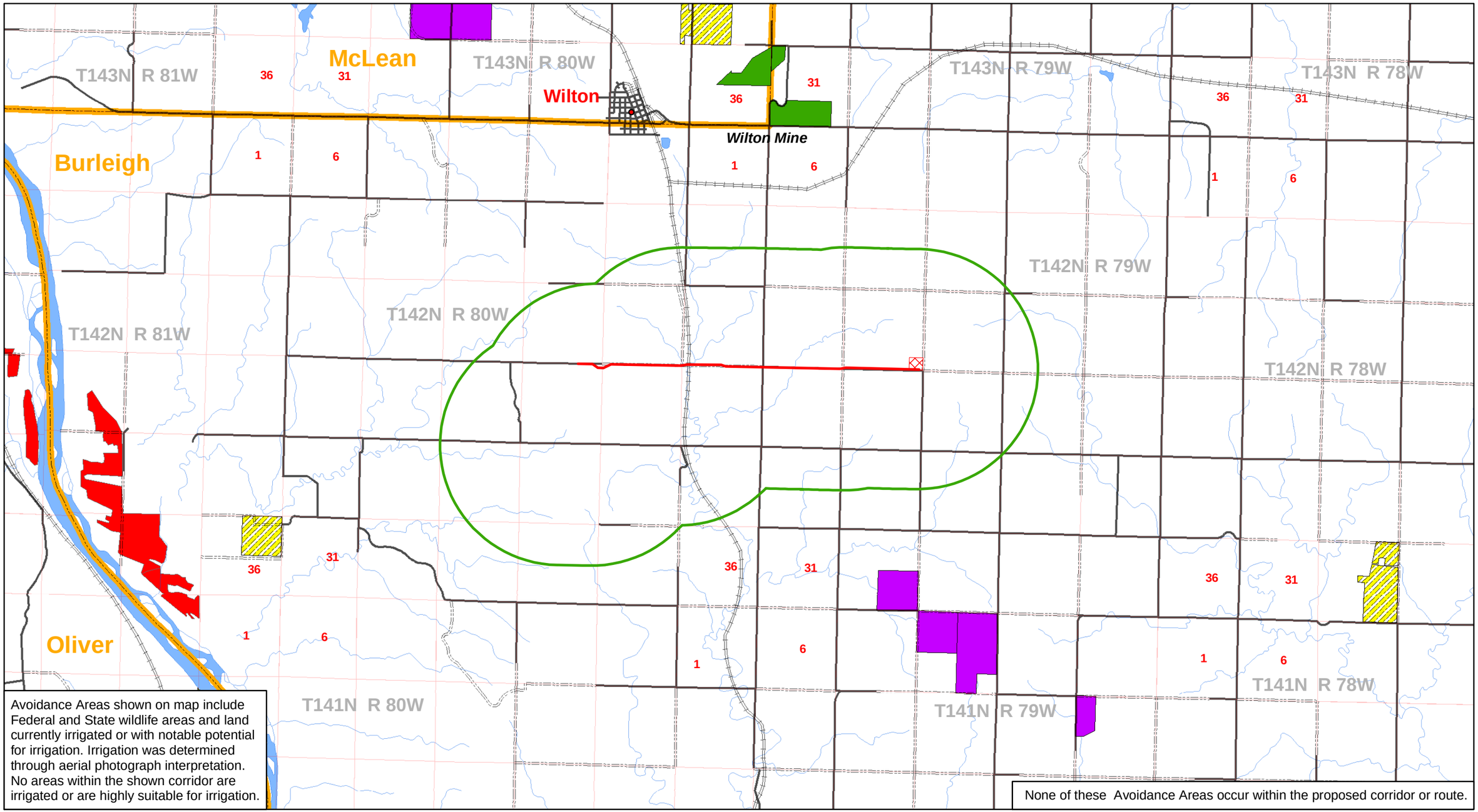
Sensitive Species and Habitats
Railroads
County Lines
Transmission Corridor (1.5 Mile Offset)
Proposed Transmission Route
Substation
Trails or Minor Roads
Major Roads

TETRA TECH, INC.

1:75,000
0 0.5 1
Miles

FIGURE 2
EXCLUSION AREAS
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 3
Avoidance Areas



TETRA TECH, INC.

1:75,000

0 0.5 1

Miles

- Trails or Minor Roads
- Railroads
- County Lines
- Conservation Reserve Enhancement Program
- Conservation Reserve Program
- Wildlife Management Area
- Other ND Game & Fish
- Irrigation Potential
- Proposed Transmission Route
- Substation
- Transmission Corridor (1.5 Mile Offset)

FIGURE 3
AVOIDANCE AREAS
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 4
Avoidance Areas – Residences and Farmsteads

T142N R 80W

T142N R 79W

T141N R 80W

T141N R 79W

Residences and other structures, including farmsteads and isolated outbuildings, shown on map were identified through interpretation of aerial photography. Structures were inspected from public access to determine status of occupancy. All homes are greater than 500ft from proposed structures, with the exception of the home at T142N, R80W SW1/4, SW 1/4 Section 11 and the home at T142N, R79W SW1/4, SE 1/4 Section 18. A consent agreement has been signed by these residents.

TETRA TECH, INC.

1:50,000

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Miles

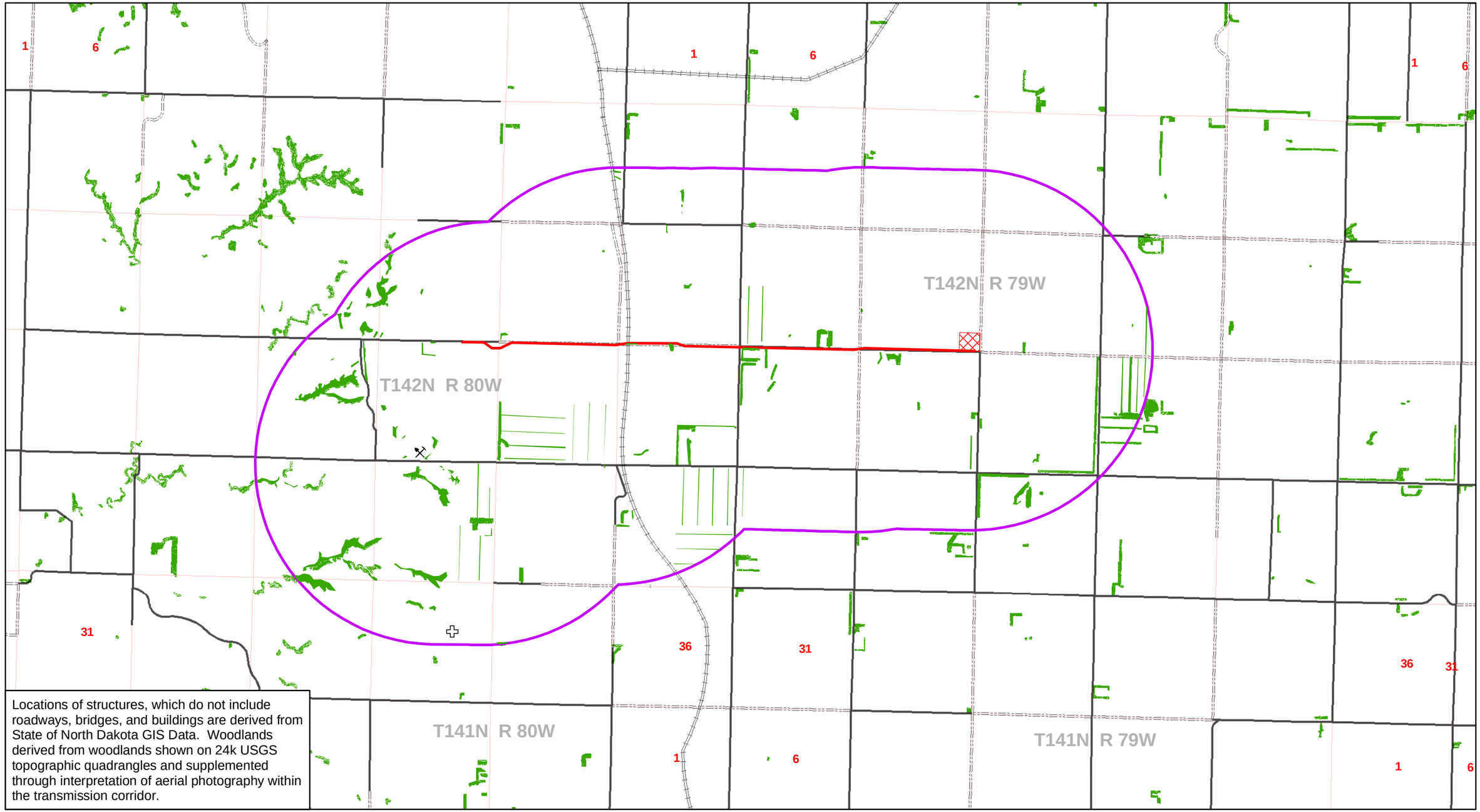
Minor Roads
Major Roads
Railroads

Transmission Corridor (1.5 Mile Offset)
Substation
Proposed Transmission Route

Occupied
Vacant

FIGURE 4
AVOIDANCE AREAS - RESIDENCES AND FARMSTEADS
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 5
Avoidance Areas – Structures



Locations of structures, which do not include roadways, bridges, and buildings are derived from State of North Dakota GIS Data. Woodlands derived from woodlands shown on 24k USGS topographic quadrangles and supplemented through interpretation of aerial photography within the transmission corridor.

TETRA TECH, INC.

1:50,000

0 0.5 1

Miles

- Trails or Minor Roads
- Major Roads
- Woodlands
- Cemetery, North & South
- Mine Shaft or Drift
- Transmission Corridor (1.5 Mile Offset)
- Substation
- Proposed Transmission Route

FIGURE 5
AVOIDANCE AREAS - STRUCTURES
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 6
Avoidance Areas – Wetlands

T142N R 80W

T142N R 79W

T141N R 80W

T141N R 79W

Wetland & WUS data derived from USFWS National Wetlands Inventory Dataset. Locations of wetlands in the immediate vicinity of the proposed route will be formally delineated and all required federal and state permits will be obtained prior to construction, following route approval.

TETRA TECH, INC.

1:50,000

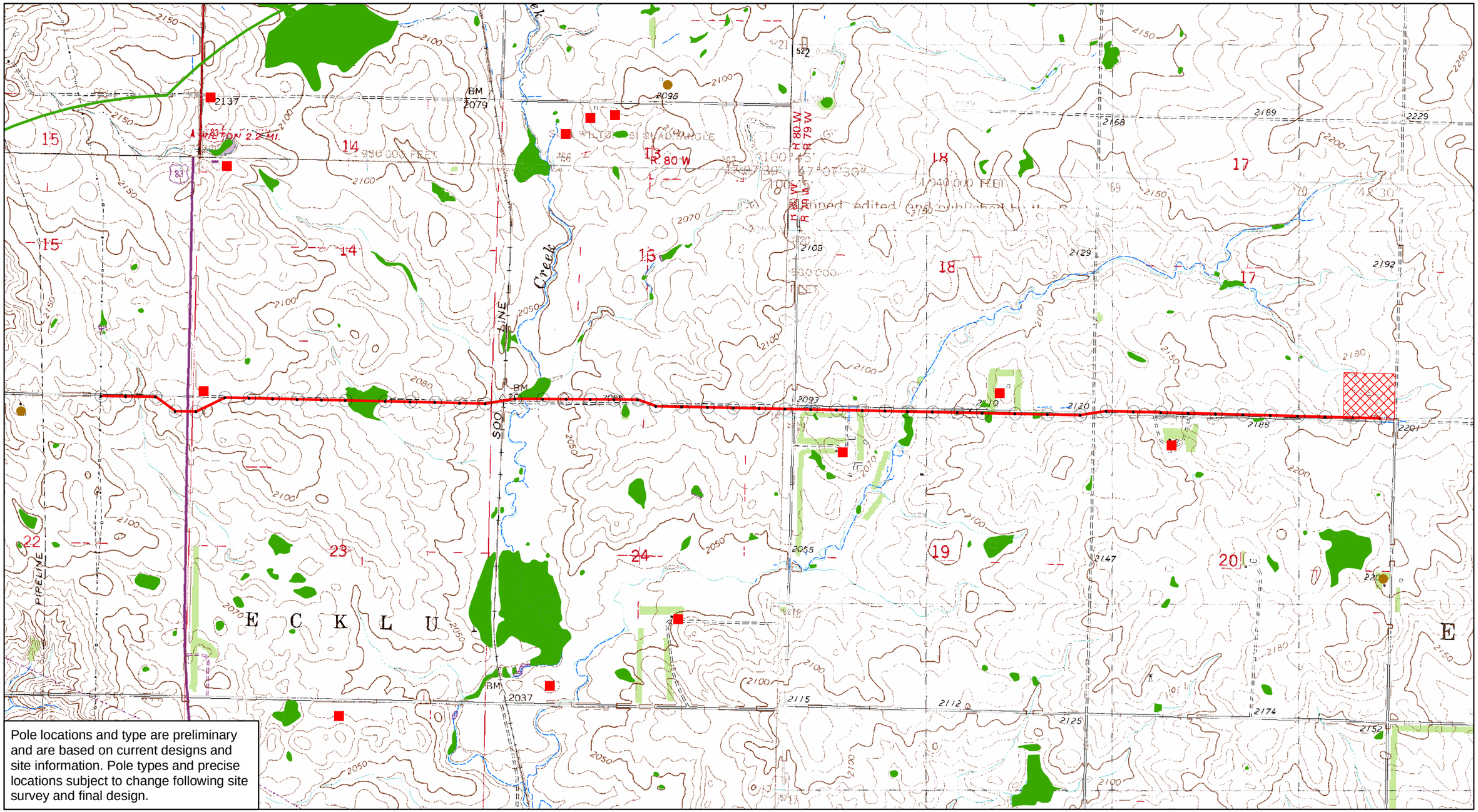
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Miles

- Waters of the US
- FWS NWI Wetlands
- USFWS Wetland Easements
- Proposed Transmission Route
- Substation
- Transmission Corridor (1.5 Mile Offset)

FIGURE 6
AVOIDANCE AREAS - WETLANDS
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Figure 7
Detailed Route View



Background: USGS 1:24,000 Topographic Quadrangle

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FIGURE 7
DETAIL ROUTE VIEW
ELECTRICAL TRANSMISSION LINE
BURLEIGH COUNTY, NORTH DAKOTA

Exhibit 5





Critical Environmental Issues Analysis

Proposed Wind Generation and Transmission Project Burleigh and Oliver Counties, North Dakota

June 2005

Prepared For

FPL Energy

Prepared By

TETRA TECH EC

MAXIM TECHNOLOGIES

A DIVISION OF TETRA TECH, INC.

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EXECUTIVE SUMMARY

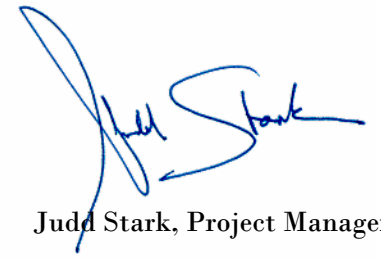
FPL Energy, LLC is currently developing plans to construct a wind-powered electrical generation facility approximately 20 miles north of Bismarck in Burleigh County, North Dakota. The electricity generated by this facility will be delivered to the existing grid via a 27.6 mile transmission line. During March and April of 2005, a study was conducted to identify potential critical issues related to the proposed energy development. Available cultural, historic, social, economic, wildlife, and habitat information was collected for the area and an experienced biologist visited the site to identify sensitive site characteristics. A description of the environment, based on all data available, is presented along with a description of environmental permits that may be required in conjunction with project development. The results are summarized under several categories of analysis with recommendations and requirements for project development. Recommendations for future actions include the following:

- *Continue consultation and discussion with the United States Fish and Wildlife Service (USFWS).* This consultation will help identify potential effects to wetlands and wildlife in the vicinity of the proposed project and identify the need or potential benefits of wildlife monitoring. The USFWS will also review the Section 10 Rivers and Harbors Act permit application submitted to the United States Army Corps of Engineers (USACE) for the transmission line crossing. Frequent communication will ensure that necessary mitigation measure or construction plans are developed and agreed upon so as not to delay approval of the application.
    - **UPDATE:** USFWS has been consulted regarding important habitats and avoidance of such features has been incorporated into plans for development where practicable. Protection measures were incorporated into the Section 10 application. The USFWS has offered comments on the Section 10 application that will effectively result in conditions of the USACE's approval.
- *Identify all shortgrass-prairie habitats near the turbine array in preparation for avian monitoring.* The USFWS is interested in preconstruction monitoring of native habitats to document avian use. In the vicinity of the turbine array, shortgrass-prairie habitats are of primary concern. These habitats were partially delineated during the initial site visit, but require more accurate delineation to formulate a course of action regarding monitoring to be performed.
    - **UPDATE:** Shortgrass-prairie habitats have been mapped. Preliminary review by USFWS and United States Geological Survey (USGS) staff have concluded that monitoring of avian use may not be necessary prior to project development due to the relatively low occurrence of shortgrass-prairie in the project area.
- *Conduct spring sharptail grouse lek surveys and point-counts of avian occurrence in areas proximal to the proposed development.* Such monitoring will document species and density of use prior to construction and possibly assist in identifying sites with elevated potential for avian and turbine interaction. USFWS has indicated that monitoring avian use on native grasslands is of particular interest as these habitats and the species that use them are of particular concern. Disturbance or construction in the immediate vicinity of sharptail grouse leks should be avoided where practicable.
    - **UPDATE:** Lek surveys have been conducted for the area surrounding the proposed turbine array. Results will be reported under separate cover. Avian point counts have not been conducted and may not be required (see update for previous item).

- *Continue consultation and discussion with the United States Army Corps of Engineers (USACE).* Continue to follow-up on the Section 10 application and track the review process. Consult with the USACE prior to submission of the nationwide wetland permits (NWP) to identify the method of submittal that allows for the easiest permitting and shortest review period possible. Frequent communication will ensure USACE deems the first application complete with minimal comments. Wetland delineations have been scheduled for the first week of May 2005.
    - **UPDATE:** The Section 10 permit is awaiting approval pending completion of Section 106 consultation. Cultural and historic resource investigations have been conducted and findings will be submitted to USACE and North Dakota State Historic Preservation Office (SHPO). The wetland survey of the proposed transmission line and turbine array was conducted during the first week of May. Survey of wetlands along transmission line access routes was not completed as not all access routes have been determined. Current plans would all wetlands permitting under NWP 33 for the entire transmission line route. One site in the proposed turbine array may require permitting under NWP 12.
- *Continue permitting in accordance with North Dakota facilities siting regulations.* Current regulations require that permitting be completed prior to construction of the transmission line. The transmission route and corridor applications have been submitted to the North Dakota Public Services Commission.
    - **UPDATE:** The public meeting for these applications occurred on May 23, 2005. A second meeting was preliminarily scheduled for later in June.
- *Determine the need for Spill Prevention Containment and Control permitting and attendant measures to be employed following final project design.* Due to the volumes of materials to be placed onsite, it is likely that SPCC plans and permits will be required. Final volumes of fuels, lubricants, and related petroleum products and locations of storage and use are necessary to determine what requirements must be met and prepare necessary permitting documents.
    - **UPDATE:** Potential turbine sites were reviewed and no sites were determined to have "real risk" for hydrocarbon contamination of surface waters. SPCC plans will be developed for those turbines and transformers where such plans are required.
- *Contact United States Department of Agriculture Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) regarding interests in the area.* The NRCS and FSA will not disclose easement locations or program enrollment until a final project layout has been identified. The next step is to present the NRCS and FSA with proposed facility locations and work with them to identify any relevant issues. The NRCS will conduct a NEPA investigation (generally a checklist EA) for disturbances within Conservation Reserve Program (CRP) lands prior to approval. A preliminary review of CRP land locations could be finalized in conjunction with the wetland survey.
    - **UPDATE:** Turbines will be limited to two or less per CRP tract to ensure that disturbance to CRP properties is minimal. This will likely negate the need for the NRCS or FSA to prepare an EA.
- *Contact the North Dakota State Water Commission (NDSWC).* Send the NDSWC a letter detailing plans for development within their jurisdiction, if any. Currently, no effects are expected within NDSWC jurisdiction. However, the close proximity of construction activities at the river crossing warrants consultation with this agency to make them aware of the project.
    - **UPDATE:** Following approval of the Section 10 application, a letter explaining the activity will be sent to the NDSWC. Preliminary consultation with this agency suggests that no permit will be required as no proposed construction occurs within NDSWC jurisdiction.

- *Continue Cultural and Historic Investigations and consultation*. Cultural and historic resources inventories are recommended by the North Dakota State Historic Preservation Office and United States Fish and Wildlife Service to identify sensitive sites that may development may avoid. The results of the Class I inventory (records search) may reveal portions of the project where Class III inventories) are especially warranted. Consultation with tribes having interests in the Project Area is ongoing.
    - **UPDATE:** A Class I inventory was completed for the transmission route and turbine array. Based on the results of this inventory, Class III surveys were recommended for portions of the transmission route and turbine array. The Class III survey for the river crossing has been completed in order to facilitate approval of the Section 10 application. No sites of significance were found.
- *Conduct a Phase I Environmental Site Assessment (ESA)*. A phase one ESA will further assess risk associated with prior land uses in the project area. ASTM standards do not require review of risks associated with abandoned mines. Given that numerous underground mines are known to in the vicinity proposed facilities, investigation of this previous land use should be included as a separate subtask to be completed in conjunction with the ESA. Underground workings may be located beneath sites proposed for construction.
    - **UPDATE:** The ESA will not be completed until all surface access agreements have been acquired. Further review of underground mine workings in the areas proximal to proposed facilities suggests that the risk of associated complications is minimal.

- April 25, 2005 [draft]
- June 1, 2005 [final]



Judd Stark, Project Manager

1. INTRODUCTION

FPL Energy, LLC, herein Burleigh County Wind, LLC, is currently developing plans to construct a wind-powered electrical generation facility approximately 20 miles north of Bismarck in Burleigh County, North Dakota (**Figure 1**). The closest urban areas are Wilton, North Dakota located approximately three miles to the northwest and Regan, North Dakota located approximately six miles to the north-northeast. In addition to the turbine facilities, Burleigh County Wind, LLC also proposes to construct a substation at the turbine array and a 230 Kilovolt (kV) transmission line connecting this facility to the Minnkota Electric Milton H. Young Power Station located approximately 21 miles to the west, across the Missouri River. The river crossing is located approximately 10 miles west of the turbine array near the community of Price.

From Bismarck, the turbine array is accessed via North Dakota State Highway 83 and other local two-lane gravel county roads (**Figures 1 and 2**). Current plans for the project include the installation of approximately 33 General Electric 1.5 Megawatt (MW) wind turbines (maximum of 49.5 MW total power generation) within a area approximately 2.1 miles north-south by 4.6 miles east-west. Turbine heights are anticipated to be approximately 360 feet (ft). Infrastructure to be constructed or installed in conjunction with the turbine array and associated substation includes access routes and both buried and overhead transmission lines.

Power will be delivered to the existing substation and grid via a new construction line initiating at the new substation proximal to the turbine array. The new transmission line will be accessed through a combination of existing access and newly constructed access routes in less developed portions of the Project Area (**Figures 1 and 2**). On the east side of the Missouri River, the new transmission line will generally be aligned along existing roads and will, at times, run adjacent to the existing Minnkota transmission line. The river crossing will include installation of two larger tubular-steel towers one either side of the river located approximately 80-100ft north of the existing Minnkota line crossing. No structures will be placed in the river bed or anywhere else below the high water mark. The remainder of the new transmission line to the west of the corridor will parallel the existing line for the majority of the distance, deviating from this preferred path wherever access agreements could not be negotiated or other site conditions were less favorable.

Tetra Tech, Inc. was contracted to conduct a critical environmental issues analysis to evaluate the project development in order to identify any significant areas of environmental concern. This work was completed by the Tetra Tech, Inc. divisions Tetra Tech EC and Maxim Technologies during March and April 2005. This report summarizes the methods and findings of this review.

2. METHODS

The Project Area[1] includes 43,176 acres (approximately 67 square miles) located within one mile of proposed facilities (facilities current on April 20, 2005). This one-mile buffer was employed to ensure that all potential environmental issues and nearby impact receptors would be identified. This wide buffer also provides adequate area of analysis to allow for minor changes associated with project development subsequent to this review. The preliminary project layout was revised subsequent to commencement of this analysis to include more refined turbine locations and the locations of access roads and collector lines (on-site powerlines). The precise location of the transmission line was the last to be determined and is presented in preliminary form, pending secured easements.

[1] The majority of the Project Area is well outside the core development area. The Project Area does not imply control by the proponent nor does it imply an expansion area; rather it was delineated to encompass all proximal areas (within 1.0 mile).

Formal query letters were prepared and submitted to the United States (US) Fish and Wildlife Service (USFWS), North Dakota State Historic Preservation Office (SHPO), North Dakota Natural Heritage Program (NDNHP), and The North Dakota Intertribal Reinternment Committee (NDIRC). These query letters and responses received are shown in **Appendix B**. The Project Area identified in these letters includes those sections partially within one mile of facilities as shown in preliminary project maps provided by FPL Energy, LLC on February 14, 2005. This project area is shown on the maps attending this correspondence and is not the same as the Project Area previously noted herein. The agency responses to these formal queries were evaluated to identify any critical issues related to project development.

Existing information was collected from a number of public domain sources to document conditions in the Project Area. Cartographic information and related literature, compiled through agency and internet sources, included the following data:

- USGS 7.5 minute quadrangle maps;
- Color aerial photography;
- FWS National Wetland Inventory (NWI) data;
- USGS Digital Elevation Models (DEM);
- Political Boundaries including states, counties, and townships;
- Public Lands Survey System Data (sections);
- National Hydrologic Dataset (NHD) including streams and lakes;
- ESRI map sets including cities, major highways, hydrology, and quadrangle boundaries;
- North Dakota transportation network dataset;
- North Dakota cultural point data including schools, residences, cemeteries, etc.; and,
- North Dakota Natural Heritage Program Datasets including sensitive species and habitat locations.

Additionally, existing literature and other information related to sensitive species distributions, migration pathways, wind-turbine avian collisions, cultural resources, zoning and public planning requirements was reviewed for relevance to the proposed project. Where more appropriate or efficient, appropriate agency personnel were interviewed via telephone or in-person to collect information about the Project Area relevant to this study.

The area of influence for the socioeconomic element of this analysis included Burleigh County as the proposed electrical generation facility, and presumably the largest economic effect, is completely within the county boundary. However, some economic effects may occur in Oliver County and will primarily result from the construction of the transmission line and substation interconnection. Baseline data for Burleigh and Oliver Counties includes population and demographic data, as well as current business and agricultural economic statistics obtained from the US Bureau of the Census (US Census Bureau 2004) and from the 1997 and 2002 Census of Agriculture (USDA 1997 and 2002). Contact was made with county and township officials in both Burleigh and Oliver Counties to identify local laws, zoning requirements, or ordinances effective in these locations.

An experienced field biologist conducted a site visit March 7 through 11, 2005 to evaluate the accuracy of available cartographic data, collect additional relevant environmental data for site description, evaluate proposed travel and transmission corridors and turbine locations, and discuss issues on-site with agency staff. This site visit focused primarily on the area within 500 feet (ft) of all areas proposed for disturbance (hereafter referred to as the buffer zone), although observations regarding other parcels in the Project Area were also recorded. The buffer distance of 500ft (approximately 4,524 acres) was selected to allow for identification of proximal environmental issues

and selection of nearby alternative routes that could avoid sensitive sites. Notes from the March 7, 2005 agency consultation and meetings are provided in **Appendix A**.

Turbine micrositing, conducted subsequent to the site visit, resulted in revised turbine locations sited to take advantage of higher nearby elevations (i.e., hilltops) and other suitable site features. The final turbine array and attendant facility layout was last revised on April 11, 2005. Subsequent to the site visit, the location of the 230kV transmission line was also revised to accommodate revised designs and other factors. The transmission route west of the Missouri River as presented in this document was selected on April 20, 2005 and is significantly different from that observed during the site visit.

The locations of roads, collector lines, and final turbine sites were not known at the time of this site visit. Consequently, observations in the vicinity of the turbine array are less focused on the proposed facilities and more inclusive of all areas potentially affected. The locations of the 36 preliminary turbine sites were known at the time of the survey and, as such, received greater attention than the remainder of the area surrounding the turbine array. The easternmost three turbines were removed during micrositing, resulting in the 33 remaining turbines which comprise the current array.

Unsigned access agreements further limited the survey and required that all observations be made from adjacent accessible properties or public access routes including county roads. The transmission line could only be viewed from public access routes and much of the corridor was entirely inaccessible due to limited roads. Observations related to accessible portions of the corridor are limited and largely based on existing cartographic information.

3. PHYSICAL AND BIOLOGICAL ENVIRONMENT

3.1 Regional Setting

The Project Area is located on the transition between the geographic regions referred to as the Northwestern Glaciated Plains and Northwestern Great Plains. The Northwestern Great Plains Ecoregion marks the westernmost extent of continental glaciation. Within this glaciated region is the Missouri Coteau Slope on which the turbine array is located. The Coteau Slope is the transition from the higher Missouri Coteau, located to the east and characterized by the hummocky topography and numerous “prairie potholes”, to the Missouri River and unglaciated plains. Relative to the Coteau, the Coteau Slope exhibits fewer wetland depressions, more cropland, and a simple drainage pattern that connects to the Missouri River Breaks. The Breaks occur in close proximity to the Missouri River and are characterized by numerous tributaries, steep slopes, wooded draws, and other uncultivated areas in rough topography. West of the river, the Breaks begin to transition into the upland areas of the Missouri Plateau. This region was unglaciated and has diverse topography and complex drainage patterns. Cropland agriculture and livestock grazing are common practices on the Plateau. The transmission line is primarily located in the Missouri River Breaks with portions at each end located on the Coteau Slope and Missouri Plateau (**Figure 1**).

Many of the valleys and drainages in the vicinity of the proposed project are likely sheltered from prevailing winds. This sheltered condition is most likely to occur during winter and autumn when these valleys tend to fill with cold air. The resulting high stability restricts vertical mixing so that winds in these valleys are not as strong as on the uplands and other exposed areas (Elliott et al. no date). The regional elevation ranges from approximately 2250ft above main sea level (amsl) at the upland area in the center of the wind turbine complex to 1640ft amsl at the Missouri River Crossing to the east (**Figure 3**).

3.2 Project Area

The Project Area is a rural location with farming, livestock grazing and related agricultural operations dominating the land use. The turbine array is characteristic of the upland portion of this region, with the majority of the land surface currently cultivated or previously tilled. Some parcels within the vicinity of the project are owned and controlled by public entities (e.g., State of North Dakota) and managed for recreation, wildlife habitat, and other uses.

The array is located at the highest elevation of the surrounding area. The transmission line traverses the distance from the array to the substation from east to west. All portions of the turbine array and route, with the exception of the river crossing, are generally devoid of aquatic features such as wetlands except in drainage bottoms and channels. Local elevations at the turbine array range from 2100ft to 2250ft amsl, with lower elevations present on slopes surrounding the ridge on which proposed turbines are sited.

Figure 2 provides an overview of the Project Area, including the location of public property and the proposed facilities. Detailed views of the core development area, including proposed facilities and the aforementioned 500ft buffer, are shown in **Figures 4 through 7**. **Figures 4** and **5** represent the conditions in the vicinity of the turbine array while **Figure Series 6** and **7** provide illustrations of the transmission route.

3.3 Vegetation

3.3.1 Plant Communities & Management

Plant communities within the vicinity of the proposed project are dominated by row crop farmland with lesser amounts of hayland, non-native and native grassland, forested shelterbelt and riparian areas and wetlands. Hayland, cropland and pasture are managed for the production of livestock forage and cereal crops. Management may include fertilization, weed and brush control by pesticide application, fallow, and reseeding. Species composition often includes mixtures of introduced grasses, mixes of grasses and legumes, small grain hay or monocultures of legumes such as alfalfa or clover. Croplands are planted in spring wheat, barley or corn with rotations to hayland crops in cycles. Cropped species are not static and tilled areas will fluctuate with market demands and farm-specific operational requirements.

The ecoregions in the vicinity of the Project Area each have somewhat unique vegetative characteristics. Native vegetation of the Missouri Plateau is dominated by blue grama, wheatgrass/needlegrass association, little bluestem, and prairie sandreed. The River Breaks native vegetation is dominated by blue grama, western wheatgrass, buffalograss, and some bluestem. Juniper and deciduous trees are found on north facing slopes and cottonwood gallery forests with willow are located on the floodplain. The Missouri Coteau Slope has western wheatgrass, needle-and-thread, prairie junegrass, and green needlegrass (USDA 2005).

The diversity of vegetation communities provides valuable habitat to a wide variety of wildlife species. Native grasslands, which are largely shortgrass-prairie and riparian habitat (especially adjacent to the Missouri River) provide important nesting and brooding habitat to many avian species. Since the 1800's, approximately 75 to 90 percent of North Dakota's native grasslands have been lost due to cropland conversion. The USFWS (Towner 2005) stated interest in native prairie for the following reasons:

- Provides migratory grassland bird and waterfowl nesting habitat;

- Exhibits plant diversity (genetic) important to agriculture and medicine;
- Provides habitat for a variety of insects;
- Provides opportunities for scientific research and recreation.

The USFWS has also stated that shortgrass-prairie provides habitat crucial to sharptail grouse (Personal Communication: Terry Ellsworth, USFWS). In the vicinity of the turbine array, relatively unfragmented tracts of (what appears to be) native grassland are located in Township 142 North, Range 79 W, Sections 8, 10, 16, 19, and 20. Section 8 has the largest unfragmented native grassland. In addition, the cottonwood communities adjacent to the river provide nesting and roost habitat for raptors including bald eagles.

Plant communities at the turbine array are largely comprised of cropland with shelterbelts and native grassland and tame grass pasture occurring over only a small portion of the area. Cropland production is not irrigated. The grasslands are commonly grazed or hayed on an annual basis. Some small isolated wetland basins were evident within the turbine array area. In addition, several large tracts of what appear to be Conservation Reserve Program (CRP) lands are located in the southeast one-quarter of Section 16 and the northeastern one-quarter of Section 21.

The transmission line traverses the entire Project Area and, as such, includes areas dominated by a diverse mixture of plant communities. The easternmost portion of the transmission line is located in communities similar to the turbine array. The centermost segment is located in the Missouri River Breaks and river bottom area where cottonwood-dominated, deciduous forests and agricultural use, some of which is irrigated, dominate the vegetative cover. The westernmost portion of the line (i.e.; area in transition to the Missouri Plateau) has less cropland and more native grassland areas in the immediate vicinity.

3.3.2 Easements and Other Limitations

The USFWS commonly purchases wetland and grassland easements to help preserve habitats critical to migratory birds and other sensitive and native species. The easements provide perpetual protection of wetlands within the boundaries of the easement agreements. Within the proposed development area, only one site is currently held under easement by the Long Lake Wetland Management District. This easement is located in Township 142 North, Range 80 West, South ½ Section 11 only includes that portion with wetland features. (Towner 2005). Current plans do not include development in this location. Therefore, USFWS easements are not an issue relevant to project development.

The USDA NRCS and Farm Service Agency (FSA) administer a number of conservation-based programs for private landowners. The Conservation Reserve Program (CRP) conserves soil and water resources and provides wildlife habitat by removing enrolled tracts from agricultural production, generally for a period of 10 years. These tracts cannot be hayed, tilled, seeded, or otherwise disturbed (including disturbance associated with powerline or other project construction) without the authorization from the USDA. NRCS and FSA policies do not allow for the release of information regarding the locations of tracts enrolled in the CRP or other programs. As such, an assessment of the locations of these properties is speculative based on observations regarding tracts that exhibit characteristics representative of such enrollments. Tracts within the turbine array that are suspected of enrollment in the CRP program are shown in **Figure 4**. These and other potential sites along the transmission route (not yet identified) should be verified with the FSA and NRCS following determination of the final facilities layout.

3.3.3 Wetlands and Riparian Areas

Wetlands and riparian areas are intrinsically important environmental resources because they provide important wildlife habitat and a variety of hydrologic (flood attenuation and groundwater recharge) and water quality (sediment attenuation, nutrient removal) functions. The Missouri River corridor is also an important migratory path for avian species during the spring and fall. During these seasons, as well as the summer months, waterfowl and other avian species utilize the water body as a food source. The close proximity of the Missouri River and Lake Sakakawea to the north likely increases waterfowl use of upland water bodies due to the presence of large populations of avian species in the area.

Drainages within the Missouri River Breaks and Missouri Plateau are generally dominated by woody vegetation while palustrine emergent wetlands are dominated by cattails and a variety of sedges and rushes. The water regime in woody draws and ravines located at higher elevations is ephemeral in nature and are generally not dominated by hydrophytic type vegetation. With the exception of a few scattered reservoirs and the Missouri River, few wetlands in the project area offer open water. Most are areas of saturated soils located near springs and seeps or simply areas of water accumulation in low-lying areas.

The majority of NWI wetlands present within the Project Area are seasonally flooded, lower perennial wetland riverine wetlands in areas of unconsolidated shore as shown in **Table 1** (Cowardin 1979). These wetlands are those located below the high water mark along the Missouri River where wetland disturbances are anticipated to be minimal. Aside from these sites, all of which are associated with the river, the wetlands at greatest risk for effects are temporarily and seasonally flooded palustrine wetlands. Water regimes of these wetlands are highly variable depending on seasonal climatic conditions, topography and location. Some of these wetlands form in shallow depressions, although most are located in drainages with minimal flow.

Approximately 1211 acres of wetlands are present within the Project Area, comprising less than three percent of the land surface. The 500ft-buffer contains approximately 89 acres of wetland features covering less than two percent of the primary development area (**Table 1**). Approximately 26,890ft of wetland reach are also present within the buffer zone, indicating that linear features comprise a significant number of potential wetland sites. The buffer zone is generally comparable to the Project Area as a whole; however, the number of deep water habitats, perennial open water, and riverine wetlands is greater in the Project Area relative to the buffer zone primarily due to the Missouri River and Lake Nelson. Palustrine wetlands comprise 38 and 95 percent of the wetland polygons and linear features, respectively, within 500ft of proposed facilities.

From the regulatory standpoint, the US Army Corps of Engineers (USACE) generally considers wetlands "waters of the US" and, as such, they are subject to jurisdiction under Section 404 of the Clean Water Act (CWA). Waters of the US include both wetlands and non-wetlands that meet USACE criteria. Wetlands are either categorized as isolated or jurisdictional. Isolated wetlands are those wetlands that have no connection to a tributary system of navigable or interstate water. In a US Supreme Court decision issued in 2001, isolated wetlands were removed from USACE jurisdiction. To meet the USACE criteria for a jurisdictional wetland, an area must have a predominance of hydrophytic vegetation, hydric soil, and wetland hydrology and be connected to a tributary system of navigable or interstate water.

TABLE 1
Summary of NWI Wetland Resources in the 1.0 Mile and 500 Foot Buffers[1]
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

Wetland Polygons					Linear Wetlands and Reaches				
Wetland Class	1.0 mi Buffer Acres	1.0 mi Buffer Percent	500ft Buffer Acres	500ft Buffer Percent	Wetland Class	1.0 mi Buffer Feet	1.0 mi Buffer Percent	500ft Buffer Feet	500ft Buffer Percent
L1UBGH	225.4	19%			PABFH	295	<1%		
PABFH	41.1	3%	4.5	5%	PEMA	12,538	3%	387	1%
PABFX	15.1	1%	0.6	<1%	PEMC	292,135	77%	23,016	86%
PEM/ABF	14.9	1%			PEMCX	7,403	2%	2,042	8%
PEM/ABFH	8.6	<1%			PFO/EMCX	250	<1%		
PEMA	225.9	19%	22.1	25%	PFOA	638	<1%		
PEMAD	0.9	<1%			PFOC	710	<1%		
PEMC	111.2	9%	12.0	13%	R2SBC	3,888	1%		
PEMCX	3.0	<1%			R2UBG	22,432	6%		
PEMF	3.1	<1%			R2UBGX	786	<1%		
PEMFH	0.8	<1%			R2UBH	999	<1%		
PFO/EMA	35.2	3%	0.7	<1%	R4SBC	31,565	8%	1,446	5%
PFO/EMC	1.6	<1%			R4SBCX	5,924	2%		
PFO/EMCX	0.4	<1%			**Total Feet**	379,563		26,890	
PFOA	3.9	<1%	0.4	<1%					
PFOC	0.5	<1%							
PUBFX	0.3	<1%							
PUSCH	1.0	<1%							
PUSCX	0.2	<1%	0.1	<1%					
R2UBGX	1.1	<1%							
R2UBH	501.6	41%	48.8	55%					
R2USC	14.7	1%							
Total Acres	1,210.6		89.1						

Wetland Class Descriptions	
L1UBGH	Lacustrine, Limnetic, Unconsolidated Bottom, Intermittently Exposed/Permanently Flooded
PABFH	Palustrine, Aquatic Bed, Semipermanently/Permanently Flooded
PABFX	Palustrine, Aquatic Bed, Semipermanently Flooded, Excavated
PEM/ABF	Palustrine, Emergent, Aquatic Bed, Semipermanently Flooded
PEM/ABFH	Palustrine, Emergent, Aquatic Bed, Semipermanently/Permanently Flooded
PEMA	Palustrine, Emergent, Temporarily Flooded
PEMAD	Palustrine, Emergent, Temporarily Flooded/Seasonally Flooded/Well Drained
PEMC	Palustrine, Emergent, Seasonally Flooded
PEMCX	Palustrine, Emergent, Seasonally Flooded, Excavated
PEMF	Palustrine, Emergent, Semipermanently Flooded
PEMFH	Palustrine, Emergent, Semipermanently/Permanently Flooded
PFO/EMA	Palustrine, Forested/Emergent, Temporarily Flooded
PFO/EMC	Palustrine, Forested/Emergent, Seasonally Flooded
PFO/EMCX	Palustrine, Forested/Emergent, Seasonally Flooded, Excavated
PFOA	Palustrine, Forested, Temporarily Flooded
PFOC	Palustrine, Forested, Seasonally Flooded
PUBFX	Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Excavated
PUSCH	Palustrine, Unconsolidated Shore, Seasonally/Permanently Flooded
PUSCX	Palustrine, Unconsolidated Shore, Seasonally Flooded, Excavated
R2SBC	Riverine, Lower Perennial, Streambed, Seasonally Flooded
R2UBG	Riverine, Lower Perennial, Unconsolidated Bottom, Intermittently Exposed
R2UBGX	Riverine, Lower Perennial, Unconsolidated Bottom, Intermittently Exposed, Excavated
R2UBH	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded
R2USC	Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded
R4SBCX	Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated

1 Wetland data derived from USFWS National Wetlands Inventory Database

A request for jurisdictional determination was submitted to the USACE on March 23, 2005 for the entire Project Area including the transmission route and turbine array (see **Appendix B**). The USACE's preliminary findings identified over 20 square miles containing jurisdictional waters within the area submitted for consideration (Renschler 2005). Approximately 30 potential wetland crossings occur along the routes submitted for their consideration (Personal Communication: Jason Renschler USACE). The majority of these crossings are associated with the transmission corridor. It is expected that most of these wetlands can be avoided during construction. Disturbance that cannot be avoided must be permitted through the USACE and NDSWC as necessary following formal delineation and development of precise construction plans.

Most wetlands in the Project Area and the 500ft buffer are located within drainage bottoms and are connected to the waters of the US. Corridor crossings at these sites, often linear features, are among those most likely to be affected by development. While isolated wetlands are not common in the Project Area due to the well developed drainage patterns found there, some isolated wetlands are found on ridge tops in soil types exhibiting poor internal drainage. These basins are generally small in size (0.1 to .25 acres) and appear to be ephemeral in nature. Of further note is the fact that numerous wetlands within areas in agricultural production have been converted and appear to be vegetated grassed water ways and depressions planted in cool season grasses harvested for hay crop. Many other wetlands are subject to heavy cattle grazing and many have been excavated to provide more permanent water sources for cattle.

3.3.3 Sensitive Plants and Communities

The NDNHP responded to the database query request by providing the list of sensitive plant communities and attendant species known to occur in Oliver and Burleigh Counties listed in **Table 2** and locations shown in **Figure 2**[2]. One plant species sheathed pondweed, *Potamogeton vaginatus*) and one community (pioneer riparian) were identified. Sheathed pondweed occurs in shallow waters of lakes and creeks and may be present in the Project Area. The pioneer riparian community may occur along the Missouri River and Burnt Creek. There is no legal requirement to avoid disturbance or effects to sheathed pondweed or pioneer riparian communities. Effects to these sensitive sites will be minimized by avoiding effects to wetlands where practicable and limiting unnecessary disturbance to vegetation.

Native vegetation offers cover, food sources, and other habitat elements often not found in such large quantities or in similar quality in cropland and other areas dominated by non-native species. As such, federal and state agencies generally recommend that disturbances to native habitats be minimized or avoided where other suitable sites for development exist (i.e., re-route around if practicable).

