July 10, 2009

Dr. Burl A. Harr
Executive Secretary
Minnesota Public Utilities Commission
Suite 350, 121 7th Place East
Saint Paul, MN 55101-2198

Re: West Stevens Wind
Application for a Site Permit for a Large Wind Energy Conversion System
MPUC Docket No.
Org No.

Dear Dr. Harr,

West Stevens Wind, LLC (WSW)is pleased to transmit this Large Wind Energy Conversion System (LWECS) Site Permit Application for the West Stevens Wind (Project) in accordance with Minnesota Rules 7836.0500.

Given that construction on the Project must begin in the fall of 2009 in order for the turbines to placed in service by July 31, 2010 so they qualify for the federal production tax credit and meet a power sales agreement deadline, we would enormously appreciate an expeditious review and determination on this application and are willing to do anything we reasonably can to facilitate the process.

Please do not hesitate to call me with any questions regarding this application.

Sincerely,

Keith L Thorstad
West Stevens Wind LLC
P.O. Box 321
Chokio, MN 56221
(320) 324-7122

West Stevens Wind

Large Wind Energy Conversion System
Site Permit Application

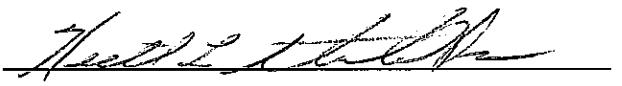
Docket No.

July 10, 2009

Prepared for:
West Stevens Wind, LLC
P.O. Box 321
Chokio, MN 56221
(320) 324-7122

Prepared by:
Mnioka Construction, LLC
P.O. Box 321
Chokio, MN 56221
(320) 324-7122

Applicant:
West Stevens Wind, LLC
P.O. Box 321
Chokio, MN 56221
(320) 324-7122

Project Name:	West Stevens Wind (Project)
Project Location:	Stevens County T 125 N, R 44 W, Sections 16, 17, 28, 29, 33 Everglade Township
Applicant:	West Stevens Wind, LLC (WSW)
Authorized Representative:	Mr. Keith L. Thorstad, President of Mnioka
Signature:	
Address:	P.O. Box 321, Chokio, Minnesota 56221
Phone:	(320) 324-7122
Fax:	(320) 324-7121
Email:	Mnioka@fedtel.net

Preparer of Application:	Mr. Roland H. Jurgens III
Signature:	
Company:	Mnioka Construction, LLC
Address:	P.O. Box 321, Chokio, Minnesota 56221
Phone:	(320) 324-7122
Fax:	(320) 324-7121
Email:	rjurgens@mnioka.com

Table of Contents

List of Tables

List of Figures

List of Appendices

Section 1
Introduction

West Stevens Wind, LLC (Applicant or WSW), a Minnesota limited liability company formed for the propose of developing the West Stevens Wind (Project), a 20 megawatt (MW) wind farm in Stevens County, Minnesota.

WSW is submitting this Site Permit Application (Application) to the Minnesota Public Utilities Commission (MPUC) for a site permit to construct and operate the Project. Mnioka Construction, LLC (Mnioka), a Minnesota limited liability company with offices in Chokio, Minnesota, is currently construction manager for the Project.

WSW has contacted Stevens County to inquire if the county wished to exercise its right to assume the responsibility of processing this application since the project falls below the 25 MW threshold. Stevens County declined the opportunity and requested that we proceed with State Permit per the Wind Sitting Act. Stevens County has issued a conditional use permit for the wind farm in the proposed project area. Individual building permits will be obtained for each turbine.

WSW proposes to construct the Project in Stevens County in west-central Minnesota, approximately 3 miles northwest of Chokio, Minnesota (see figure 2.1). The Project is contains approximately 2880 acres (4.5 square miles) which is agricultural land. The permit requests to construct a 20 MW wind farm, consisting of up to 13 turbines (depending on the turbine specifications), collection system, substation, connection transmission lines, permanent meteorological tower, and associated roads. No operations and maintenance facility is planned for this project. WSW anticipates using ten Suzlon S.88/2100 turbines, at 2 megawatts each, with a total output of approximately 20 megawatts. Two alternative designs are under consideration which would consist of up to (i) thirteen GE 1.5 MW sle turbines (ii) eight Clipper Liberty 2.5 MW turbines, with the total output not exceeding approximately 20 megawatts. Because the turbine has not been selected, WSW proposes to permit the Project for a range in turbine sizes from 1.5 to 2.5 MW. WSW requests the right to choose turbines from a different vendor but in a similar class to the Suzlon, GE, and Clipper, depending on turbine availability and scheduling.

WSW authorized representative is Keith Thorstad, President of Mnioka. Mr. Thorstad may be contacted by U.S. mail at P.O. Box 321, Chokio, Minnesota 56221, by e-mail at mnioka@fedtel.net, or by telephone at (320) 324-7122.

WSW application was prepared by Roland Jurgens III of Mnioka.

WSW will serve as the lead role in managing the ongoing operation of the Project, including monitoring, maintenance and repair activity. Much of this work will be performed under contract with operations and maintenance service providers. Mnioka, a Minnesota contracting and development company will be the construction manager for the Project. In that role Mnioka will be responsible for retaining the services of a general contractor and certain specialty subcontractors for the Project. This role may, however, be shared with a financial investor as discussed in Section 6.

WSW is owned by 8 local Minnesota entities. Each of the 8 entities will own one or two of the turbines, in addition to their respective participation in WSW. WSW will own, operate and maintain the Project throughout its life, which is anticipated to be at least 20-30 years. The local entities may admit a financial equity partner to facilitate financing of construction. The local entities are described in Table 1.1 below. Ricky P. Carstensen has a minor ownership interest a LWECS, Carstensen Wind, LLC. No other WSW owners have ownership or financial interests in another LWECS.

WSW will be the permittee if a site permit is issued, Permittees' mailing address is:

West Stevens Wind, LLC
P.O. Box 321
Chokio, Minnesota 56221

The Project is a Large Wind Energy Conversation System (LWECS), as defined in the Wind Siting Act, Minnesota Statutes 216F.01, and a Site Permit is required for the Project under Minnesota Statutes 216F.04.

The WSW Project is not a Large Electric Power Generating Plant (LEPGP) as defined by Minn. Stat 216.2421, subd. 2 and therefore does not require the issuance of a Certificate of Need by the Minnesota Public Utilities Commission (pursuant to Minn. Stat. 216B.243).

WSW is finalizing an agreement with a Minnesota utility for the sale of power generated by the Project. In that WSW will be qualified as a C-BED project, any Wind Generation Purchase Agreement will be filed with the Minnesota Public Utilities Commission.

WSW has entered into a Power Purchase Agreement (PPA) dated 11/30/2006, then first amended 5/1/2007, and second amended 11/19/2007, with Northern States Power Company, a Minnesota Corporation (NSP) d/b/a Xcel Energy. WSW received PPA "Notice of Approval of C-BED Project" on 2/1/2007 (Docket No. E-002/M-07-4).

Consistent with MPUC objectives, WSW is committed to optimizing the wind resources at the Project site, consistent with the energy objectives of the State of Minnesota and the local community. The Project has been designed to make the most efficient use of land and wind resources to maximize sustainable, environmentally beneficial energy supplies while minimizing the potential for environmental impacts. Project design decisions have been based on environmental, topographical features, available technology, and the nature of the prevailing wind resources. The environmental impacts of either the baseline or the alternative turbine layout are essentially similar. The final selection of equipment and layout will be made on the basis of maximizing the available wind resource at the most efficient cost. The alternative Project adds three turbine locations at the edge of the project area. The environmental setting is the same for either layout. The Project is community-based, developing renewable energy resources while enhancing local economic development.