3.3.5 Impact Assessment and Recommendations

Impacts to plant communities from construction activities at the proposed turbine sites, collector systems, and access road system were analyzed during the on-site field reconnaissance. All proposed turbine sites and the general area including the proposed collector system and access road corridors were visually inspected. Notable site-specific issues identified during this reconnaissance, especially those present at the turbine array, were recorded in the field notes presented in **Appendix C**.

[2] Wildlife species on this list are discussed in Section 3.4

TABLE 2
Sensitive Plant and Animals Previously Recorded Near Project[1]
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

Site	Scientific Name	Common Name
W-1	*Potamogeton vaginatus*	Sheathed Pondweed
W-2	*Cathartes aura*	Turkey Vulture
W-3	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern
W-4	*Sterna antillarum*	Interior Least Tern
W-5	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern
W-6	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern
W-7	*Haliaeetus leucocephalus*	Bald Eagle
W-8	Pioneer Riparian Community	N/A
W-9	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern
W-10	*Cycleptus elongatus*	Blue Sucker
W-11	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern
W-12	*Charadrius melodus*	Piping Plover
	Sterna antillarum	Interior Least Tern

1 Records of occurenct from NDNHP 2005

Access road construction will result in the greatest effects to native grasslands and wooded draws resulting in permanent loss of these habitats where they occur along selected routes. Installation of the proposed buried and overhead collector system will result in some temporary effects to native and non-native grasslands. Where disturbances are significant, effects can be mitigated by reseeding of the trenched areas with native grasses and legumes following completion of construction activities. There are no legal requirements that would require modification of the proposed action in consideration of the native grasslands present in the Project Area and agency queries have thus far identified no areas under easement or having similar limitations for use. However, the NRCS and FSA will not provide such information until project siting is complete and requests can be more specific.

Figures 4 through 7 identify known wetlands in relation to the proposed turbine array and transmission line. On-site delineation of these features prior to construction will help identify those sites which should be avoided where practicable. Final access road and collector line route placement prior to construction will likely avoid many of these potential wetland sites. Based on the site visit and review of available cartographic information, wetland effects in the proposed project are largely avoidable through minor modification to the layout and avoidance of these habitats during the construction phase.

All turbines have been sited to take advantage of higher elevations and, therefore, avoid low-lying areas. However, new access roads, collector lines, and the 230kV transmission route cross a number of potential wetland features that may be disturbed during construction. Significant and permanent disturbances in drainages or wetlands under the jurisdiction of the USACE may require authorization of the work under a nationwide Section 404 permit (NWP) 12 issued by the USACE. Minor temporary disturbances in wetlands and waters of the US may be authorized through a NWP 33. (These permits are further discussed in Section 5.9.4)

3.4 Wildlife

A detailed list of wildlife species is not readily available for the Project Area. However, a list of species known to be common to the area approximately 110 miles to the southeast was compiled for the Edgeley-Kulm Wind Energy Project Environmental Assessment (Western 2003) as shown in **Appendix D**. The majority of these species are presumed to be located in the vicinity of this project as they are common to much of the Coteau and Coteau Slope habitats. The most notable deviations from this listing would be a number of additional waterfowl species present at this Project Area in association with migratory routes proximal to the Missouri River. Most of these additional species are non-resident and would be present in the vicinity of the turbine array to a very limited extent during spring and fall.

Based on issues identified at wind generation sites throughout the US, those species of greatest concern are federally or state-protected species, avian species, and bats that may occur in the Project Area. Other species of conservation priority are also of concern where important or sensitive habitats for these species are present in the Project Area and may be adversely affected by project development. Avoidance of wetland and native habitats where practicable will limit the potential to encounter sensitive species not noted in this section.

3.4.1 Federally Protected Species

The Endangered Species Act requires protection of species federally-listed as threatened or endangered. Significant changes to habitats of these species and projects that have potential to result in a "take" will require close scrutiny by the USFWS and may require special permitting or mitigation measures to lessen or mitigate effects. Of the federally-listed species known to occur in North Dakota, the bald eagle, whooping crane, interior least tern, and piping plover are all known to occasionally or frequently occur in the Project Area. Other species may be present but are either very infrequently observed or have historic range in the Project Area.

Bald Eagle (Threatened)

The bald eagle is not common in North Dakota, but is known to winter along the Missouri River and is occasionally observed along the Missouri River during migration (Gomes no date). Bald eagles have been documented to nest in North Dakota (USFWS 2005) and are typically located in forested habitats within one half mile of water (Towner 2005). These habitats exist within the transmission corridor, but are limited in the vicinity of the turbine array. During a site visit on March 7, 2005, a bald eagle was observed to fly over the existing transmission line crossing the Missouri River. The nearest documented nest in the vicinity of the Project Area is located approximately two miles downstream from the river crossing on the east side of the river (Towner 2005).

Whooping Crane (Endangered)

The total population of whooping cranes in North Dakota numbers 140-150 birds (Towner 2005). Surveys of whooping crane activity in North Dakota note that the palustrine wetlands, many of which occur in the project area, are a preferred habitat (Austin and Richert 2001). This same source notes that most sightings are in the western half of the state and along the Missouri River. North Dakota provides crucial stopover habitat for these birds, with most use occurring in large wetlands and adjacent uplands (NDGFD 2004).

Interior Least Tern (Endangered)

The interior least tern nests on sparsely-vegetated, midstream sandbars of the Missouri River (Towner 2005), generally laying 2-3 eggs in shallow nest scrapes (NDGFD 2004). Habitat may occur

in the Project Area. The breeding season is May through August, with the peak of nesting occurring between mid-June and mid-July. Relevant recommended actions include avoidance of activity near sandbars where least terns are present (USFWS 2005).

Piping Plover (Threatened)
More than three-fourths of piping plovers in North Dakota nest on prairie alkali lakes, while the remainder uses riverine sandbars along the Missouri River. Nests are generally located in barren sand and gravel shores and usually contain four eggs. The breeding season extends from late April through early August. Preferred beaches and sandbars average 30 yards in width (USGS 1995). Such sites are found in the vicinity of the proposed river crossing. Relevant recommended actions include avoidance of activity near sandbars with piping plover activity (USFWS 2005).

Other Federally Listed Threatened and Endangered Species
The pallid sturgeon (endangered) is only known to occur in the Missouri and Yellowstone Rivers. No reproduction has been documented in 15 years (Towner 2005). Preferred habitat has a diversity of depths and velocities formed by braided channels, sandbars, islands, sand flats, and gravel bars (USFWS 2005). Due to low population of this species in the Missouri River and very minimal potential for effects to the river's aquatic environment, risks for interaction with this species and other riverine fish are minimal.

The black-footed ferret (endangered) is entirely dependent on prairie dog towns. There are no records of occurrence of this species in recent years and there are no known prairie dog towns in the vicinity of the Project Area, though there is potential for future reintroduction (Towner 2005). Project activities are not likely to affect this species or materially affect reintroduction potential.

The gray wolf (threatened) may occasionally enter North Dakota from Minnesota, Montana, or Manitoba, Canada; there are reported sightings from the mid 1990s (USFWS 2005). The presence of wolves in North Dakota will likely remain sporadic, and project activities are not likely to affect this species.

3.4.2 State Protected and Other Species of Conservation Concern

Through nationally approved legislation and funding of State Wildlife Grants, NDGFD has identified 100 species in decline at the national, regional or state level, or species whose population status is not well known, but thought to be in decline. These species are ranked in three priority levels based such factors as known status, funding available for conservation, and presence of breeding habitat in North Dakota (NDGFD 2004). Of the species listed by NDGFD and the USFWSS those most likely to be present in the Project Area and potentially affected are shown in **Table 3**[3]**.**

The blue sucker and the turkey vulture were identified by the NDNHP as sensitive species in response to our query (listed in **Table 2**). The blue sucker is no longer a candidate for federal listing under the Endangered Species Act, but is a Species of Management Concern and is listed as Priority Level I species by NDGF. It inhabits swift, turbid waters of the Missouri River. The turkey vulture is found throughout North Dakota from April through September and may be locally common over the plains along the Missouri River (Gomes no date).

[3] Avian species are the most likely species to be present in the Project Area and be impacted by project development and potential for impacts to aquatic species is minimal. Therefore, the species listed do not include aquatic life forms (e.g., fish) which are listed and potentially present in vicinity of the proposed development (including the Missouri River).

TABLE 3
Federally-Listed Species[1,2] and North Dakota Game and Fish Department Priority Avian Species[3] Potentially Present in Project Area
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

Common Name	*Scientific Name*	Federal	State	Preferred Habitat / Range
American Avocet	*Recurvirostra americana*		II	Statewide, found on ponds or lakes with exposed, sparsely vegetated shorelines; nest in open near water.
American Bittern	*Botaurus lentiginosus*		I	East of Missouri River; wetland cattails & bullrushes; next in uplands.
American White Pelican	*Pelecanus erythrorhynchos*		I	Primarily Missouri Coteau & drift prairie.
Baird's Sparrow	*Ammodramus bairdii*	FC	I	Upland prairies of mixed-grass or tall grass habitat types; not heavily grazed areas.
Bald Eagle	*Haliaeetus leucocephalus*	T	I	Forested habitat near bodies of water.
Black Billed Cuckoo	*Coccyzus erythropthalmus*		I	Statewide, woodlands, thickets, prairie shrubs, shelterbelts & wooded areas of towns.
Black Tern	*Chlidonias niger*	FC	I	Inland marshes & sloughs with dense emergent vegetation.
Black-footed Ferret	*Mustela nigripes*	E	II	An obligate of prairie dog towns. No recorded observations in recent years, potential exists for reintroductions.
Blue Sucker	*Cycleptus elongatus*	FD	I	Found in the Missouri River, prefers swift current of large, turbid rivers in areas with rocky or gravel bottoms.
Bobolink	*Dolichonyx oryzivorus*		II	Statewide; uses a variety of grasslands.
Canvasback	*Aythya Valisineria*		II	East of Missouri River, semipermanent wetlands; nests over water in dense vegetation.
Chestnut-Collared Longspur	*Calcarius ornatus*		I	Grazed or hayed mixed-grass prairie.
Dickcissel	*Spiza americana*		II	Statewide, mainly southern portion of state; alfalfa, sweet clover, & other brushy grasslands.
Ferruginous Hawk	*Buteo regalis*	FC	I	Dry unbroken prairie with little cultivated land.
Franklin's Gull	*Larus pipixcan*		I	East of Missouri River. Build nests in dead marsh plants.
Grey Wolf	*Canis lupus*	T	III	Not known to be in state except in extreme NE corner.
Grasshopper Sparrow	*Ammodramus savannarum*		I	Statewide; uses idle or lightly-grazed mixed-grass prairie, meadows & hayfields.
Horned Grebe	*Podiceps auritus*		I	East of Missouri River, wetlands & lakes with open water.
Interior Least Tern	*Sterna antillarum*	E	II	Habitat confined to the Missouri River; nests on sparsely vegetated sandbars. Critical habitat designated.
Lark Bunting	*Calamospiza melanocorys*		I	Statewide; sagebrush or sage prairie preferred.
Le Conte's Sparrow	*Ammodramus leconteii*		II	High densities in Missouri Coteau; fens, wet meadows & marshes.
Loggerhead Shrike	*Lanius ludovicianus*	FC		Open country with patches of trees or shrubs present; wooded coulees & shelterbelts with native prairie or cropland nearby.
Long-billed Curlew	*Numenius americanus*		I	High densities in Missouri Coteau; uses wetlands, streams & lakes, nests in often heavily grazed prairie.
Marbled Godwit	*Limosa fedoa*		I	High densities in Missouri Coteau; uses wetlands, streams & lakes, nests in often heavily grazed prairie.
McCown's Longspur	*Calcarius mccownii*		I	West of Missouri River. Prefers arid, short-grass prairie or heavily grazed mixed grass prairie.
Nelson's Sharp-Tailed Sparrow	*Ammodramus nelsoni*		I	East of Missouri river, fens & shallow marsh zones of wetlands & lakes.
Northern Harrier	*Circus cyaneus*		II	Statewide, but primarily in Missouri Coteau & drift prairie. Nests in upland grasses near water.
Northern Pintail	*Anas acuta*		II	East of Missouri River; wetlands for food; nests in uplands.
Pallid Sturgeon	*Scaphirhynchusalbus*	T	II	Missouri River. Loss of habitat attributed to damming and channelization of Missouri River.
Perigrine Falcon	*Falco peregrinus anatum*	FE	III	Any habitat with suitable prey; cliffs for nesting.
Piping Plover	*Charandrius melodus*	T	II	Barren sand & gravel shores of rivers & lakes; avoid dense vegetation; alkaline wetlands with salt encrusted beaches & sandbars.
Redhead	*Aythya americana*		II	East of Missouri River, semipermanent wetlands; nests over water in emergent vegetation.
Red-headed Woodpekcer	*Melanerpes erythrocephalus*		II	Found in natural stands of mature deciduous trees along the Missouri River, shelterbelts, wooded areas. Nests in snags.
Sedge Wren	*Cistothorus platensis*		II	East of Missouri River; prefers wet meadows of tall grasses & sedges.
Sharp Tailed Grouse	*Tympanuchus phasianellus*		II	Statewide on prairies that contain scattered patches of small trees or shrubs.
Short-Eared Owl	*Asio flammeus*		II	Statewide, prairies, marshes, & fields; nests on ground in prairies, hayfields, & stubble fields.
Sprague's Pipit	*Anthus spragueii*		I	Statewide, extensive tracts of ungrazed or lightly-grazed prairie.
Swainson's Hawk	*Buteo swainsoni*		I	Statewide, nest in lone prairie trees.
Upland Sandpiper	*Bartramia longicauda*		I	Statewide, most common in dry, open mixed-grass prairie.
Western Burrowing Owl	*Athene cunicularia hypugea*	FC	II	Heavily grazed tracts of mixed-grass prairie.
Whooping Crane	*Grus americanus*	E	III	Shallow wetlands that are characterized by cattails, bulrushes, & sedges; upland areas during migration.
Willet	*Catoptrophorus semipalmatus*		I	Heavy Densities on the Missouri Coteau; prefer wetlands; nests in uplands in native prairies away from water.
Wilson's Phalarope	*Phalaropus tricolor*		I	Statewide in shallow wetlands & mudflats, nests in grass on the margins of wetlands.
Yellow Rail	*Coturnicops noveboracensis*		I	East of Missouri river, fens or groundwater-fed wetlands.

Federal

E - Endangered
T - Threatened
FC - Former Candidate

North Dakota Game & Fish Department

I Species having a high level of conservation priority because of declining status either in North Dakota or across their range; or a high rate of occurrence in North
II Species having a moderate level of conservation priority or a high level of conservation priority, but a substantial amount of non-State Wildlife Grant funding is
III North Dakota's species having a moderate level of conservation priority, but are believed to be peripheral or do not breed in North Dakota.

1 USGS 1995
2 FWS 2004
3 NDGFD 2004

3.4.3 Field Reconnaissance

A qualified biologist observed all areas proposed for development during the period from March 7 through 11, 2005 as noted in Section 2. Site observations and notes related to wildlife habitats and related conditions in the areas adjacent to the turbine array are presented in **Appendix C**. Representative photographs depicting various sites and habitats are shown in **Appendix E**. Species observed during the site visit are listed in **Table 4**.

TABLE 4
Wildlife Species Observed During Site Reconnaissance
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

Common Name	Scientific Name
Northern harrier	*Circus cyaneus*
Bald Eagle	*Haliaeetus leucocephalus*
Bluejay	*Cyanocitta cristata*
Horned lark	*Eremophila alpestris*
Ringneck Pheasant	*Phasianus ornis*
Sharptail grouse	*Pedioecetes phasianellus*
Whitetailed deer	*Odocoileus virginianus*
Striped skunk	*Mephitis mephitis*
Coyote	*Canis latrans*
Canada Geese	*Branta canadensis*

3.4.4 Raptors

Raptor use is high in the vicinity of the Missouri River corridor, including areas encompassed by the turbine array and transmission line. Potential perches are present on the poles of the existing high voltage power lines, forested shelterbelts, and native cottonwood forests adjacent to the river bottom. Snag and tree density are low to non-existent near the turbine array, thereby increasing the attractiveness of turbine towers as perches to raptors. In the vicinity of the array, most existing perch and nesting opportunities are located within shelterbelts adjacent to farmsteads. A variety of perches are also present along the transmission route, the most notable of which are the cottonwood forest along the river bottom and the existing Minnkota line poles and towers.

Based on the available cover present within the Project Area, prey densities are expected to be highest in unfragmented areas of native grassland. However, cropped areas may also be attractive to rodent prey species utilizing waste grain as a food resource. These habitats are noted in the turbine specific tables of **Appendix C** and can be observed in the aerial photography presented in **Figure 5**. A northern harrier and a bald eagle were observed during the field reconnaissance at the turbine array and river crossing respectively.

3.4.5 Bats

Due to the timing of the field reconnaissance, no bats were observed during reconnaissance of the turbine array or transmission corridor. However, bats are likely present in the vicinity of the project with portions of the Project Area receiving more use than other portions. Bat species which may occur in the Project Area are listed in **Appendix D**.

Bats typically utilize farm buildings, and dead and dying trees with cavities and loose bark as roosting and maternity habitat. Several buildings and dead or dying trees with cavities and loose bark were noted within the Project Area. In the vicinity of the turbine array, potential bat roosting

habitat was noted at the shelterbelts and farm buildings located at the sites shown in **Figures 4 and 5** (shelterbelts shown as light green in **Figure 4**). Snag density in the vicinity of the turbine array is low or non-existent and offers minimal roosting opportunities for bats. No turbines are proposed in close proximity to the potential roosting and maternity habitats, thereby reducing the potential for bat turbine interaction in these areas.

Bats typically use riparian corridors and wetlands as feeding habitats due to higher nocturnal insect densities in these areas. In the vicinity of the turbine array, neither of these habitats is present in significant amounts, thereby reducing the risk for interactions. The combination of poor habitat in the Project Area and notable distance from the river bottom forests is likely adequate to limit intensive use in the vicinity of the turbine array. Due to the lack of data concerning bat/turbine interactions, actual effects to bat populations with the Project Area cannot be predicted (Keely 2001).

3.4.6 Avian Migration and Potential Occurrence in the Project Area

The Project Area is heavily utilized by numerous species of birds which migrate to and through the Project Area during the spring and fall. These include many species of waterfowl (i.e. ducks, geese and swans), shorebirds, songbirds and raptors. Bird species likely to use the area in the vicinity of the project, at least on a seasonal basis, are presented in **Appendix D**. Bird and turbine interactions are determined by a number of factors including visibility and weather, with increased bird and turbine interactions occurring at night and in inclement weather. Inclement weather and low cloud ceilings force migrating birds to fly at reduced altitudes, thereby putting them at greater risk for adverse interactions with turbines, turbine towers and support infrastructure (NWCC 2004).

Hay and grain crops are often heavily utilized by migrating waterfowl and upland bird species as food resources. Heavy use of cropped fields by waterfowl may result in increased collision potential at nearby turbine locations. In areas adjacent to the river, croplands were observed to have high densities of Canada geese present during the site visit. Use of the area surrounding the turbine array has not been documented.

3.4.7 Impact Assessment and Recommendations

Impacts to wildlife resources within the Project Area from construction activities at the proposed turbine sites, collector systems and access road system were analyzed during the on-site field reconnaissance. Potential issues related to wildlife and other site specific conditions and concerns noted during the field reconnaissance in the vicinity of the turbine array are presented in **Appendix C**. Notable potential impacts have been summarized and a qualitative evaluation of the potential for issues related to wildlife species along the transmission route and turbine array are shown in **Tables 5 and 6**, respectively.

Turbine and access road construction will result in effects to wildlife species which utilized the native prairie and grassland habitats lost due to construction. In addition, activities such as road construction and tree clearing can destroy or disrupt habitats and allow for the introduction of unwanted plant species. Installation of the proposed buried collector and transmission systems will result in a temporary loss of wildlife habitat. Wildlife will also be temporarily displaced from the Project Areas during the installation of these facilities. Displaced wildlife will likely relocate to nearby unaffected areas within the Project Area until construction activities have been completed. The temporary loss of habitat may be mitigated by reseeding of the affected areas with native prairie plant species where disturbance is significant and natural regeneration of onsite plant propagules does not occur.

TABLE 5
Summary of Potential Wildlife Issues Associated with Transmission Line
Proposed Wind Generation and Transmission Line Project
Burleigh and Oliver Counties, North Dakota

Issue	Potential[1]				Comments
	VH	H	M	L	
Potential for Raptor Nest Sites			X		Large woody vegetation is within the Missouri River floodplain. Some woody vegetation is found in drainages and ravines within the transmission corridor west of Hwy 83. Large woody vegetation was also present in windbreaks planted around dwellings and far
Potential Raptor Flight Collisions			X		Use of the project area by raptors is likely to occur during migration periods in the spring and fall. Some raptors would be expected to reside in project area during spring and summer. Limited raptor use of the project area was observed during the site v
Potential Migration Pathways	X				Numerous flights of Canada geese and some ducks were observed within the Missouri River floodplain corridor. The Missouri River is highly utilized by migrating waterfowl, shorebirds and bald eagles.
Potential for Raptor Prey Species		X			Production of grain crops and density of grasslands and hay crops indicative of high prey density potential.
Potential for Protected Species to Occur	X				Potential for impacts to migrating waterfowl and other avian species in conjunction with the Missouri River Crossing. Protected species (least terns, bald eagles, Piping plover and whooping cranes) are known to use the Missouri River. Impacts to these spe
Potential for Federal and State Game Issues			X		Sharp-tail grouse leks may be present on the project area. The area should be surveyed for sharp-tail grouse leks and if encountered these areas should be avoided if practicable.
Uniqueness of Habitat in Project Area				X	Habitat in project area is not unique to the surrounding landscape or region. However, more native grasslands are present along the transmission route than the turbine array.
Potential for Rare Plants to Occur			X		Undisturbed native prairie was not observed during the site visit. Several large tracts of CRP planted to native prairie species were present. Native grassland habitat present in the project area is grazed or hayed.
Potential For Use by Bats			X		Limited amount of large woody vegetation which would provide suitable maternity and roosting habitat is present in wooded drainages, shelterbelts, and riparian forests along the route. Several abandoned farm structures are present which may be utilized by
Impacts to Native Prairie Habitats				X	Undisturbed native prairie was not observed during the site visit. Several large tracts of CRP planted to native prairie species was present. Native grassland habitat present in the project area is grazed or hayed. Permanent impacts from the proposed tra

1 Potential Ratings: VH = Very High; H = High; M = Medium; and L = Low

In order to reduce the potential for adverse effects to raptors using the Project Area, collection and transmission lines should be buried to the extent practicable. Where overhead lines are constructed, the USFWS recommends (Towner 2005) that potential for bird electrocutions and bird strikes be reduced through implementation of measures outlined in "Suggested Practices for Raptor Protection on Power Lines" (Edison Electric 1996) and "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994" (Edison Electric 1994). Line markers and other deterrent devices may also be required at the river crossing site as specified through approval of the river crossing permit (issued by the USACE). Use of guy wires on meteorological towers should be avoided where not required.

TABLE 6
Summary of Potential Wildlife Issues Associated with Turbine Array
Proposed Wind Generation and Transmission Line Project
Burleigh and Oliver Counties, North Dakota

Issue	Potential[1]				Comments
	VH	H	M	L	
Potential for Raptor Nest Sites			X		Limited amount of large woody vegetation is present near the turbine locations. Woody vegetation is primarily restricted to field shelterbelts and windbreaks planted around dwellings and farm buildings. No raptor nests were observed within the project are
Potential Raptor Flight Collisions			X		Use of the project area by raptors is likely to occur during migration periods in the spring and fall. Some raptors would be expected to reside in project area during spring and summer. Limited raptor use of the project area was observed during the site v
Potential Migration Pathways		X			Some flights of Canada geese were observed flying over the project area. Missouri River corridor to the west (approximately 8 miles) is highly utilized by migrating waterfowl, shorebirds and bald eagles.
Potential for Raptor Prey Species		X			Production of grain crops and density of grasslands and hay crops indicative of high prey density potential.
Potential for Protected Species to Occur			X		Potential impacts to migrating waterfowl and other avian species protected by federal law. Most potential impacts associated with collision potential.
Potential for Federal and State Game Issues			X		Sharp-tail grouse leks may be present on the project area. The area should be surveyed for sharp-tail grouse leks and if encountered these areas should be avoided if practicable.
Uniqueness of Habitat in Project Area				X	Habitat in project area is not unique to the surrounding landscape or to the region.
Potential for Rare Plants to Occur				X	Undisturbed native prairie was not observed during the site visit. Several large tracts of CRP planted to native prairie species was present. Native grassland habitat present in the project area is grazed or hayed.
Potential For Use by Bats			X		Limited amount of large woody vegetation which would provide suitable maternity and roosting habitat is present near the turbine locations. Several abandoned farm structures are present which may be utilized by bats as roosts and maternity sites. No known
Impacts to Native Prairie Habitats				X	Undisturbed native prairie was not observed during the site visit. Several large tracts of CRP planted to native prairie species was present. Native grassland habitat present in the project area is grazed or hayed.

1 Potential Ratings: VH = Very High; H = High; M = Medium; and L = Low

Raptor nest surveys and monitoring of avian use and occurrence are recommended in appropriate seasons immediately prior to project construction. Spring point-counts of avian occurrence in areas proximal to the proposed development will document species' presence and density of use prior to construction and possibly assist in identifying sites with elevated potential for avian and turbine interaction. A spring survey for raptor nests throughout the Project Area to document the intensity of resident raptor use is also recommended to identify sites where effects could be further minimized as practicable. Such surveys are best conducted prior to project development if the results are to be used to either make decisions regarding development or document changes in use resulting from the facility's construction. In the vicinity of the river crossing, USACE monitoring is expected to document piping plover and interior least tern activity (Personal Communication: Jason Renschler, USACE).

Avian monitoring in the vicinity of the Project Area (especially the turbine array) is also recommended by the USFWS. "[The USFWS] encourage[s] project proponents to conduct collision monitoring studies designed to determine the effect of several factors, such as site selection, turbine designs, the layout of wind plants, wind plant operations, habitat alteration, and changes in available perching and nesting sites on bird deaths." Site specific recommendations and issues should be further discussed with USFWS following finalization of facilities layout in consideration of issues stated herein.

The USFWS has also specifically noted the use of the site by sharptail grouse and the potential adverse effects on this species caused by habitat fragmentation. Numerous sharptail grouse were observed within the Project Area during the site survey and are reportedly present in the area year-round. Native grasslands are especially important to this species and leks (breeding grounds) are often present in areas of short-grass prairie. A significant portion of leks are also located on hilltops. Since turbines are generally sited to take advantage of higher locations, leks may be at increased risk if present in the Project Area. In order to identify and avoid leks where practicable, monitoring in the Spring of 2005 for active leks in the vicinity of the turbine array prior to commencement of construction activities is recommended (Personal Communication: Terry Ellsworth, USACE).

4. SOCIAL AND ECONOMIC ENVIRONMENT

4.1 Demographic Overview

The proposed project is located in Burleigh and Oliver counties in North Dakota, primarily a rural agricultural area located east and west of US Highway 83. In 2003, the US Census Bureau estimated Burleigh County had a population of 71,693, an increase of 3.3 percent from the 2000 Census count of 69,416 and an increase of over 16 percent since the 1990 census (US Census Bureau 2004). The county contains approximately 1,633 square miles, with a population density of just over 42 persons per square mile. Ninety-five (95) percent of the population is composed of white persons who are not of Hispanic or Latino origin (see Environmental Justice section below). The median age of Burleigh County residents is currently 35.9 years and increasing. At the time of the census, 12.4 percent of the county population is 65 years or older while only 14.7 percent of the state population is in this age grouping.

For the same period (2003), Oliver County had a smaller population of 1,905, which represented a decline of 7.7 percent since the 2000 census level of 2,065 people. The 2003 population level has fallen over 13 percent since 1990. Oliver County encompasses 724 square miles, with a population density of 2.9 people per square mile. Over 97 percent of the population is composed of white persons who are not of Hispanic or Latino origin (see Environmental Justice section below). The age of the population within this county appears to be increasing with a median age of 42. Over 14 percent of Oliver County's population is 65 or older compared to 14.7 percent for the state of North Dakota.

There are several urban areas near and within Project Area. Nearby cities and towns within Burleigh County (and their 2000 census populations, as available) include Wilton (242 – incorporated as South Wilton), Regan (43), Wing (124), Wogansport and Baldwin. Cities and small unincorporated towns near the proposed Project Area within Oliver County include Price, Center (678) and Hanover. The northern portion of the city of Wilton (565 – incorporated as North Wilton) is actually in McLean County which lies approximately one mile northwest of the proposed turbine array. The town of Regan is located approximately six miles to the north-northeast. Burleigh County also hosts the capital city of Bismarck (55,532) located approximately 20 miles south of the proposed Project Area.

4.2 Economic Overview

The economy of Burleigh County in 2000 consisted primarily of employment in the Services and Professional sector with over 70 percent of the workforce involved in the sub-categories of this sector including:

- Services (Health, Legal, Business, Others) 35.9 percent,
- Retail Trade 18.7 percent,
- Finance 6.9 percent,
- Transportation & Public Utilities 5.4, and
- Wholesale Trade 3.9 percent.

Almost 17 percent of the workforce worked in the Government sector and an additional 5.4 percent worked in the construction industry (2000 US Census Data). Per capita income in 1999 was $20,436; median family income was over $41,300. Total retail sales in Burleigh County exceeded $814,579,000 in 1997 which represented over 12 percent of total sales in North Dakota for the same period (US Census Bureau 2005).

Quite dissimilar from Burleigh County in economic base, Oliver County consisted heavily on employment in the Farm and Agricultural Services sector with almost 400 related jobs (33.9 percent) out of 1,169 available in 2000. An additional 153 (13.1 percent) of jobs in 2000 were designated as Governmental (2000 US Census Data). Per capita income in 1999 was $16,271; median family income was over $36,650 (US Census Bureau 2004). According to the USDA, in 2002 the Oliver County had 307 farms encompassing over 400,000 acres. Of these, 131 were a thousand acres or more. More than $22,579,000 was generated by the sale of agricultural products in 2002 (USDA 2002).

4.3 Environmental Justice

Executive Order (EO) 12898 (February 11, 1994), Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, was executed to avoid a disproportionate placement of adverse environmental, economic, social, or health effects from federal actions and policies on minority and low-income populations. Analysis requires the identification of minority and low-income populations that may be affected by any of the alternatives. For purposes of this section, minority and low-income populations are defined as follows:

- *Minority populations* are persons of Hispanic or Latino origin of any race, Blacks or African Americans, American Indians or Alaska Natives, Asians, and Native Hawaiian and other Pacific Islanders.
- *Low-income populations* are persons living below the national poverty level. In 2000, the poverty weighted average threshold for a family of four was $17,603 and $8,794 for an unrelated individual.

Estimates of these two populations were then developed to determine if environmental justice populations exist in Burleigh or Oliver Counties (**Table 7**).

TABLE 7
Minority and Low-Income Populations[1]
Burleigh / Oliver Counties and the State of North Dakota
Proposed Wind Generation and Transmission Line Project
Burleigh / Oliver Counties, North Dakota

Location	Total Population	Percent Minority	Percent Below Poverty
Burleigh County	69,416	5.4	7.8
Oliver County	2,065	2.9	14.9
State of North Dakota	642,200	8.3	11.9

[1]Source: US Census Bureau 2005.

In 2000, Burleigh County had a population of 69,416 persons, of which approximately 3,748 (5.4 percent) were minorities and approximately 5,414 (7.8 percent) were living below the poverty level. Oliver County had a population of 2,065 persons, of which approximately 60 (2.9 percent) were minorities and approximately 307 (14.9 percent) were living below the poverty level. Minority populations were lower in both Burleigh and Oliver Counties than in the state of North Dakota. The low-income population in Oliver County was higher than for the state of North Dakota but not significantly higher as to qualify as a population of concern (greater than the state level plus 10 percent in accordance with Council on Environmental Quality guidance). The poverty level within Burleigh County was significantly lower than the state level.

There are no Tribal reservations within or adjacent to the Project Area. The Standing Rock Sioux Reservation northern border is approximately 50 miles south of the proposed project. The Fort Berthold Indian Reservation southeastern border is also approximately 50 miles from the Project Area. These two regions may represent the closest minority or low-income populations in the region. This information supports the conclusion that no environmental justice populations exist within the Project Area, and no impact analysis is required.

4.4 Human Health Risk

Executive Order (EO) 13045, Protection of Children from Environmental Health Risks and Safety Risks (April 21, 1997):

> *"This order recognizes a growing body of scientific knowledge that demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because (1) children's bodily systems are not fully developed, (2) children eat, drink, and breathe more in proportion to their body weight, (3) their size and weight may diminish protection from standard safety features, and (4) their behavior patterns may make them more susceptible to accidents. Based on these factors, the President directed each federal agency to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The President also directed each federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks."*

The southern section of the town of Wilton is located adjacent to the northern border of the Project Area. The town of Regan is several miles to the northeast of the project. It is expected that sensitive populations including children are not expected to be present at the constructed facilities. However, the close proximity of farmsteads in the area combined with public access on nearly every section line in the vicinity of the turbine array introduces potential for children and other persons to be at risk

from development. On such occasions that persons not involved in facilities construction or operation are present, safety precautions such as fencing, limitations on access to high hazard areas, and provision of adult supervision should be implemented. Based on the social overview of the site, no additional impact analysis is required at this time. Should federal agency permitting and analysis be required for some future action, additional review of these issues may become necessary.

4.5 Noise

Potential noise receptors in the vicinity of the proposed wind generation facility include scattered rural residences, the closest of which is located in Township 142 North, Range 80 West, SE ¼ Section 18 approximately 1640ft from Turbine 15. No local or state noise regulations were found during this investigation. The National Safety Council (NSC) recommends no more than 85 dBA for eight hours of exposure as the safe limit for farm operations. The industrial standards of the Occupational Safety and Health Act (OSHA) regulations would apply during construction, operation and maintenance of the facility. OSHA permissible noise exposures are shown in **Table 8.**

TABLE 8
OSHA Permissable Noise Standards
Proposed Wind Generation and Transmission Project
Burleigh / Oliver Counties, North Dakota

Duration (number of hours per day)	Sound level (dBA)
8.0	90
6.0	92
4.0	95
3.0	97
2.0	100
1.5	102
1.0	105
1.0	110
0.5	115

Short-term noise issues would be related to construction of the project; long term issues would be related to operation of the facility. Noise generated by construction activities would occur intermittently over the construction period and would be generated by an increase in traffic on local roads, as well as heavy equipment operation. Available estimates from other wind farm construction projects indicate that the maximum noise levels from heavy equipment would be 85 to 88 dBA at a distance of 50ft. (Western 2003). Given that the distance to residences is expected to be greater than 1500ft., noise issues are not expected to be a long-term concern at this project site.

Noise associated with transmission line construction is expected to be localized and short-term. All construction operations will occur during daylight hours. Only one residence is located within 500ft of the transmission line (same residence near Turbine 15 noted above). This landowner has been contacted and the proximity approved. It is recommended that occupants of residences in close proximity, but not within 500ft of the line, will be contacted prior to construction to further reduce annoyances and other potential social impacts from these operations.

4.6 Aesthetics

The Project Area lies in a rural location with farming and livestock grazing and related agricultural operations dominating the land use. The array consists of approximately seven square miles of a rolling to moderately hilly landscape with prominent ridges trending in northwesterly to southeasterly direction. Land use in the vicinity of the turbine array is primarily agricultural,

consisting of a mosaic of land in row-crop and hay-crop production, native and non-native grassland pastures and what appear to be CRP lands. Some areas which appear to be unbroken native grassland are present on several of the prominent ridges located within the Project Area. While these areas possess numerous plant species found in native prairie habitats, these areas have been historically grazed or hayed and are not representative of undisturbed native prairie habitats which formerly dominated the landscape. The visual resources of the area are neither unique to the region nor entirely natural.

The proposed project will consist of wind turbines, transmission line structures, and access roads. The uppermost portion of the turbine blades will stand at 360ft above ground surface and will be visible for up to several miles, changing the visual character of the area from agricultural to quasi-industrial. Some of the turbines will require lights on top of the nacelle for aircraft safety, potentially changing the view from nearby rural residences and from the roadways. Visual effects will decrease as the distance from the wind farm increases.

The transmission line will bisect the rural areas from the turbine array to the substation. Where the line parallels the existing Minnkota line, cumulative changes in visual effects are expected to be minimal. However, where the transmission line deviates from routes traversed by other tall structures, their appearance will result in changes to the aesthetics of the landscape. Landowner concerns are a consideration in the right of way agreements negotiated along the route. Reroute potential has been discussed with one landowner on the east side of the river in response to concerns regarding the visibility of the proposed line. Options regarding the type of tower utilized (H-frame or single-pole) have also been discussed where warranted.

The power transmission lines are expected to cross the Missouri River near the small town of Price located in Oliver County. The final form of the river crossing is still to be determined. Currently there is an existing Minnkota Electric DC powerline crossing corridor over the Missouri River at this same location. The presence of additional structures at the crossing site is not expected to result in substantive changes to the aesthetics of the site. However, line markers required by the USFWS to mitigate potential for avian collisions may make the lines noticeably more visible. No specific recommendations can be made to avoid negative visual effects or receptors at this time.

4.7 Land Use and Zoning

The land in Burleigh County within the proposed project boundaries is primarily agricultural with scattered farmstead residences. Townships within Burleigh County which would be impacted by the proposed project include Ecklund, Painted Woods and Ghylin. These townships have locally retained zoning rights. According to supervisors in each township, there is no zoning that would preclude development of the proposed project although the power company may have to obtain specific permits in order to develop. In the township of Ecklund, final placement of turbine arrays or ancillary items will require approval or variance of the county zoning committee. In addition, a variance fee of $500 and 0.1 percent of the value of constructed items will be assessed by the zoning committee on the construction expenditures of the project (Personal Communication: John Spitzer, Ecklund Township). According to the Supervisor of the Painted Woods Township, a conditional use permit must be filed by the power operator which would require approval by the four members of the zoning board. The board may also solicit public comment on the permit application (Personal Communication: Tom Davenport, Painted Woods Township). According to the Supervisor of the Ghylin Township, a request must be made of the board for approval of proposed development. No other zoning constraints were known to the Supervisor (Personal Communication: Richard Steiner, Ghylin Township).

Burleigh County is charged with maintenance of public roads in these townships and throughout the county. The county has eminent right-of-way authority in two forms. The first is command of the road corridors stretching 33ft to either side of a county road centerline. According to the Burleigh County Engineer, in the past, accommodations have been made to share this corridor as mutually convenient with utility companies. The second county right-of-way authority came to pass with legislation in 1971. In an effort to shore up county authority to expand and maintain road ways, the legislation provides the County with authority extending control up to 75ft from the road centerline. Utilities placed within this area, even on private property, could be made to relocate the utility to the satisfaction of the county. The cost of this relocation would be borne by the utility company (Personal Communication: Jon Mill, Burleigh County Engineering Department). Building permits are issued by the state and do not cover wind generation towers although any ancillary buildings may be required to meet state code (Personal Communication: Hoffman, Dickey County Auditor).

Oliver County has retained zoning rights at the county level. The County Auditor is not aware of any zoning ordinance that would affect development of the proposed project. A more conclusive assessment of the county zoning ordinances may be obtained from John Wickland [701.794.3404][4]. The individuals contacted regarding this local inquiry are as follows:

Burleigh County Engineering Department
Jon Mill, County Engineer
701.221.6870

Painted Woods Township
Tom Davenport, Supervisor
701.734.6966

Ecklund Township
John Spitzer, Supervisor
701.223.0948

Ghylin Township
Richard Steiner, Supervisor
701.400.9385 [Cell]

Oliver County Office
Barb Fleming, County Auditor
701.794.8721

4.8 Transportation

The turbine array is located east of US Highway 83 and south of State Highway 36. US Highway 83 junctions with Interstate-93 approximately 20 miles south of the Project Area. Construction of the proposed project will increase traffic on local roads to the site, possibly causing temporary effects while hauling equipment to the site. The construction company hired to build the project may need to obtain permits for transporting equipment, which can be obtained from the North Dakota Highway Patrol online at www.state.nd.us/ndhp/permits.html. There are weight limits on North Dakota roads from approximately the end of February to May to avoid damage to road surfaces during the spring thaw. The Highway Patrol and North Dakota Department of Transportation should also be contacted regarding the transmission line crossings. Operation of the proposed project is not expected to result in any significant traffic issues on the area highways or state roads provided that necessary permits are obtained and safety protocol implemented. Turn radii and related road limitations and upgrade requirements were not investigated.

[4] This point of contact is only available the first Tuesday of each month and was unavailable at the time of this inquiry.

4.9 Archaeological, Cultural, and Historical Resources

While this analysis did not identify any widely known cultural resource values such as historical monuments or widely known battlefields, significant cultural resources are known to be present in and around the Project Area. The Missouri River corridor has long been a trade route and source of food and materials for both Native American tribes and European settlers. In addition, a number of Native American villages (Mandan and Hidatsa Indians) are known to be located near the west side of the river north of Bismarck (Personal Communication: Suzanne Nelson, Metcalf Archaeology). Initial contact was made with entities engaged in cultural resource management.

4.9.1 North Dakota State Historic Preservation Office

The North Dakota SHPO has not yet responded to the query for available information submitted in the early phases of this analysis. However, based on responses to previous queries it is expected that the SHPO will perform a file search that will return a list of surveys previously conducted and potentially a list of known cultural or historic resources in the area including sites listed on the National Register of Historic Places. This review would not constitute an official Class I inventory (records search). The SHPO usually recommends that a Class I inventory be conducted for all areas that may be effected by the project and notes that a Class III inventory (pedestrian survey) may be warranted once more information is known. Permitting requirements with the USACE and ND Public Service Commission (PSC) may also require that on-site inventories be conducted prior to permitting and project construction.

4.9.2 Tribal Historic and Cultural Preservation Offices

Although there are no reservations or Bureau of Indian Affairs trust lands in Burleigh or Oliver County, the following Tribal Historic Preservation Officers (THPO) or the Tribal Cultural Preservation Officer (TCPO) may need to be contacted if a traditional cultural property of Tribal interest is identified prior to or during construction:

Tim Mentz, THPO
Standing Rock Sioux Tribe
Phone: 701.854.2120

Elgin Crows Breast, TCPO
Three Affiliated Tribes – Mandan – Hidatsa & Arikara Nation
Phone: 701.627.4781

Ambrose Littleghost, THPO
Spirit Lake Tribe
Phone: 701.996.4477

Additionally, contacting these individuals may help identify cultural resources, historic sites, or other values in the area not on record with the SHPO. Jane Martin of the NDIRC has indicated that the project is located in the aboriginal homelands of several Native American tribes who may have resources there.

4.9.3 Burial Sites

The Native American Graves Protection and Repatriation Act of 1990 allows Tribes to protect American Indian graves and to repatriate human remains. According to Jane Martin with the North Dakota Intertribal Reinternment Committee (NDRIC), the proposed Project Area lies in the aboriginal homelands to several of the current North Dakota Tribes. The proponent must comply with this act if a burial site is encountered during construction as the aforementioned Act applies to

all developments regardless of the funding source. Any burial site identified, including Tribal or pioneer, must be referred to the North Dakota Intertribal Reinternment Committee and the North Dakota State Historical Society.

The North Dakota Intertribal
Reinternment Committee (NDIRC)
Ms. Jane Martin
Turtle Mountain Housing Authority
P.O. Box 620
Belcourt, ND 58301

State Historical Society North Dakota
Mr. Paul Picha, Chief Archeologist
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830
ppicha@state.nd.us

Maps available for review at the time of this study do not depict cemeteries within 500ft of any proposed facilities. No burial sites were identified during site surveys.

4.9.4 Impact Assessment and Recommendations

Phone conversations with SHPO and other agencies representatives indicated that the region in which the project is located is known for a high density of cultural and historical resources. While no specific resources have been identified in the Project Area at this time potential for discovery does exist. A Class I survey has been contracted and is currently underway. Further investigations may also be warranted pending the results of the Class I inventory and consideration of regulatory requirements for on-site surveys.

5. Environmental Permitting and Compliance

There are few regulations governing wind energy generation and transmission development in Burleigh County. The need for federal, state and/or local permits and/or approvals depends on several factors such as final location and layout design, land ownership, equipment used, presence of threatened or endangered species, jurisdictional determinations made by the USACE and involvement of federal agencies. **Table 9** identifies the permits most likely to be required in conjunction with project development and these permits are summarized below. In addition, if federal funds are used, the project must also be cleared by the North Dakota Department of Commerce in conformance with the North Dakota Federal Program Review System to assure the economic validity of the proposal. Review by the NDIRC and the State Historical Society of North Dakota is required if a burial site is found, regardless of funding. Local zoning permits are generally straightforward and, may or may not require any consideration of environmental affects. Other permits are discussed in the following section.

5.1 USACE Clean Water Act Permits

Disturbances to wetlands under the jurisdiction of the USACE will require permitting under the Clean Water Act. Most potential wetland impacts occur where proposed facilities cross blue-lines shown on the USGS 7.5 minute quadrangle maps, but others occur in areas with a high density of wetlands as identified by the USFWS NWI data set. While there are a significant number of wetland sites in the vicinity of the proposed facilities as described in Section 3.3.3, the extent to which these must be disturbed is expected to be minimal. Due to the limited extent of disturbances expected in association with the proposed development, permitting will likely consist of application for one or more nationwide permits (NWPs).

Table 9
Environmental Permits Potentially Required[1]
Proposed Wind Generation and Transmission Line Project
Burleigh and Oliver Counties, North Dakota

Act / Permit Required	Agency	Trigger
FEDERAL PERMITS		
Section 404 Clean Water Act (Wetland Permits)	USACE	Placement of dredge or fill materials into waters of the US, including jurisdictional wetlands.
Section 10 Rivers and Harbors Act	USACE	River crossings including transmission line.
Spill Prevention Containment and Control	EPA	Exceedence of threshold limits for quantities of hydrocarbons onsite.
STATE PERMITS		
North Dakota Permit for Construction Activity North Dakota Water Pollution Control Act NDR10-0000	Department of Health	Clearing, grading or excavation of more than one acre.
North Dakota Energy Conversion and Transmission Facility Siting Act	Public Service Commission	Transmission line in excess of 155kV - or - Total Generation in excess of 100MW.
LOCAL PERMITS		
Zoning, Conditional Use Authorization, and Related	Township Boards	Turbine Arrays; requirements unique and specific to each township.

1 Does not include transportation and related permits.

NWPs are intended to simplify the process of permit review and issuance for projects that have no more than minimal impacts (from a site-specific and cumulative standpoint), on the aquatic environment. Two types of NWPs are approvable for disturbances associated with the proposed project. The NWP 12 is for activities required for construction, maintenance, and repair of utility lines and associated facilities that do not result greater than 0.5 acres of impact to waters of the US. The NWP 33 is for temporary structures, work and discharges necessary for construction activities or access fills or dewatering of construction sites. The combination of permits required for the proposed development will be determined following completion of a full site survey and formal wetland delineations, if necessary. USACE has agreed (Personal Communication: Jason Renschler, USACE) that the project may be partitioned into the following sections for separate permitting: 1) transmission route west of river crossing; 2) river crossing and adjacent lowlands; 3) transmission route east of river crossing; and 4) turbine array and associated facilities. Partitioning will be implemented as necessary to prepare applications with total disturbances less than 0.5acres for each NWP 12 application.

Where required by the terms and conditions of the NWPs, the applicant must notify the USACE with a Pre-Construction Notification (PCN) prior to commencing the activity. A PCN would be required for all NWP 33 applications. A PCN is required for NWP 12 applications where the following conditions, as identified in 33 CFR Part 330 and the NWP language, are exceeded:

- Mechanized land clearing in a forested wetland for the utility line right-of-way;
- A Rivers and Harbors Act Section 10 permit is required;
- The utility line in waters of the US, excluding overhead lines exceeds 500ft;
- The utility line is placed within a jurisdictional area (i.e., a water of the US), and it runs parallel to a streambed that is within that jurisdictional area;
- Discharges associated with the construction of utility line substations that result in the loss of greater than 0.1 acre of waters of the US;
- More than 500ft of permanent access roads constructed above grade in waters of the US; or
- Permanent access roads constructed in waters of the US with impervious materials.

Notifications must include contact information, location of the project, and a description of the projects purpose, environmental affects, and all permits intended for use. NWP 12 will always require formal wetland delineation, while NWP 33 may not. Mitigation and restoration measures may also be required depending on the permit utilized and the level of impact expected.

5.2 USACE Rivers and Harbors Act Section 10 Permit

Overhead utility lines constructed over Section 10 waters, such as the Missouri River, without a discharge of dredged or fill material require a Section 10 permit. The necessary application materials for the transmission line crossing were submitted to the USACE on April 19, 2005. The application materials provided detailed documentation of the crossing location, construction methods, and mitigation measures implemented to limit impacts to sensitive resources including federally-listed species. The construction methods presented in Attachment B of this application are presented in **Appendix F** of this document.

5.3 Spill Prevention Containment and Control

Construction and regular operations at the proposed project will likely require a Spill Prevention Containment and Control (SPCC) Plan. At a minimum, coolant and other oils associated with the new substation are expected to exceed the minimum exemption limits, thus triggering requirements for an SPCC plan. In addition, turbine facilities may also fall under the requirements of this regulation. The physical arrangement of wind turbine installations or evaluation of continuous land ownership may trigger an SPCC Plan if the aggregate storage capacity of oil exceeds 1,320 gallons. Prior to project construction, appropriate plans should be established and permits acquired. There are no further stringent requirements above EPA Federal Regulations regarding SPCC, in North Dakota, other than requirements regarding reportable spill quantities, if a spill were to occur. Risks unique to the river crossing, may also require special precautionary measures be taken during construction to avoid potential fuel or oil contamination of surface and ground waters.

5.4 North Dakota Water Pollution Control Act

Prior to construction, it will be necessary to apply for and receive authorization under the North Dakota Water Pollution Control Act which will issue permits in accordance with the National Pollution Discharge Elimination System Requirements. These permits apply to clearing, grading, and excavation activities in excess of one acre in size. The application requires submission of a notice of intent and project information and preparation of a stormwater pollution prevention plan. Construction activities associated with the river crossing may also require special precautionary measures be taken to ensure that sediment is not allowed to discharge. Borings for the river crossing towers are expected to require removal of significant amounts of spoil material and drilling may also require pumping of water seeping into holes. Spoil must be properly disposed in a location that meets federal and state waste material requirements and must not be placed in waters of the US including wetlands. Long-term placement of spoil materials (even for storage) should be avoided to minimize risk associated with potential sediment generation. (See **Appendix F** for further discussion of these issues relative to proposed construction at the river crossing.)

5.5 North Dakota Facility Siting Regulations

Review of North Dakota Code and discussions with the North Dakota Public Service Commission (PSC) have concluded that a permit issued in accordance with the North Dakota Energy Conversion and Transmission Facility Siting Act (North Dakota Century Code Chapter 49-22) will be required for the proposed project. The policy or purpose of this Act is described as follows:

> *"The legislative assembly finds that the construction of energy conversion facilities and transmission facilities affects the environment and the welfare of the citizens of this state. Therefore, it is necessary to ensure that the location, construction, and operation of energy conversion facilities and transmission facilities will produce minimal adverse effects on the environment and upon the welfare of the citizens of this state by providing that no energy conversion facility or transmission facility shall be located, constructed, and operated within this state without a certificate of site compatibility or a route permit acquired pursuant to this chapter. The legislative assembly hereby declares it to be the policy of this state to site energy conversion facilities and to route transmission facilities in an orderly manner compatible with environmental preservation and the efficient use of resources. In accordance with this policy, sites and routes shall be chosen which minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion."*

An initial step in this process is to submit a letter of intent and application to the PSC. The application must include such information as a description of the proposed facility, summary of environmental impact studies, statement of need, description of facility location, information supporting site selection, description of measures to mitigate adverse impacts, and various other information as required by the PSC. The PSC will evaluate the proposal based on social, economic, and environmental characteristics as identified in the Act. Applications for the transmission corridor and route were submitted on April 20, 2005 and are currently under review by the PSC.

During North Dakota's 2005 congressional session, HB 1283 introduced the proposal to raise the limits for PSC permitting under the energy conversion facilities siting regulations from 50MW to 100MW. The bill passed the house and senate with revision only to incorporate language that the bill was an emergency measure. The bill was signed into law by the governor on March 23, 2005. Due to the size of the currently proposed generation facilities (less than 100MW), an application for the turbine array and attendant facilities is not required at this time.

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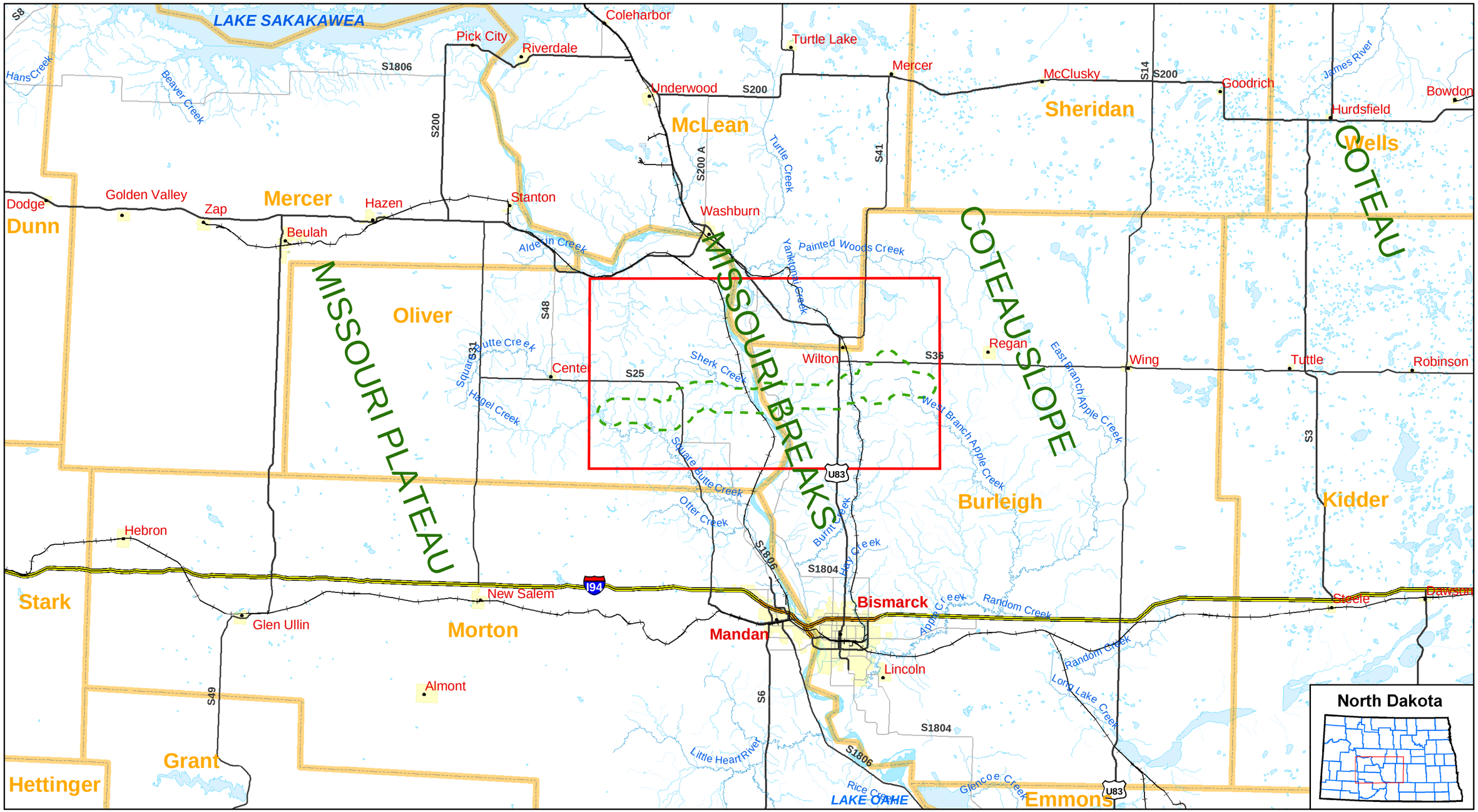
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FIGURES



TETRA TECH, INC.

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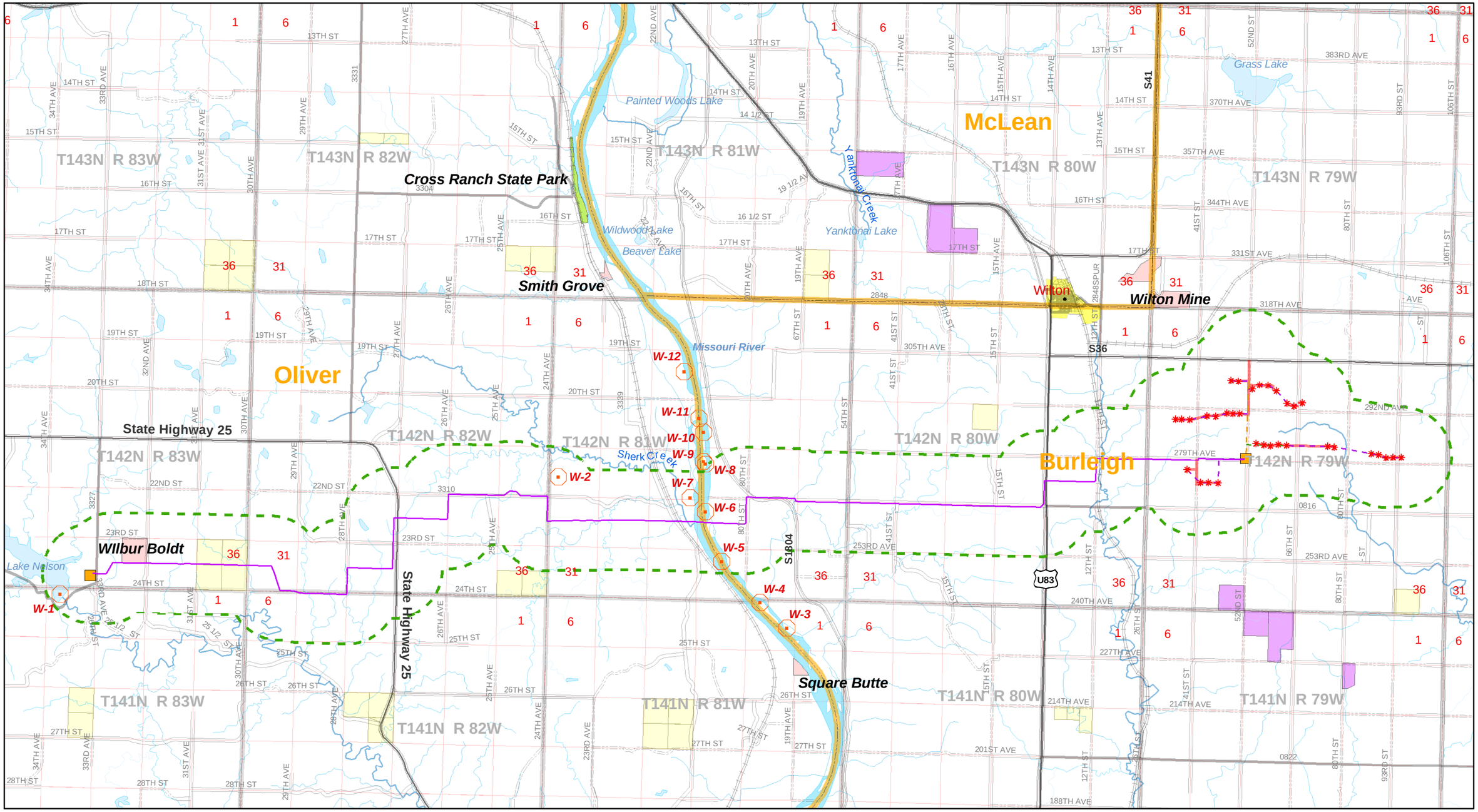
0 5 10

Miles

General Project Area

1:120,000 Scale View

FIGURE 1
STATEWIDE OVERVIEW
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



TETRA TECH, INC.

1:120,000
0 1 2
Miles

Roads
Railroads
County Lines
1.0 Mile Facilities Offset
State Park
State Land
Wildlife Management Area
Other ND Game & Fish
Substation
Turbines
Sensitive Species and Habitats
New Access Roads
4/0 Buried Cable
1000 MCM Buried Cable
OH 34.5 kV Transmission LIne
230 kV OH Transmission Line

FIGURE 2
LOCAL OVERVIEW
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.

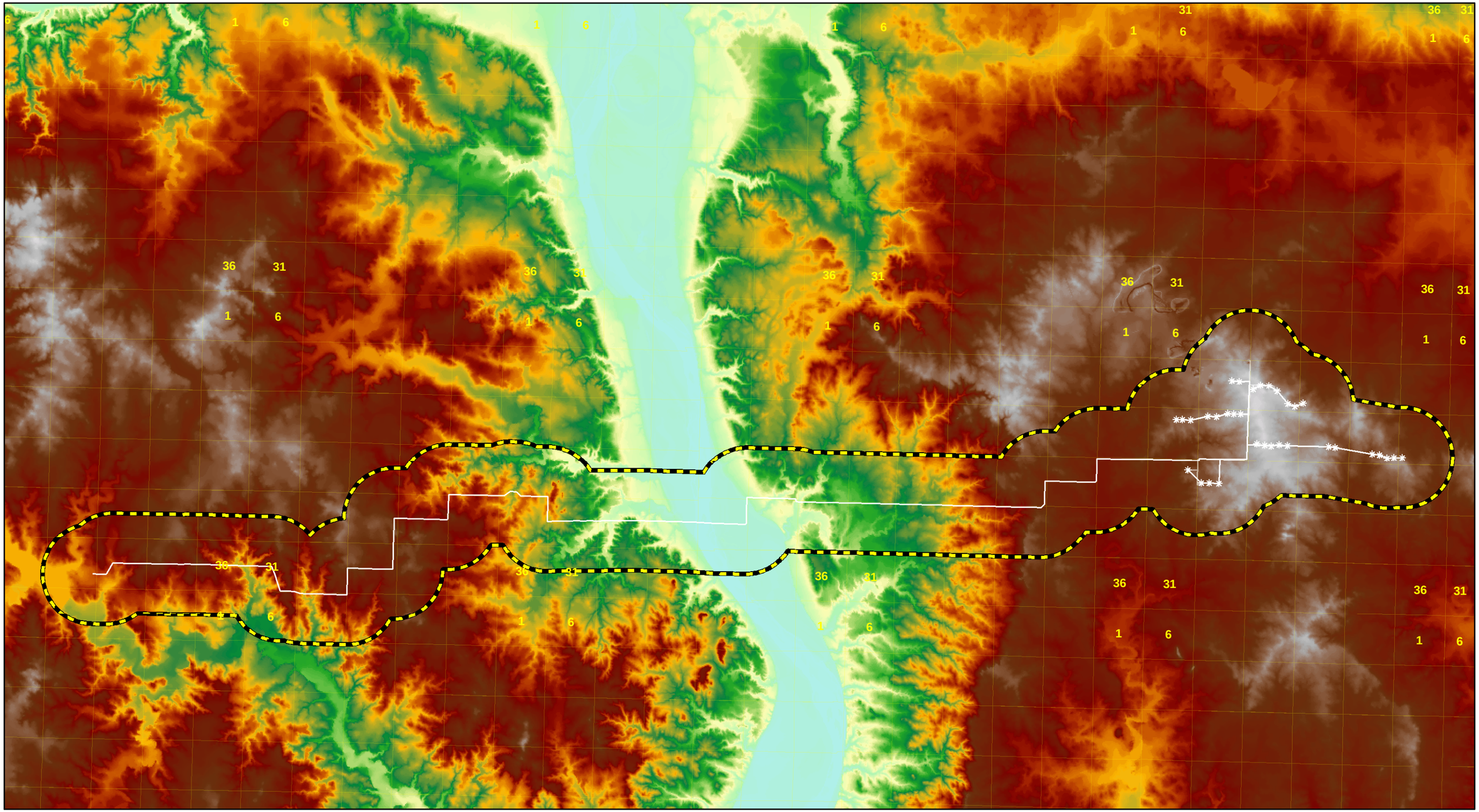
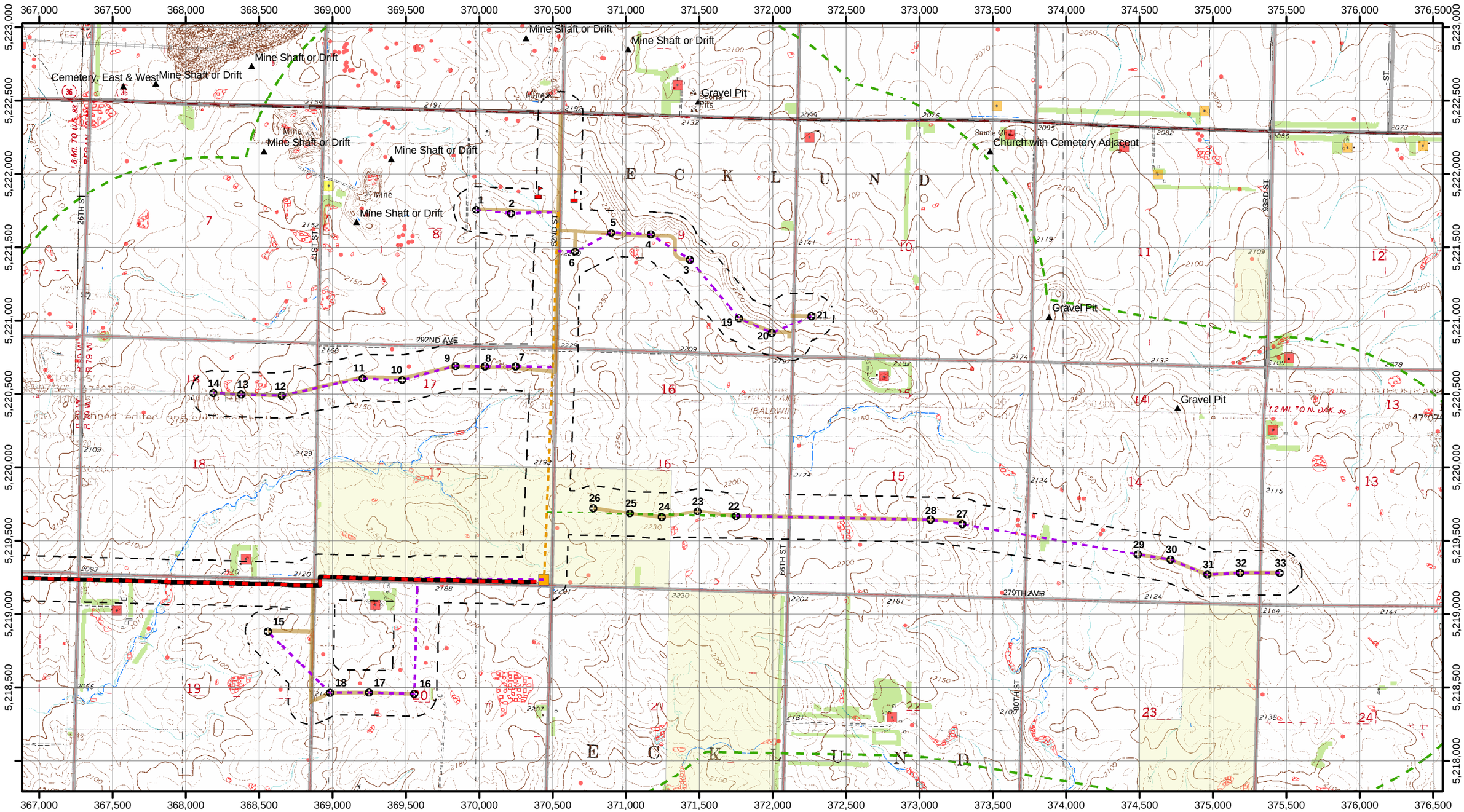


FIGURE 3
LOCAL OVERVIEW - ELEVATION MODEL
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



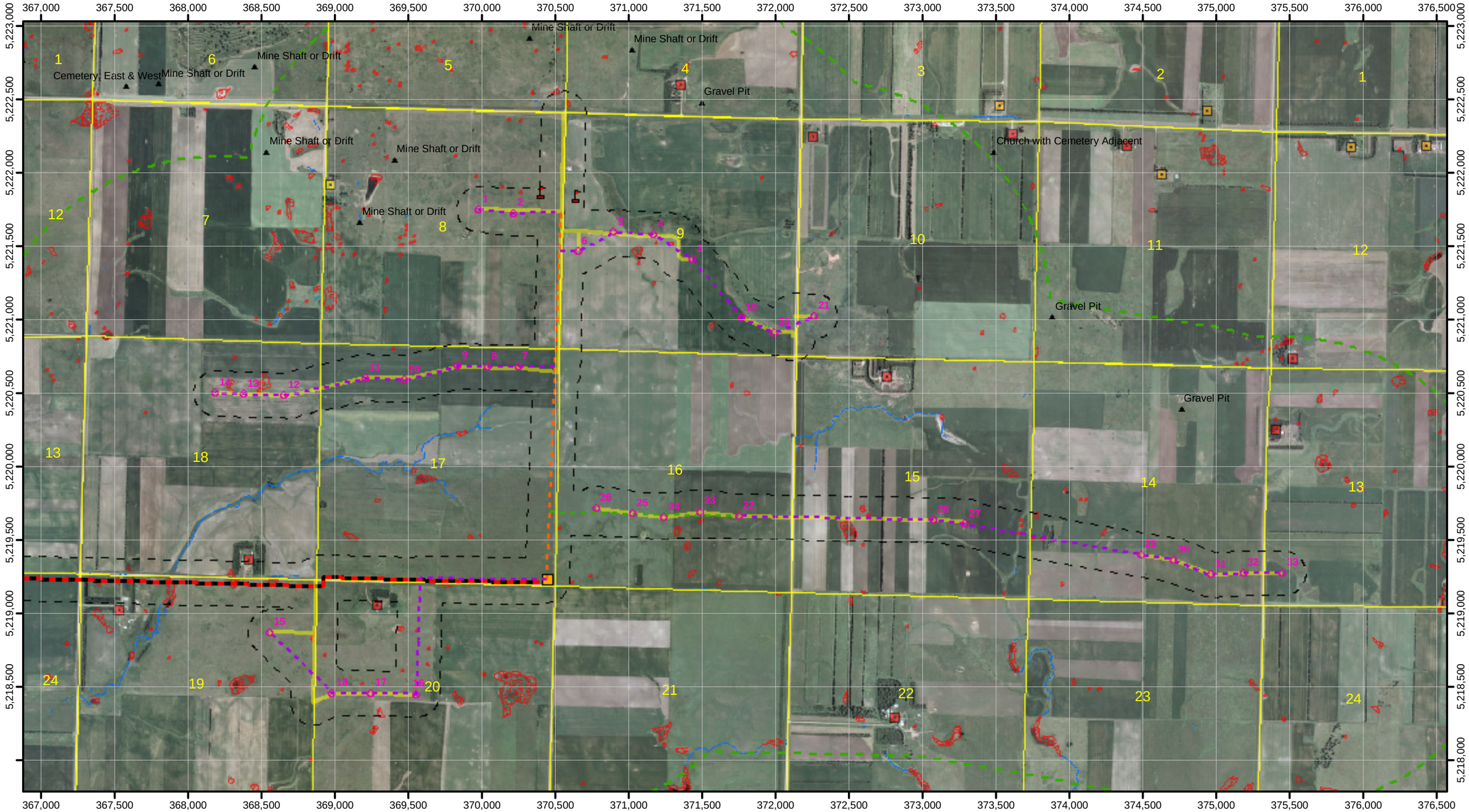
GRID: NAD 83 - UTM ZONE 14 NORTH - METERS
All Sections Within T 142 N, R 79 W

TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Roads
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- NRCS CRP (unconfirmed)
- New Access Roads
- 230 kV OH Transmission Line
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- Met Towers
- Substation
- Turbines
- 4/0 Buried Cable
- 1000 MCM Buried Cable
- 34.5 kV OH Transmission LIne

FIGURE 4
TURBINE ARRAY - USGS QUAD BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.

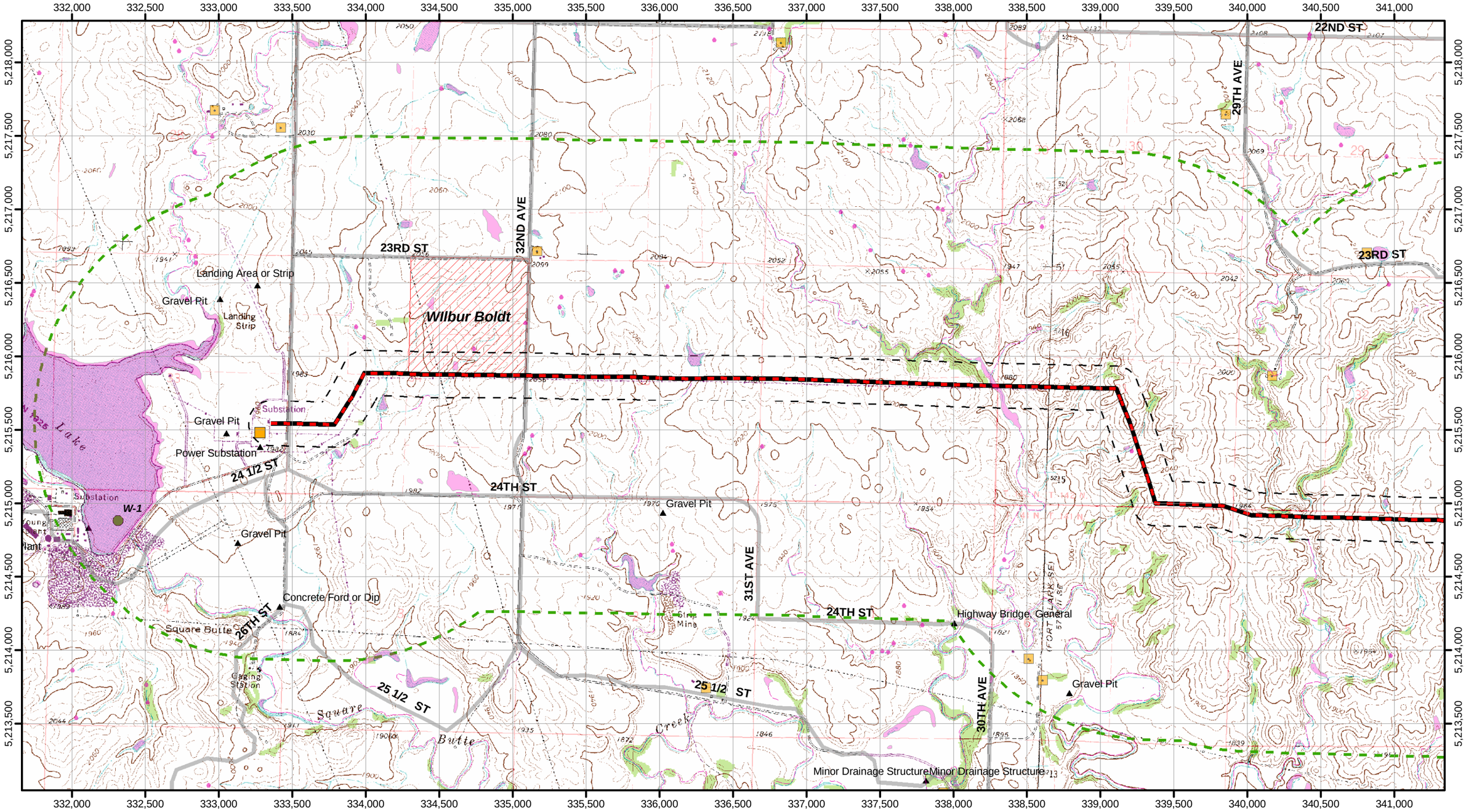


GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

FIGURE 5
TURBINE ARRAY - AERIAL PHOTOGRAPH BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



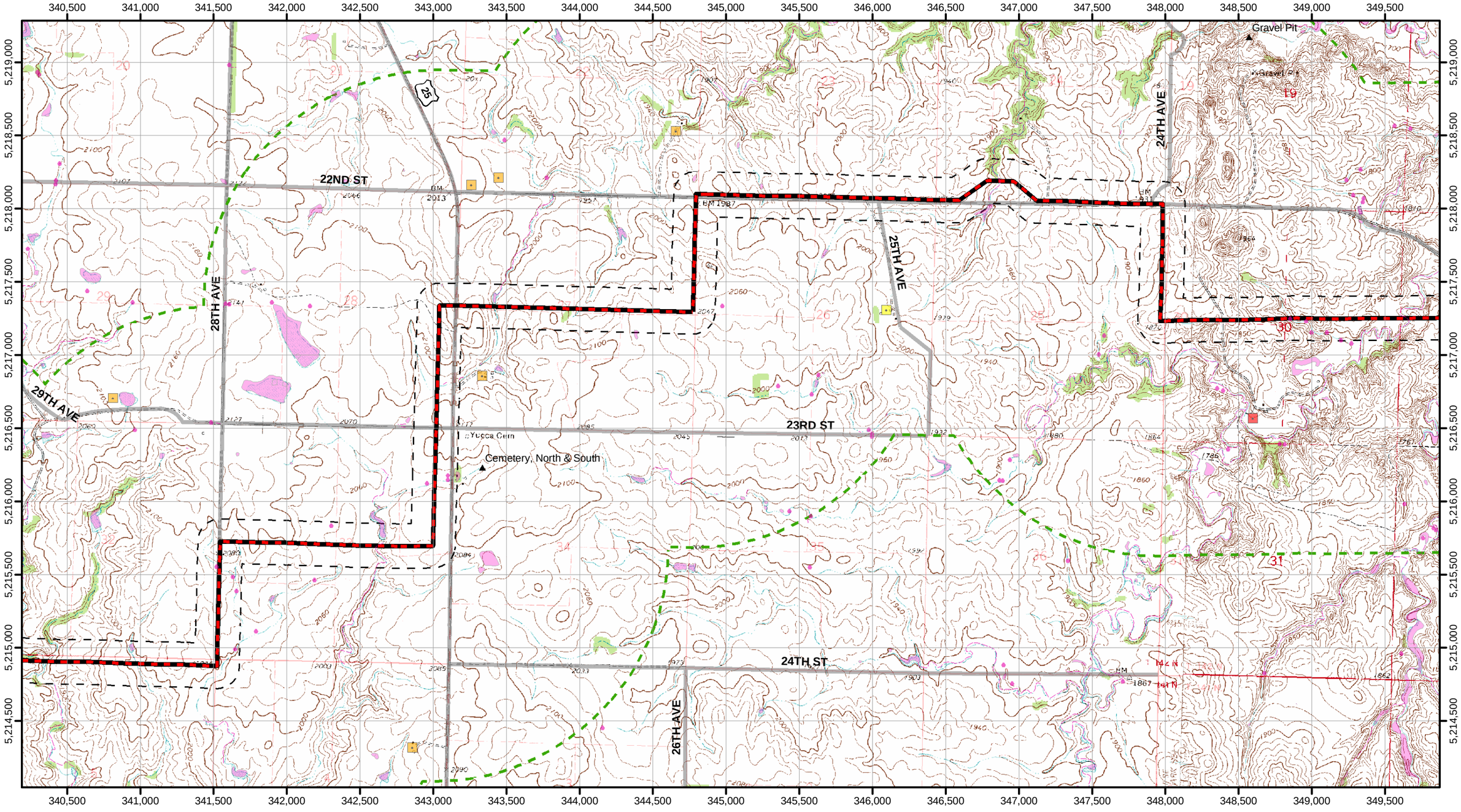
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TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- NDNHP Sites
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- Wildlife Management Area
- Substation
- 230 kV OH Transmission Line
- Major Roads
- Roads

FIGURE 6-1
TRANSMISSION LINE - USGS QUAD BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

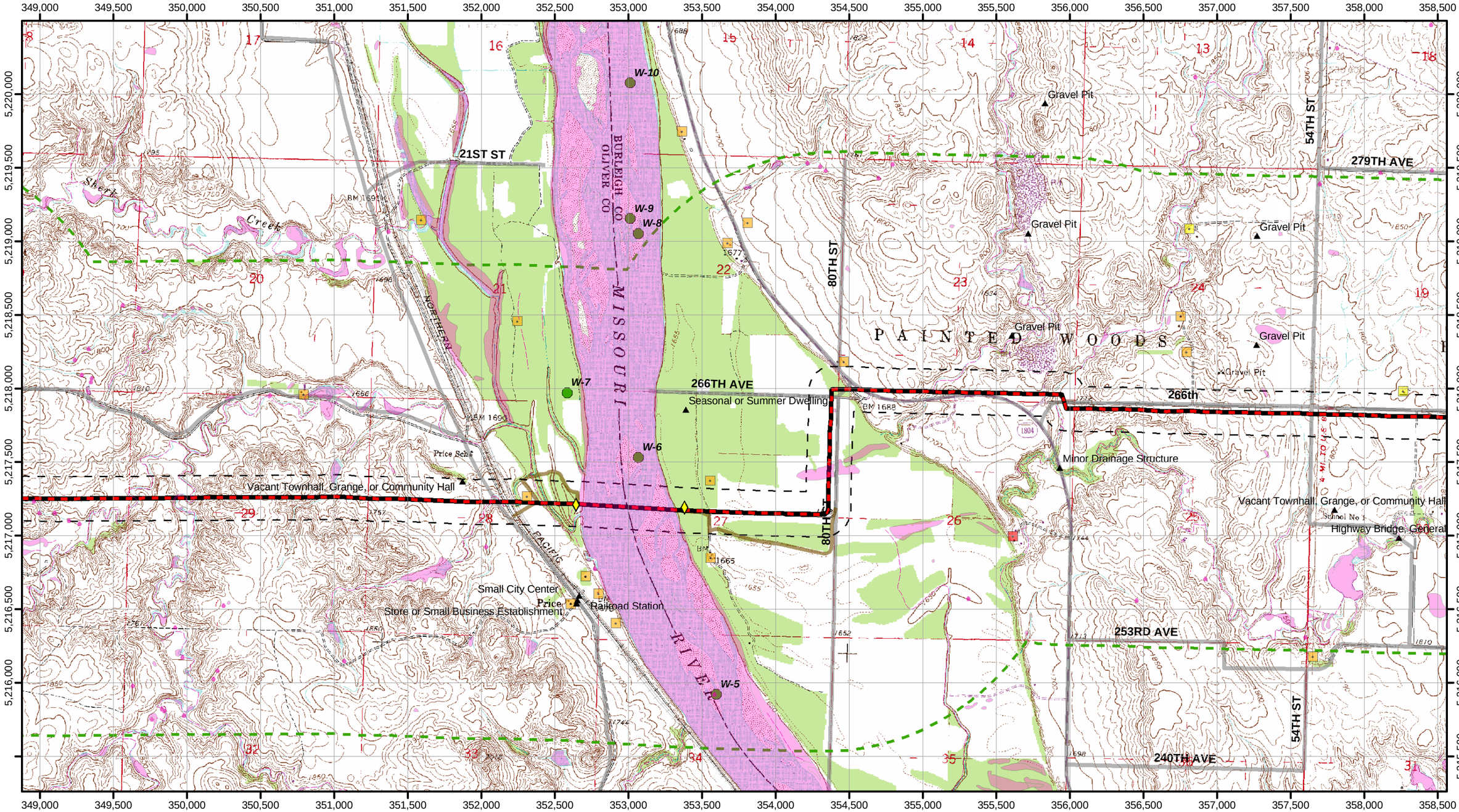
1:25,000

0 1,000 2,000

Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- 230 kV OH Transmission Line
- Major Roads
- Roads

FIGURE 6-2
TRANSMISSION LINE - USGS QUAD BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



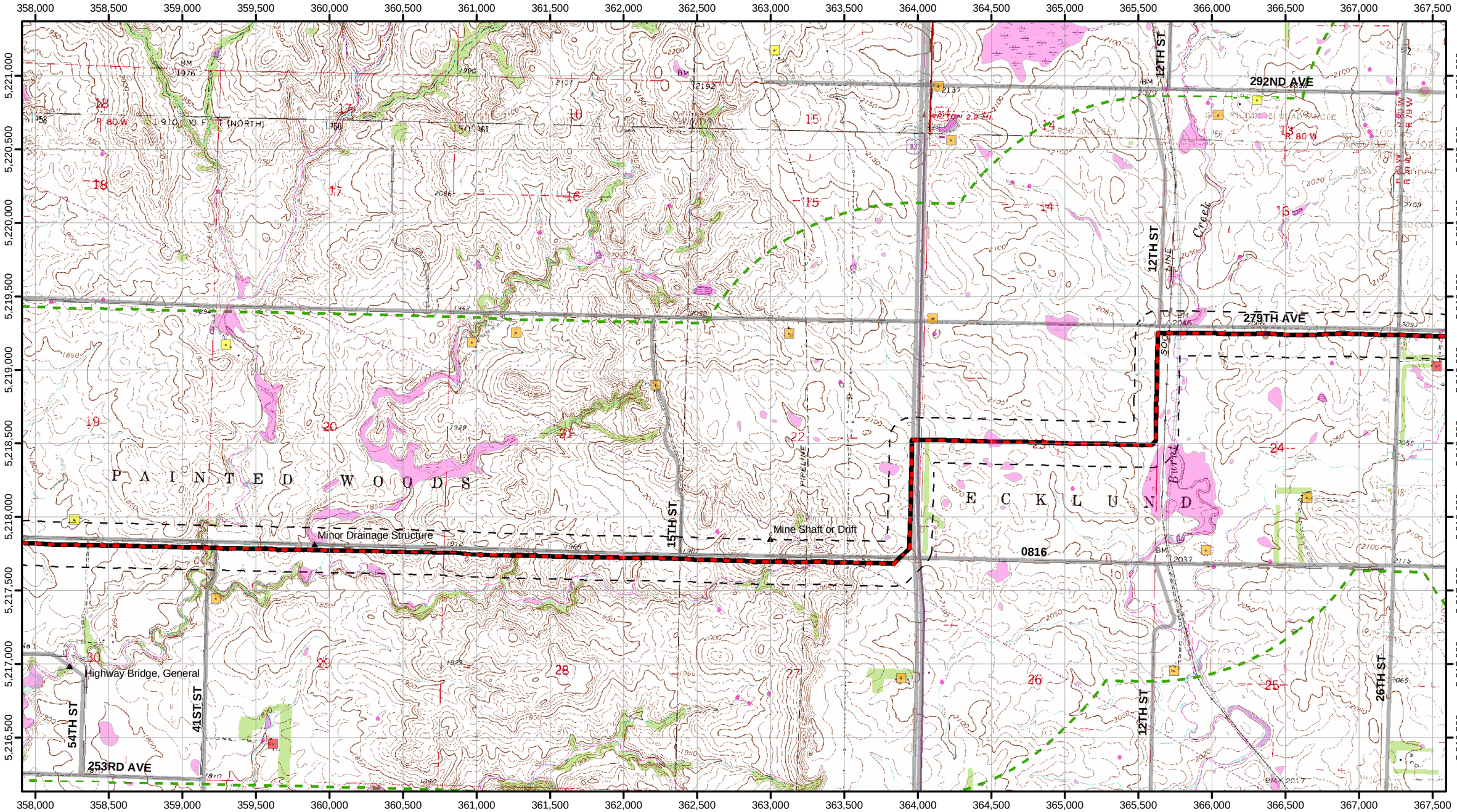
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TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- NDNHP Sites
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- River Crossing Access
- River Crossing Poles
- 230 kV OH Transmission Line
- Major Roads
- Roads

FIGURE 6-3
TRANSMISSION LINE - USGS QUAD BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



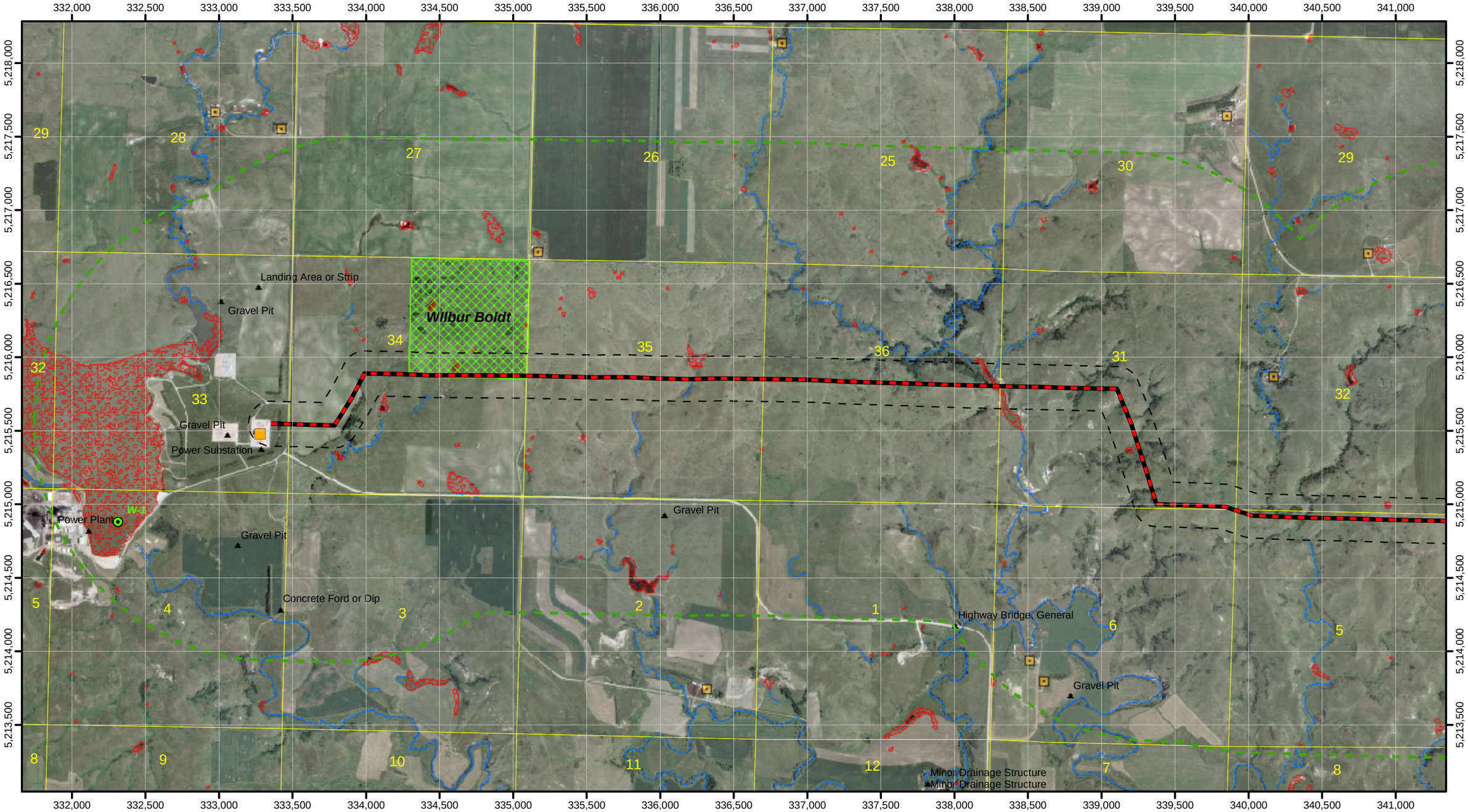
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TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- 230 kV OH Transmission Line
- Major Roads
- Roads