The Projects 20 megawatts will help to satisfy the State of Minnesota's renewable energy objectives, as defined by the State's Renewable Portfolio Standard (RPS) which seeks to have 25% of the State's energy supplied from renewable sources by the year 2025.

WSW will proceed as a Community-Based Energy Development (C-BED) project pursuant to Minn. Stat. 216.1612, subd. 2 (f)(l). As a matter of State policy, the Legislature has identified C-BED projects as a priority for utilities that need to construct or purchase additional renewable energy generation capacity. C-BED projects such as the Project will help Minnesota-based utilities meet renewable energy objectives which have been established by the Legislature and the Governor (Minn. Stat. 216B.1691). The Stevens County Board has approved a resolution supporting the Project as a C-BED project. A copy of this resolution is provided in **Appendix A**. As a community-based project, there is strong local support for the Project. WSW is owned by 8 local Minnesota entities. The local entities are described in Table 1.1 below.

Table 1.1 – Project Owners

Owner	Contact Person	Street Address	City	State	Zip	email
MJC Wind, LLC	Douglas Christians	16837 600th Ave.	Chokio	MN	56221	kthorstad@fedteldirect.net
CAF Wind	Madella Thorstad	610 2nd St. West	Chokio	MN	56221	kthorstad@fedteldirect.net
BJC Wind	Bradley Carstensen	502 Center St.	Trosky	MN	56177	rickyp@iw.net
LKM Wind	Kelly Zimmerman	19939 600th Ave.	Chokio	MN	56221	zimmfarms@hotmail.com
MLB Wind	Mike Breuer	57248 State Hwy. 28	Alberta	MN	56207	msbreuer@fedtel.net
MT Wind	Keith Thorstad	610 2nd St. West	Chokio	MN	56221	kthorstad@fedteldirect.net
RC Wind	Ricky P. Carstensen	502 Center St.	Trosky	MN	56177	rickyp@iw.net
West Stevens Wind	Keith Thorstad	610 2nd St. West	Chokio	MN	56221	mnioka@fedtel.net

Section 2
Proposed Site

2.1 Identification of Project Area

The center of the Project site is located in Stevens County approximately three miles northwest of Chokio, MN. The turbine location nearest Chokio is more than one mile from the town, and the farthest turbine is about 4 miles from the town Land comprising the Project site is owned by local farmers. WSW controls the right to develop wind energy facilities on these properties through lease agreements. Land leases or agreements have been executed with property owners within the Project area. A limited number of agreements are currently being negotiated and are expected to be finalized within 120 days. Approximately 2,880 acres will be involved in the lease arrangements, inclusive of wind easements.

The proposed Project site requested for the Site Permit consists of parcels in the sections 16, 17, 28, 29, and 33 of Stevens County Township 125 North, Range 44 West (Everglade Township). For the alternative layout of 13 GE 1.5 MW sle turbines or 8 Clipper Liberty 2.5 MW turbines, the affected landowners and the affected tracts of land are the same as for the baseline layout. Turbine spacing is also the same, with the incremental turbines added or removed at the edges of the proposed array.

Figure 2-1 depicts the proposed Project site on a USGS topographic base map. A detailed Project layout and additional mapping are provided in **Appendix C**.

2.2 Wind Characteristics in Project Area

To obtain an accurate representation of the wind resource in the Project area, two wind assessment consulting firms (WindLogic, Inc. and EAPC Architects Engineers) each prepared a comprehensive analysis using the following data;

- Minnesota Department of Commerce state wind resource maps at 80 meters, developed in 2006 by WindLogics (St. Paul, MN).
- 11 year meteorological data from a Minnesota Department of Commerce meteorological mast near Alberta, MN.
- Data from nearby meteorological towers.
- Minnesota Department of Commerce wind rose data.