FIGURE 6-4
TRANSMISSION LINE - USGS QUAD BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



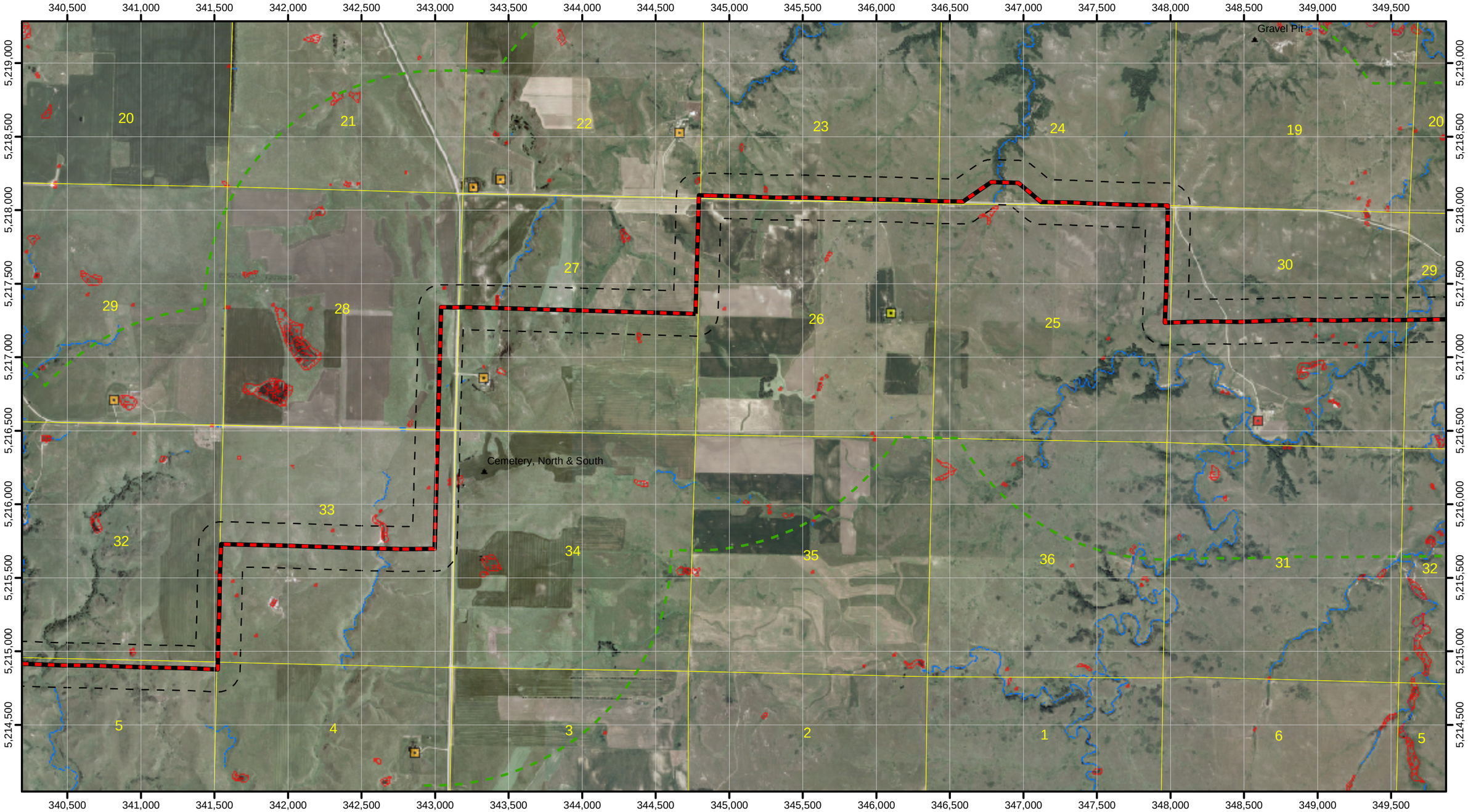
GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Substation
- NDNHP Sites
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- Wildlife Management Area
- 230 kV OH Transmission Line

FIGURE 7-1
TRANSMISSION LINE - AERIAL PHOTOGRAPH BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



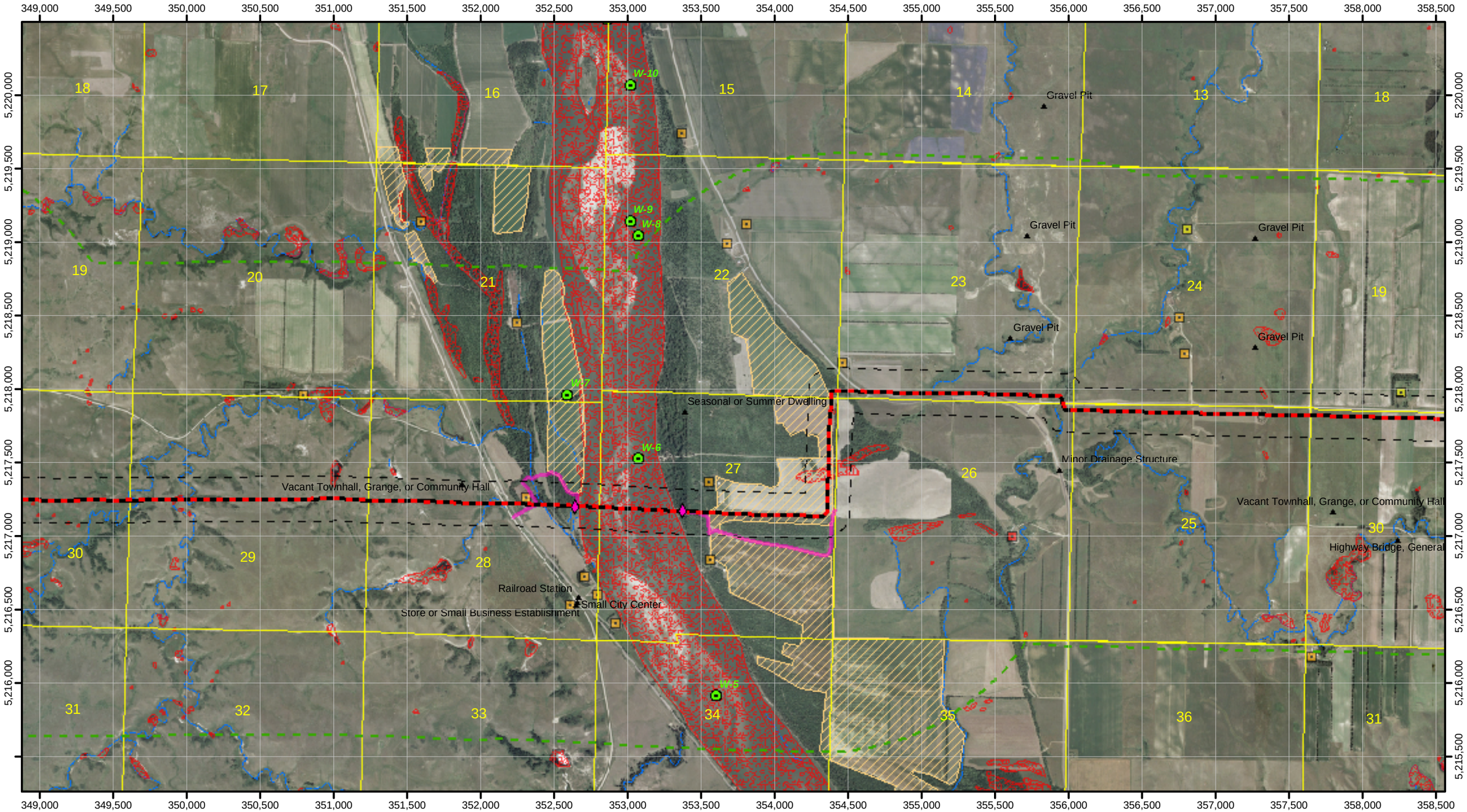
GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- 230 kV OH Transmission Line

FIGURE 7-2
TRANSMISSION LINE - AERIAL PHOTOGRAPH BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

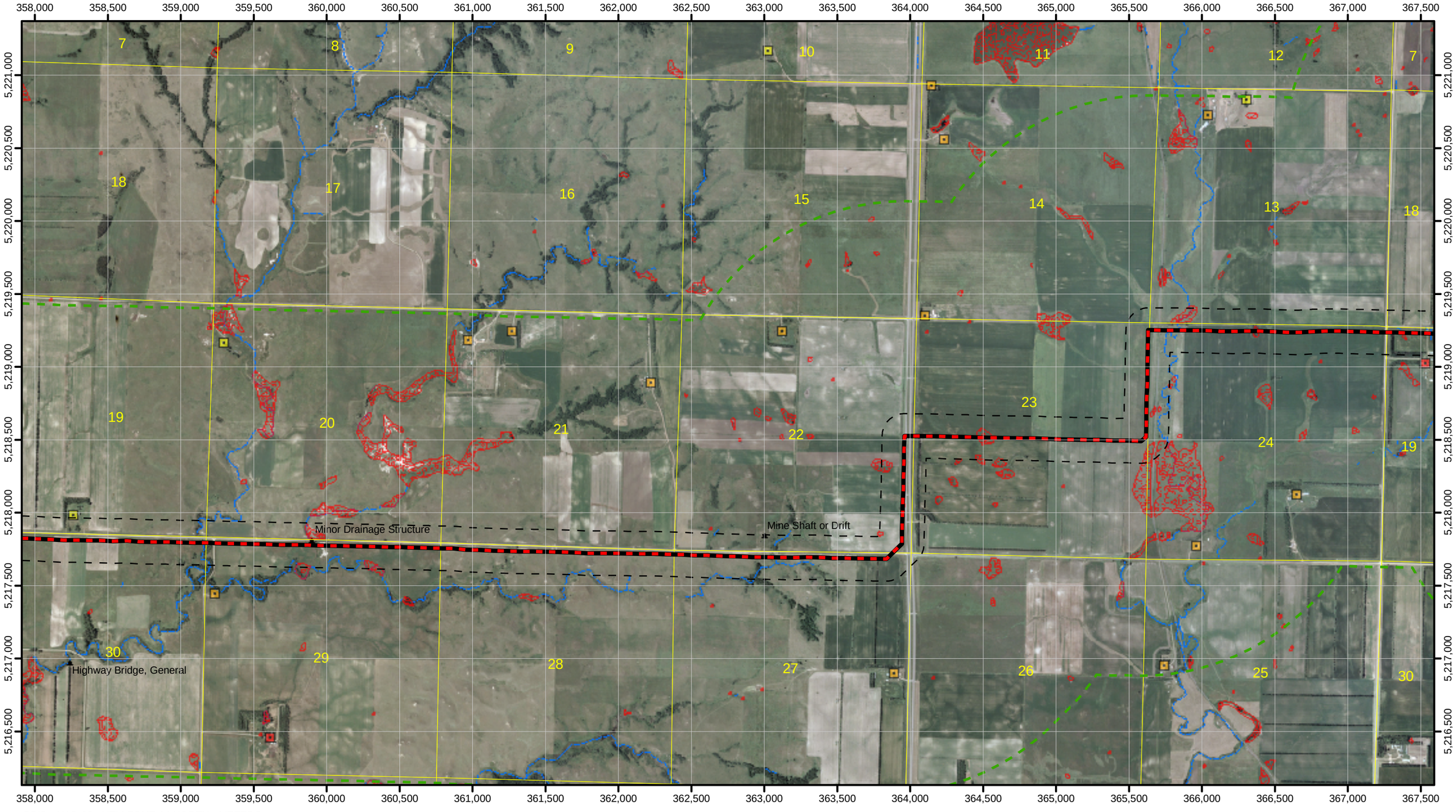
1:25,000

0 1,000 2,000

Feet

- Other Building
- Occupied Residence
- Vacant Residence
- NDNHP Sites
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- Irrigation Potential
- River Crossing Poles
- 230 kV OH Transmission Line
- River Crossing Access
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset

FIGURE 7-3
TRANSMISSION LINE - AERIAL PHOTOGRAPH BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.



GRID: NAD 83 - UTM ZONE 14 NORTH - METERS

TETRA TECH, INC.

1:25,000
0 1,000 2,000
Feet

- Other Building
- Occupied Residence
- Vacant Residence
- Waters of the US
- Wetland Point Features
- FWS NWI Wetlands
- 500 ft Facilities Offset
- 1.0 Mile Facilities Offset
- 230 kV OH Transmission Line

FIGURE 7-4
TRANSMISSION LINE - AERIAL PHOTOGRAPH BACKGROUND
WIND GENERATION AND TRANSMISSION PROJECT
BURLEIGH COUNTY WIND, LLC.

APPENDIX A

MARCH 7, 2005 MEETING NOTES

APPENDIX A

Agency Meetings and Site Visit

A representative from Maxim Technologies visited the site from March 7 through March 11, 2005. A meeting with representatives from agencies with potential jurisdictional authority was held on March 7, 2005.

The remainder of the site visit included an examination of areas of the proposed project including wind turbine locations, a proposed Missouri River crossing site, and assessment of one proposed transmission corridor. Only areas of the project which for which access agreements were in place or accessible from public roads were visually inspected.

Agency Coordination Meeting

We meet for several hours with each agency representative presenting their respective agency's concerns. Attendees included representatives with the United States Army Corp of Engineers (USACE), United States Fish and Wildlife Service (USFWS), North Dakota State Water Commission (NDSWC), North Dakota Game and Fish Department (NDGFD) and the North Dakota Historic Preservation Office (NDSHPO). The meeting included an inspection of one potential Missouri River crossing site, where the DC line crosses, from both the eastern and western banks.

USACE Representatives at the meeting were Daniel Cimarosti, and Jason Renschler.

The USACE which will coordinate the review of any permits applications, Section 10 Letter of Permission (LOP) or Section 404 permit applications with the other agencies, expressed some concerns with the July construction date, if an individual permit is required. Minimum above water height is dependent upon line voltage carried; in this case minimum is 20 feet above the water, taking into consideration flood heights. This will likely not be an issue based on USFWS comments concerning crossing design as detailed in the next paragraph.

USFWS Representative - Terry Ellsworth

The major concern of the USFWS is the potential for impacts to endangered species at any of the proposed crossing sites, with bird collisions (Bald eagle, interior least tern, piping plover, whooping cranes) and subsequent mortality being the biggest concerns. The USFWS indicated that their position is that these impacts would be greatest at a new crossing site, relative to crossing near the existing DC utility corridor or other existing crossing, provided the new crossing was at the same height and appropriate avoidance mitigation methodologies were employed. USFWS representatives stated that it would be difficult to obtain a No-Effect determination at a new crossing; while crossing near the existing DC corridor might actually reduce the potential for bird interactions at the crossing by enhancing the visibility of the existing lines. USFWS also expressed concerned with sharptail grouse leks, bird collisions (migratory birds and raptors) native prairie and wetlands.

ND State Water Commission Representative - Jim Lindseth

The ND Water Commission's authority includes the Missouri River up to the ordinary high water mark, waters which were meandered out of homestead parcels, wetland with drainages greater than 80 acres, and other designated waters of statewide significance.

Based on a preliminary review of the regulations, it appears that wetland regulations will not apply, as the dredge, fill, and drain activities noted in the regulations will be avoided. However, if the river crossing requires construction within in areas below the high water mark, then the regulations on islands and beds of navigable streams and waters would apply. This should be further discussed with the State Water Commission to verify that these determinations are correct. Final determinations cannot be made without final project development information.

ND Game and Fish Department Representative - John Schumacher

The ND Game and Fish expressed concerned with impacts to woody habitats, native prairies habitats, avian collisions with line and towers and impacts to sharptail grouse lek sites.

ND Historic Preservation Representative - Paul Picha

The NDSHPO representative expressed concern for known Historic sites, ground disturbance, and visual effects and indicated that a Class I cultural resources inventory should be performed for those areas with ground disturbance.

Based on the meeting, the preferred alternative is crossing adjacent to the existing DC line or other existing crossing site. The USACE representative indicated that such a crossing could likely be permitted for Section 10 and Section 404 by a simple letter of permission (LOP) and NWP 12 and/or NWP 14 with about a thirty day turnaround from application to issuance. Use of NWPs would be subject to meeting the thresholds for impacts (300 linear feet for stream crossings and 1/2 acre).

Site Description

Missouri River Crossing Site

The proposed site for crossing the Missouri River was located adjacent to and upstream of the existing Minnkota Electric DC line crossing. The Missouri River at this location is multi-channeled with several large sand bars present in mid-channel. These sandbars are utilized as nesting and foraging habitat by interior least terns and piping plovers. One adult bald eagle was observed in the area at the time of the site visit. This eagle was using large tree along the river bank in the crossing area for roosting and was observed flying low over the river in search of fish other food resources. Both banks are forested with large cottonwood and elm trees. Portions of the west bank in the vicinity are in hay or row crop production. Several wetland drainages were also present in the floodplain on the western bank. If this site is selected, it may not be possible to avoid at least minimal impacts to wetlands.

Wind Farm Site

The wind farm site consists of approximately 17 sections of land located Township 142N, Range 78 and 79 W, in Burleigh County, North Dakota. Land within the proposed wind farm is rolling to moderately hilly in nature with prominent ridges trending in northwesterly to southeasterly direction. During the site visit, access agreements with all the landowners within the project area had not been formalized. Maxim physically inspected proposed turbine sites located within the southern one-half of Section 15, the southeastern quarter of Section 14, the southern half of Section 13 in Township 142N Range 79 W and Section 18 of Township 142N Range 78W.

APPENDIX A

The project area lies in a rural location with farming and livestock grazing and related agricultural operations dominating the land use. Land use within the proposed wind farm is primarily agricultural, consisting of a mosaic of land in row-crop and hay-crop production, native and non-native grassland pastures and what appeared to be Conservation Reserve Program (CRP) lands. Some areas which appear to be unbroken native grassland are present on several of the prominent ridges located within the project area. While these areas possess numerous plant species found in native prairie habitats, these areas have been historically grazed or hayed and are not representative of undisturbed native prairie habitats which formerly dominated the landscape.

Forested areas consist almost entirely of planted shelterbelts or small patches of shrub/scrub located within drainages or uncultivated areas of the site. These areas may provide roosting, nesting and perching habitat for raptor and bats. No raptor nests were observed with the project boundaries.

Numerous wetland areas were identified during the site visit. These wetlands provide habitat for a wide variety of wildlife including reptiles and amphibians, birds and waterfowl and mammals present on the site. Wetland areas are present in every section of land within the project area, with the majority of wetlands. Wetland types include isolated palustrine emergent wetlands which have no connection to jurisdictional water of United States (US), palustrine emergent shrub/scrub and palustrine emergent forested with connections to ephemeral and permanent drainages which are tributaries to navigable WUS. Some palustrine emergent wetlands located in ephemeral drainages appear to be hayed on an annual basis.

Depending upon the orientation of collectors and access roads, wetland impacts may occur. Impacts to tributaries streams to navigable waters will likely be under the jurisdiction of the USACE and will require Section 404 permits for any collector crossings or culvert installations and road crossing. These types of crossings can likely be permitted using Nationwide Permit (NWP) number 12 or 14, provided combined impacts of the project for these types of crossings are less than ½ acre in total. Impacts to wetlands determined to be isolated from WUS should be avoided if possible. However, impacts to these wetland types would not require Section 404 permits or mitigation activities.

Transmission Corridor

One transmission corridor was investigated during the site visit. This proposed corridor investigated during the site visit lays to the south of 226 Avenue west to approximately within approximately ½ mile of the Missouri River where it runs to the south to the existing Minnkota Electric DC line (DC line). The transmission line crosses the Missouri River upstream and adjacent to the existing DC line. After the crossing the Missouri River, the proposed corridor continues to the west, north of the 226 Ave line until it reaches Highway 25. At this point, it turns south to the meet the existing DC line, and then proceeds to the Minnkota Power substation along a corridor parallel to the existing DC line.

The transmission line project area lies in a rural location with farming and livestock grazing and related agricultural operations dominating the land use. Land use within the proposed transmission line corridor is primarily agricultural, consisting of a mosaic of land in row-crop and hay-crop production, native and non-native grassland pastures and what appears to be Conservation Reserve Program (CRP) lands. Pasture land and hay land dominate the agricultural use in the portion of the corridor west of Highway 83. Areas which appear to be unbroken

native grassland are present on several of the prominent ridges located within the project area. These areas possess numerous plant species which are found in native prairie habitats. These areas are currently or have been historically grazed or hayed and are not representative of undisturbed native prairie habitats which formerly dominated the landscape.

Forested areas consist almost entirely of patches of shrub/scrub located within drainages or uncultivated areas of the site. These areas may provide roosting, nesting and perching habitat for raptor and bats. No raptor nests were observed with the project boundaries.

Numerous wetland areas were identified during the site visit. These wetlands provide habitat for a wide variety of wildlife including reptiles and amphibians, birds and waterfowl and mammals present on the site. Wetland areas are present in every section of land within the project area, with the majority of wetlands. Wetland types include palustrine emergent wetlands with a predominance of herbaceous vegetation, palustrine emergent shrub/scrub and palustrine emergent forested wetlands with connections to ephemeral and permanent drainages which are tributaries to navigable WUS.

Depending upon the location of transmission towers and roads used to access tower locations, wetland impacts may occur. Impacts to tributaries streams to navigable waters will likely be under the jurisdiction of the USACE and will require Section 404 permits for any culvert installations and road crossing. These types of crossings can likely be permitted using Nationwide Permit (NWP) number 12 or 14, provided combined impacts of the project for these types of crossings are less than ½ acre in total. Impacts to wetlands determined to be isolated from WUS should be avoided if possible. However, impacts to these wetland types would not require Section 404 permits or mitigation activities.

In Section 26 of Township 142 N, Range 80 W, the proposed corridor cuts through what appears to be a subdivided parcel of land. One residence was present within the subdivided parcel at the time of the site visit.

APPENDIX B

QUERY LETTERS AND RESPONSES

MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 28, 2005

Ms. Jane Martin, NDIRC
Turtle Mountain Housing Authority
P.O. Box 620
Belcourt, ND 58301-0620

Dear Ms. Martin:

Maxim Technologies has been retained by a private company to do a preliminary investigation of several tracts in Burleigh and Oliver Counties as potential locations for a wind power generation farm. While many details, including the exact location and number of wind towers, have yet to be determined, the area located south-southwest and southeast of the town of Wilton, ND (please see the attached maps) is the subject of our investigation.

We have sent a request to the State Historic Preservation Officer for a preliminary review of the area in order to determine whether there are sites within the boundaries of the tracts listed which would influence a decision about use of the land for wind generation.

We have conducted a preliminary site investigation which took place March 7 through March 11, 2005, and plan to have a draft report prepared by April 5, 2005. If, based on this preliminary report, our client decides to proceed with this project, we will contact you with full details and ask for NDIRC review and participation in determining if there are burial sites on the property.

Thank you for your assistance. Please contact me 406-443-5210 or Karen Lyncoln, Senior Socioeconomist at 406-323-1677 if you should have any questions.

Maxim Technologies
A DIVISION OF TETRA TECH, INC.



Richard Leferink
Economist

RL/rr
Enclosure

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MAXIM TECHNOLOGIES
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Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 25, 2005

North Dakota Game and Fish Department
ATTN: Dean Hildebrand, Director (701-328-6345)
100 North Bismarck Expressway
Bismarck, North Dakota 58501-5095

RE: Project Area Environmental Scan

Dear Mr. Hildebrand:

Maxim Technologies has been retained by a private company to do a preliminary investigation of the below referenced tracts in Burleigh and Oliver Counties as potential locations of a wind energy facility and attendant transmission corridor. We met with John Shumacher of NDGFD and other agency representatives in the field on March 7, 2005 to discuss various aspects of this project, including the river crossing. This query letter is the next step in our environmental investigations.

We are consulting NDGFD for assistance in identifying sites and environmental properties within the boundaries of the tracts listed that would influence a decision regarding the use of the land for wind electric generation or transmission. We are specifically interested in such information as the location of notable State wildlife interests, sensitive species habitats, and any other special or sensitive environmental conditions that exist in or near the study area.

While many details, including the exact location and number of wind towers and precise route of the transmission line, have yet to be determined, the area shown in the attached figure is the primary focus of our investigations. The Primary Development Area outlines the likely location of facilities, with the secondary buffer of one mile providing a larger area within which to identify nearby resources.

Enclosed please find a location map that depicts the following tracts:

Township	Range	Sections
141N	81W	6
141N	83W	1,2,3,4,5
141N	82W	1,2,3,4,5,6
142N	80W	10,11,12,**13,14,15,**16,17,18,**19,20,21,22,23,24,26,27,28,29,30**
142N	81W	13,14,15,19,20,21,**22,23,24,25,26,27,28,29,30,31,**32,33,34,35
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142N	83W	25,26,27,28,32,**33,34,35,36**
142N	78W	7,8,17,**18,19,**20

Tracts identified in blue bold are partially within the primary development area and may receive some level of surface disturbance associated with project development.

This information will be used as an initial step to help guide project development in a manner that identifies and avoids impacts to sensitive resources where practicable. We have sent similar query letters to other agencies including the United States Fish and Wildlife Service. If you are able, we would appreciate a preliminary scan of parcels in your district by April 11, 2005. Please contact me at 406-248-

9161 if you have any questions.

Thank you for your assistance.

Maxim Technologies
A DIVISION OF TETRA TECH, INC.

Judd Stark
Project Manger,
Natural Resources

Enclosure n\typing\Env-fac\5550746\Edgeley_ USFWS_letter2

MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 25, 2005

North Dakota Parks and Recreation Department
North Dakota Natural Heritage Program
ATTN: Kathy Duttenhefner, Coordinator (701.328.5270)
1835 Bismarck Expressway
Bismarck, ND 58504

RE: Request for Natural Heritage Program Review

Dear Kathy,

Maxim Technologies has been retained by a private company to do a preliminary investigation of the below referenced tracts in Burleigh and Oliver counties as potential locations for a wind power generation farm. While many details, including the exact location and number of wind towers, have yet to be determined, this area shown in the attached figure is the subject of our review.

We are consulting the North Dakota Natural Heritage Program for assistance in identifying sites and environmental properties within the boundaries of the tracts listed that would influence a decision regarding the use of the land for wind generation. We are specifically interested in such information as reports of rare species sitings, natural ecological communities in the area, and any other special or sensitive environmental conditions that exist in or near the study area.

Enclosed please find a location map that depicts the following tracts:

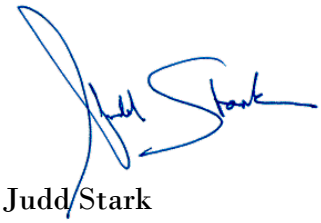
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141N	82W	1,2,3,4,5,6
142N	80W	10,11,12,**13,14,15,**16,17,18,**19,20,21,22,23,24,26,27,28,29,30**
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142N	83W	25,26,27,28,32,**33,34,35,36**
142N	78W	7,8,17,**18,19,**20

Tracts identified in blue bold are partially within the primary development area and may receive some level of surface disturbance.

This information will be used as an initial step to help guide project development in a manner that identifies and avoids impacts to sensitive resources where practicable. A qualified biologist will visit the site as necessary to collect other information and verify any information you are able to provide.

I have attached a signed release letter in a manner comparable to a previous request. If this is not adequate, please fee free to contact me at 406.671.3961 and let me know what additional information I may provide. We would appreciate this preliminary scan by April 11, 2005.

Thank you for your assistance,



Judd Stark
Project Manager,
Natural Resources

Enclosure

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NORTH DAKOTA NATURAL HERITAGE PROGRAM

Agreement for the Release of Data

To

Judd Stark
Maxim Technologies Inc.
618 South 25th Street
PO Box 30615
Billings, MT 59107

The North Dakota Natural Heritage Inventory (NDNHI), administered by the North Dakota Parks and Recreation Department (Department) will provide spatial and/or tabular information for element occurrences within and adjacent to the proposed wind power generation project area (within a one mile buffer) including but not limited to element occurrence code, global scientific name, global common name, state scientific name, state common name, latitude, longitude, precision of location, quadrangle name, quadrangle code, county name, township, range, section, site name, managed area name, watershed, state rank, global rank, federal status, last observation, size, and owner.

The NDNHI, for management and conservation reasons, considers this information confidential and sensitive due to the species' vulnerability to intentional or unintentional disturbance. The information in the form in which it is complied and provided is the property of the Department, and its dissemination is subject to policies and procedures intended to protect its security and thereby the well being of the subject animals and plants.

Maxim Technologies Inc. (Recipient) requesting access to the North Dakota Natural Heritage Biological and Conservation Data System digital data (BCD) hereby agrees to abide by the terms specified below. This agreement is necessary because of the cumulative nature of the NDNHP inventory. Recipient agrees to the following:

1. The Recipient understands that this agreement and any written documentation that accompanies the digital element occurrence data are an integral part of the data. Failure to use this written material in conjunction with the digital data constitutes misuse of the data.

2. The Recipient understands that digital data provided under this agreement are not a legal substitute for the BCD maintained by the NDNHI. Should any discrepancy exist between the digital data and the BCD, the BCD is the correct source of information.

3. The Recipient understands that the databases make up the BCD are continually growing as new habitats and occurrences of rare species and communities are discovered and that the digital data provided under this agreement may therefore become obsolete. The NDNHI add, delete and change records on a daily basis. Consequently, the NDNHI advises that the recipient plan to update the data set on an annual to bi-annual basis. It is the Recipient's responsibility to use a current copy of the BCD for analysis or other work. The NDNHI agrees to supply data update service for digital data. The data shall consist of one bi-annual update of licensed digital data unless otherwise specified.

4. The Recipient understands that these digital data cannot be relied on as a definitive statement of the location of rare species or significant natural communities.

5. The Recipient agrees not to release copies of the data outside agency unless required by law.

6. The Recipient understands that as a professional courtesy, the acknowledgment of the NDNHI should be noted as a source for the information, whenever use of the data occurs in reports, papers, publications, or in maps that incorporate BCD graphic elements.

7. The Recipient agrees with the attached "North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer".

8. The Recipient understands that the NDNHI data require a certain degree of biological expertise for proper analysis, interpretation and application. To as much degree as possible, given limited staff and time, the NDNHI is available by phone or letter to advise in the technical aspects of the data. The NDNHI can also arrange a Natural Heritage Inventory data use training and orientation. The Recipient understands that it is their responsibility to insure the data obtained from the NDNHI are not misapplied.

9. The Recipient understands that the term of this agreement shall expire within one year at time of signatures unless the Recipient fails to comply with any of the terms and conditions provided herein at which time the agreement will be terminated.

_____ _____
ND Natural Heritage Inventory Coordinator Date

_____ _____
Recipient Date

_____
Agency, Company, Organization

John Hoeven, Governor
Douglass A. Prchal, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@state.nd.us
www.NDparks.com

RECEIVED
APR 11 2005

April 8, 2005

Judd Stark
Maxim Technologies
PO Box 30615
Billings, MT 59107-0615

Re: Potential Sites for Wind Power Generation Farm

Dear Mr. Stark:

The North Dakota Parks and Recreation Department (NDPRD) has reviewed the above referenced project to construct wind power generation farms located in areas within Burleigh and Oliver Counties.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare species and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Natural Heritage Inventory (NDNHI) has records indicating the presence of *Charadrius melodus* (piping plover), *Sterna antillarum* (least tern), *Potamogeton vaginatus* (sheathed pondweed), *Cycleptus elongatus* (blue sucker), *Cathartes aura* (turkey vulture), *Haliaeetus leucocephalus* (bald eagle), and Pioneer riparian community (sandbar) within or adjacent to the project area. Please see attached spreadsheet and map for more specific information on these species. We defer further comments regarding the animal species to the North Dakota Game and Fish Department and the United States Fish and Wildlife Service.

The NDPRD recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

It is our policy to charge out-of-state requests for data services including data retrieval, data analysis, manual and computer searches, packaging and collection of data. An invoice for services provided has been enclosed.

An Agreement for Release of Data is only required when we release electronic copies of our data and is therefore not needed in this case. However, if you prefer this data in an electronic format we can provide it under your current agreement which does not expire until December 15, 2005.

Thank you for the opportunity to comment on this project. Please contact Kathy Duttenhefner (701-328-5370 or kgduttenhefner@state.nd.us) of our staff if additional information is needed.

Sincerely,

Jesse Hanson

Jesse Hanson, Coordinator
Planning and Natural Resources Division

R.USNDNHI*1479

Play in our backyard!

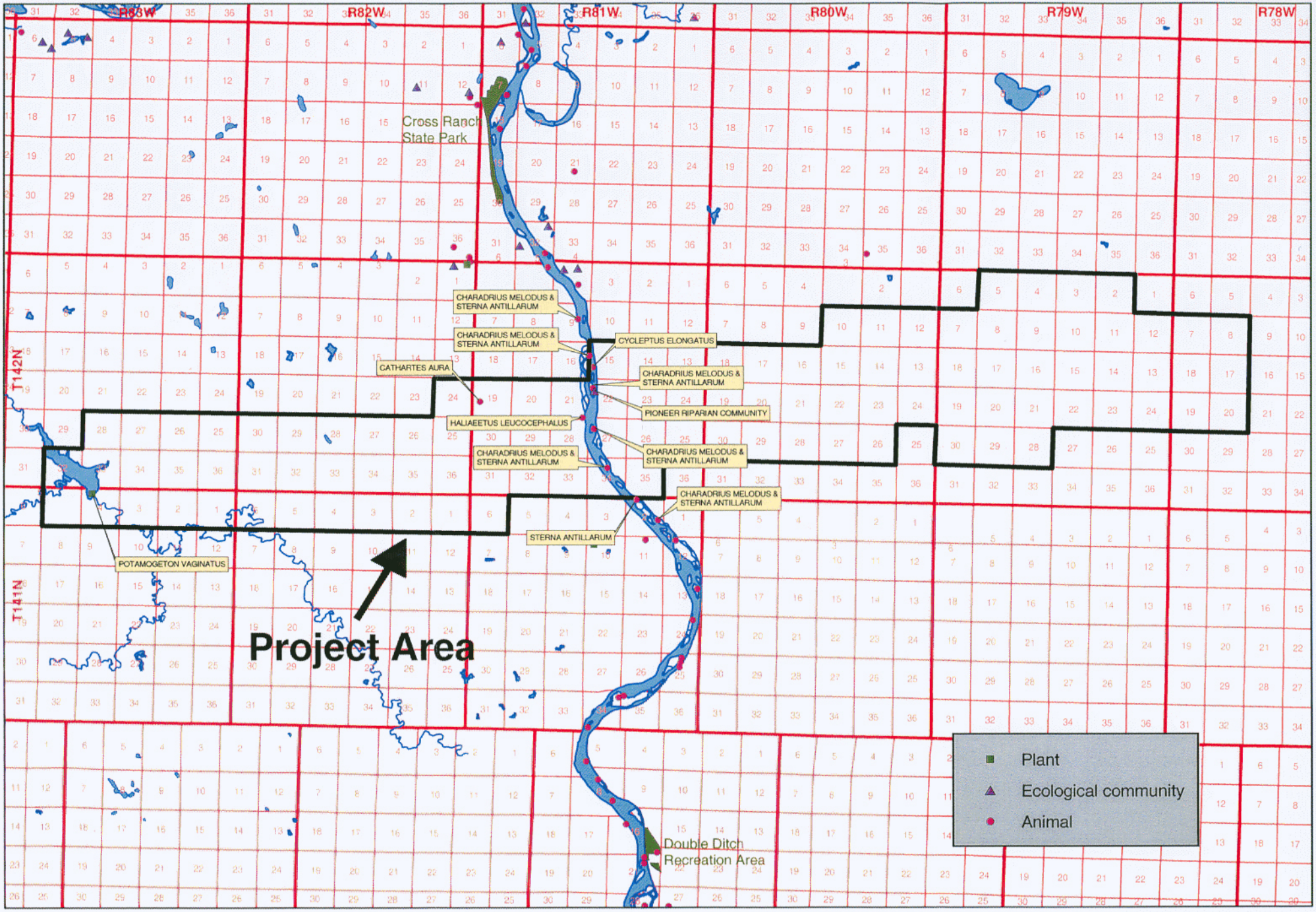
North Dakota Natural Heritage Inventory
Species of Concern and Significant Ecological Communities

State Scientific Name	State Common Name	Township & Range	Section	TRS Notes	State Rank	Global Rank	Federal Status	Last Observation
CHARADRIUS MELODUS	PIPING PLOVER	141N081W	02		S1S2	G3	(LE,LT)	1993-07-14
STERNA ANTILLARUM	LEAST TERN	141N081W	02		S1	G4	(PS:LE)	1993-07-14
STERNA ANTILLARUM	LEAST TERN	141N081W	02		S1	G4	(PS:LE)	1998-06-22
POTAMOGETON VAGINATUS	SHEATHED PONDWEED	141N083W	4		S3	G5		1978-07-31
CHARADRIUS MELODUS	PIPING PLOVER	142N081W	09		S1S2	G3	(LE,LT)	1990
STERNA ANTILLARUM	LEAST TERN	142N081W	09		S1	G4	(PS:LE)	1987-07
CYCLEPTUS ELONGATUS	BLUE SUCKER	142N081W	15		S3	G3G4		1994-08-18
CHARADRIUS MELODUS	PIPING PLOVER	142N081W	16		S1S2	G3	(LE,LT)	1993
STERNA ANTILLARUM	LEAST TERN	142N081W	16		S1	G4	(PS:LE)	1993-07-14
CATHARTES AURA	TURKEY VULTURE	142N081W	19	NW4SW4	S4	G5		1988-06
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	142N081W	21		S1	G4	(PS:LT,	1979-01-23
CHARADRIUS MELODUS	PIPING PLOVER	142N081W	22	NW4	S1S2	G3	(LE,LT)	1993-07-14
STERNA ANTILLARUM	LEAST TERN	142N081W	22	NW4	S1	G4	(PS:LE)	1993-07-14
PIONEER RIPARIAN COMMUNITY	SANDBAR	142N081W	22	NW4	S3			1983-08-12
CHARADRIUS MELODUS	PIPING PLOVER	142N081W	27		S1S2	G3	(LE,LT)	1999-06-22
STERNA ANTILLARUM	LEAST TERN	142N081W	27		S1	G4	(PS:LE)	1999
CHARADRIUS MELODUS	PIPING PLOVER	142N081W	34		S1S2	G3	(LE,LT)	1992
STERNA ANTILLARUM	LEAST TERN	142N081W	34		S1	G4	(PS:LE)	1991-07

North Dakota Natural Heritage Inventory Biological and Conservation Data Disclaimer

The quantity and quality of data collected by the North Dakota Natural Heritage Inventory are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in North Dakota have never been thoroughly surveyed, and new species are still being discovered. For these reasons, the Natural Heritage Inventory cannot provide a definite statement on the presence, absence, or condition of biological elements in any part of North Dakota. Natural Heritage data summarize the existing information known at the time of the request. Our data are continually upgraded and information is continually being added to the database. This data should never be regarded as final statements on the elements or areas that are being considered, nor should they be substituted for on-site surveys.

North Dakota Natural Heritage Inventory
Species of Concern and Significant Ecological Communities



North Dakota Parks & Recreation Department
North Dakota Natural Heritage Inventory
April 2005

MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 28, 2005

Merl Paaverud, ND SHPO
State Historical Society of North Dakota
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Dear Mr. Paaverud:

Maxim Technologies has been retained by a private company to do a preliminary investigation of the below referenced tracts in Burleigh and Oliver Counties as potential locations for a wind power generation farm. While many details, including the exact location and number of wind towers, have yet to be determined, this area located south-southwest and southeast of the town of Wilton, ND is the subject of our investigation.

We are hoping that your office can tell us if there are any sites within the boundaries of the tracts listed that would influence a decision about use of the land for wind generation. We, of course, are not requesting the name or exact location of the site(s) beyond that which you would normally provide to the public, just an indication of the location and whether the site would preclude development in a particular location.

Enclosed please find attached location maps that depict the following tracts:

Township	Range	Sections
141N	81W	6
141N	83W	1,2,3,4,5
141N	82W	1,2,3,4,5,6
142N	80W	10,11,12,**13,14,15,**16,17,18,**19,20,21,22,23,24,26,27,28,29,30**
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142N	83W	25,26,27,28,32,**33,34,35,36**
142N	78W	7,8,17,**18,19,**20

Tracts identified in blue bold are partially within the primary development area.

We would appreciate this preliminary scan by April 5, 2005. If, based on this preliminary report, our client decides to proceed with this project, we will supply ND SHPO with more specific information. Please contact me at 406-443-5210 or Karen Lyncoln, Senior Socioeconomist at 406-323-1677 if you should have any questions.

Thank you for your assistance.

Maxim Technologies
A DIVISION OF TETRA TECH, INC.



Richard Leferink
Economist

RL/rr
Enclosure

Cc w/ encl(s): Ms. Fern Swenson, Director of Historical Preservation Division
State Historical Society of North Dakota
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Mr. Paul Picha, Chief Archeologist
State Historical Society of North Dakota
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830

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MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 25, 2005

Long Lake National Wildlife Refuge
U.S. Fish and Wildlife Service
ATTN: Natoma Buskness (701-387-4397)
12000 353rd St. SE
Moffit, North Dakota 58560-9704

RE: Project Area Environmental Scan

Dear Mrs. Buskness:

Maxim Technologies has been retained by a private company to do a preliminary investigation of the below referenced tracts in Burleigh and Oliver Counties as potential locations of a wind energy facility and attendant transmission corridor. While many details, including the exact location and number of wind towers and precise route of the transmission line, have yet to be determined, the area shown in the attached figure is the primary focus of our investigations. The Primary Development Area outlines the likely location of facilities, with the secondary buffer of one mile providing a larger area within which to identify nearby resources.

We are consulting the US Fish and Wildlife Service for assistance in identifying sites and environmental properties within the boundaries of the tracts listed that would influence a decision regarding the use of the land for wind electric generation or transmission. We are specifically interested in such information as the location of known wetlands, rare species sitings, wetland or grassland easements, and any other special or sensitive environmental conditions that exist in or near the study area.

Enclosed please find a location map that depicts the following tracts:

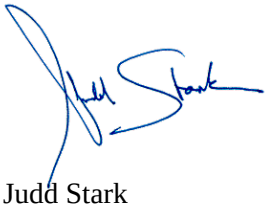
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Tracts identified in blue bold are partially within the primary development area.

This information will be used as an initial step to help guide project development in a manner that identifies and avoids impacts to sensitive resources where practicable. We have met with Terry Ellsworth regarding the river crossing and will be sending a similar request to him as well. If you are able, we would appreciate a preliminary scan of parcels in your district by April 11, 2005. Please contact me at 406-248-9161 if you have any questions.

Thank you for your assistance.

Maxim Technologies
A DIVISION OF TETRA TECH, INC.



Judd Stark
Project Manger,
Natural Resources

Enclosure

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MAXIM TECHNOLOGIES
A DIVISION OF TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 25, 2005

U.S. Fish and Wildlife Service
North Dakota Field Office
ATTN: Terry Ellsworth (701.250.4481)
3425 Miriam Ave
Bismarck ND 58501

RE: Project Area Environmental Scan

Dear Mr. Ellsworth:

Maxim Technologies has been retained by a private company to do a preliminary investigation of the below referenced tracts in Burleigh and Oliver Counties as potential locations of a wind energy facility and attendant transmission corridor. Greg Dawdy of our staff met with you and other agency representatives on March 7, 2005 to discuss various aspects of this project, including the river crossing. While many details, including the exact location and number of wind towers and precise route of the transmission line, have yet to be determined, the area shown in the attached figure is the primary focus of our investigations. The Primary Development Area outlines the likely location of facilities, with the secondary buffer of one mile providing a larger area within which to identify nearby resources.

We are consulting the US Fish and Wildlife Service for assistance in identifying sites and environmental properties within the boundaries of the tracts listed that would influence a decision regarding the use of the land for wind electric generation or transmission. We are specifically interested in such information as the location of known wetlands, rare species sitings, wetland or grassland easements, and any other special or sensitive environmental conditions that exist in or near the study area.

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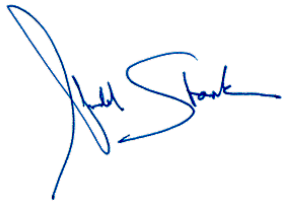
Tracts identified in blue bold are partially within the primary development area.

This information will be used as an initial step to help guide project development in a manner that

identifies and avoids impacts to sensitive resources where practicable. We have submitted a separate request to Natoma Buskness with Long Lake National Wildlife Refuge for information in Burleigh County. If you are able, we would appreciate a preliminary scan of parcels in your district by April 11, 2005. Please contact me at 406-248-9161 if you have any questions.

Thank you for your assistance.

Maxim Technologies
A DIVISION OF TETRA TECH, INC.



Judd Stark
Project Manger,
Natural Resources

Enclosure

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501

RECEIVED
APR 11 2005

APR - 6 2005

Mr. Judd Stark, Project Manager
Maxim Technologies
618 South 25th Street
P.O. Box 30615
Billings, Montana 59107-0615

Dear Mr. Stark:

I am writing in response to your March 25, 2005, request for information in relation to a proposed wind power project near Wilton, North Dakota. The proposed project includes construction of wind turbines, electric transmission lines (crossing the Missouri River), access roads, and ancillary facilities. The proposed location for the wind power project is in Burleigh and Oliver Counties, North Dakota:

T. 141 N., R. 81 W., Section 6
T. 141 N., R. 83 W., Sections 1-5
T. 141 N., R. 82 W., Sections 1-6
T. 142 N., R. 78 W., Sections 7, 8, 17-20
T. 142 N., R. 79 W., Sections 2-5, 7-24, 28-30
T. 142 N., R. 80 W., Sections 10-24, 26-30
T. 142 N., R. 81 W., Sections 13-15, 19-35
T. 142 N., R. 82 W., Sections 24-36
T. 142 N., R. 83 W., Sections 25-28, 32-36

In general, wildlife resources and issues that warrant consideration during project planning include: migratory birds (e.g., collisions and electrocutions); tribal, state or federal land interests; wetlands, prairie, and woodland habitats; Clean Water Act - Section 404 activities; threatened and endangered species; ancillary facility development (e.g., roads, substations, underground cables, or overhead transmission lines); and monitoring, research, and assessment. Natural resources and issues that may be applicable to your project are further addressed below.

Migratory Birds

Adequate consideration to bird resources early in the site evaluation process can minimize impacts and facilitate project construction. Although current wind turbine technology minimizes the incidence of avian death due to blade and tower strikes, direct mortality of some migratory

birds will continue to occur. The U.S. Fish and Wildlife Service (Service), under the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Act, the Endangered Species Act, and Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds," is directed to protect migratory birds. The provisions of these Acts generally make it unlawful to take migratory birds. However, being responsive to Congressional and Presidential mandates, treaties, and legislation, wind power developers, in concert with the Service, can cooperatively ensure projects proceed in a positive manner. Together we have a responsibility to scientifically determine the factors in siting and operation of wind power plants that contribute to avian fatalities and to implement measures to minimize impacts to migratory birds.

To minimize the electrocution hazard to birds, the Service, with support from the Rural Utilities Service, recommends that new or updated overhead power lines be constructed in accordance with the current guidelines for preventing raptor electrocutions. The recommended guidelines can be found in "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996". To increase power line visibility and reduce bird fatalities resulting from collisions with power lines, the Service recommends power lines that cross or run adjacent to rivers or large wetlands be modified according to "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994". Both publications can be obtained by writing or calling the Edison Electric Institute, P.O. Box 266, Waldorf, Maryland 20604-0266, (1-800-334-5453) or visiting their website at www.eei.org.

Research, Monitoring and Assessment

We encourage project proponents to conduct collision monitoring studies designed to determine the effect of several factors, such as site selection, turbine designs, the layout of wind plants, wind plant operations, habitat alteration, and changes in available perching and nesting sites on bird deaths. The Avian Subcommittee of the National Wind Coordinating Committee (NWCC) has developed a guidance document to assist wind energy developers in designing studies that will produce credible and comparable results of avian interaction with wind power plants. The NWCC document, "Studying Wind Energy/Bird Interactions: A Guidance Document. Metrics and methods for determining or monitoring potential impacts on birds at existing and proposed wind energy sites," can be obtained by contacting the National Wind Coordination Committee, c/o RESOLVE, 1255 23rd Street, Suite 275, Washington, D.C. 20037, or by visiting their website at (www.nationalwind.org). The Service currently is compiling a list of research and monitoring issues related to wind power development in the Dakotas. We look forward to sharing these ideas with you and other industry representatives, and cooperatively developing a reasonable approach to acquisition of information that may help identify additional measures to minimize impacts to wildlife resources.

Fish and Wildlife Service Property Interests

As part of the National Wildlife Refuge System, the Service administers fee title Refuge and Waterfowl Production Areas, as well as wetland and grassland easements throughout North

Dakota. A review of our plat books indicates a Service wetland easement (photocopy enclosed) is located in the proposed project area in T. 142 N., R. 80 W., Section 11, SW¼, W½SE¼, Burleigh County, North Dakota. This wetland easement is administered by the Long Lake Wetland Management District (WMD). I suggest you contact Paul VanNingen, Project Leader, Long Lake Wetland Management District, 12000 353rd Street SE, Moffit, North Dakota 58560-9740, (701-387-4397) to determine the need for permits. Your letter indicated that a request for information was also sent to Natoma Buskness, Long Lake National Wildlife Refuge.

Wetland, Grassland, and Woodland Resources

The proposed project area is located in the Missouri Slope region of North Dakota and includes areas of native mixed-grass prairie. Since the 1800s, North Dakota has lost approximately 75-90 percent of its native grasslands, primarily due to crop production.

Native prairie has significant natural resource values including:

- Provides habitat for a number of migratory grassland birds whose populations are declining.
- Provides nesting habitat for millions of waterfowl.
- Contains 200-300 plant species, which provide genetic diversity important to agriculture and medicine.
- Provides habitat for thousands of insects including the Dakota skipper, a candidate species, and other butterflies (Ex: Regal fritillary, Tawny crescent).
- Crucial for soil and water conservation.
- Provides recreational opportunities (hunting, bird watching/wildlife observation, hiking).
- Living laboratories for scientific research.

Our review of National Wetlands Inventory (NWI) maps indicates that wetland areas are located within the project area. NWI data can be accessed directly by visiting their website at (wetlands.fws.gov). We recommend you avoid construction of wind towers and ancillary facilities in or adjacent to wetlands when possible.

Construction activities should be conducted in a manner that will minimize impacts to the existing habitat in the project area. Where impacts are unavoidable, we recommend that you:

- Time construction for late summer (after July 15) or fall so as not to disrupt waterfowl or other wildlife during the nesting season.
- Avoid construction in native prairie if possible and reseed disturbed native prairie with a comparable native grass/forb seed mixture. Obtain seed stock from nurseries within 250 miles of the project area to insure the particular cultivars are well adapted to the local climate.
- Minimize grassland disturbance by using fewer, larger turbines and limiting new road construction.

- Use underground transmission lines between turbines, as well as to the primary substation.
- Locate ancillary facilities to avoid placement of fill in wetlands along the route.
- Install and maintain appropriate erosion control measures to reduce sedimentation and water quality degradation of wetlands and streams near the project area.
- Replace unavoidable wetland losses with functionally equivalent wetlands and replace trees or shrubs destroyed during construction on a 2:1 basis.

Section 404 program

Section 404 of the Clean Water Act regulates placement of fill materials in wetlands. A Corps of Engineers' 404 permit may be required if fill material will be placed in aquatic sites including wetlands. Contact Mr. Dan Cimarosti, Regulatory Office, Corps of Engineers, 1513 South 12th Street, Bismarck, North Dakota 58504 (701-255-0015), to determine their permit requirements. If a 404 permit is required, the Service will provide recommendations on this project to the Corps.

Threatened and Endangered Species

A list of federally threatened and endangered species that may occur within the proposed project's area of influence is enclosed. This list fulfills requirements of the Fish and Wildlife Service under Section 7 of the Endangered Species Act.

If a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its delegated agent, is required to evaluate whether the action "may affect" listed species or critical habitat. If the Federal agency or its designated agent determines the action "is likely to adversely affect" listed species or modify critical habitat, the responsible Federal agency shall request formal section 7 consultation with this office. If the evaluation shows a "no effect" determination on listed species or critical habitat, further consultation is not necessary. If a private entity receives Federal funding for a construction project, or if any Federal permit is required, the Federal agency may designate the fund recipient or permittee as its agent for purposes of informal section 7 consultation.

Section 10(a)(1)(B) of the Endangered Species Act allows non-Federal parties planning activities that have no Federal nexus, but which could result in the incidental taking of listed animals, to apply for an incidental take permit. The application must include a habitat conservation plan (HCP) laying out the proposed actions, determining the effects of those actions on affected fish and wildlife species and their habitats (often including proposed or candidate species), and defining measures to minimize and mitigate adverse effects.

On March 7, 2005, the Service met with the North Dakota Game and Fish Department, the Corps of Engineers, Maxim Technologies, and FPL Energy to discuss potential project issues. At that meeting, the Service pointed out the potential impact to threatened and endangered species (bald

eagle, piping plover, and least tern) from a transmission line crossing the Missouri River. During a site visit later that day, a bald eagle was observed flying over an existing transmission line crossing the river near one of the sites proposed for the new transmission line crossing. At that time, we discussed constructing the new line at the same height and as close as possible to the existing line with bird flight diverters or marker balls installed on the wires.

Bald eagles prefer forested habitats near bodies of water and most nest sites are located within one half mile of water. Adult bald eagles mate for life and tend to use the same nest year after year. Bald eagle nesting activity begins in mid February and the young are usually fledged by mid July. Although individual bald eagle pairs can show considerable tolerance to human activity, every effort must be made to minimize disturbance of nesting pairs. A review of our database of bald eagle nest sites along the Garrison Reach of the Missouri River indicates the nearest bald eagle nest to the proposed crossing is located approximately two miles downstream on the east side of the river.

Thank you for the opportunity to comment on this project. If you require further information or the project plans change, please contact Terry Ellsworth of my staff at 701-250-4481, or at the letterhead address above.

Sincerely,

Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

Enclosures (2)

cc: ARD, ES, Denver (MAIL STOP 60120)
(Attn: R. Dach)
Long Lake WMD, Project Leader
Regulatory Office, Army Corps of Engineers, Bismarck
(Attn: D. Cimarosti)
Director, ND Game & Fish Department, Bismarck
(Attn: M. McKenna)

FEDERAL THREATENED AND ENDANGERED SPECIES
AND DESIGNATED CRITICAL HABITAT FOUND IN
BURLEIGH COUNTY, NORTH DAKOTA
April 2005

ENDANGERED SPECIES

Birds

Interior least tern (Sterna antillarum): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.

Whooping crane (Grus Americana): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

Fish

Pallid sturgeon (Scaphirhynchus albus): Known only from the Missouri and Yellowstone Rivers. No reproduction has been documented in 15 years.

THREATENED SPECIES

Birds

Bald eagle (Haliaeetus leucocephalus): Migrates spring and fall statewide but primarily along the major river courses. It concentrates along the Missouri River during winter and is known to nest in the floodplain forest.

Piping plover (Charadrius melodus): Nests on midstream sandbars of the Missouri and Yellowstone Rivers and along shorelines of saline wetlands. More nest in North Dakota than any other state.

DESIGNATED CRITICAL HABITAT

Birds

Piping Plover - Missouri River - Critical habitat includes sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and the interface with the river.

FEDERAL THREATENED AND ENDANGERED SPECIES
AND DESIGNATED CRITICAL HABITAT FOUND IN
OLIVER COUNTY, NORTH DAKOTA
April 2005

ENDANGERED SPECIES

Birds

Interior least tern (Sterna antillarum): Nests along midstream sandbars of the Missouri and Yellowstone Rivers.

Whooping crane (Grus Americana): Migrates through west and central counties during spring and fall. Prefers to roost on wetlands and stockdams with good visibility. Young adult summered in North Dakota in 1989, 1990, and 1993. Total population 140-150 birds.

Fish

Pallid sturgeon (Scaphirhynchus albus): Known only from the Missouri and Yellowstone Rivers. No reproduction has been documented in 15 years.

Mammals

Black-footed ferret (Mustela nigripes): Exclusively associated with prairie dog towns. No records of occurrence in recent years, although there is potential for reintroduction in the future.

THREATENED SPECIES

Birds

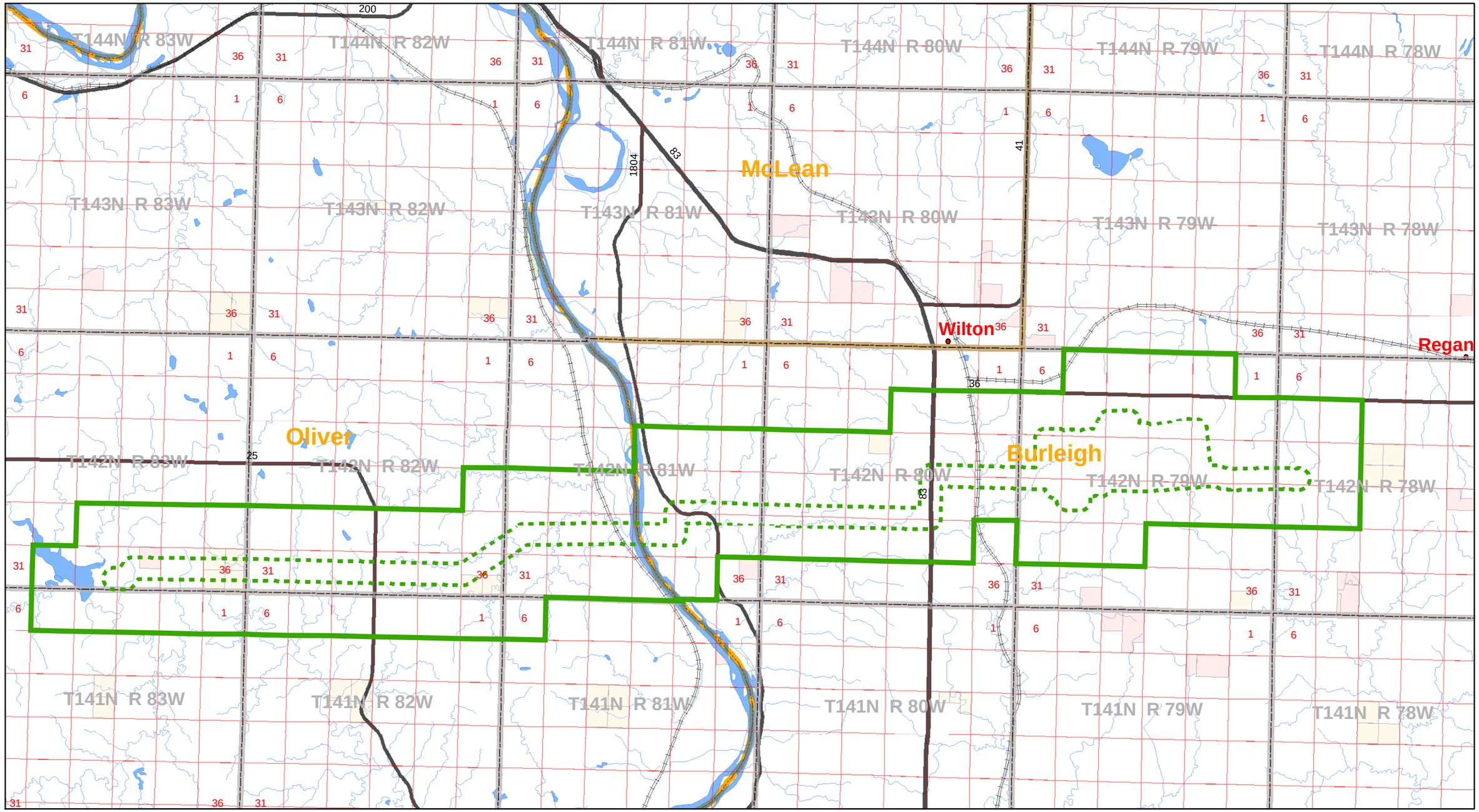
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Piping plover (Charadrius melodus): Nests on midstream sandbars of the Missouri and Yellowstone Rivers and along shorelines of saline wetlands. More nest in North Dakota than any other state.

DESIGNATED CRITICAL HABITAT

Birds

Piping Plover - Missouri River - Critical habitat includes sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and the interface with the river.



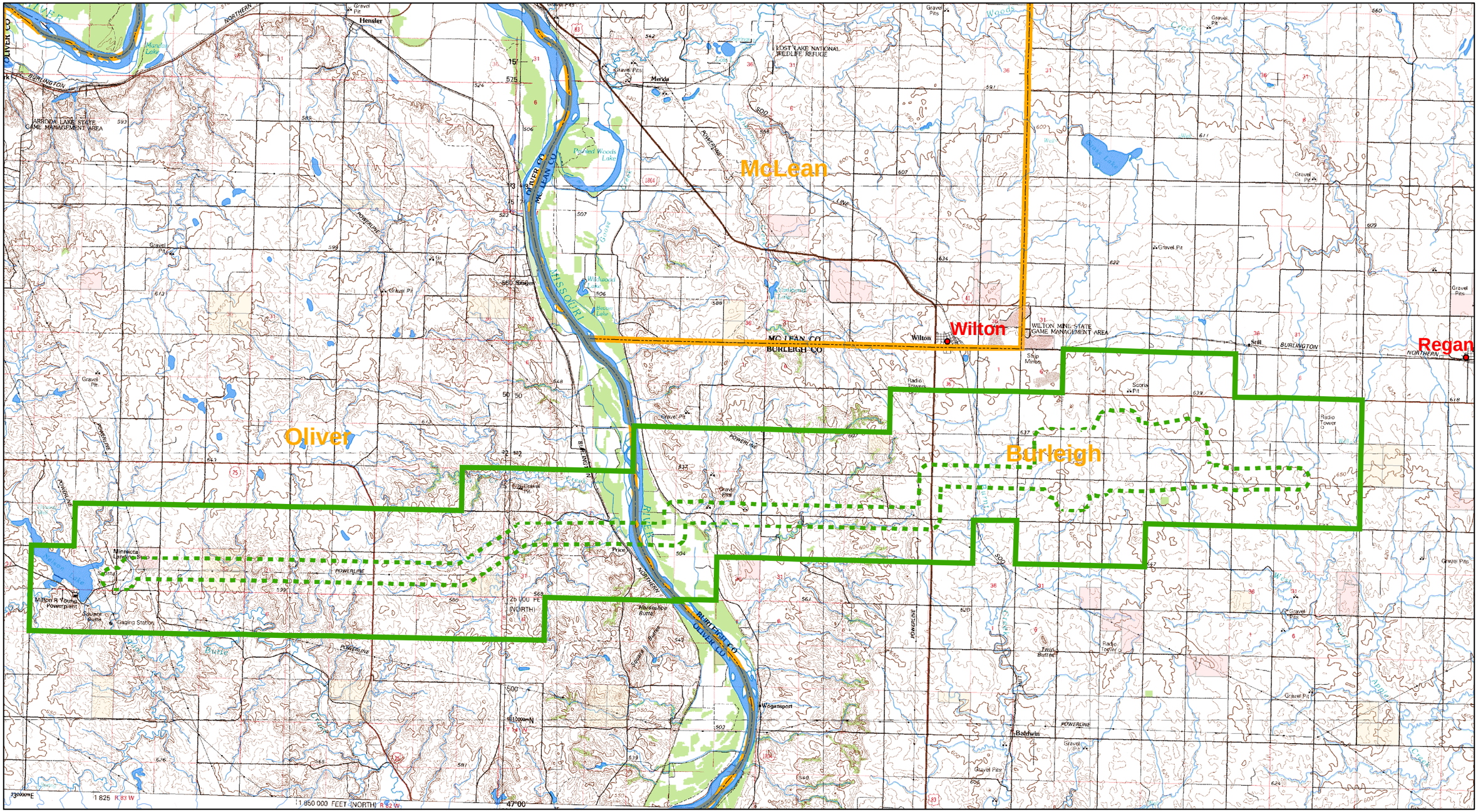
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0 1 2 3 4
Miles

Major Roads
Railroads
State Land
State Park
Park
ND G&F
County Lines
Sections
Townships
Rivers and Streams
Major Water Body
Primary Development Area
Secondary Buffer Area

TETRA TECH, INC.

PROPOSED DEVELOPMENT AREA
VICINITY OF WILTON, NORTH DAKOTA
BURLEIGH AND OLIVER COUNTIES



1:140,000

0 1 2 3 4

Miles

State Land
State Park
Park
ND G&F
County Lines
Rivers and Streams
Major Water Body
Primary Development Area
Secondary Buffer Area

TETRA TECH, INC.

PROPOSED DEVELOPMENT AREA
VICINITY OF WILTON, NORTH DAKOTA
BURLEIGH AND OLIVER COUNTIES

TETRA TECH, INC.

Consulting Engineers & Environmental Scientists
618 South 25th Street
P O Box 30615
Billings, MT 59107
Telephone: (406) 248-9161
Fax: (406) 248-9282

March 23, 2005

United States Army Corps of Engineers - Omaha District
Attn: Jason J. Renschler - Project Manager
North Dakota Regulatory Office
1513 S. 12th Street
Bismarck, North Dakota 58504

RE: Request for Jurisdictional Determination

Dear Mr. Renschler,

As discussed during our phone conversation of March 23, 2005, Tetra Tech, Inc. is respectfully requesting determinations be made to determine the jurisdictional status of aquatic resources located within the project area of a proposed Missouri River transmission line crossing, a proposed electrical transmission line corridor, and a proposed wind generation facility. We are submitting this request on behalf of FPL Energy, Inc., the proponent of these projects. Please note that proposed projects are depicted in the five enclosed figures. The content of these figures is as follows:

Figure #1 Overview Map;
Figure #2 Location Map of proposed transmission line corridor west of the Missouri River;
Figure #3 Location Map of proposed Missouri River crossing;
Figure #4 Location Map of proposed transmission line corridor east of the Missouri River; end
Figure #5 Location Map of the proposed wind farm turbine array.

If the results of the jurisdictional determination indicate that Waters of the United States (WUS) are present within the project area, and the proposed construction activities will impact any of these aquatic resources, the appropriate permit applications will be submitted to your office.

If you need additional project details to facilitate your review of the proposed projects, Tetra Tech will be pleased to provide this information. If you have any questions regarding this request, please contact Matt Kearns (617.457.8205), Judd Stark (406.248.9161) or me at 314.425.0880.

Thank you

FOR

Gregory C Dawdy
Tetra Tech-MTI

w/enclosures

EAST TRANSMISSION ROUTE

WEST TRANSMISSION ROUTE

TURBINE SITES AND ASSOCIATED FACILITIES

MISSOURI RIVER CROSSING

MC LEAN CO
BURLEIGH CO

BURLEIGH CO
OLIVER CO

Hensler

Merida

Wilton

Still

Price

Wogansport

Baldwin

Minnkota Landing Strip

Milton R Young Powerplant

LOST LAKE NATIONAL WILDLIFE REFUGE

ARROPA LAKE STATE GAME MANAGEMENT AREA

WILTON MINE STATE GAME MANAGEMENT AREA

Missouri River

Square Butte

Horseshoe Butte

Twin Buttes

Painted Woods Lake

Wildwood Lake

Beaver Lake

Lost Lake

Crooked Creek

Apple Creek

Burnt Creek

Woods Creek

Deep Creek

Square Butte Creek

Gaging Station

Gravel Pits

Gravel Pit

Scoria Pit

Radio Towers

Radio Tower

Ship Mindus

Substation

POWERLINE

NORTHERN

BURLINGTON

MC LEAN CO

OLIVER CO

25 000 FT
(NORTH)

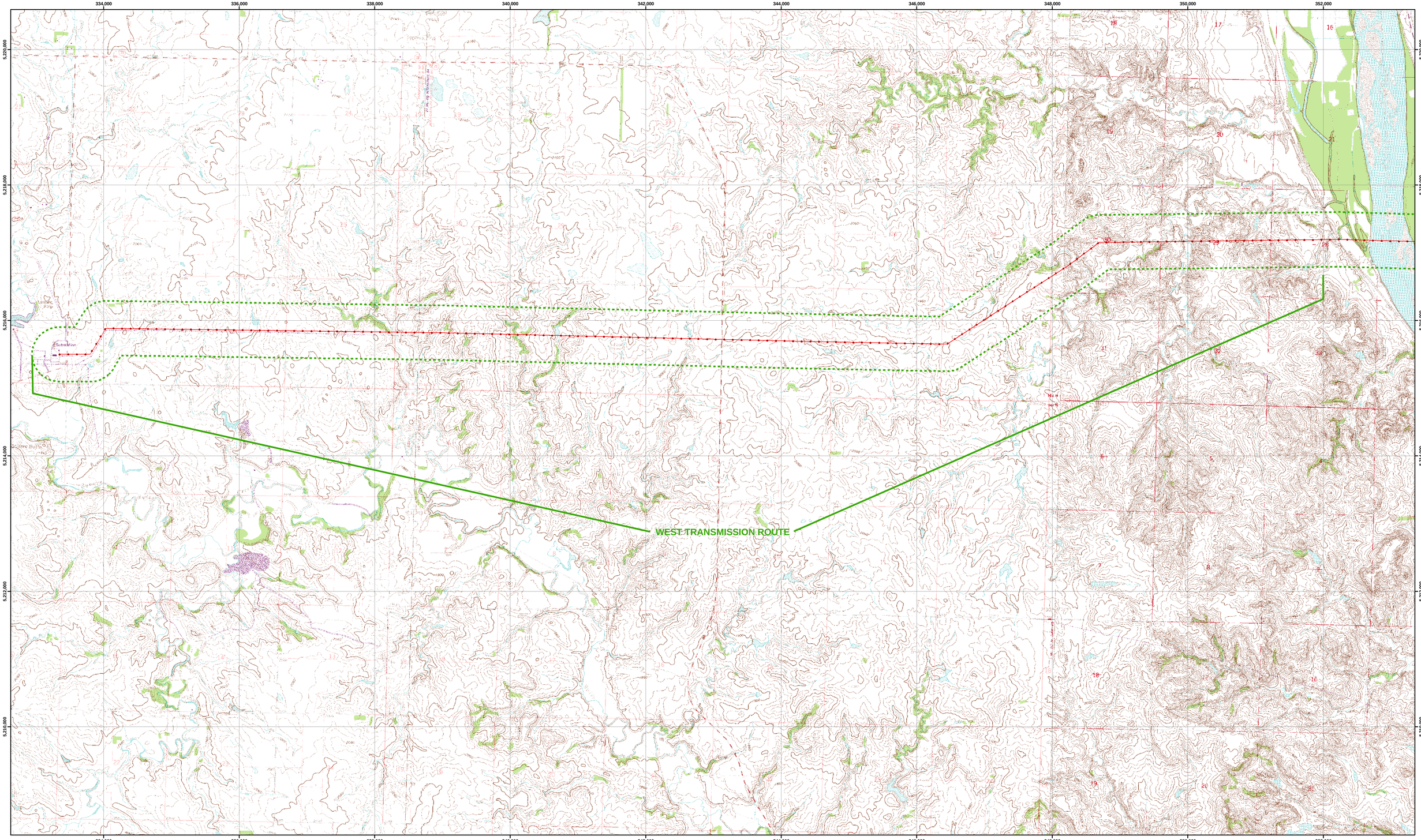
GRID: NAD 83 - UTM Zone 14 North - Meters
USGS Topographic Map Base

TETRA TECH, INC.

1:60,000
0 0.5 1 1.5 2
Miles

Turbines
Transmission Route
1/4 Mile Facilities Buffer

FIGURE 1 - FACILITIES OVERVIEW
USACE JURISDICTIONAL DETERMINATION
VICINITY OF BISMARCK, ND
FPL ENERGY, INC.



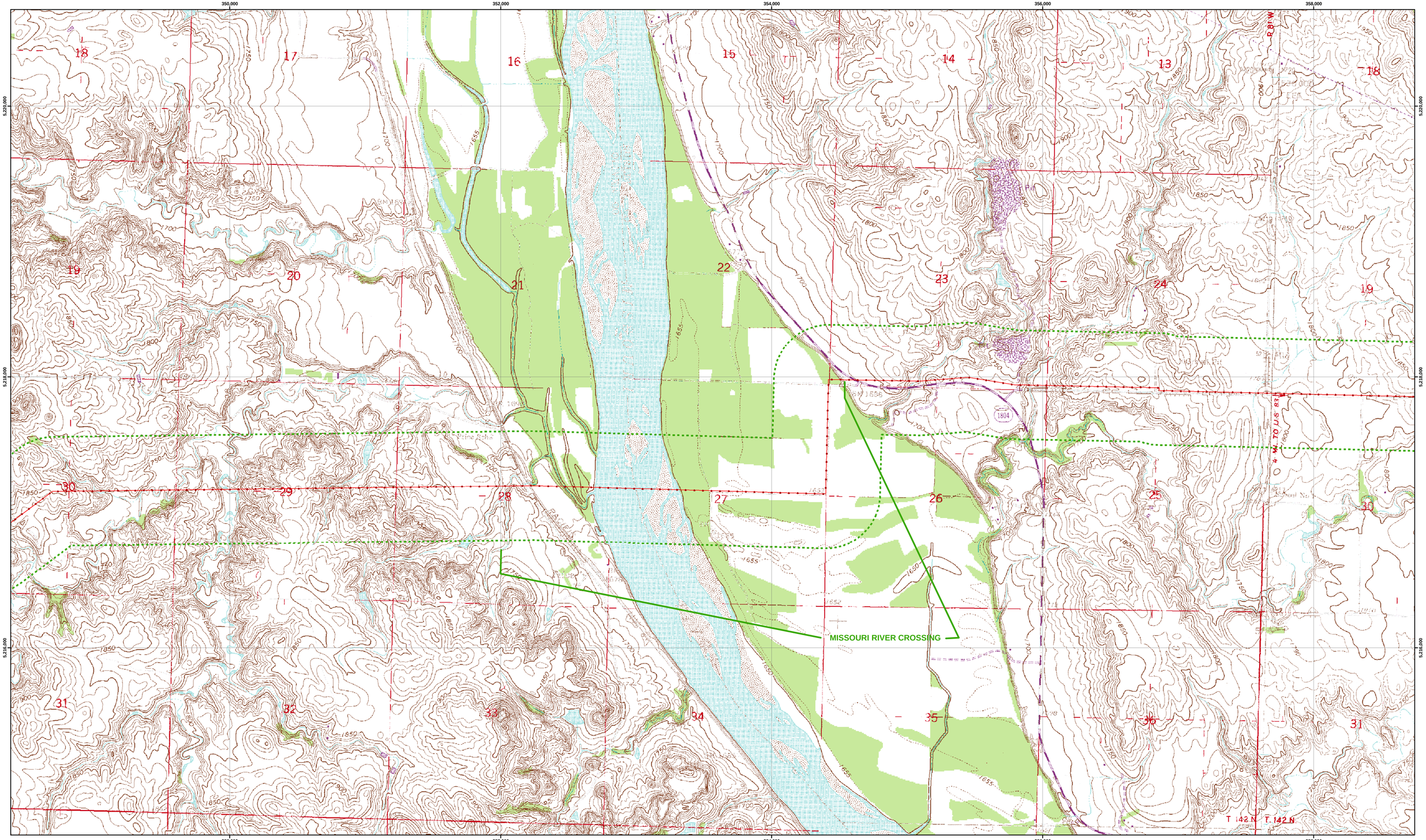
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USGS Topographic Map Base

TETRA TECH, INC.

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0 0.25 0.5 0.75 1
Miles

Transmission Route
1/4 Mile Facilities Buffer

FIGURE 2 - WEST TRANSMISSION ROUTE
USACE JURISDICTIONAL DETERMINATION
VICINITY OF BISMARCK, ND
FPL ENERGY, INC.



GRID: NAD 83 - UTM Zone 14 North - Meters
USGS Topographic Map Base

TETRA TECH, INC.

1:12,000
0 1,000 2,000 3,000 4,000
Feet

Transmission Route
1/4 Mile Facilities Buffer

FIGURE 3 - MISSOURI RIVER CROSSING
USACE JURISDICTIONAL DETERMINATION
VICINITY OF BISMARCK, ND
FPL ENERGY, INC.

354,000 356,000 358,000 360,000 362,000 364,000 366,000 368,000 370,000 372,000

5,224,000 5,222,000 5,220,000 5,218,000 5,216,000 5,214,000

EAST TRANSMISSION ROUTE

GRID: NAD 83 - UTM Zone 14 North - Meters
USGS Topographic Map Base

TETRA TECH, INC.

1:24,000
0 0.25 0.5 0.75 1
Miles

Transmission Route
1/4 Mile Facilities Buffer

FIGURE 4 - EAST TRANSMISSION ROUTE
USACE JURISDICTIONAL DETERMINATION
VICINITY OF BISMARCK, ND
FPL ENERGY, INC.

TURBINE SITES AND ASSOCIATED FACILITIES

362,000 364,000 366,000 368,000 370,000 372,000 374,000 376,000 378,000 380,000 382,000

5,226,000 5,224,000 5,222,000 5,220,000 5,218,000 5,216,000

GRID: NAD 83 - UTM Zone 14 North - Meters
USGS Topographic Map Base

TETRA TECH, INC.

1:24,000
0 0.25 0.5 0.75 1
Miles

Turbines
1/4 Mile Facilities Buffer

FIGURE 5 - TURBINE SITES AND ASSOCIATED FACILITIES
USACE JURISDICTIONAL DETERMINATION
VICINITY OF BISMARCK, ND
FPL ENERGY, INC.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

April 13, 2005

[200560157]

Mr. Judd Stark
Tetra Tech, Inc.
PO Box 30615
Billings, Montana 59107

Dear Mr. Stark:

We have reviewed your request for Department of the Army, Corps of Engineers (Corps) jurisdictional wetland determination on a parcel of land located in several Sections within Townships 141 and 142 North, Ranges 78 through 83 West, Burleigh and Oliver Counties, North Dakota.

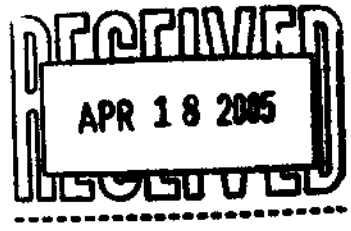
The Corps of Engineers regulates work affecting navigable waterways under Section 10 of the Rivers and Harbors Act. Through Section 404 of the Clean Water Act the Corps regulates the discharge of dredged or fill material into waters of the United States. Waters of the United States may include, but are not limited to, lakes, ponds, rivers, streams, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and vernal pools. Based on the information that you provided to this office, we have made a preliminary determination that the proposed project located in Sections 34, 35, 36 R83W; Sections 31, 32, 33, 34, 36, R82W; Sections 23, 24, 27, 28, 29, 30 R81W; Sections 13, 14, 19, 20, 22 R80W; Section 18, Range 79W; all within Township 142 North appear to contain jurisdictional waters of the United States. Therefore, should the proposed project and/or associated construction activities result in the discharge of dredged or fill material into waters of the United States, a Corps permit may be required. If however, the project and associated work can be accomplished by avoiding impacts to waters of the United States, a Corps permit would not be required.

In order for the Corps to fully review the proposed project for Section 10/404 authorization, a completed Corps of Engineers permit application must be submitted to this office. Should construction activities associated with this project result in impacts to waters of the United States, please complete and submit the enclosed permit application to the U.S. Army Corps of Engineers, North Dakota Regulatory Office, 1513 South 12th Street, Bismarck, North Dakota 58504. It is essential to identify all impacts to waters of the United States resulting from the proposed project.

Should you have any questions regarding this determination, please do not hesitate to contact this office at telephone number (701)-255-0015 or at the letterhead address and reference project number 200560157.

Sincerely,

Jason Renschler
Project Manager
North Dakota Regulatory Office



Printed on Recycled Paper

Instructions for Preparing a
Department of the Army Permit Application

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, *e.g.*, Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the county and state where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Section, Township, and Range of the site and / or the latitude and longitude. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known.

Block 17, Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site.

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wingwalls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identity the authorization, if possible.

Block 24. Names and Addresses of Adjoining Property Owners, Lessees, etc.,Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 25. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 26. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (tracing paper or film may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT *(33 CFR 325)*	OMB APPROVAL NO. 0710-0003 Expires December 31, 2004

The public reporting burden for this collection of information is estimated to average 10 hours per response, although the majority of applications should require 5 hours or less. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies. Submission of requested information is voluntary, however, if information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE *(an agent is not required)*
6. APPLICANT'S ADDRESS	9. AGENT'S ADDRESS
7. APPLICANT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business	10. AGENT'S PHONE NUMBERS WITH AREA CODE a. Residence b. Business

11. **STATEMENT OF AUTHORIZATION**

I hereby authorize _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

APPLICANT'S SIGNATURE DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE *(see instructions)*

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*	14. PROJECT STREET ADDRESS *(if applicable)*
15. LOCATION OF PROJECT COUNTY _____ STATE _____	

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

17. DIRECTIONS TO THE SITE

18. Nature of Activity *(Description of project, include all features)*

19. Project Purpose *(Describe the reason or purpose of the project, see instructions)*

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled *(see instructions)*

23. Is Any Portion of the Work Already Complete? Yes _____ No _____ IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

*Would include but is not restricted to zoning, building and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT _____ DATE _____ SIGNATURE OF AGENT _____ DATE _____

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

APPENDIX C

FIELD NOTES AND OBSERVATIONS

APPENDIX C
Field Notes and Observations
(Turbine Specific)
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

T 142 N R 79 W Section	Turbine Number	Existing Vegetation	Potential Adverse Impacts at Turbine Site	Potential Adverse Effects of Road or Collector System Installation	Alternatives	Comments
8	**Section is largely native grassland pasture**					
	1	Native Grassland / Pastured	None	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks. Restore grassland habitat to the extent practicable.	Shaft and pit mines located on the eastern part of the section.
	2	Native Grassland / Pastured	None	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks. Restore grassland habitat to the extent practicable.	Shaft and pit mines located on the eastern part of the section.
9	**Section appears to be entirely planted to row crops.**					
	6	Row crop.	None	Small farmed wetlands may lie in road and collector corridor.	Realign road and collectors to avoid wetland.	
	5	Row crop.	None	Small farmed wetlands may lay in road and collector corridor.	Realign road and collectors to avoid wetlands.	
	4	Row crop	None	None	NA	
	3	Row crop	None	None	NA	
	19	Row crop	None	None	NA	
	20	Row crop	None	None	NA	
10	**Section is primarily in row crop. Turbine location is in Native Grassland / Pastured**					
	21	Native Grassland / Pastured	Fragmentation and loss of grassland habitat.	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
18	**Section is primarily in row crop.**					
	14	Row crop	None	None	NA	
	13	Row crop	None	None	NA	
	12	Row crop	None	None	NA	

APPENDIX C
Field Notes and Observations
(Turbine Specific)
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

T 142 N R 79 W Section	Turbine Number	Existing Vegetation	Potential Adverse Impacts at Turbine Site	Potential Adverse Effects of Road or Collector System Installation	Alternatives	Comments
17	**Section is primarily in row crop, hay crop and CRP**					
	11	Row crop	None	None	NA	
	10	Row crop	None	None	NA	
	9	Row crop	None	None	NA	
	8	Row crop	None	None	NA	
	7	Row crop	None	None	NA	
16	**Section is partially row crop and partially native vegetation.**					
	26	Native Grassland / Pastured	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
	25	Native Grassland / Pastured	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
	24	Native Grassland / Pastured	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
	23	Row Crop	Isolated wetland south of turbine location.	Isolated wetland south of road and collector location.	Avoid wetland during construction.	
	22	Row Crop	None	Collector east of T22 crosses a linear wetland. Fragmentation and loss of grassland habitat.	Restore impacts following construction	Wetland may be jurisdictional.
15	**Dominated by Hay cropland.**					
	28	Hay cropped	None	None		
	27	Hay cropped	None	Proposed collector crosses Linear wetlands east of T-27.	Restore impacts following construction	Wetland may be jurisdictional.

APPENDIX C
Field Notes and Observations
(Turbine Specific)
Proposed Wind Generation and Transmission Line Project
Oliver and Burleigh Counties, North Dakota

T 142 N R 79 W Section	Turbine Number	Existing Vegetation	Potential Adverse Impacts at Turbine Site	Potential Adverse Effects of Road or Collector System Installation	Alternatives	Comments
14	**Mostly row cropped.**					
	29	Row Cropped	None	Proposed collector crosses Linear wetlands west of T-29.	Restore impacts following construction	Wetland may be jurisdictional.
	30	Row Cropped	None	None	NA	
	31	Row Cropped	None	None	NA	
	32	Row Cropped	None	None	NA	
	25	Row Cropped	None	None	NA	
13	**This section is dominated by cropland and hayland.**					
	33	Hay cropped	None	None	N/A	
19	**Portions of section in array are in native grass pasture. This community has potential to offer wildlife habitat (nesting birds).**					
	15	Native Grassland pasture	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
20	**Portions of section in array are in native grass pasture. This community has potential to offer wildlife habitat (nesting birds).**					
	18	Native Grassland pasture	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
	17	Native Grassland pasture	Loss of Grassland Habitat	Fragmentation and loss of grassland habitat.	Grassland should be investigated for the presence of Sharptail grouse leks.	
	16	Native Grassland pasture	Loss of Grassland Habitat	Proposed collector may impact a small isolated wetland.	Avoid wetland during construction.	

APPENDIX D

WILDLIFE SPECIES LIST

APPENDIX D

WILDLIFE SPECIES LIKELY TO OCCUR IN THE PROJECT AREA
(Western 2003)

Bird Species

Primary Species

Gadwall
Mallard
Pintail
Blue-winged Teal
Northern Shoveler
American
Black Tern
Mourning Dove
Horned Lark
Western Meadowlark
Red-winged Blackbird
Yellow-headed Blackbird
Brown-headed Cowbird
Coot Savannah Sparrow
Clay-colored Sparrow
Chestnut-collared Longspur

Secondary Species

Eared Grebe
Pied-billed Grebe
American Bittern
Black-crowned Night Willow
Heron
American Wigeon
American Green-winged
Teal
Canvasback
Redhead
Ruddy Duck
Swainson's Hawk
Red-tailed Hawk
Marsh Hawk
Sharp-tailed Grouse
Ring-necked Pheasant
Gray Partridge
Sora
Killdeer
Upland Plover
Willet
Marbled Godwit
American Avocet
Wilson's Phalarope
Franklin's Gull
Ring-billed Gull
Black-billed Cuckoo
Yellow-shafted Flicker
Eastern Kingbird
Western Kingbird
Flycatcher
Bank Swallow
Barn Swallow
Cliff Swallow
Common Crow
House Wren
Long-billed Marsh Wren
Brown Thrasher
Gray Catbird
American Robin
Sprague's Pipit
Cedar Waxwing
Yellow Warbler
Common Yellowthroat
House Sparrow
Bobolink
Common Grackle
American Goldfinch
Lark Bunting
Baird's Sparrow
Grasshopper Sparrow
Vesper Sparrow
Song Sparrow
Great Horned Owl

APPENDIX D

Mammals Likely to Occur in the Vicinity of the Project Area

SCIENTIFIC NAME	COMMON NAME
Order Marsupialia	
Family Didelphidea	
Didelphis virginiana	Virginia Opossum
Order Insectivora	
Family Soricidae	
Sorex Cinereus	Masked Shrew
Sorex arcticus	Arctic Shrew
Microsorex hoyi	Pigmy Shrew
Blarina brevicauda	Short-tailed Shrew
Order Chiroptera	
Family Vespertilionidae	
Myotis lucifugus	Little Brown Myotis
Myotis septentrionalis	Northern Myotis
Lasionycteris noctivagans	Silver-haired Bat
Eptesicus fuscus	Big Brown Bat
Lasiurus borealis	Red Bat
Lasiurus cinereus	Hoary Bat
Order Lagomorpha	
Family Leporidae	
Sylvilagus floridanus	Eastern Cottontail
Lepus townsendii	White-tailed Jackrabbit
Order Rodentia	
Family Sciuridae	
Tamias striatus	Eastern Chipmunk
Marmota monax	Woodchuck
Spermophilus richardsonii	Richardson's Ground Squirrel
Spermophilus tridecemlineatus	Thirteen-lined Ground Squirrel
Spermophilus franklinii	Franklin's Ground Squirrel
Sciurus carolinensis	Gray Squirrel
Sciurus niger	Fox Squirrel
Tamiasciurus hudsonicus	Red Squirrel
Glaucomys sabrinus	Northern Flying Squirrel
Family Geomyidae	
Geomy bursarius	Plains Pocket Gopher
Family Heteromyidae	
Perognathus fasciatus	Olived-backed Pocket Mouse
Perognathus flavescens	Plains Pocket Mouse
Family Castoridae	
Castor canadensis	Beaver
Family Cricetidae	
Reithrodontomys megalotis	Western Harvest Mouse
Peromyscus maniculatus	Deer Mouse

Mammals Likely to Occur in the Vicinity of the Project Area cont…

SCIENTIFIC NAME	COMMON NAME
Order Rodentia cont…	
Family Cricetidae cont…	
Peromyscus leucopus	White-footed Mouse
Onychomys leucogaster	Northern Grasshopper Mouse
Clethrionomys gapperi	Southern Red-backed Vole
Microtus pennsylvanicus	Meadow Vole
Microtus ochrogaster	Prairie Vole
Ondatra zibethicus	Muskrat
Family Muridae	
Rattus norvegius	Norway Rat
Mus musculus	House Mouse
Family Zapodidae	
Zapus hudsonius	Meadow Jumping Mouse
Family Erethizontidae	
Erethizon dorsatum	Porcupine
Order Carnivora	
Family Canidae	
Canis Latrans	Coyote
Vulpes vulpes	Red Fox
Urocyon cinereoargenteus	Gray Fox
Family Procyonidae	
Procyon lotor	Raccoon
Family Mustelidae	
Mustela erminea	Ermine
Mustela nivalis	Least Weasel
Mustela frenata	Long-tailed Weasel
Mustela vison	Mink
Taxidea taxus	Badger
Spilogale putorius	Eastern Spotted Skunk
Mephitis mephitis	Striped Skunk
Family Felidae	
Felis rufus	Bobcat
Order Artiodactyla	
Family Cervidae	
Odocoileus virginianus	White-taile Deer

APPENDIX D

Amphibians and Reptiles Likely to Occur in the Vicinity of the Project Area

REPTILES

Lizards
Northern Prairie Skink

Turtles
Common Snapping Turtle
Western Painted Turtle

Snakes
Common Garter Snake
Plains Garter Snake
Smooth Green Snake
Western Hognose Snake

AMPHIBIANS

Toads
American Toad
Canadian Toad
Great Plains Toad
Woodhouse's Toad

Frogs
Northern Leopard Frog
Western Chorus Frog
Wood Frog

Salamanders
Tiger Salamander

APPENDIX E

SELECTED SITE PHOTOGRAPHS

APPENDIX E

SITE RECONAISSANCE PHOTOS



Access road to existing DC line River Crossing Site



Whitetail Deer on wind turbine site east of proposed Turbine location T-33

APPENDIX E

SITE RECONAISSANCE PHOTOS



Existing MinnKota DC line river crossing site looking west. Note midriver sandbars



Double leg tower on existing DC line west of River Crossing Site

APPENDIX E

SITE RECONAISSANCE PHOTOS



Native grassland pasture habitats near existing DC line



MinnKota Electric Inverter Building, site of transmission line interconnect

APPENDIX E

SITE RECONAISSANCE PHOTOS



Native grassland and shrub scrub habitats along existing Minnkota Electric DC line



Turbine location T-8

APPENDIX E



Land cover looking north from ridgeline located in the center of T142N, R79W, SEC 18



Native grassland habitat in southwest corner of T142N, R79W, SEC 11

APPENDIX E

SITE RECONAISSANCE PHOTOS



Wetland basin located in SW portion of T142N, R79W, SEC 18



Wetland basin located in SE portion of T142N, R79W, SEC 13

APPENDIX E

SITE RECONAISSANCE PHOTOS



Native grassland habitat near Minnkota Electric Power Plant



Existing Minnkota Electric transmission line from Highway 83 looking east

APPENDIX E

SITE RECONAISSANCE PHOTOS



River crossing site from Highway 1806 looking east



Conservation Reserve Program (CRP) grassland (unconfirmed) near turbine location T-10

APPENDIX E

SITE RECONAISSANCE PHOTOS



View downstream on the west bank of the proposed river crossing site



View looking upstream from the west bank at the existing Minnkota DC line crossing site.