The wind studies were conducted using the baseline turbine layout of 10 Suzlon S.88/2100 turbines. The two wind studies agreed well, and compilation of data from one study is shown in **Table 2.1**. This table presents the capacity factor and energy production for each turbine site for the baseline proposal of 10, 2 MW turbines. The expected capacity factor for the alternative project of 13, GE 1.5 MW sle turbines or 8 Clipper Liberty 2.5 MW turbines is slightly better, due to higher expected efficiencies at the lower wind speeds. **Table 2.2** depicts the estimated mean annual wind speed around the Project in meters per second at 80 meters (262 feet). As shown in the table, the Project area has an average wind speed of 6.94 to 8.94 meters per second (15.5 to 20.0 miles per hour) at a turbine hub height of 80 meters (262 feet), which classifies the project as a Class 3 wind site.

Figure 2-1 – Project Site on USGS Topographic Base Map

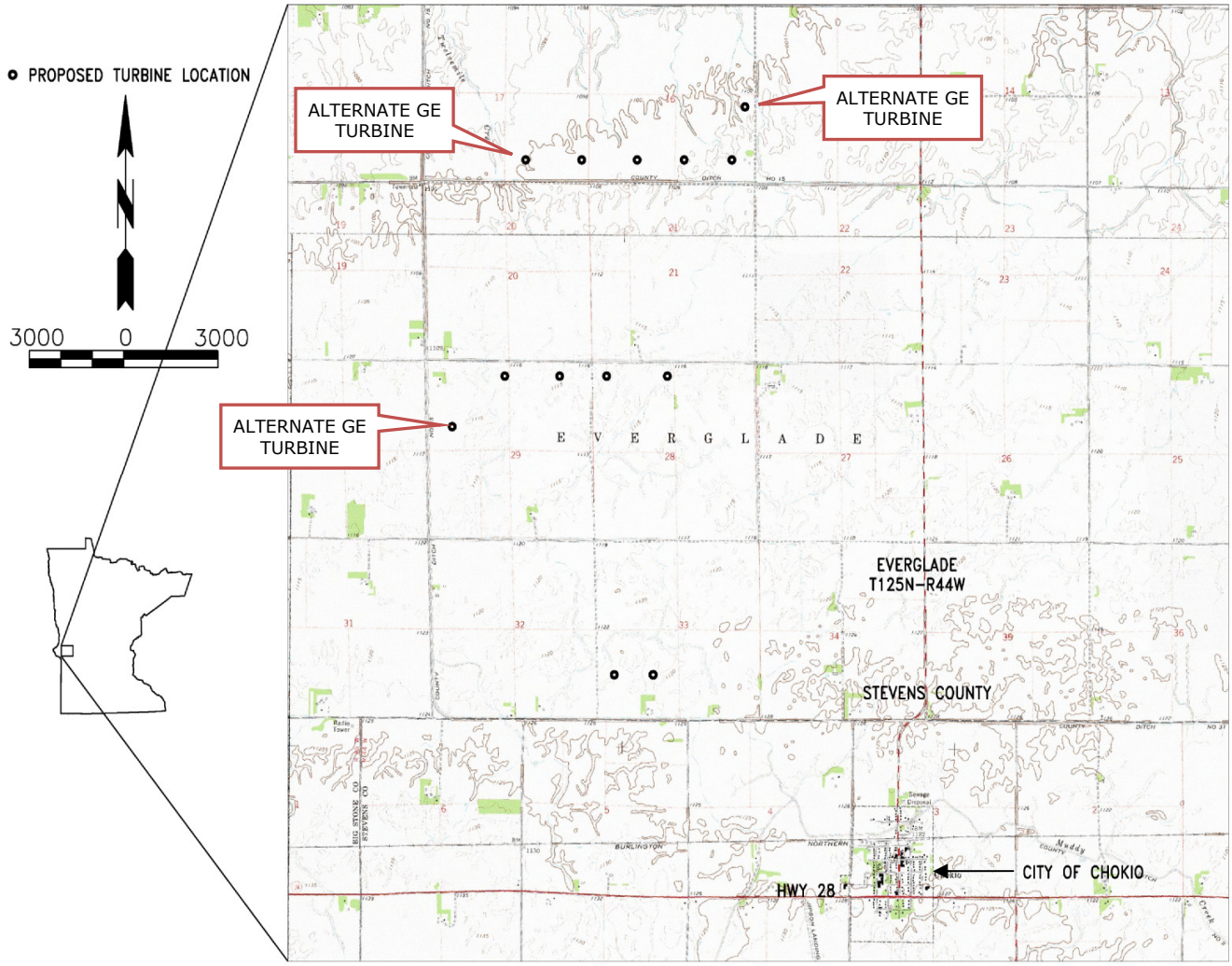


Table 2.1 – Energy Production Projections

Normalized Monthly and Annual Gross Energy Production and Capacity Factor – 80m Suzlon S.88 2 Mw		
Month	**Energy Production, MWh/mo**	**Capacity Factor**
January	**748**	**50%**
February	**649**	**48%**
March	**670**	**45%**
April	**708**	**49%**
May	**659**	**44%**
June	**518**	**36%**
July	**527**	**35%**
August	**533**	**36%**
September	**653**	**45%**
October	**813**	**55%**