APPENDIX E

SITE RECONAISSANCE PHOTOS



Second tower of the existing Minnkota DC line west of River Crossing Site



Double leg tower on existing DC line located in Section 39 T142N R82W

APPENDIX E

SITE RECONAISSANCE PHOTOS



Existing Minnkota DC line south of turbine array



View looking east from the west bank at the existing Minnkota DC line crossing site.

APPENDIX E

SITE RECONAISSANCE PHOTOS



Land cover looking north from ridgeline located in the center of R142N, R79W, SEC 18



Native grassland habitat in the Northeastern corner of T142N, R79W, SEC 22

APPENDIX E

SITE RECONAISSANCE PHOTOS



Native grassland pasture habitats near existing DC line adjacent to the east side of Highway 25

APPENDIX F

PROPOSED RIVER CROSSING
CONSTRUCTION METHODS

APPENDIX F

USACE Section 10 Permit
ATTACHMENT B
Construction Methods

1.0 Introduction

The following sections describe the proposed methods to be employed during construction of the Missouri River crossing at the location shown in Figure 1. Proposed permanent and temporary impacts and reclamation activities associated with surface disturbances are discussed along with mitigation as part of this plan. Potential disturbances are discussed in Section 2. Reclamation activities are presented in Section 3. Interactions with wildlife, including avian and endangered species, are discussed in Section 4 along with mitigation measures proposed to address potential impacts to these species as a result of construction activities.

2.0 Potential Disturbances

Construction at the crossing site is expected to last 45 days. The line installation following tower construction is expected to take only one day. The following disturbances are expected to occur during construction activities at the Missouri River crossing site:

2.1 Access Roads

Existing private roads in the immediate vicinity of the crossing towers may be upgraded with temporary improvements by placing gravel and geotextile to a nominal width of 12-feet as necessary to accommodate access of cement and material delivery trucks and cranes to and from the tower locations. The roads will be upgraded by re-grading and placing limestone aggregate on a geotextile material. This will provide a suitable road base to support the equipment necessary for construction. Access roads which may require upgrading are shown on Figure 2.

Jurisdictional waters, including wetlands, are located in several locations on the west side of the river. In order to access the site for construction, non-wetland, dry bed waters of the United States (US) may be crossed without dredge or fill. At this time it is anticipated that it will not be necessary to cross wetlands in order to access the site. A formal wetland survey will be conducted onsite prior to construction. Delineated wetlands will be avoided wherever possible. Should avoidance not be possible, a separate permit application will be submitted well in advance of initiation of construction activities. In the event that a separate permit would be filed, preliminary assessments of the site confirm that such activities would not cause the loss of greater than 0.5 acre of non-tidal waters of the US.

2.2 Tree Removal

Tree removal is expected to encompass an 80-foot X 80-foot area (approximately 6400 ft^2) at each tower location as shown in Figure 2 (east and west bank of the Missouri River). Tree removal will be minimized to the extent practicable to allow for safe and efficient management of the tower construction activities.

APPENDIX F

2.3 *Laydown Areas (construction staging)*

Laydown areas for use during construction will be set back from the river a minimum of 0.25 mile and may be shared for river crossing and other line construction activities. The laydown areas have not yet been selected. The final locations of these sites will be selected to minimize the affects on current land uses. Sites will be located at sites that avoid potential impacts to wetlands and other sensitive environmental resources.

2.4 *Tower Piling Foundations*

The overhead line will be supported on each side of the navigable waterway by steel tubular towers located adequate distance from the river bank to ensure no disturbance of the riverbank itself (see Figure 2 and Attachment A for locations). Relative to the existing Minnkota crossing towers, the newly constructed towers are expected to be at least 15 feet further from the river bank. Disturbance during installation of the tower structures will occur during excavation for installation of the tower foundations. The foundations supporting the two-legged steel towers on each side of the river will require excavation to approximately a depth of 30 feet with a diameter of approximately 16 feet. An estimated volume of 225 cubic yards (cy) will be removed from each excavation for an approximate total of 900 cy of material.

Boring equipment will be used to facilitate the installation of tower foundations. The foundations will be constructed of reinforced concrete with pre-fabricated reinforcing placed in the boreholes. Spoil removed during boring activities will be removed to adjacent upland areas.

2.5 Tower Foundation Boring/Excavation Spoil Disposal

Spoil from the excavations will be removed from the site and disposed of according to State and local regulations. Spoil disposal site(s) will be located outside of the Missouri River floodplain a minimum of 1/4 mile from river in upland areas. Spoil will not be placed in positions where fill of wetlands would occur.

2.6 Dewatering and Stormwater Plans

If significant volumes of water are encountered during excavation for the foundations for the steel towers, operations will be discontinued until water can be contained and pumped into temporary containment prior to being managed offsite. A Stormwater Pollution Prevention Plan in compliance with Federal, State and local environmental regulations will be developed and implemented. The North Dakota State Department of Health will be consulted in the development of this plan.

2.7 Tower and Line Installation

The steel towers supporting the overhead wires will be installed in sections using cranes. Actual crane size and installation techniques will be dependent upon available easments and rights-of-way.

The proposed overhead line will span the entire distance between the steel towers located on the

banks of the river as noted in Section 2.4 and Figure 2. The expected length of the span is expected to range from 2360 to 2440 feet depending on final tower siting and survey. The average height of the line above ground is expected to be comparable to the elevation of the line at the adjacent crossing. The conductors of the towers are approximately 140 feet above ground. Following construction the minimum distance from the line to the ground surface is expected to be no less than 90 feet.

The overhead wires spanning the navigable waterway will be installed by pulling "lead" ropes across the navigable waterway, attaching such ropes to the wires, and pulling the wires across the navigable portion of the waterway. The wires will be pulled across the navigable waterway while under tension to ensure the wires are not touching or become submerged in the water. If necessary, pedestrian activity or use of a small boat will be employed to assist in line installation. Line installation will occur during the week during daylight hours to minimize hazards for recreational users of the waterway. Buoys will be placed a minimum of 200 feet up and down channel as warning.

3.0 Mitigation Activities

The following mitigation measures will be implemented to reclaim sites and minimize impacts from the construction outlined in Section 2.

3.1 Revegetation

Construction activities may disturb soils and vegetation to an extent that would require some regrading and reseeding following completion of operations. Should such disturbance occur, these soils will be smoothed to the natural contours of the surrounding areas and reseeded with native perennial species compatible with the surrounding vegetation. If surface disturbance does not significantly impact nearby vegetation, plants may regenerate or sprout from onsite propagules, thus negating the need for further action. Routes necessary to maintain access to the site will remain cleared of vegetation and some coarse surface material may be left in place to ensure access is possible during adverse weather conditions. Road surface materials will not be placed in waters of the US and wetlands will not be impacted by regrade or resoiling activities associated with this project as proposed.

3.2 Soil Stabilization and Erosion Control

Construction activities will include implementation of the Stormwater Pollution Prevention Plan. In addition to this, soils at risk to erosion will be identified and the need for placement of additional silt fence or erosion control matting will be evaluated. At this time, such activity is not anticipated.

3.3 Avian Interactions

Use of the Missouri River corridor by migrating birds including bald eagles and other raptors, whooping cranes, waterfowl and shorebirds is well documented. Construction at the towers will be conducted anytime in 2005 following approval of the application. However, the timing the line pull and installation of line crossing will be coordinated with US Fish and Wildlife Service and US Army Corps of Engineers as necessary to avoid potential impacts to Federally-listed

avian species. Use of nesting deterrents, such as mylar flagging, will be implemented prior to the nesting period in consultation with these agencies to minimize potential for avian use at the crossing site.

Risk for avian collision associated with the proposed line will also be mitigated in part by constructing the line at an elevation comparable to that of the adjacent power line crossing. This is expected to improve the visibility of both lines and reduce the potential for collision. Line marking with FAA markers consistent with Minnkota line marking will also be installed. Other markers were considered, but the corona affect of these measures reacts adversely with line function. Agency requirements for this crossing will be met and recommendations for line marking will be considered.

3.4 Endangered Species Concerns

Endangered species including interior least terns, piping plovers, bald eagles, and a variety of aquatic species are known to occur in the habitat offered by the Missouri River Corridor. Given the nature of this project and the proposed protection measures, impacts to aquatic species are not anticipated. Of these avian species of concern, the interior least tern and piping plover are the most likely to occur at the site of the proposed action. These two species nest during the period from May 1 through August 1.

The interior least tern is known to use the Missouri River habitat for nesting and other activities during the period proposed for construction. The riverine nesting areas of interior least terns are generally characterized as sparsely vegetated sand and gravel bars within a wide unobstructed river channel, or salt flats along lake shorelines. Nesting locations usually are at the higher elevations and away from the water's edge because nesting starts when the river flows are high and small amounts of sand are exposed. The size of nesting areas depends on water levels and the extent of associated sandbars. Based on the projected low water in the Missouri River basin this spring large amounts of suitable nesting habitat will be available near the crossing site.

The least tern nest is a simple unlined scrape usually containing three brown-spotted buffy eggs. Breeding colonies or terneries are usually small (up to 20 nests) with nests spaced far apart. However, colonies of 75 nests have been reported on the Mississippi River. Egg-laying and incubation occur from late May to early August, depending on the geographical location and availability of habitat. After a 20-day incubation period the chicks hatch and will fledge in another 20 days.

The piping plover also nests on sand and gravel beaches of rivers and lakes. Four eggs are laid in a shallow depression and incubation lasts from 24 to 31 days. Chicks fledge in approximately 21 days. Beaches used by plovers generally average 30 yards in width.

Prior to any activity at the river crossing site the sand bars and other potential nest sites will be surveyed by USFWS or the proponent for the presence of interior least tern nests or chicks. If nesting interior least terns or piping plovers or chicks or fledglings of either species are present during the inspection, construction will be delayed until either 1) area is no longer in use by these species or 2) potential for impacts are mitigated or determined to be acceptable through consultation with the US Fish and Wildlife Service and US Army Corps of Engineers.

Exhibit 6

Exhibit 6a
FPL Energy Burleigh County Wind, LLC Policy









BUILDING FOR A SUSTAINABLE FUTURE

ENVIRONMENTAL REPORT

FPL GROUP



FPL Group At A Glance (NYSE: FPL)

FPL Group is one of the nation's largest providers of electricity-related services with annual revenues of $8.5 billion. Our companies include:

	Overview	Highlights
Florida Power & Light	Serves 4 million customer accounts in Florida	More than 21,000 MW of generating capacity covering 27,700 square miles of service territory, approximately 550 substations and over 67,000 miles of electric lines
FPL Energy	A leader in producing electricity from clean and renewable fuels	More than 5,000 MW of owned operating capacity in more than a dozen states
FPL FiberNet	A leading provider of fiber-optic networks in Florida	More than 2,500 route miles of fiber optic capacity, which is the second-largest metropolitan area fiber network in the U.S.

To Our Friends and Neighbors



We at FPL Group work hard to provide reliable and reasonably priced electricity and related services to customers across the United States. Doing so safely and in harmony with our environment continues to be a value all of our employees share. It is a challenge and commitment we take very seriously, and it is a key to our success.

The examples in this report will help you understand how we're minimizing our impact on the environment and collaborating with our communities on sensitive issues.

Building on our successes, we can look with great confidence to the challenges and opportunities of the future. Growth in demand for electricity will continue across the markets we serve. Much of this growth will be driven by increases in the use of technology, which is radically transforming the way we live, work and play. Consumers, community groups and others are more keenly aware of environmental issues than ever before and will continue to share their views with us and with policymakers in government.

These realities are driving us to think in new and highly creative ways about how best to serve both our customers and the communities in which we do business, while positioning the company for strong performance going forward.

We're excited about the future. Meeting the demand for cost-effective production of electric power *can* go hand-in-hand with sustaining, protecting and enhancing our beautiful and fragile environment … and, in our view, it *must*. Future generations will be affected by how we act today, and we believe this is the most important reason to continue building a sustainable future for every part of our business.

Sincerely,

Lew Hay
Chairman,
CEO and President

Randy LaBauve
Vice President,
Environmental Services

We're Your Neighbors



Innovest ranked FPL #1 out of 28 major electric utilities surveyed for environmental performance.

FPL Group is one of the largest energy companies in the nation, with millions of people benefiting from the electricity and related services we provide.

Our aim, however, is to operate not as a large, faceless corporation, but rather as a team of dedicated employees led by strong corporate leadership. In that sense, we're sharply focused on:

- anticipating and understanding our customers' needs;
- building long-term relationships in the neighborhoods and communities of which we're a part, and;
- being open-minded and receptive to new ideas.

An important part of all of these strategies and actions is a commitment to conduct all business activities in an environmentally responsible manner. For example:

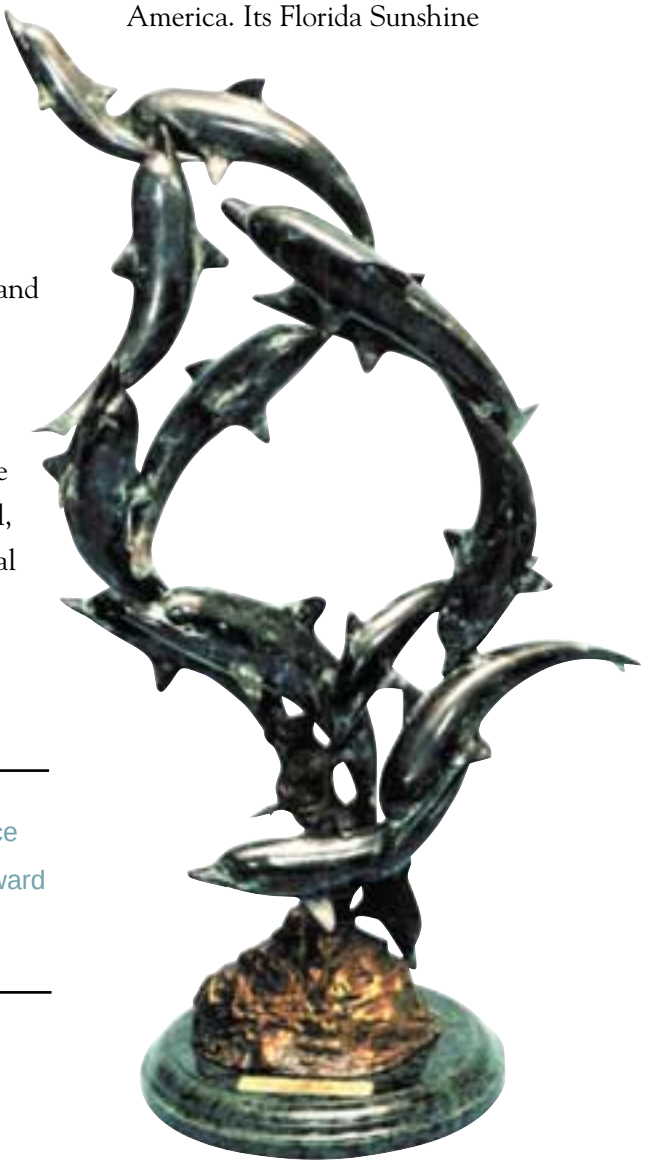
- We work to embrace the spirit and intent of environmental laws, regulations and standards, as we continue to focus on environmental improvement.
- We incorporate environmental protection and stewardship as an integral part of the design, construction, operation and maintenance of our facilities.
- We encourage the wise use of energy to minimize adverse impacts on the environment.
- We communicate clearly and frequently on environmental issues.
- We conduct periodic self-evaluations and report on our performance.

So after having heard our intentions, some may ask: How have we done? Has FPL Group been a good neighbor?

Many of you will judge our performance based on your own personal interactions with and observations of the company … and that's as it should be. Others of you may find it helpful to judge our performance by reviewing the numerous local, state and national environmental awards FPL Group continues to receive.

For example:

- In 2002 FPL ranked first out of 28 major electric utilities surveyed in an environmental assessment conducted by Innovest, an independent advisory group. Innovest believes a company's environmental performance bodes well for its future stock price performance.
- We were awarded the 2001 Waste Reduction and Pollution Prevention Award from the Solid Waste Association of North America. Its Florida Sunshine

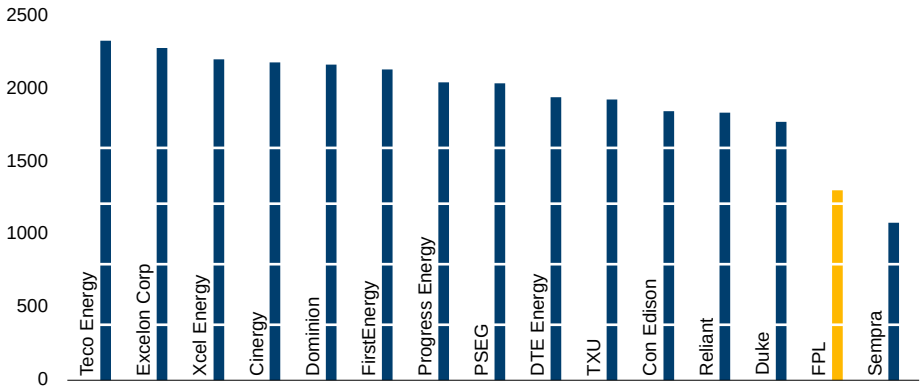


The Florida Ocean Alliance, whose mission is to protect and enhance ocean resources, presented FPL with its Environmental Achievement Award for our innovative energy management programs in 2001.

Chapter recognized us for our efforts to conserve resources and protect the environment.

- FPL received a 2001 Program Champion Award from the Environmental Protection Agency's WasteWise program. This is the third time we have received this honor. WasteWise is a voluntary program and involves business, government agencies and others who have pledged to conserve natural resources through solid waste reduction.
- Our innovative wildlife, land and water management efforts at FPL Energy's Harris hydroelectric facility in Maine were recognized by the National Hydropower Association in its 2002 Outstanding Stewardship of America's Rivers report.
- The Florida Department of Environmental Protection named FPL a "Partner for Ecosystem Protection" for our emission-reducing "repowering" projects at our Fort Myers and Sanford locations. Repowering involves converting older, oil-fired plants to new clean-burning and more efficient natural gas-fired technology.
- Guidelines and information we developed for our Web site, www.fpl.com, for protection of the Florida manatee generated a StudyWeb Academic Excellence Award for FPL. StudyWeb is a favorite Web site for teachers and students who use the site's educational resources for classroom projects and homework assignments.

Although we've earned important recognition for our environmental programs, we continue to seek ways to do even better.

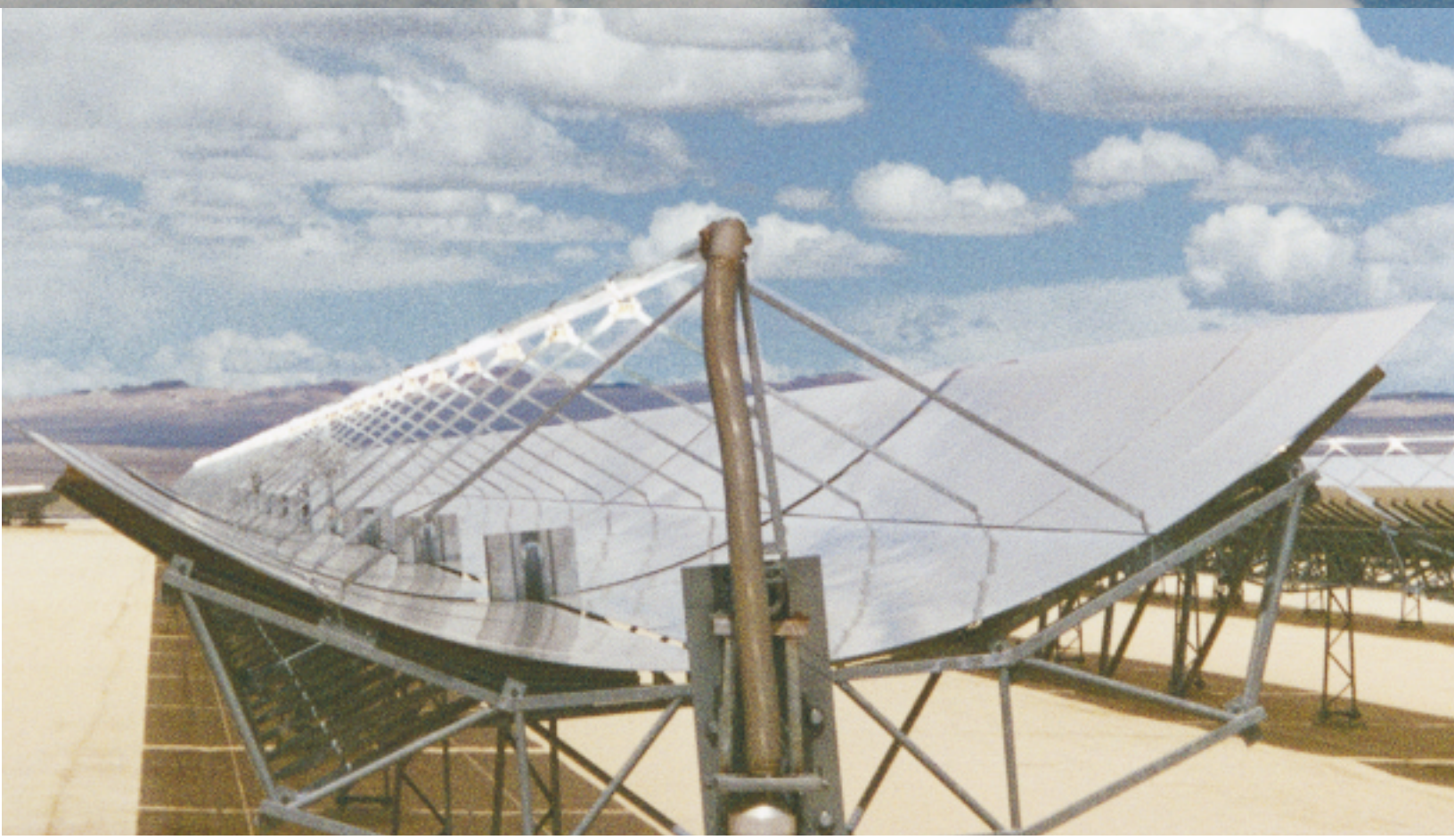


Fossil Generation Portfolio CO_2 Emissions (lbs/mwh)
Source: Resource Data Institute. Based on a 3-year average of 1999-2001. Includes only fossil generation. Excludes plants with incomplete data, usually peakers and smaller units.

FPL Group is a charter partner in the Environmental Protection Agency's voluntary Climate Leaders program aimed at reducing greenhouse gas emissions. The program will begin by inventorying six greenhouse gases produced by fossil fuel-burning facilities and other greenhouse gas contributors.

Over the past decade, we voluntarily have made significant reductions in plant emissions, and today we have some of the lowest emission rates of sulfur dioxide, nitrogen oxide and carbon dioxide in the industry. Partnering with the EPA in Climate Leaders is an important next step for FPL Group to take on our journey to assess and reduce emissions at our power plants in Florida and throughout the country.

FPL Energy owns and operates the largest solar field in the world at its Mojave Desert facility.



We're Taking Care of Business

From design and construction to operations, maintenance, and all other aspects of our business, no major decision is made at FPL Group without carefully considering its environmental impact.

For example, it's our policy that:

- the Board of Directors reviews company environmental strategies and performance;
- operating divisions' business plans include environmental performance as a key component;
- we regularly conduct environmental audits of our facilities and operations;
- environmental factors make up a big part of company "due

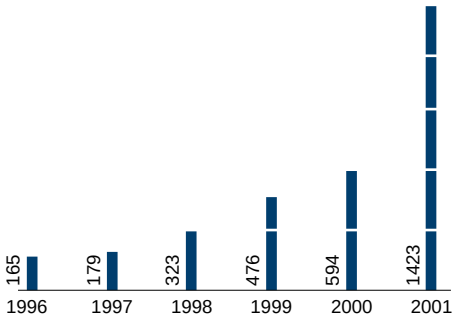


FPL Energy is the largest developer and operator of wind energy in the United States.

diligence" research prior to making any decision to purchase a development project, power plant or business;
- employees are trained in many aspects of environmental awareness, management and procedures, and;
- employee performance evaluations consider whether environmental targets have been completed successfully.

The environmental activities of FPL Group are guided by environmental professionals who represent more than 45 areas of expertise and have an average of 15 years of experience. Many worked previously as regulators, power plant personnel or environmental consultants.

Here's a glimpse at how the company's high expectations are being achieved on a daily basis:
- FPL maintains a diverse fuel mix of nuclear, oil, natural gas and coal to ensure reliable service to our customers.



Growth in FPL Energy Wind Generation (mw)

- FPL Energy is the nation's leading developer, builder and owner of wind generation facilities, with more than 23 facilities across the U.S.
- We own and operate the largest wind farm in the west, the Stateline Energy Center on the Oregon-Washington border.
- We own the largest solar fields in the world — the Solar Electric Generating Stations (SEGS) — in California's Mojave desert.
- We operate 29 hydroelectric facilities in Maine and New Hampshire.

While we continue to add new power plants across the nation, we also utilize energy conservation programs in Florida to help individual customers reduce their demand for electricity, saving energy and money at the same time. These programs include:
- a Web-based home energy survey available at www.fpl.com to help customers understand how they are using power and find ways to maximize energy efficiency in their homes;
- encouraging customers — often via rebates — to adopt high efficiency heating, ventilation, air conditioning, lighting, window treatments and roof and ceiling insulation, and;
- our voluntary "On-Call" program where customers elect to have FPL briefly interrupt some of their electric appliances for short periods during times of high electricity demand, in exchange for credits on their bill.

We are actively supporting research and development programs that promote the development of alternative, cost-effective renewable energy sources. We're also continuing to explore innovative new retail programs using environmentally-friendly sources such as solar, biomass, landfill gases, wind and hydroelectric power.



We're Enhancing Our Commitment

FPL Group is constantly seeking ways to improve our performance to go beyond what is expected. This commitment permeates our business, notably our approach to environmental issues. We frequently develop or support programs that are more far-reaching than what is legally required.

We strive for more efficient operations and improved performance with less impact on the environment. For example:

- In Maine, we assist in preserving archeological sites on our property, in carbon-dating recovered materials, and we monitor our sites annually to ensure they are not disrupted by erosion.
- We were awarded Edison Electric Institute's National Land Management Award for our stewardship of 25,000 acres surrounding our Turkey Point plant. This site contains fresh and estuarine wetlands, subtropical hardwood forests and is home to 26 state- and 17 federally-protected animal species, including the American crocodile and the wood stork.
- Our 20 years of monitoring at our Turkey Point plant has shown dramatic increases in the number of endangered American crocodile hatchlings: from 15 to more than 300 annually.
- We sponsor charity fishing tournaments at several of our plants, as well as beach cleanups, to which families and friends are invited.

Water is another valued natural resource. With our hydroelectric



Our hydroelectric facilities provide environmental and recreational benefits.

facilities in Maine and New Hampshire, and water as a key ingredient in electricity generation at other plants as well, we have a keen interest in managing this resource wisely.

- In Maine, we manage river flows to meet the habitat needs of fish species and to provide opportunities for whitewater recreation, boaters and anglers at our dams. We also manage water levels for fish spawning, loon nesting and public water access.
- In an ongoing water use reduction project, we installed equipment and procedures at six power plants to collect, treat and re-use water for such purposes as steam generation and plant operations. The use of this water has reduced our need for groundwater and municipal water supplies.
- Our Bellingham plant in Massachusetts and Doswell plant in Virginia are known as "zero discharge" facilities. This means we re-use all industrial wastewater, preserving the quality of our rivers, lakes and streams.

Our commitment to reduce emissions has yielded important dividends for air quality as well.

- Our hydro, wind, nuclear and solar plants across the country generate no greenhouse gases whatsoever.
- Over the past 10 years, FPL has demonstrated a trend of reductions in the rates of sulfur dioxide and nitrogen dioxides by 29% and 38% respectively.
- In Florida, our rates of emission of sulfur dioxide, carbon dioxide and nitrogen oxides are among the lowest of the major investor-owned utilities in the state and in the nation.

Beyond developing new ways to maintain and enhance our resources, we look for opportunities to properly dispose of waste and to recycle and re-use materials required for company operations.

- A voluntary clean-up of non-hazardous industrial waste



Our Turkey Point plant is home to the endangered American crocodile.

The cooling canals at our Turkey Point plant are one of three nesting areas in the country for the endangered North American saltwater crocodile. The remote and secure canals afford a tranquil and protected environment for this reclusive species.

products has removed more than 350,000 tons of waste from 13 facilities in Florida. This clean-up has helped us identify many innovative recycling techniques such as transforming the wastes into useful products.

- For more than 20 years, FPL has operated an in-house recycling center and presently handles more than 100 different types of recyclable materials. The center's mission is to cost-effectively recover and market the company's surplus assets, maximizing value while protecting the environment.
- Each year, we recycle an average of 14,000 tons of reclaimed metals; 6,000 tons of scrap wood; 1,300 tons of porcelain; and 1,000 tons of paper and cardboard.
- Our recycling center benefits

from a unique partnership with Palm Beach Habilitation Center, which prepares adults with disabilities to learn skills needed for full-time employment.

- More than $1.7 million worth of poleline hardware was refurbished and restocked in 2001, a 21% increase over 2000.
- Children, businesses and the environment all benefit from the work of the Resource Depot, a clearinghouse through which businesses donate surplus goods. These materials are then given to day care centers, teachers and parents for use in learning and other creative activities with children. FPL is a charter sponsor of this charitable organization.

FPL Group is continuously looking for ways to improve our operations to minimize impacts on birds and other wildlife near our facilities. To support this commitment we have initiated a comprehensive wildlife and natural resources training program for our field crews.



FPL assists in the safe relocation of osprey nests.

We're Building Better Communities Through Stronger Relationships

Our neighbors recognize that electric power is essential to today's lifestyles. Together, we're making our communities great places to live, work and play.

And working with our neighbors on things that matter most to them can reap many rewards for the environment.

Through tours, special displays and mailings, and our Web site, www.fpl.com, we offer a wide array of information to schools, community groups and individuals about how we do business and the environmental issues we all care about. For example:

- We sponsor popular evening walks near our St. Lucie plant on Hutchinson Island in Florida where people can view loggerhead sea turtles nesting. We also conduct nesting surveys for the State of Florida, maintain one of the largest sea turtle databases in the world and track the movements of these turtles for wildlife agencies.
- Our award-winning Web site features information on tree planting in Florida, as well as educational materials for students and teachers on endangered and protected species.
- In Maine, we've built special fishways and pumps to help a variety of native fish migrate. The tours we offer to school groups and the public include videos, classroom presentations, visits to fishways and fish viewing areas.

Before we undertake major electric system expansion or upgrade projects, we reach out to solicit the views of community members on a variety of issues, including how to minimize our impacts on the environment.

- As part of our two major energy-boosting "repowering" projects in Florida, we sought the views of customers, environmental groups, state and local legislators and the arts community. We have incorporated their ideas in developing plans for our new operations.
- We also work closely with the community when planning and siting our transmission and distribution systems — our poles and wires. By using existing corridors we've avoided disrupting private property and having to disturb natural resources.

FPL Fort Myers Plant Emission Improvements From Repowering (lbs/mwh)

Emission	Historical	Repowered
Nitrogen Oxide (NO_x)	7.23	0.26
Sulfur Dioxide (SO_2)	20.94	0.02
Carbon Dioxide (CO_2)	1722.00	774.00
Carbon Monoxide (CO)	1.53	0.18
Particulate Matter (PM)	0.62	0.04
Volatile Organic Compounds (VOC)	0.05	0.01

FPL Group seeks input from our communities when planning new operations.



FPL Group has instituted community outreach programs that have become an integral part of our planning for all major projects. This outreach, which uses such tools as phone surveys, meetings, open houses and presentations to community and environmental groups, is a proactive measure that ensures the community has an opportunity to voice their questions and concerns about a project. This approach enables us to respond to community concerns in a timely and meaningful way and has resulted in stronger relationships in many communities involved in our repowering projects, new development projects, nuclear relicensing, substation and transmission line siting projects, and hydroelectric licensing.



The lush flora and fauna of Manatee Island, located in the Caloosahatchee River adjacent to the Fort Myers plant, will continue to be protected with FPL's donation of the 18-acre refuge to the U.S. Fish and Wildlife Service in January 2001. The island serves as a unique haven for birds and other species of wildlife. With FPL's donation, Manatee Island becomes the first addition to the Caloosahatchee National Wildlife Refuge, established in 1920.

Many of the environmental projects we undertake in our neighborhoods are driven by a strong network of employee volunteers. Each year, Earth Day and Arbor Day, for example, spur a variety of activities. Recently:

- FPL Energy staff members volunteered to host fourth and fifth graders from CK Burns Elementary School in Saco, Maine, at a salmon release at the Saco River. Students learned about salmon habitat and migration patterns.
- Habitat for Humanity engaged several of FPL's employees in its effort to build a home completely by women and for women. The home also conformed to FPL's BuildSmart™ guidelines for energy efficiency.
- In Florida, FPL volunteers joined forces with the Marine Resources Council, Boy Scouts and Explorers and the Merritt Island High School Earth Club to plant 2,000 mangroves along the east side of our Cape Canaveral plant.
- At Miami's Metro Zoo, nearly 100 FPL volunteers highlighted our energy conservation efforts



FPL donated Manatee Island to the National Wildlife Refuge.

and our ecological activities protecting endangered species. An FPL electric vehicle and our mobile emissions testing laboratory were also on display.

- In Sarasota, Florida, vegetation management staffers helped dedicate Millennium Trail, a grove of 145 native trees at the John and Mabel Ringling Sarasota Museum of Art.
- We make the best use of the special talents of our large and growing retiree population in various activities. For example, FPL retirees host the public at our manatee viewing area in Riviera Beach, Florida.
- We were the major sponsor of the Air and Waste Management Association's international meeting in 2001, where we trained K-12 science teachers on the use of environmental resource guides and offered educational programs for children, students and adults in attendance.

As part of the process of permitting or relicensing some of our power plants, we've donated land to governments and implemented a number of innovative programs to aid local conservation and recreation activities.

- Our Everglades Mitigation Bank is returning more than 13,000 acres of wetlands to its natural condition. Located between two national parks, the site is home to more than 38 species of wildlife, of which 12 are endangered and nine are threatened.
- At our Harris hydroelectric facility on Maine's Upper Kennebec River, we're putting 1,300 acres of land into conservation easements.

Recreational opportunities and "ecotourism" are valued by many of our neighbors. Recognizing that, we work in partnership with community groups to preserve and enhance these opportunities as we grow our business.

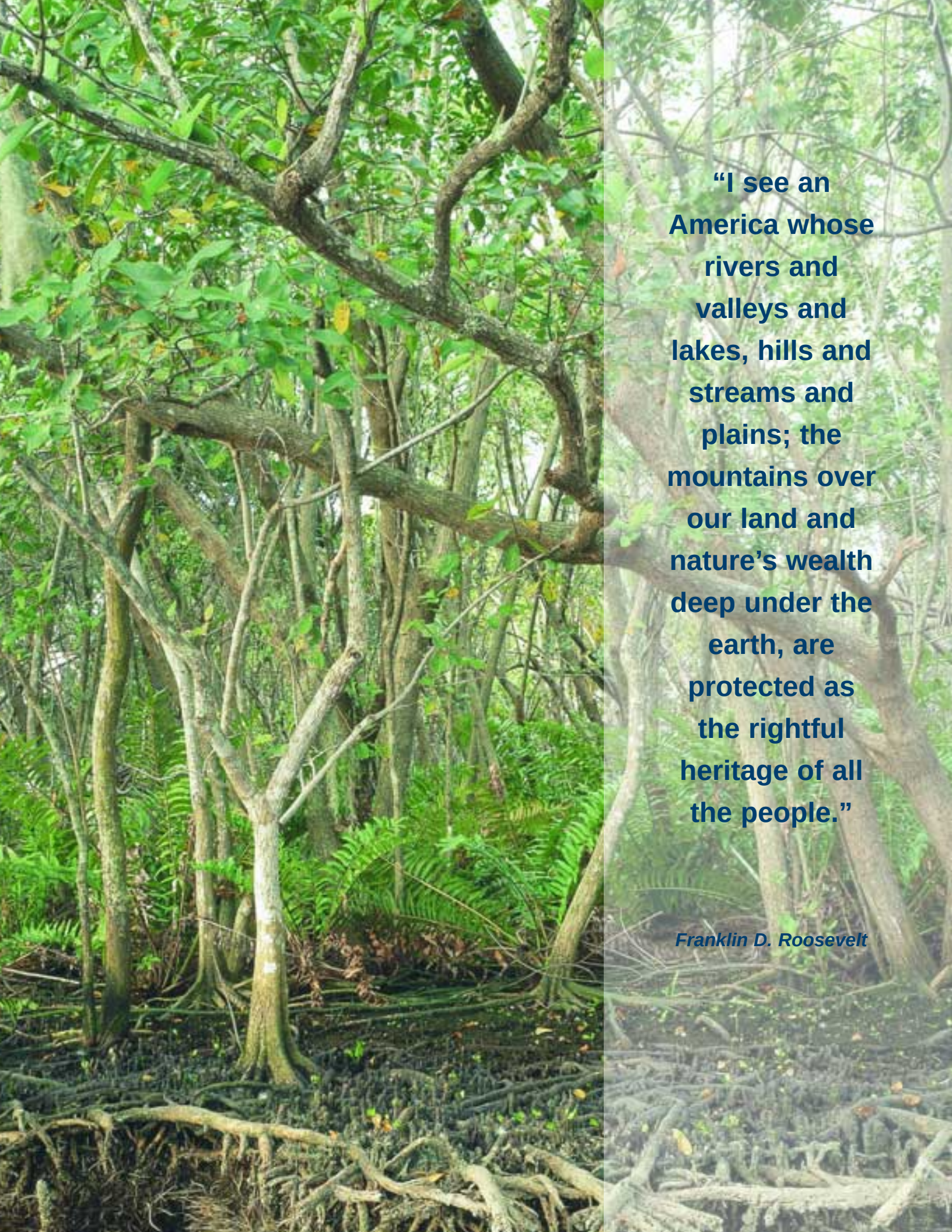
- In Maine, we ensure public access to more than 300 recreation sites along our

reservoirs and waterways. We support whitewater recreation, a multi-million dollar industry in the state. We also provide parking, trails and proper water flows to optimize fishing access and fish habitat on area rivers.

- The Barley Barber Swamp is a 400-acre natural cypress swamp voluntarily preserved by FPL at our Martin power plant in Florida. Trained guides lead visitors along a one-mile boardwalk that winds through this pristine ecosystem.



FPL Group would like to acknowledge Jim Valentine for many of the environmental photos in this report.



“I see an America whose rivers and valleys and lakes, hills and streams and plains; the mountains over our land and nature’s wealth deep under the earth, are protected as the rightful heritage of all the people.”

Franklin D. Roosevelt

FPL Group, Inc.
700 Universe Boulevard
Juno Beach, Florida 33408

This environmental report was printed on an alkaline pH paper made from 100% post-consumer waste and uses inks derived from renewable agricultural materials.



Printed on recycled paper

Exhibit 6b
Central Power Electric Cooperative, Inc. Policy

About Central Power

About Us

Member Cooperatives

Contact Us

Officers & Directors

Employees

Affiliated Organizations

Central Power Electric Cooperative, Inc. is a wholesale electrical generation and transmission cooperative, G&T, organized in 1949 to generate power for its member rural electric distribution cooperatives.

Central Power today, as a Preference Customer of the Western Area Power Administration and as a Class A member of Basin Electric Power Cooperative, continues to supply the bulk power needs of its members through its backbone system of transmission and subtransmission facilities. The six member cooperative owners of Central Power combine to serve over 48,000 farms, homes and businesses located in a service area of 25 counties across the central and southeastern portion of North Dakota.

Central Power's facilities required to serve the members include 114 distribution substations, 23 high-voltage transmission stations and 932 miles of transmission line interconnected with the Western Area Power Administration, Basin Electric Cooperative, and three investor owned utilities. In all, Central Power has a $73 million investment in total utility plant.

Central Power Electric Cooperative's all-requirements members enjoy some of the best rates in the country at just slightly over 3 cents per kilowatt-hour delivered to their substation reclosers.

Our Mission

Central Power Electric Cooperative, Inc. exists to assist its member systems in becoming the electric suppliers of choice.

To accomplish our mission, we will:

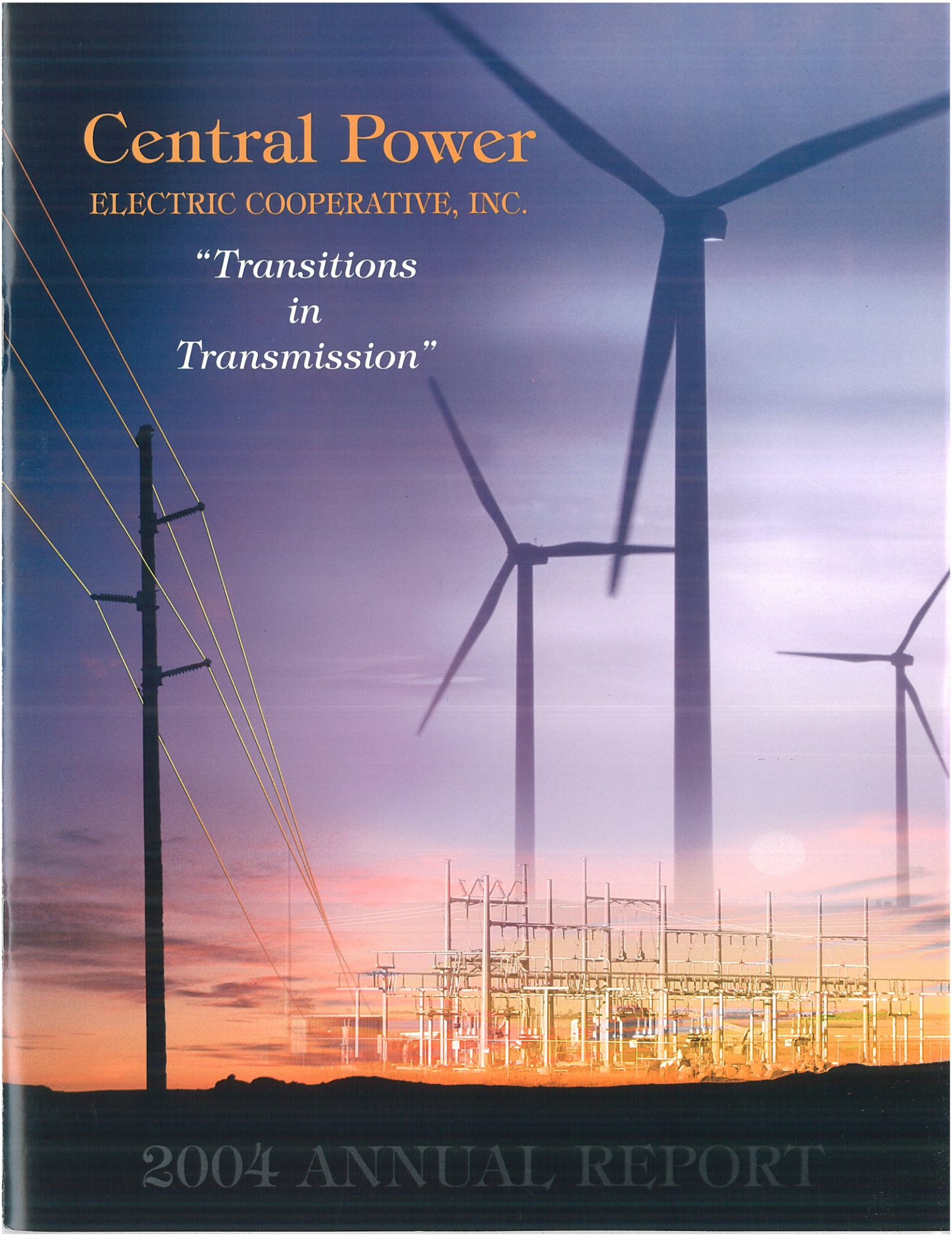
- Serve as a leading and unifying force among our membership.
- Provide a reliable, economical and efficient electric supply.
- Perform those functions that can most efficiently be provided as a united effort.

In accomplishing its mission, Central Power will adhere to the ideals of consumer ownership and cooperative principles, where the member-consumer is placed first in determining policies, procedures and practices.

"Putting Value on the Line"

Home | About Us | Members | Contact Us | Officers & Directors | Employees | Affiliated Organizations

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Central Power

ELECTRIC COOPERATIVE, INC.

"Transitions in Transmission"

2004 ANNUAL REPORT

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About Central Power

Central Power Electric Cooperative, Inc. is a wholesale power supply and transmission cooperative organized in 1949 to generate power for its member rural electric distribution cooperatives.

Central Power today continues to supply the bulk power needs of its members through a backbone system of transmission and subtransmission facilities. The six member cooperatives that make up Central Power combine to serve over 49,000 farms, homes and businesses located in a service area of 25 counties across the central and southeastern third of North Dakota.

Central Power's facilities required to serve the members include 114 distribution substations, 18 wholly owned and 5 jointly owned high-voltage transmission stations, and 932 miles of transmission line interconnected with the Western Area Power Administration, Basin Electric Power Cooperative, and three investor-owned utilities. In all, Central Power has a $73 million investment in utility plant.

"Transitions in Transmission"





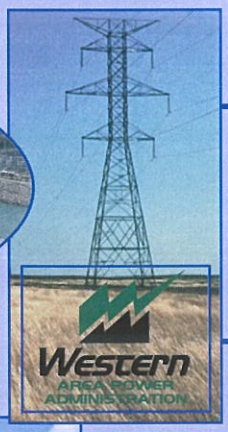






Power Suppliers







Affiliated Organizations

MID-WEST ELECTRIC CONSUMERS ASSOCIATION

NiSC
National Information Solutions Cooperative

WESTERN STATES POWER COOPERATIVE

NRECA

REC
NDAREC
STATEWIDE

A Touchstone Energy℠ Cooperative

The power of human connections

Generation • Transmission • Distribution

Board of Directors, Member Directors and Managers



Ray Keplin, Vice President
North Central Electric Cooperative
Bottineau, ND

North Central Electric

1. Cedric Jacobson - Manager, *Bottineau*
2. Jim Mongeon - President, *Rolette*
3. David Biberdorf, *Willow City*
4. Jean Brandt, *Kramer*
5. Ken Brenden, *Souris*
6. Kenneth Haarsager, *Mohall*
7. Ray Keplin, *Belcourt*
8. Dennis Kittleson, *Bottineau*
9. David O'Connell, *Lansford*
10. Christine Peterson, *Antler*

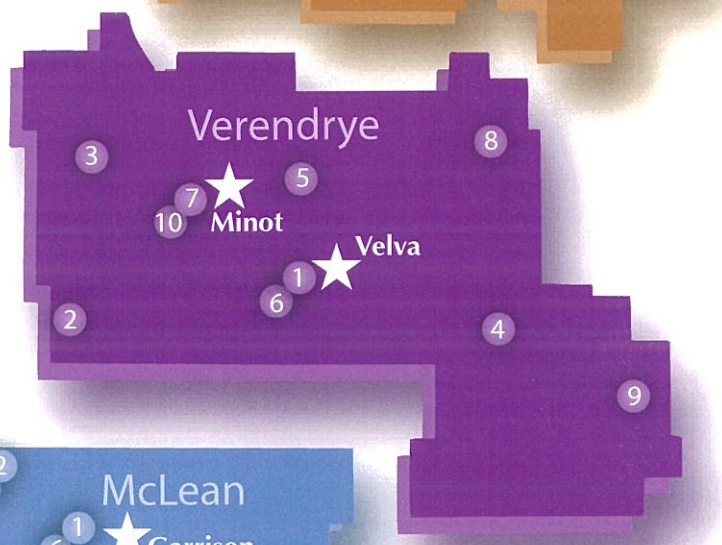


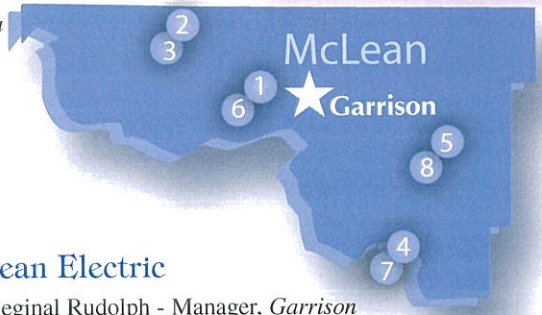


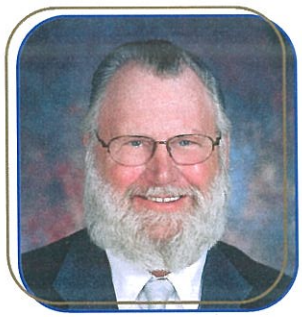
Clifford Gjellstad, Asst. Sec./Treas.
Verendrye Electric Cooperative
Velva, ND

Verendrye Electric

1. Bruce Carlson - Manager, *Velva*
2. Everett Dobrinski - President, *Makoti*
3. Ralph Birdsall, *Berthold*
4. Blaine Bruner, *Drake*
5. Clifford Gjellstad, *Norwich*
6. Burdette Kittelson, *Velva*
7. Donald Larson, *Minot*
8. Orrin Nelson, *Towner*
9. Kenneth Schild, *Harvey*
10. Cynthia Smith, *Minot*





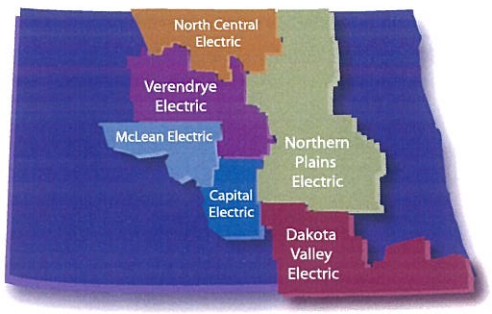


Waldo Westrum, Director
McLean Electric Cooperative
Garrison, ND

McLean Electric

1. Reginal Rudolph - Manager, *Garrison*
2. Alvin Myers - President, *Ryder*
3. Ronald Bloom, *Ryder*
4. Laverne Kreft, *Washburn*
5. Orvin Ravnaas, *Turtle Lake*
6. Del Sayler, *Garrison*
7. Don Sorge, *Washburn*
8. Waldo Westrum, *Turtle Lake*





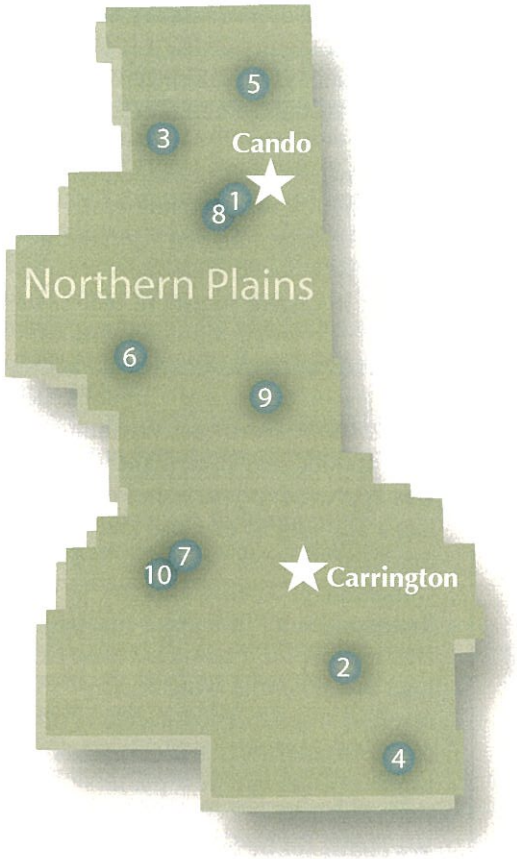


Bernard Falkenstein, Sec./Treas.
Capital Electric Cooperative
Bismarck, ND

Capital Electric

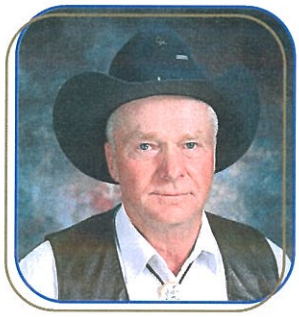
1. Ordean "Lars" Nygren - Manager, *Bismarck*
2. Duane Lasher - President, *McClusky*
3. Blaine Doppler, *Menoken*
4. Bernard Falkenstein, *Wilton*
5. E. Gene Hilken, *Wilton*
6. David Liuska, *Wing*
7. Arlene Olson, *Wing*
8. Shelly Peterson, *Bismarck*
9. Ann Reich, *Bismarck*
10. Dwight Wrangham, *Bismarck*

Central Power Electric Cooperative, Inc. is guided by a board of directors representing its six member-owned distribution cooperatives.

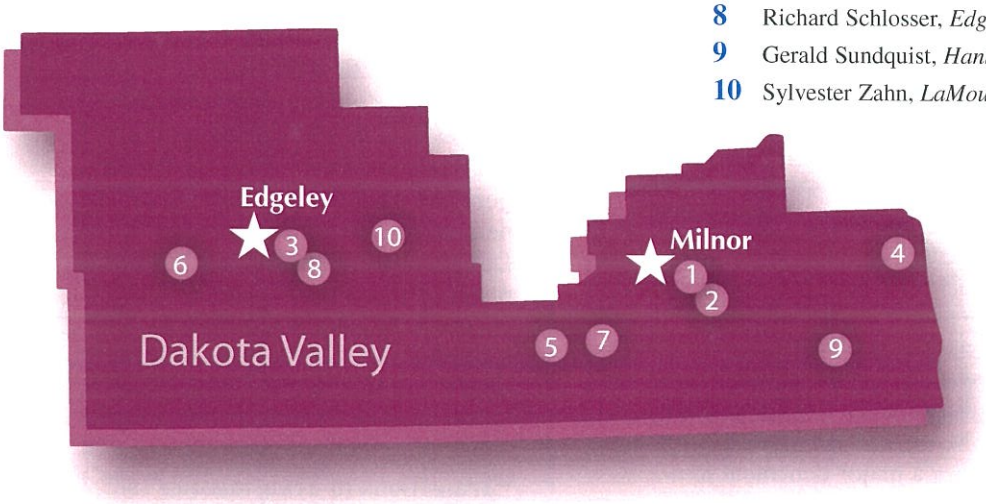


Northern Plains Electric

1. Robert Spencer - Manager, *Cando*
2. Bill Riebe - President, *Pingree*
3. Tracy Boe, *Mylo*
4. Russell Carlson, *Jamestown*
5. Mavis Carter, *Rock Lake*
6. Ron Erickson, *Esmond*
7. Douglas Geier, *Heaton*
8. Jeff Miller, *Cando*
9. Randall J. Simon, *Oberon*
10. Curtis Wiesz, *Heaton*



Douglas Geier, Director
Northern Plains Electric Cooperative
Carrington, ND



Dakota Valley Electric

1. Jay Jacobson - Manager, *Milnor*
2. Thomas Mund - President, *Milnor*
3. Arden Fuher, *Edgeley*
4. John Hauschild, *Wahpeton*
5. John Hayen, *Cogswell*
6. Ronald Kinzler, *Kulm*
7. Kim Rasmussen, *Forman*
8. Richard Schlosser, *Edgeley*
9. Gerald Sundquist, *Hankinson*
10. Sylvester Zahn, *LaMoure*



Arden Fuher, President
Dakota Valley Electric Cooperative
Edgeley, ND



Donald Negaard, Attorney
Pringle and Herigstad, PC
Minot, ND

Message from the President



Arden Fuher
President

The theme for the 2004 annual report is **"Transitions in Transmission,"** recognizing the significant changes occurring within the electric utility transmission industry. These national, regional, and local changes were critical issues for Central Power throughout the year and will no doubt continue to be in the years ahead. On behalf of the Central Power Board of Directors, I am pleased to share with the membership that our management and staff have met these challenges head on and Central Power is positioned for a successful future.

While Central Power serves as the all-requirements power supplier for its five consolidated member-owners and a fixed percentage of Capital Electric, the role of transmission provider was the most critical responsibility at Central Power in 2004. This past year we were once again deeply immersed in a Midwest Independent System Operator (MISO) matter—their FERC filing and the subsequent proceedings of its Energy Market Tariff. While this complex issue and its implications to Central Power is covered in more detail later in this report, I would like to underscore the capability of Central Power to deal with this MISO issue on a collective basis and draw attention to this shining example of the ability of Central Power to address extremely time consuming and complicated power supply and transmission matters relative to all its members. Working closely with our sister G&T East River Electric Power Cooperative and our supplemental power supplier, Basin Electric Power Cooperative, our management and staff have been fully engaged with this issue. At the time of this writing, Central Power is on the verge of executing a most favorable settlement agreement with the MISO and Otter Tail Power. Indeed, this will be a remarkable accomplishment.

Closer to home, the Mid-West Electric Consumers Association's Water and Power Committee established a Transmission Policy Sub–Committee to analyze and evaluate potential policy changes regarding the Western Area Power Administration and Basin Electric Integrated System (IS) in response to Open Access Transmission developments. Central Power has relied on its extensive transmission expertise and knowledge in representing its members' interest on this committee to analyze and address potential implications to Central Power.

In conjunction with this Mid-West analysis, Basin Electric proposed a policy and rate structure modification for its member systems. This modification involves a phase out of the Delivery Point Discount program and the inclusion of member "qualifying" facilities in the IS through a Basin/member lease arrangement, thus eliminating Basin's involvement with lower voltage transmission and allowing them to concentrate on resource development and high-voltage transmission matters. Central Power represented its members' interests on the Basin Rate Sub-Committee and the Manager's Advisory Committee, turning a major detriment to a significant positive benefit.

Central Power is at the table as our principal power supplier develops plans for a new large scale East Side resource to meet load growth. With power supply costs representing roughly 82% of Central Power's annual expense, and Basin purchases representing approximately 86% of our power supply costs, it is critical for us that Basin maximize our existing resources and delay costly additions as long as reasonably possible. However, they must couple this consideration with the numerous potential environmental regulations they will be faced with addressing in the not to distant future. In that respect, we are encouraged with the numerous strategic small scale additions Basin has recently implemented. The 250MW Northeast Wyoming mine mouth coal fired plant which was approved at year's end is the latest and largest of these and is expected to come on line in 2011. Concerning **"Transitions in Transmission,"** it is clear that as Basin plans for a new East Side base load and potential wind energy resource, transmission access is one of the most critical and complicated aspects of siting a new plant.

We could not be more pleased with the large scale Edgeley and Highmore wind energy resource additions Basin has added to its portfolio, the former of which Central Power is proud to be a part of. In 2004, Basin's overall wind energy capacity factor reached an amazing 39.4%, exceeding everyone's expectations. With renewable portfolio standard implementation in neighboring states and with North Dakota ranking number one for wind resource potential, we are excited about the prospects and the role Central Power will play in assisting with the development of additional wind projects.

"Transitions in Transmission" are not only occurring on a national and regional basis, but here at home, Central Power has made many significant system additions/improvements in 2004. These improvements are outlined later in this report, but I wish

to make a point of the tremendous success of the Ruthville/Minot Air Force Base joint project in the Minot area. With the assistance of Verendrye Electric, we were able to work together to spread our risks and leverage our resources to invest for the future and to address critical quality of service and reliability needs of one of our member's largest load and Central Power's second largest ultimate load. This project represented **"Transitions in Transmission"** as this was the first major power supply type substation addition for Central Power since the early 1990s.

In addition to continued operation of the system, Central Power will be looking closely at building more transmission to improve reliability, reduce losses, and move load from the OTP/MISO system to the WAPA/Basin IS. In addition, we will be working hard on a number of notable system additions, improvements, and reconstruction projects while continuing the vital operation and maintenance of our valuable transmission and substation power delivery system.

A most rewarding accomplishment this past year was the initial implementation and follow up extension of the Central Power Load Monitoring Program. Upon the completion of the McLean Electric area load monitoring system in early 2004 and with the extremely accurate and reliable performance of the new radio and programmable logic controller (PLC) based system; Central Power moved on to and completed the installation of a similar system in the North Central Electric service area in 2004. This new system went on line in time for Central Power's November coincident peak. Like the McLean area system, we are very pleased with the performance and reliability of the North Central area system.

The Load Monitoring Program created the cooperative structure for Central Power to maintain and improve its critical load monitoring capabilities by allowing any member whose existing system is unable to economically provide accurate, reliable near real-time load data to turn this responsibility over to Central Power at any time. It also provides for a means to fairly compensate the members who are able to furnish the required load data with their existing infrastructure. This policy went into effect January 1, 2004 and for the year Central Power provided $161,000 in member load monitoring credits.

In 2004, the Central Power Board of Directors fulfilled the request of the membership for a "Strategic Thinking Session" immediately following the 2004 Annual Meeting. This was an excellent opportunity to hear from the membership. Also, Central Power took this opportunity to explain the results of the Capital Consolidation Study. Your Chairman and General Manager were invited to visit with the Capital Electric Board on this matter and we were pleased to have had that opportunity as Capital considers the matter further.

We must thank our statewide organization for their diligent preparation leading up to the 2005 legislative session. Being prepared made it easier for the member coops to engage resistance during the session. Thus the several "anti-coop" bills that were introduced met with defeat or withdrawal. It is apparent that we as a cooperative family must continue to exhibit the Touchstone Energy values, so as to help continue our favorable presence in the political arena.

This past year the board was pleased to be able to maintain our one-twentieth of balance capital credit retirement plan enacted in 2001.

Since adopting this policy, Central Power has retired $3,004,397 in capital credits to our members. This represents over one third of total retirements to date. Our board examined Central Power's rate structure including a detailed look at electric heat. We approved changing from a "credit" to a rate format and the rate for 2005 was adjusted in an effort to move it toward its cost. With minor changes, we are pleased to be able to nearly hold the line on rates while absorbing significant increases from WAPA.

I believe I have outlined numerous examples illustrating the important benefit of owning such a jewel of a transmission cooperative. Should each distribution cooperative member be required to provide the necessary staff time, travel, expertise, etc., it would represent a significant expense, not to mention a drag on limited resources.

Regarding **"Transitions in Transmission,"** Central Power will experience the retirement of its General Manager of 38 years in the coming months. Speaking for past, present, and future Central Power directors, we wish to thank our General Manager, Gary Williamson for his unequaled dedication, unrivaled commitment, and tireless leadership to Central Power, its membership, and the rural electric program. We wish Gary and Mavis all the best in their well deserved retirement and in the adventures that await them.



Arden Fuher
President

Report from the General Manager



Gary M. Williamson
General Manager

It is with great pleasure that I present to the membership what is my 38th annual report as General Manager of this remarkable organization that is Central Power Electric Cooperative. Not unlike 1967 when I started at Central Power, the year 2004 was full of challenges as the electric utility industry braced for **"Transitions in Transmission"** that are about to occur at our border, within our public power and cooperative family, and internally. In light of all the challenges and changes, I am delighted to report that 2004 was a year of considerable accomplishment.

One measure of this accomplishment is member rates. In 2004, in spite of over an effective 14% WAPA rate increase, Central Power's members paid the lowest average rate since 1981, exclusive of the extraordinary power bill credits received over the past six years. Remarkably, this has been accomplished with the 2001 board approved one-twentieth of balance capital credit retirement program and the fourth straight year of positive operating margins, and the sixth year total, since the board set this as an objective seven years ago. Additionally, Central Power's 2004 member allocation amounted to $6.1M with Basin's allocation to Central Power of $5.6M.

Other events responsible for Central Power's remarkable financial achievements this past year included passing directly through to the members the nearly $1.1M Basin power bill credit received in December. This bill credit lowered member average rates from 32.5 mills to 31.7 mills. Over the past five years Central Power has provided bill credits totaling $14.4M while receiving $15.1M in bill credits from Basin over the same period.

Looking forward, it is very encouraging to see the budgeted average member rate for 2005 at just under 33.3 mills. This represents just over a 2% increase from the pre-power bill credit average rate paid in 2004. This is rather significant because at the same time, Central Power will experience a complete year of the full 2004 WAPA 2 mill, two-step and tiered energy rate increase, and while no longer the case, Central budgeted another WAPA increase of 2.5 mills in October 2005. Member loads made a strong showing for 2004 with a 2.8% increase in energy requirements and a 4.5% increase in demand requirements.

This past year was full of other remarkable accomplishments including Central Power's latest addition to our numerous power supply transmission substation facilities with the completion of the Ruthville 115kV substation. Investing today to address what was a pending capacity issue in the Minot area, Central Power is now well positioned for considerable load growth in this area with over a 50% increase in transmission capacity.

Central Power was also busy with numerous capacity upgrades to meet member load growth including our continued work on the Devils Lake Outlet project to facilitate Northern Plain's service to the North Dakota State Water Commission. We are pleased with our new Load Monitoring Program performance in which our collective average monthly reporting error was less than three-fourths of one percent. With Central Power's installation of a new system in the North Central area late in the year, we hope to drive that error down close to zero going forward. Also in 2004, Central Power installed a dedicated transformer at the Radar substation, at Basin's request, to eliminate the wind turbine voltage flicker issue for the native load consumers. We have completed a Spill Prevention Control and Countermeasure plan update to comply with new EPA regulations and our personnel will be busy this year constructing the required containment provisions and coordinating our response plan with our members.

Having been delayed by a month, the Mid-West Independent System Operator's Energy Market Tariff (EMT) is scheduled to startup on April 1, the day after the close of our 2005 Annual Meeting. It has been a challenging and demanding issue for us but I am pleased to report that at the time of this writing, it appears likely that we will bring this matter to a successful close, perhaps even before the annual meeting. This was a critical matter to Central Power beginning with the March 31, 2004 filing of the EMT by MISO and the subsequent FERC order which established procedures for pre-existing Grand Fathered Agreements (GFA's). This included Central Power's Intergrated Transmission Agreement with Otter Tail along with East River's Otter Tail and Xcel agreements. We were quite disappointed with FERC's order on the subsequent GFA hearing after having received a most compelling argument from the hearing's Administrative Law Judges (ALJ's). The ALJ's found that the Central agreement should not be subject to the market. The Commission did not come to this clear of a position and instead instituted a settlement proceeding for Central Power, MISO, and Otter Tail to work out our differences.

We will be busy in the year ahead with continued investment in the power delivery facilities which serve our members, continued operation and maintenance of our system, and preparation of a new RUS work plan and loan and, Vulnerability Assessment and Emergency Restoration Plan.

On the power supply front, WAPA continues to struggle with low water in

the Missouri Main Stem Reservoir System with no relief in site. While they no longer plan to raise rates in 2005, we are now looking at up to an additional 11% rate increase starting January 2006. In addition to the ongoing appropriations and irrigation issues, we must now prepare to support Mid-West Electric's defense against the Administration's budget consideration for the PMA's—to raise their rates to "market-based." This could potentially represent over a $10M annual increase to Central Power.

We are strongly positioned with our member-ownership of Basin Electric. A favorable development at the beginning of 2005 is that under the Basin four part rate analysis for the years 2006-2012, Central Power stands to realize a $2.8M rate reduction over that period from these changes. These changes include a complete fixed charge phase-out going from $15M in 2009 to $0 by 2012, a one mill electric heat rate increase for 2006 and again in 2007, the phase out of the Delivery Point Discount by 2010, and finally the Basin/member IS qualifying facilities lease. However, the rate reduction does not include the effects of reduced Basin surplus sales and at some point major capital additions for environmental requirements or a new base load east side resource. On a bright note, however, is the potential for DGC to start returning money to Basin which will help defray those increases. The unfavorable DGC hedges ended in October 2004 and the revenue sharing requirement with the Department of Energy was reduced by one-half at year's end.

Central Power continued its support of the Western Area Power Administration, the Corps of Engineers, and the Bureau of Reclamation through membership in Western States Power Corporation. In 2004, Central Power loaned out and was repaid $865,785. This approach to low cost short term financing has helped to ensure the continued good work of the Western Area Power Administration in maintaining and improving the reliability of the federal transmission system. However, it must be clear that these funds are supplemental only and that WAPA, the Bureau, and the Corps must continue to rely on Federal appropriations for the majority of their financial needs.



Ruthville 115-41.6kV Substation.

Looking ahead to 2005, there are a great number of promising developments. Central Power's member loads are off to a strong start exceeding one quarter of a gigawatt peak demand on two days in January with a new all-time peak coincident demand of 260MW and strong energy sales. The recently completed 2004 Load Forecast shows a steady 1% annual increase in energy requirements and there are several potential large load additions. The electric cooperatives of North Dakota should be reassured with their strong legislative support received during the current session.

I have witnessed a lot of **"Transitions in Transmission"** during my career as well as other changes in our cooperative family and two of the most significant experiences I have gleaned from those transitions is how much we can accomplish if we stick and work together and the clear difference between the operation of an organization where the owners are also the customers and one where the owner is strictly an investor.

While I have several months remaining at Central, I would like to thank the membership and the past and present Central Power Board of Directors for this truly rewarding experience serving as their General Manager. I have had the fine privilege to work for a program I so deeply believe in and to work alongside so many excellent people including our member directors, managers, employees; the fine people at Mid-West Electric Consumers Association; the Western Area Power Administration; Basin Electric Power Cooperative; the National Rural Electric Cooperative Association; the North Dakota Association of Rural Electric Cooperatives; and many more too numerous to mention.

Finally and with the utmost appreciation, I would like to thank the Central Power employees for their hard work and cooperation throughout all of my years here at Central Power. Knowing the directors and employees at Central Power, I am confident with the continued future success of this terrific organization.



Gary Williamson
General Manager

Year in Review

The following report summarizes the highlights of Central Power's operations over the past year.

Economic Development Program

Effective January 2, 2003, Central Power became eligible to make up to $600,000 of the Basin Electric Economic Development Loan program available to its members, to provide a funding mechanism for projects at the local level. The loans are available on a prorated basis according to the Cooperative's 2001 margin allocation. The loans bear a one percent interest rate and have up to a 15-year amortization, although the loans can be paid in full prior to 15 years. Projects for which loans are obtained must enhance the quality of life in rural America, or create or retain jobs in rural areas. Each member requesting an economic development loan must match each individual loan request and certify that the loan is for economic development. To date, Central Power facilitated nine loans totaling $195,000 to three members under Basin Electric's Economic Development Program.

Member Energy Purchases

Member energy purchases of 1,403.5GWH in 2004 demonstrated a 2.8 percent increase from 2003, making it the 13th year of a 14 year run of increased sales. Concurrently, Central Power's peak demand of 254MW for January 2004 established a new all-time peak demand, exceeding the 243MW set in January of 2003. Looking ahead to the first month of 2005, Central Power set an all-time peak demand of 260MW.

In 2001, all six of Central Power's members extended/renewed their All-Requirements contracts with Central Power through 2039, coinciding with the term of Central Power's All Supplemental Requirements Contract with Basin Electric.

Rates

In 2004, Central Power and its members as a whole spent $36,054,409 on wholesale power purchases, including the $3,142,531 Basin Electric fixed charges. This amounts to 82 percent of Central Power's annual operating expense. Adding in Central Power's cost of operation including $557,194 in net wheeling payments to other utilities for use of their transmission facilities and accounting for system losses, Central Power's members paid an all inclusive average 31.74 mills per kWh in 2004, including approximately 2.2 mills per kWh for the Basin Electric fixed charge. This represents an increase of approximately 1.4% from 2003. Central Power's non-consolidated member, Capital Electric, paid 26.9 mills per kWh for their Central Power purchases, reflecting the fact that they purchase only base rate power and take transmission service from Central Power at only Goodrich, McClusky, and Polarware.



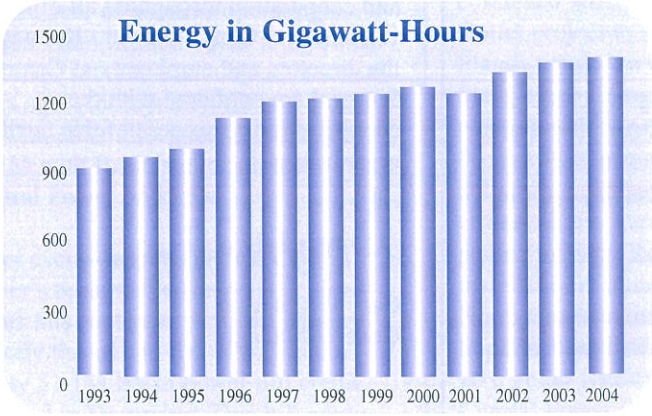
Dennis Peterson
Business Manager



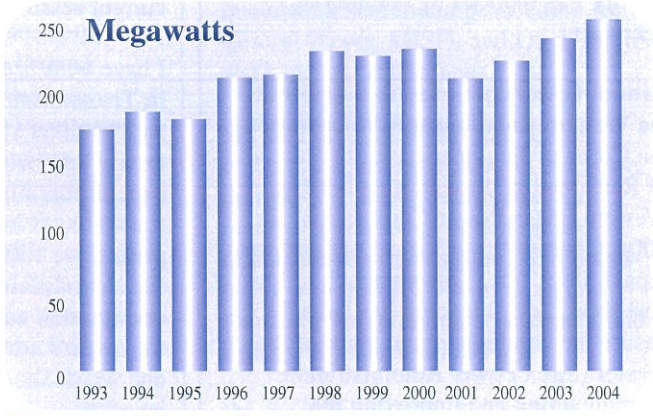
Mick Kossan, CPA
Controller

POWER SUPPLY

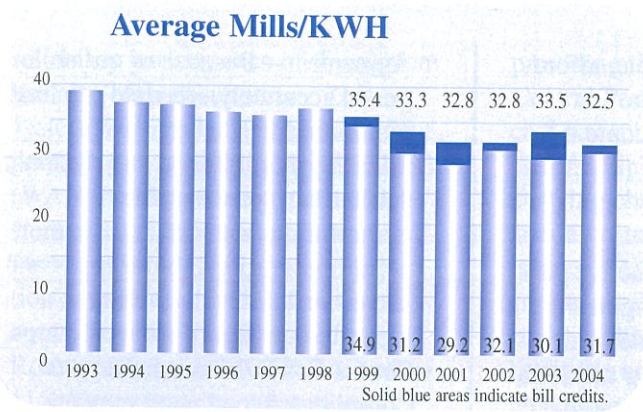
Central Power's two power supply resources include, the Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (Basin). Approximately 82 percent of Central Power's operating expenses are purchase power. Approximately 23.5 percent of Central Power's total



MEMBER LOAD GROWTH



MEMBER PEAK DEMAND



Member Rates

power supply is hydropower produced from the main-stem Missouri River system and marketed by WAPA. The balance, or 76.5 percent, of our power is supplied from Basin's coal-fired plants in North Dakota and Wyoming, along with some smaller amounts of peaking and wind power. Central Power's WAPA/Basin resource mix is 20/80 without the Minot Air Force Base WAPA allocation and respective load.

In 2004, Central Power paid an average of 24.5 mills per kWh for purchase power, up considerably from 22.5 mills per kWh in 2003.

Western Area Power Administration

The 23.5 percent hydropower resource is secured through a firm Contract Rate of Delivery (CROD) contract with the Western Area Power Administration. WAPA, having fulfilled a commitment to maintain stable rates for five years in 2003, implemented a 2 mill, 2 step and tiered energy rate increase in February and October of 2004. This increased Central Power's purchase power cost from WAPA from 14.4 mills per kWh to 16.2 mills per kWh in 2005.

Unfortunately, with the continued drought in the Missouri Main Stem Reservoir, WAPA has had to rely heavily on purchase power from other sources to meet its contractual obligations to its preference customers. Because of this and other factors, WAPA is planning for a 2-3 mill rate increase effective January 1, 2006.

In 1995, Central Power, with the help of Mid-West Electric, renewed its contract with WAPA to the year 2020. This renewal came with a mandatory four percent reduction in our allocation we experienced on January 1, 2001 and possibly up to a one percent reduction in the years 2006 and 2011.

Basin Electric Power Cooperative

The 76.5 percent Basin primarily coal-fired generation was purchased at 27.1 mills per kWh, including the fixed charge, under the Central/Basin supplemental All-Requirements Contract. This is also up considerably from 24.8 mills per kWh in 2003. However, without the extraordinary power bill credits, this purchase would have been at 28 mills per kWh as compared to a 2003 average rate of 29.1 mills per kWh. Basin completed another successful year of operation, returning $10M in power bill credits to its members, and continuing to furnish the power cost adjustments anticipated to continue through 2008.

Basin implemented significant rate changes in 2003 including the beginning of a six-year plan to reduce fixed charge component #2 from $45M to $15M. Additionally, for 2003, Basin reallocated the fixed charge from the April 1987 through March 1988 period to 1990 through 1994 and rolls it forward every year by two years until it catches up to the prior year, at which time it will be rolled forward one year at a time. For 2005, it will be based on the years 1994-1998. Also in 2003, Basin enacted a Class A Fixed Charge of $12,000 per year. Central Power's net fixed charge will decrease approximately $178,261 for 2005.

The 2003 and 2006 rate changes were implemented primarily to address the potential base load resource additions Basin is contemplating to meet member and potential non-member load growth. The member growth primarily includes coal bed methane, ag processing, ethanol plants, oil recovery, urban residential and small commercial, and the increase in Tri-State's fixed CROD from 100MW to 225MW. Potential non-member loads include the growth of two Minneapolis area Great River Energy member cooperatives, and various municipal agencies among others. Basin has been active in relatively small gas fired peaking resource additions including the following:



Control panel wiring.

Year in Review



Tom Meland, PE
Manager of Operations & Engineering

- 45MW of Wyoming combustion gas turbines commissioned in the fall of 2002
- A 40MW share of the joint 80MW Wisdom, Iowa gas turbine project with Cornbelt commissioned in March of 2004
- Four 6MW Northern Border Pipeline cogeneration projects totaling 24MW under development
- A 10MW diesel project arrangement with the City of Madison, South Dakota
- A planned 100MW combustion turbine this year for the east side in the Groton area.

In all, these completed or planned additions represent 219MW of peaking resources above the 104MW Spirit Mound station. Basin also completed the 200MW DC tie at Rapid City, joint with Black Hills Power & Light on a 130/70MW capacity split in 2003.

In the renewable category, in 2003, Basin added to the 2.6MW Minot and Chamberlain Prairie Winds projects with the purchase power agreement with FPL Energy for the output of the 40MW Edgeley and 40MW Hide County wind farms for 25 years.

In 1994, Central Power renewed its Basin contract through the year 2039. These steps secured reliable, affordable electric energy for the membership for years to come.

OPERATIONS AND ENGINEERING

It was another busy, productive year for the Operations and Engineering Department in planning, designing, operating, and maintaining the $73M investment the members have in Central Power. The following report will highlight these activities and what's ahead for 2005.

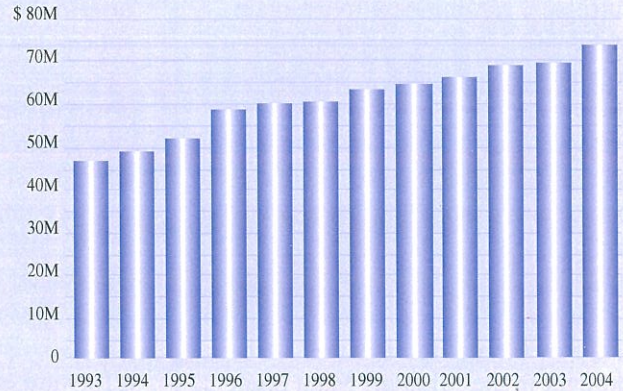
Load Monitoring Program

Accurate, reliable load data is an invaluable tool and it has experienced increasing importance in the past few years for several reasons. A recap on those reasons and some of the value derived from the system are as follows:

- The Otter Tail Power (OTP) Control Area Services and Operations Tariff (CASOT) – Basin reimbursed Central Power for approximately 80% of the Scheduling and Dispatch and Load Regulation charges and all energy imbalance which started in March, 2003. Total payments for 2004 made by Basin were over $155,000. A condition for this reimbursement is to accurately and reliably monitor all loads in a foreign control area.
- Basin Load Data Acquisition Incentive Credit – Central Power achieved $51,006 in credits in 2004 out of a possible total credit of $56,900.
- CPEC/MISO/OTP Energy Market Tariff Settlement Agreement – Because of our abilities to accurately schedule our load out of the MISO control area utilizing short interval and dynamic scheduling, we were able to demonstrate that MISO generation would not respond to our loads and therefore MISO was willing to agree to our "out of market" status.
- Central Power/Member Systems Consolidated load management– accurate load data allowed Central to effectively control 12 out of 12 months in 2004 for an estimated demand savings of $1.2 million.

Central Power completed the McLean area load monitoring system early in 2004 after gaining access to a tower required to reach the last remaining substation. The accuracy and reliability performance of this system were exceptional. Subsequent to completing the McLean area system, Central Power started on a similar system in the North Central area, having received a letter of request from North Central. This project involved North Central's headquarters, 19 distribution substations, two repeater sites, and one transmission substation. The new system was completed in mid-November in time for the monthly billing peak that occurred later in the month. The accuracy and

TOTAL UTILITY PLANT



reliability performance of this system has also been exceptional. This system delivered a side benefit of providing looped Wide Area Network (WAN) communications into North Central's headquarters and the Dunning 115kV transmission substation as well as allowing future communications options to the Rolette, Rugby, and OTP Bottineau 115kV transmission substations.



East Minot transformer addition.

Also during the year, Central Power replaced and upgraded its 1995 Advanced Control Systems (ACS) Load Management CPU and software system with a network server PC and an additional license of the Allen Bradley RSView software we already have for the PLC based SCADA. This $150,000 ACS system was replaced for about $15,000 along with programming time. The new system allows for recording every two minute reading from all 120 distribution substations. That's over 31,500,000 data points in a year. This has given Central Power the ability to accurately verify Otter Tail's CASOT charges and to identify inaccurate or unreliable load monitoring points that need to be addressed.

Central Power then developed a credit to compensate the other members for providing the required data based on Central Power's actual installation cost per substation in the McLean area multiplied times a monthly carrying charge rate of 1.33% (16% annually) to account for depreciation, interest, O&M, etc. The monthly credits available to the members are equal to this value, $183, multiplied times the number of substations for which the member provides monitored load data. They must meet requirements for accuracy which include no more than plus or minus 3% error on the Central Power peak and the Basin East Side peak. Central Power budgeted two thirds, or $150,000, of the possible maximum annual credits of $225,000 into the rates, based on historic member performance. In 2004, $161,400 was paid out in credits.

This credit will undergo a minor, if any, adjustment based on the weighted average cost of the North Central area system upon final closeout of that system.

Long Term Investments

Central Power was busy in 2004 with numerous significant system improvement projects to address load growth and reliability/power quality concerns. The most noteworthy of these projects included the following:

- **Ruthville/MAFB Area Upgrades** – Construction of this major project, which engineering and ROW were nearly complete in 2003, was kicked off in June and was complete by the end of October. It consisted of the following major components:
  - **Ruthville 115-41.6kV, 56MVA substation, with four circuit exits including** constructing a 115kV switching station and a 1 mile 115kV h-frame tap line. It also includes relocating 115kV metering and the upgrade of the Mallard-Dunning 115kV line relaying and control.
  - **10.6 miles 41.6kV line** - included two tie lines and a 1.3 mile single to double circuit conversion to the Minot Air Force Base South Substation.
  - **MAFB South Substation 41.6-12.5kV, 10/14MVA Transformer Addition**
  - **Five Supervisory Controlled Line Switch Operators**

- **Capacity Increases**
  - **East Minot** – Installed a second 41.6-12.5/7.2kV, 5/7MVA transformer, regulators, and metering and constructed an associated new high-side.
  - **Pipestem** – constructed an additional 12.5kV low side for more circuit exits and upgraded bus and regulators in anticipation of an upgrade to a 10/14MVA transformer in the future.
  - **Jamestown** – Upgraded the 12.5kV bus to accommodate WAPA's installation of a new 10/14MVA transformer. WAPA had been borrowing a 7.5/10.5MVA transformer from Central Power which upon its return was moved to Voltaire to replace two 3.75/5.25MVA units. One of these was then used at Rangely while the other was put into inventory as a spare.
  - **Rangely** – Upgraded to a 3.75/5.25MVA transformer from Voltaire.
  - **Lonetree** – Upgraded to three 833kVA single phase transformers from Rangely.

Major Repairs/Replacements
Along with system additions, Central Power also made numerous major repairs and replacements including:

- **Des Lacs-Ryder and Benno Corner Storm Job** – Replaced seven broken poles and straightened many more that resulted from a severe ice and wind storm in the Berthold area in early May. This $22k expense was nearly covered by FEMA.

- **Dunseith Transformer Replacement** – Replaced a 69-12.5/7.2kV, 5/7MVA transformer that failed early in the year.

- **Bowden-Robinson Reroute** – Central Power rerouted a one-half mile section of this 41.6kV line out of deep water. Ice out last spring caused trouble and likely would have again this year if it were not relocated.

- **Minot Prairie Winds Radar Substation Dedicated Transformer Installation** – Central Power installed, at Basin's expense, a dedicated substation transformer and line switch, high side, and low side structure at the Radar substation early in the summer. This transformer isolates the large inrush current drawn by the wind turbines when the large generator starts. This reduced the momentary voltage flicker experienced by the Verendrye consumers served from the Radar substation. This is a permanent fix which replicated the wind turbines being supplied from Central Power's mobile substation in the interim.

- **Substation Fence Expansion/Replacements**
  - Des Lacs fence expansion to meet code
  - Benedict OCB 41.6kV station fence expansion to meet code
  - Gackle OCB 41.6kV station fence replacement

- **Transmission Substation Battery Bank and/or Charger replacements:**
  - Hoving 115kV
  - Dunning 115kV
  - Harvey 230kV

- **ProGold 115kV Circuit Switcher Insulator Support Column Replacements** – Central Power worked with the manufacturer to replace the insulating support columns on one of the four 115kV circuit switchers installed at ProGold (and two at MinnDak) in 1996 to determine what is causing them to malfunction. This was at the manufacturer's expense.



Mounting cooling radiators on 115-41.6kV transformer.

ITA Transmission System Investments

Having completed a significant amount of major improvement projects under the Central Power/Otter Tail Power Integrated Transmission Agreement CASOT Settlement Agreement, there were no additions in 2004 by either party.

Central Power and Otter Tail included all of these settlement facilities in the Integrated Transmission System Agreement (ITA) for their respective facility credit toward system deficiency payment determination. Central Power had the majority of the new investments thereby significantly reducing our system deficiency payment.



ProGold 115kV circuit switcher replacement.

What's ahead?

The coming year will be full of construction projects, the highlights of which include the following:

- **Devils Lake Outlet** – Engineering and right-of-way are nearly complete and construction on the following components of this project will start this spring to be completed as close as possible to the North Dakota State Water Commissions June 1 requested service date:
  - Round Lake and Josephine 41.6-12.5/7.2kV, 5MVA Substations initially serving two 1,250hp pump motors at each pumping site. These stations will incorporate high side interrupters and an



Retiring 115kV CTs from Mallard Sub for installation in Dunning Sub.

associated relay protections and control system.