November	**747**	**52%**
December	**726**	**49%**
Annual	**7951**	**45%**
Mean quantities normalized to long-term average. Data distributions representative of model year. Source: Windlogics, May 12, 2006, Wind Resource Analysis, Chokio, MN, for Minoka Construction		

Table 2.2 – Wind Resource Projections

Normalized Monthly and Annual Wind Speed Averages (m/s)	
Month	**Wind Speed, m/s**
January	**8.34**
February	**7.99**
March	**7.75**
April	**8.34**
May	**8.17**
June	**7.27**
July	**7.13**
August	**6.94**
September	**8.04**
October	**8.94**
November	**8.41**
December	**8.00**
Annual Average	**7.94**
Mean quantities normalized to long-term average. Data distributions representative of model year. Source: Windlogics, May 12, 2006, Wind Resource Analysis, Chokio, MN, for Minoka Construction	

2.2.1 Interannual Variation

The expected annual average wind speed at the site as determined by the Windlogics study is 7.94 m/s at an 80 meter hub height (17.8 miles/hour at 262 feet). Windlogics compared the model year analysis to long term average wind speeds near the project site. The analysis showed a high correlation (r=0.922) between the site-specific analysis and long term data near this location. The high correlation lends confidence to an assessment that the analyzed site-specific data will be typical of long term conditions, and that the annual average wind will be within 10% of projections.