- 3.25 miles 41.6kV line - includes two 41.6kV taps on Otter Tail's Devils Lake to Barlow line and two tap lines, one 0.25 miles and the other 3.0 miles. These will be built to 115kV specifications along the original 115kV line route for future upgrade if and when the pumping stations expand.

- **Ellendale 41.6-12.5/7.2kV Substation Replacement** – Rebuild substation and transmission line tap adjacent to existing station.

- **Cando 12.5kV Foundation Replacements** – The foundations on the center of three low side bays at Cando have been jacking from frost heave and will be replaced this year.

- **Mallard Phase II Protective Relay and Control System Upgrade** – After completion of the new Ruthville source, Central Power will be upgrading the transformer protection and controls to modern microprocessor based relaying and PLC based control system to match with the 41.6kV line protection and control upgrade made several years ago and the 115kV line protection and control upgrade made this past year for the Ruthville project.

- **Neal Protective Relay Upgrade** – Central Power will replace the 115-41.6kV transformer and bus differential relays with new standardized microprocessor based units and replace 115kV transfer breaker relay to coordinate better with the recent Neal 12.5kV installation.

- **Transmission Station SCADA Replacements/Upgrades** – Central Power will replace/upgrade several old substation SCADA Remote Terminal Units (RTU's) with modern PLC's.

- **Quality of Service Monitoring** – Central Power is currently evaluating a cell-phone based quality of service monitoring system for possible installation in every distribution substation.

- **SPPC Secondary Oil Containment** – In response to the EPA Spill Prevention Control and Countermeasures regulation changes, Central Power has completed a comprehensive study to determine our requirements. Central Power will be working with its member systems on a first response plan implementation and will also be busy with required secondary oil containment projects in the coming year.

Central Power will also be evaluating several potential reliability and financially beneficial projects in the coming year in the Harvey, Bottineau, New Rockford, and Hoving areas.





Top: Installing low side bushings in 115-41.6kV transformer.

Left: Installing transformer bushings at Ruthville Sub.

Employees of Central Power Electric Cooperative, Inc.

Geared Up For "Transitions In Transmission"


Troy Aannerud • 1 yr.
Apprentice Lineman


Todd Ahmann, CCNA • 5 yrs.
Network Administrator


Sheldon Baglien • 15 yrs.
Electrician Foreman


Rick Baukol • 27 yrs.
Electrician Foreman


Chad Brown • 2 yrs.
Electrician

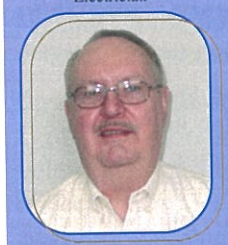

Kandace D'Ambrosio • 6 yrs.
Executive Assistant


Richard Duchsherer • 30 yrs.
Lineman


Phil Ehli • 31 yrs.
Electrician Foreman


Don Graf • 29 yrs.
Warehouseman


Lance Haugen • 26 yrs.
Lineman


Ken Holand • 31 yrs.
Project Supervisor

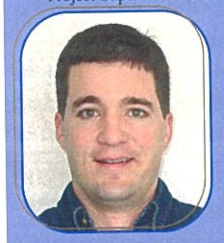

Brandon Hovda • 3 yrs.
Electrician


Tracy Hunter • 27 yrs.
Lineman


Lonnie Huseby • 36 yrs.
Operations Superintendent


Geri Jacob • 23 yrs.
Administrative Coordinator


Dave Klein • 26 yrs.
Accountant


Mick Kossan, CPA • 3 yrs.
Controller


Chuck McNicholas • 26 yrs.
Lineman


Tom Magnuson • 12 yrs.
Electrician


Randy Meyer • 12 yrs.
Utility Man


Tom Meland, PE • 10 yrs.
Operations/Engineering Manager


Leon Nieters • 19 yrs.
Lineman


Dennis Olson • 3 yrs.
Electrical Engineer


Jon Oster • 5 yrs.
CAD Technician


Dennis Peterson • 26 yrs.
Business Manager


Budd Redding • 25 yrs.
Equipment Operator


Fred Schmidt • 24 yrs.
Electrician


Mark Sherman, PE • 8 yrs.
Chief Engineer


Kevan Syverson • 27 yrs.
Lineman


Joan Tschannen • 7 yrs.
Secretary/Account Clerk

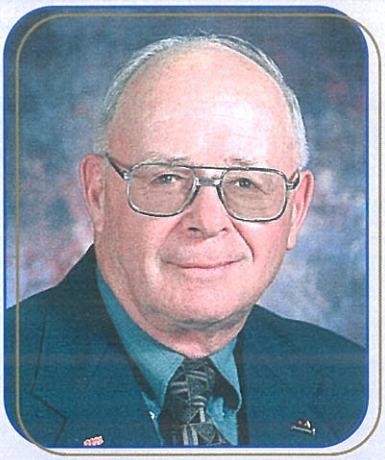

Bob Volk • 31 yrs.
Lineman Foreman


Kent Vollmer • 5 yrs.
Electrician


Gary Williamson • 38 yrs.
General Manager


Jerry Zainhofsky • 10 yrs.
Engineering Assistant

Treasurer's Report



Bernard Falkenstein
Secretary/Treasurer

The year 2004 operations resulted in a net margin of $6,110,653. Operating margins of $531,212, interest income for $75,481, Basin Electric Cooperative's capital credits for $5,601,920, and $39,142 other patronage dividends offset by $137,102 non-operating losses make up this net margin.

Central Power's member's energy purchases were up 2.8% from the prior year, Basin Electric issued a year end $1 million power bill credit which Central Power passed on entirely to the six member cooperative.

Central Power's total operating expense for 2004 amounted to $44,018,590. This was $22,163,269 more than for year 2003. Purchased power costs making up 82% of expenses, increased by $22,191,144. This purchased power increase was largely the result of the Basin wholesale power contact partial assignment ending in September 2003, and because of increased member energy purchases. Other expenses that increased include administrative and general for $80,313, depreciation for $81,355, interest expense for $10,700, and taxes for $118,264. Wheeling and transmission operation and maintenance expenses were $322,132 less than last year.

As in the past, the Board of Directors rotating Financial Review Committee meets each month to review the financial expenditures of the cooperative. This committee then reports to the full board.

The accounting system is kept in accordance with the uniform system of accounts prescribed by RUS and audited by a certified public accounting firm each year. The Eide Bailly LLP staff completed a 2004 records audit recently and found those documents accurate and complete.

Bernard Falkenstein

Bernard Falkenstein
Secretary/Treasurer

Mission Statement

Central Power Electric Cooperative, Inc. exists to assist its member systems to become the electric suppliers of choice.

To accomplish our mission, we will:

- ***Serve as a leading and unifying force among our membership.***
- ***Provide a reliable, economical and efficient electric supply.***
- ***Perform those functions that can most efficiently be provided as a united effort.***

In accomplishing its mission, Central Power will adhere to the ideals of consumer ownership and cooperative principles, where the member-consumer is placed first in determining policies, procedures and practices.

Finance and Accounting Report

Balance Sheet

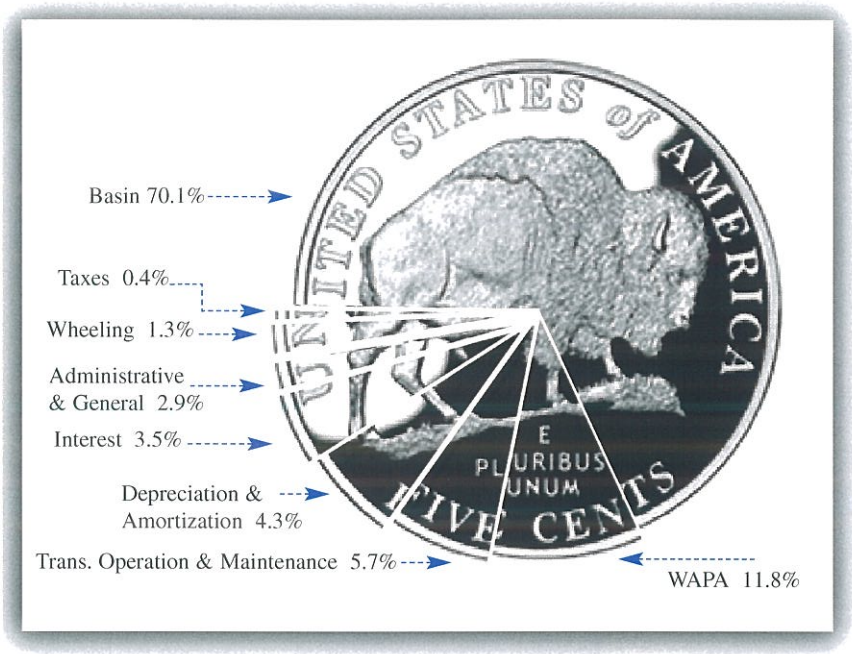
	2004	2003	Difference
ASSETS AND OTHER DEBITS			
UTILITY PLANT AT ORIGINAL COST			
Utility plant in service	$69,520,232	$68,980,853	$539,379
Construction work in progress	2,675,321	710,864	1,964,457
Accumulated provision for depreciation	(32,141,137)	(31,510,203)	($630,934)
Net utility plant	$40,054,416	$38,181,514	$1,872,902
INVESTMENTS IN ASSOCIATED ORGANIZATIONS	$15,940,840	$9,878,509	$6,062,331
OTHER ASSETS			
Cash and temporary investments	$589,415	$579,567	$9,848
Accounts receivable	4,746,582	6,270,129	(1,523,547)
Notes receivable	195,000	125,000	
Material & supplies	4,500,773	5,015,935	(515,162)
Prepaid expense	66,294	62,018	4,276
Other deferred debits	28,761	16,035	12,726
Total assets and other debits	**$66,122,081**	**$60,128,707**	**$5,993,374**
LIABILITIES AND OTHER CREDITS			
MEMBER EQUITY			
Member patronage equity	$19,891,418	$18,553,878	$1,337,540
Current year margins	6,110,653	2,384,424	3,726,229
Net member equity	26,002,071	20,938,302	5,063,769
LONG-TERM DEBT	35,121,262	35,047,720	73,542
CURRENT & ACCRUED LIABILITIES			
Notes payable	195,000	125,000	70,000
Accounts payable	4,163,360	3,407,721	755,639
Accrued taxes and liabilities	640,388	609,964	30,424
Total liabilities and other credits	**$66,122,081**	**$60,128,707**	**$5,993,374**

Statement of Revenue and Expenses

	2004	2003	Increase (Decrease)
REVENUES FROM ENERGY SALES	$44,549,802	$23,217,037	$21,332,765
COST OF ELECTRIC SERVICE			
PURCHASED POWER			
Central Power's WAPA Purchases	5,186,276	4,539,460	646,816
Central Power's Basin Purchases	30,868,133	9,323,805	21,544,328
** Member Direct Basin Fixed Charge (Memo Only)*	*0*	*2,178,447*	*($2,178,447)*
** Member Direct Basin Purchases (Memo Only)*	*0*	*19,840,560*	*(19,840,560)*
Total purchased power	**$36,054,409**	**$13,863,265**	**$22,191,144**
TRANSMISSION & DISTRIBUTION SYSTEM EXPENSE			
Wheeling	557,195	698,322	(141,127)
Operation	1,535,242	1,516,093	19,149
Maintenance	967,743	1,167,897	(200,154)
General plant maintenance	49,372	45,920	3,452
Consumer billing expense	35,965	36,894	(929)
Administrative and general	1,190,859	1,110,546	80,313
Depreciation	1,887,952	1,806,597	81,355
Taxes	186,085	67,821	118,264
Interest	1,539,867	1,529,167	10,700
Contributions & Other Deductions	13,901	12,799	1,102
Total cost of service	**$44,018,590**	**$21,855,321**	**$22,163,269**
Operating margins	$531,212	$1,361,716	($830,504)
Interest income	75,481	47,218	28,263
Other Income	(137,102)	109	(137,211)
G&T and other capital credits	5,641,062	976,181	4,664,881
Net patronage capital and margins	**$6,110,653**	**$2,385,224**	**$3,725,429**

*Member direct purchases from Basin are shown only for comparative purposes.

2004 Total Cost Of Service



Capital Credit Retirements

Years	Amount
1958-1990	$3,525,773
1991-1993	0
1994	430,391
1995-1997	0
1998	800,000
1999	460,000
2000	321,000
2002	981,066
2003	976,446
2004	1,046,885
Refunds To Date	$8,541,561

Statistics

Member Power Cost Statistics	2004	2003	2002	2001	2000	1999	1998
ENERGY PURCHASES (GWH)							
Capital Electric Cooperative	50.9	50.4	47.6	44.4	41.8	38.3	37.2
Dakota Valley Electric Cooperative	408.6	407.8	389.5	361.6	382.6	379.0	368.9
McLean Electric Cooperative	57.0	56.8	56.0	52.2	51.9	49.8	49.7
North Central Electric Cooperative	202.0	189.8	188.7	173.3	170.5	155.9	158.2
Northern Plains Electric Cooperative	333.0	312.8	324.1	298.6	306.2	299.0	305.2
Verendrye Electric Cooperative	281.1	276.7	271.4	262.0	252.2	241.4	231.6
VEC - Air Force Base	71.0	71.5	70.9	72.4	75.2	73.7	73.7
TOTAL PURCHASES (GWH)	**1,403.5**	**1,365.8**	**1,348.2**	**1,264.5**	**1,280.3**	**1,237.1**	**1,224.5**
TOTAL REVENUE FROM MEMBERS	**$44.5 M**	**$41.1 M**	**$43.3 M**	**$36.9 M**	**$40.0 M**	**$43.1 M**	**$43.6 M**
COST TO MEMBERS (Avg Mills/KWH)	**31.7**	**30.1**	**32.1**	**29.2**	**31.2**	**34.9**	**35.6**
(Average Mills Before Power Bill Credits)	32.5	33.5	32.8	32.8	33.3	35.4	
CENTRAL POWER STATISTICS							
PURCHASED POWER COSTS	$36.1 M	$31.7 M*#	$34.2 M*#	$27.9 M*#	$31.9 M*#	$34.3 M*#	$34.8 M*
Average mills/KWH total cost	24.7	22.5*#	24.5*#	21.4*#	24.2*#	26.8*#	27.5*
WAPA - Cost (mills/KWH)	16.2@	14.4@	13.7	13.5	13.4	13.4	13.3
Basin - Cost (mills/KWH)	27.1	24.8*#	27.7*#	24.0*#	27.8*#	31.3*#	32.4*
Percentage power cost of member revenue	80.9%	77.2%*#	78.8%*#	75.6%*#	80.1%*#	80.1%*#	81%*
DEBT							
Long-term debt	$35.1 M	$35.0 M	$33.9 M	$35.3 M	$36.6 M	$35.7 M	$36.3 M
Interest expense	$1.5 M	$1.5 M	$1.7 M	$1.8 M	$1.8 M	$1.8 M	$1.9 M
TOTAL MARGINS	**$6,110,653**	**$2,385,224**	**$937,408**	**$554,412**	**$370,555**	**$1,286,063**	**$2,174,450**
MEMBER EQUITY	**39.3%**	**34.8%**	**34.8%**	**34.6%**	**32.9%**	**33.1%**	**30.4%**

* Adjusted for Basin's direct billing to members for fixed charges: Yr. 2003 - $2,178,447; Yr. 2002 - $3,097,566; Yr. 2001 - $4,363,589; Yr. 2000 - $5,103,249; Yrs. 1999-1997 - $5,489,659.

Adjusted for Basin's direct billing to members for purchases under "Assignment": Yr. 2003 - $19,840,560; Yr. 2002 - $25,235,762; Yr. 2001 - $18,424,161; Yr. 2000 - $20,861,365; Yr. 1999 - $6,112,535.

@ WAPA's OTP wheeling credit was changed from a purchased power credit to a transmission operation credit. Yr. 2003 - $243,205, Yr. 2004 - $241,552.

Member Financial and Statistical Report

Financial & Statistical Report 2004

	Capital	Dakota Valley	McLean	North Central	Northern Plains	Verendrye	Total or Average
Statement of Operations							
Operating Revenue	$13,968,887	$19,691,554	$3,968,348	$12,165,792	$19,292,107	$19,450,236	$88,536,924
Operating Expenses	8,493,864	16,470,744	3,052,971	8,861,812	15,035,422	15,526,022	67,440,835
Depreciation, Taxes, Interest & Other	2,916,872	2,615,234	765,235	2,567,336	4,072,680	3,488,617	16,425,974
Total Cost of Electric Service	$11,410,736	$19,085,978	$3,818,206	$11,429,148	$19,108,102	$19,014,639	$83,866,809
Operating Margins	2,558,151	605,576	150,142	736,644	184,005	435,597	4,670,115
Non-Operating Margins	1,139,105	2,389,876	293,431	1,022,512	1,795,561	1,688,002	8,328,487
Total Margins	$3,697,256	$2,995,452	$443,573	$1,759,156	$1,979,566	$2,123,599	$12,998,602
Balance Sheet							
Assets							
Utility Plant	$56,996,283	$45,927,047	$15,180,338	$44,137,531	$78,008,396	$53,379,435	$293,629,030
Reserve for Depreciation	19,319,627	19,736,806	5,372,050	15,827,720	33,359,532	20,237,748	113,853,483
Net Utility Plant	$37,676,656	$26,190,241	$9,808,288	$28,309,811	$44,648,864	$33,141,687	$179,775,547
Other Property and Investments	6,983,485	15,787,402	2,855,483	7,119,458	16,758,300	9,485,735	58,989,863
Current and Accrued Assets	8,815,920	7,765,997	1,312,310	2,782,407	3,623,601	6,055,349	30,355,584
Deferred Debits	(2,913)	22,139	37,228	65,194	53,617	0	175,265
Total Assets	$53,473,148	$49,765,779	$14,013,309	$38,276,870	$65,084,382	$48,682,771	$269,296,259
Liabilities							
Margins and Equities	$28,711,314	$24,471,728	$5,178,309	$13,250,291	$20,927,576	$15,666,150	$108,205,368
Long-Term Debt	20,970,314	20,519,214	7,821,867	22,284,825	36,728,626	28,927,849	137,252,695
Current and Accrued Liabilities	2,909,243	4,148,908	948,386	2,587,701	4,490,189	4,026,678	19,111,105
Deferred Credits (Operating Reserves)	882,277	625,929	64,747	154,053	2,937,991	62,094	4,727,091
Total Liabilities	$53,473,148	$49,765,779	$14,013,309	$38,276,870	$65,084,382	$48,682,771	$269,296,259
Other Statistics							
Average number served:							
All Residential (Any Irrigation)	11,040	5,304	2,734	5,653	9,605	9,072	43,408
All Commercial	1,083	433	231	1,473	1,145	1,136	5,501
All Other (For Resale)	70	92	35	31	27	51	306
Total	12,193	5,829	3,000	7,157	10,777	10,259	49,215
KWH Sales							
All Residential (Any Irrigation)	112,124,762	99,455,302	33,569,711	98,188,760	187,727,536	121,754,652	652,820,723
All Commercial	83,047,271	298,456,701	14,727,057	85,762,587	117,314,025	129,954,463	729,262,104
All Other (For Resale)	956,463	593,897	5,195,291	3,620,832	6,599,540	85,147,472	102,113,495
Total	196,128,496	398,505,900	53,492,059	187,572,179	311,641,101	336,856,587	1,484,196,322
Revenues							
All Residential (Any Irrigation)	$8,487,617	$7,696,047	$2,767,628	$5,964,517	$12,438,882	$9,215,582	$46,570,273
All Commercial	5,375,744	11,880,787	832,692	5,861,987	6,304,678	7,235,199	37,491,087
All Other (For Resale)	99,365	56,641	339,427	252,333	345,766	2,933,976	4,027,508
Total	$13,962,726	$19,633,475	$3,939,747	$12,078,837	$19,089,326	$19,384,757	$88,088,868
Other Statistics							
Miles of Transmission Line	160						160
Central's Transmission Line							932
Miles of Distribution Line	2,311	4,713	1,721	3,159	6,869	4,298	23,071
Consumers Served per Distribution Mile	5.28	1.24	1.74	2.27	1.57	2.39	2.13
Revenue per kWh Sold	$0.0712	$0.0493	$0.0737	$0.0644	$0.0613	$0.0575	$0.0594
kWH Sold per Consumer	16,085	68,366	17,831	26,208	28,917	32,835	30,157
Annual Revenue per Consumer	$1,145	$3,368	$1,313	$1,688	$1,771	$1,890	$1,790
Annual Revenue per Distribution Line Mile	$6,042	$4,166	$2,289	$3,824	$2,779	$4,510	$3,818

"We wish to dedicate this page of the annual report to commemorate Gary Williamson's accomplishments and his 38 years of loyal service to Central Power and its member systems."

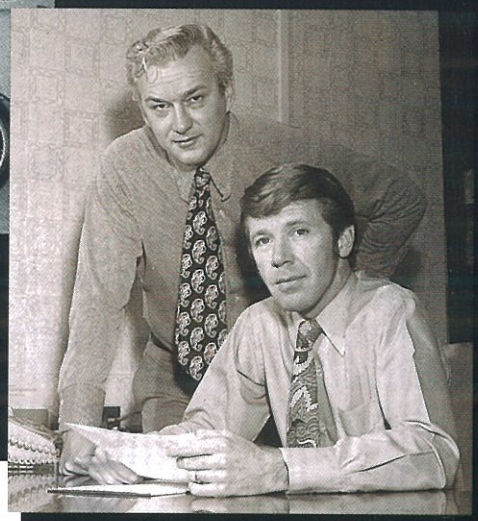
—The Central Power Board of Directors



Gary Williamson was hired as General Manager July 21, 1967.



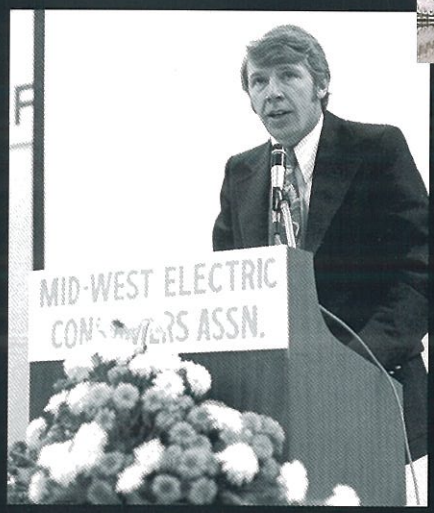
Gary at the wheel of North Dakota's first modern-day electric vehicle acquired by Central Power in March, 1970. The vehicle cruised at 25 miles per hour and traveled approximately 50 miles between battery charges.



Attorney Mark Purdy and Gary discuss the lawsuit against the REA over the Consolidation loan rate of 2% being changed to 5%. The lawsuit was successfully settled in 1977. Central went on to successfully resolve a "subtransmision -vs- bulk transmission" loan rate matter with REA in 1983.



At the 1974 annual meeting, Central Power celebrates the consolidation effected Jan. 1, 1973 after years of intensive review and study. The consolidation changed Central's role of a generation cooperative to one of a fully operating power supply and transmission cooperative.



Gary served as director on the Mid-West Electric Consumers Association Board for over 30 years.

1967-2005



1976 - "New Ways for New Days." Central initiated a pilot load management program. A new long-range engineering plan and a new power requirements survey were completed.



Gary and Mavis attend the 1993 Inaugural Ball.

"Transitions in Transmission"



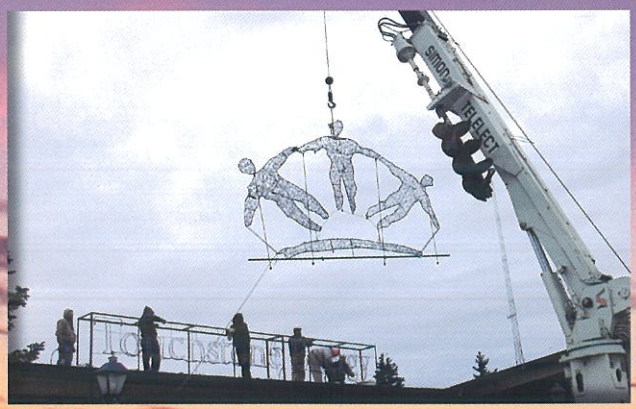
Touchstone Energy℠ is an alliance of local, consumer owned utilities around the country, committed to providing superior service at affordable rates to all customers, large and small.

"Building the Brand"

Accountability



Innovation





Commitment to Community

Integrity

Central Power Electric Cooperative, Inc.
525 20th Avenue Southwest • Minot, ND 58701
Phone (701) 852-4407 • E-mail: cpec@centralpwr.com

Exhibit 7

Exhibit 7a
Permit Table

Burleigh County Transmission Line
Permit Table

Permit/ Approval	Issuing Agency/ Entity	Status
Section 404 Clean Water Act - Nationwide Permits 33 and 12 (wetlands disturbance)	US Army Corps of Engineers	Applications to be filed once wetland impacts are calculated.
Article 69-06: Energy Conversion and Transmission Facility Siting Act (transmission line >115kV)	North Dakota Public Service Commission (PSC)	Application complete – PSC considering application.
Spill Prevention, Control and Countermeasure Plan (SPCC)	Environmental Protection Agency (EPA) and North Dakota Department of Health Environmental Health Section	Plan to be prepared prior to start of project operation.
North Dakota Permit for Construction Activity and North Dakota Water Pollution Control Act (NDR10-0000)	Environmental Protection Agency (EPA) and North Dakota Department of Health Environmental Health Section	Permit application to be filed prior to start of construction in accordance with State regulations.
National Historic Preservation Act and North Dakota State Regulations	North Dakota State Historic Preservation Office (SHPO)	Class I survey complete, Class III survey underway.
Native American Graves Protection and Repatriation Act	Standing Rock Sioux and Fort Berthold Tribes	Tribal consultation is ongoing.
Highway Crossing and Hauling Permits	North Dakota Department of Transportation	To be completed prior to construction.
Zoning, Conditional Use Approval	Local Townships	To be completed prior to construction.

Exhibit 7b
Railroad Permit

CANADIAN PACIFIC RAILWAY

Mr. D. C. Little – Sr. Tech.
Canadian Pacific Railway
501 Marquette Avenue South
Minneapolis, MN 55402

Date: 05-11-05
Telephone #: 701.709.0351

Dear Sir: The undersigned requests a permit at or near Wilton (City or Town) located in Burleigh County, ND State, NW ¼, NW ¼, Section 24, T 142N, R 80W.

1. Encroachment described as: (Check as many as description warrants)

Communications Line		Underground Crossings	
Power Lines	X	Depth of trenching on right of way.....	N/A
Longitudinal		Depth below base of rail.....	N/A
Underground		Distance, Bore pit to nearest rail.....	N/A
Overhead	X	(minimum of 12' is required)	
Fiber Optic Line	May be included	Method of installation.....	

2. Encroachment of Facility:

(a) Supporting Structure

Number of Poles	0
Number of Towers	0
Sq Ft Occupied	0
# of Guys or Anchors	0
Crossarm Overhang	0

(b) Open Wire Facility
Number of Wires..... 7 Total
Kind of Wire...Cpr_____ Iron_____ Other Alumn.Reinf. w/steel
Size of Wire.....7.95 mcm
Insulated_____ Bare X Stranded X Solid_____
If Communication, Carrier Trans Applied_____
If Power Line, Voltage 230 KVA 200,000 max

(c) Cable Facility:
Number of Cables N/A, Maximum Voltage _____
Size of Cables (Outside Diameter) 1._____ 2._____

3. Location and Clearances of Encroachment n/a Ft. (East/West) of _____
Center Line of Bridge # n/a and extending East/West _____ Ft. North/South _____ Ft.
Center Line of Culvert # n/a of Crossing _____
Other Fixed Point on R/W_____
NOTE: Do not use Mile Post location, and whenever possible, show location and clearances on print attached to the application or submit a suitable sketch.

Distance from each encroachment to Center Line of Main Track.....	Pole 75'.. to E, Pole 215' to W.
Distance from each encroachment to Center Line of adjacent Tracks.....	n/a
Distance between supporting structures.....300'...span.....	
Distance of anchor from associated pole.....	
Side clearance from RR Co's closest wire to nearest supporting structure.....	n/a
Clearance of Crossing over Railroad Wire.....	n/a
Clearance of Crossing over Rails.....	27' minimum
Length of span crossing tracks.....	300'
Angle of crossing with track (Degrees).....	90 degrees

4. Reason for Encroachment:

Is encroachment facility to serve other than RR Company or RR Tenant?.....	Yes
Is encroachment facility to exclusively serve Railroad Company?.....	No
Is encroachment facility to exclusively serve tenant of RR Company?.....	No

If this application is granted, the undersigned will sign and accept the standard lease or permit issued by said Railroad Company or withdraw the application within 30 days. It is further understood and agreed that in the event the undersigned fails to execute said lease or permit within thirty (30) days after presentation thereof, it shall be returned to the Railroad Company for cancellation and no right, privileges or immunities shall accrue to the undersigned by reason of the application and its acceptance by the Railroad Company.

All notices may be served on the undersigned by mail addressed to: Mr. Orin Shakerdge

FPL Energy Burleigh Co.Wind,LLC — 700 Universe Blvd.,JunoBeach,FL. 33408
(Show complete corporate name) (Address)

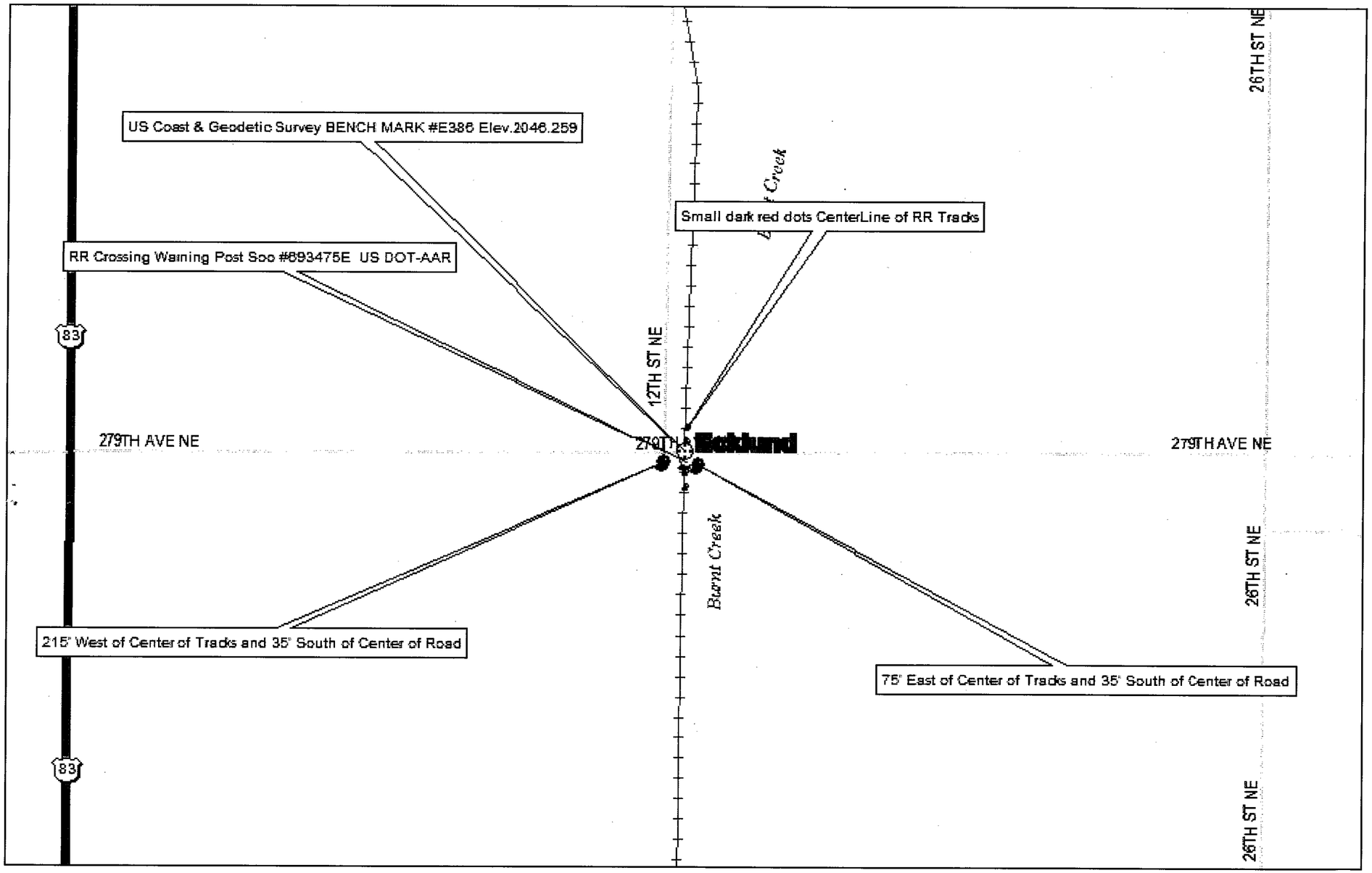
John C. Wergin (By)
JOHN C. WERGIN PROJECT COORDINATOR

Office:561.691.7171
Fax:561.691.7177
Revised 3/2/92

Burleigh Co., ND.
Ecklund Twp. 142N & R80W - Setion 24

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MN (0.0° W)

0 600 1200 1800 2400 3000 ft

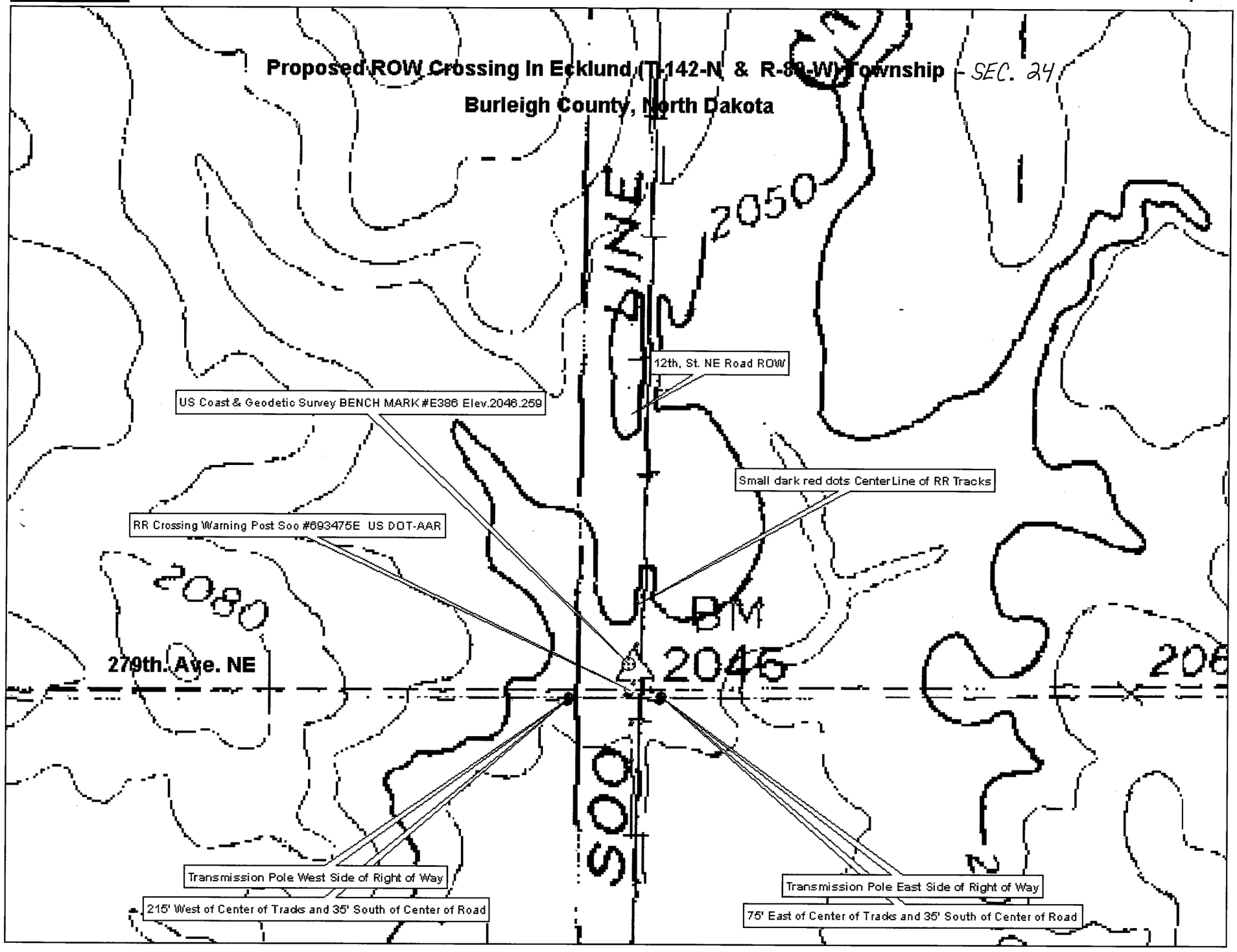
Data Zoom 13-3

DELORME

XMap® 4.5

Proposed ROW Crossing In Ecklund (T-142-N & R-80-W) Township - SEC. 24

Burleigh County, North Dakota



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MN (7.5° E)

0 160 320 480 640 800 ft

Data Zoom 15-0

Exhibit 7c
Utility Permit

North Dakota Department of Transportation

David A. Sprynczynatyk, P.E.
Director

John Hoeven
Governor

June 21, 2005

John Wergin
FPL Energy
PO Box 67
Edgeley, ND 58433

PROPOSED POWER LINE CROSSING OF US 83

We have reviewed your request for a 230 KV overhead power line crossing US 83 in reference point 108. The Department of Transportation approves of the proposed crossing and will issue the permit upon your request and submittal of necessary information and insurance forms.

The minimum clearance for the overhead crossing is 30 feet.

If you have any more questions please call 701-328-6950.

Renee Seibel

RENEE SEIBEL – ADMINISTRATIVE ASSISTANT III

UTILITY OCCUPANCY APPLICATION AND PERMIT

PRELIMINARY

North Dakota Department of Transportation, Design Division
SFN 7995 (Rev. 05-2004)

Document No. _____ (FOR STATE USE ONLY) Permit No. _____

APPLICANT INFORMATION

Owner of Facility: FPL ENERGY BURLEIGH Co. WIND, LLC	City: JUNO BEACH		State: FL	Zip Code: 33408
Mailing Address: 700 UNIVERSE BLVD. LAW/JB				Telephone Number
Owner's Agent: ORIN SHAKERDGE	City: JUNO BEACH	State: FL	Zip Code: 33408	Telephone Number: 561-691-7171
Owner's Contractor: CENTRAL POWER Co-op	City: MINOT		State: ND	Telephone Number: 701-852-4407

LOCATION NO. 1 (FOR STATE USE ONLY) Begin Ref. Point _____ End Ref. Point _____

Highway No. 83 ☐ Along or ☒ Across Lanes of traffic ☐ 2 ☒ 4

Direction ☐ N ☐ S ☑ E ☑ W Begin _____ feet from reference marker _____

Direction ☐ N ☐ S ☐ E ☐ W End _____ feet from reference marker _____

☐ N ☑ S ☐ E ☐ W from ~~city of~~ Intersection 279 AVE or 255 ~~miles~~ feet from junction ~~highway~~ 279 AVE

TYPE OF FACILITY (Complete appropriate spaces only.)

Description of Proposed Facility: 230 Kv. Overhead Powe Line

Size of Facility	Number of Cables: 4	Length of Down Guys: N/A
Pipeline Pressure: N/A	Size of Casing	Length of Casing
Location of Pole(s): E & W of ROW (MAP ATTACHED)	Location of Appurtenances	Location - Others

TERMS AND CONDITIONS: Installation and maintenance of said facilities on highway right of way shall be subject to the North Dakota Department of Transportation's (NDDOT's) "*A Policy for Accommodation of Utilities on State Highway Right of Way*", current edition, and the following terms and conditions, attached hereto and made a part hereof.

(A) Installation/maintenance of said facilities shall be done in a manner satisfactory to the NDDOT district engineer.
(B) Owner shall notify the NDDOT district engineer forty-eight (48) hours prior to installing, maintaining, relocating, or removing said facilities. All disturbed areas shall be restored to their original condition in a manner satisfactory to the NDDOT district engineer.
(C) The Risk Management Appendix, attached, is hereby incorporated and made a part of this agreement.
(D) Owner shall repair or replace highway structures and appurtenances, and any existing facilities located on, over, or under highway right of way, which may be damaged as a result of the installation and maintenance of said facilities on highway right of way.
(E) Owner shall promptly remove said facilities from highway right of way, or shall relocate or adjust said facilities, at its sole cost and expense when requested to do so by NDDOT.
(F) NDDOT specifically reserves the right to revoke, or change the terms and conditions of, this Permit with or without cause and upon notice to the Owner.
(G) The installation shall be completed on or before DECEMBER 15, 2005

June 20, 2005
DATE

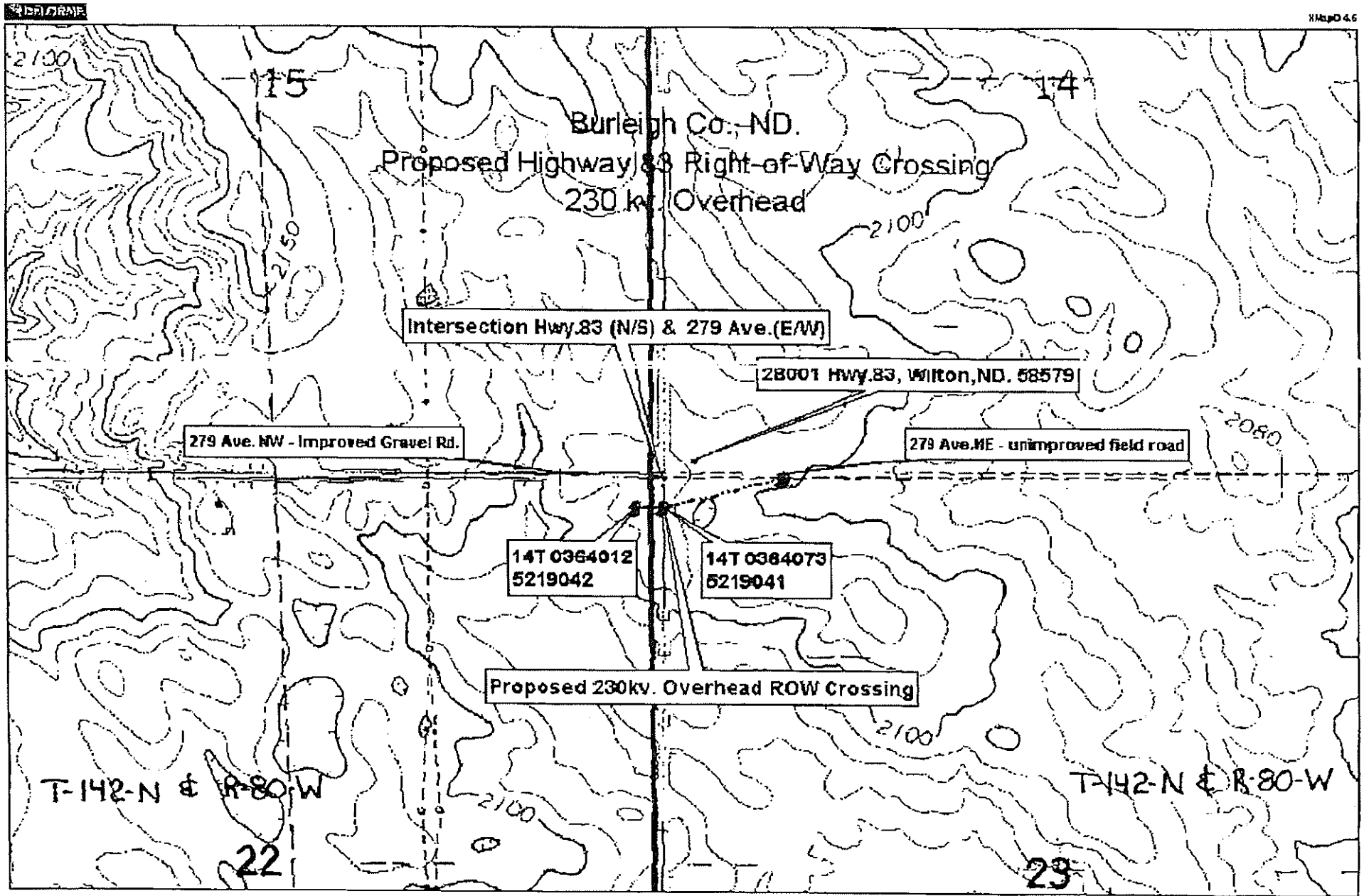
FPL ENERGY ND WIND
John C. Wergin, Project Coordinator
OWNER'S SIGNATURE / Representative
701-709-0351

The Owner is hereby granted permission to install and maintain the facilities applied for, as shown on the plans attached hereto and made a part hereof. Approved by NDDOT this _____ day of _____, 20____.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

_____
DISTRICT ENGINEER (TYPE OR PRINT)

_____
SIGNATURE



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MN (7.5° E)

Data Zoom 13-6