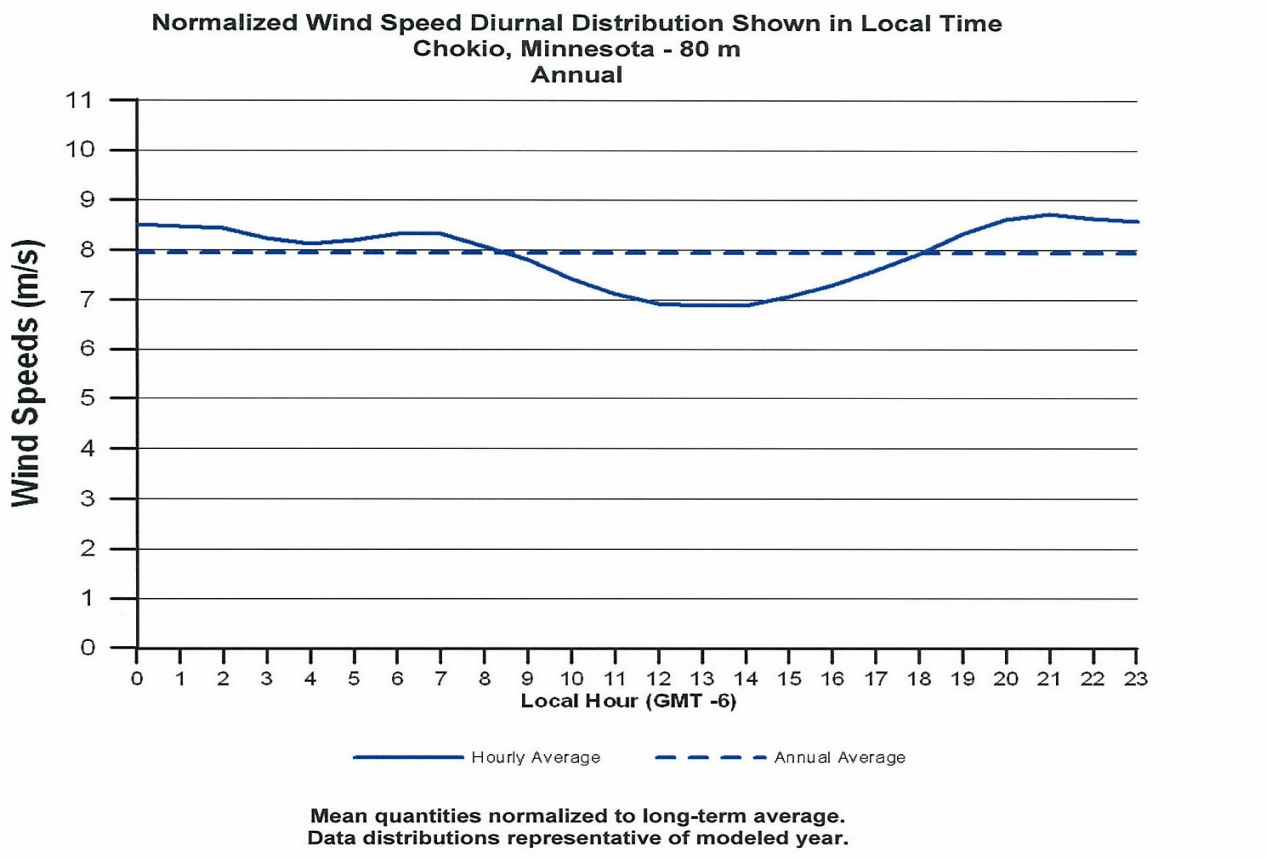
2.2.2 Seasonal Variation

The Wind Logics study shows the predicted monthly average wind speeds for the site at a hub height of 80 meters (262 feet). Wind speeds are highest in October at 8.94 m/s (20 miles per hour) and lowest in August at 6.94 m/s (15.6 miles per hour). Wind speeds are the highest in spring, fall and winter months. Winds decrease during the summer months.

2.2.3 Diurnal Conditions

At the project site the winds at turbine hub height (80 meters above ground) generally fall off in the morning as solar warming causes increased mixing of the winds at different levels above ground. After sunset, less mixing occurs and the winds at the hub height will again tend to increase. **Figure 2.2** below shows the annual average diurnal wind speeds. Monthly diurnal wind speed graphs for each month are also available.

Figure 2-2 – Annual Average Diurnal Wind Speeds



2.2.4 Atmospheric Stability

As is typical of rural sites, atmospheric stability data has not been compiled for this site as the inputs are normally not collected with onsite equipment. However, it is expected to be "moderately stable" in the general area, since stability conditions for the open and relatively flat terrain in the west-central Minnesota region do not vary significantly. Storm events can occur in the area, although their intensity, frequency, and duration are not unusual in comparison with typical Minnesota locations.. Other wind farms have been placed in similar environments.

2.2.5 Turbulence

In general, the turbulence intensity for this part of west-central Minnesota is reasonably anticipated to be low. The 10 minute turbulence intensity (standard deviation of wind speed divided by average wind speed) was measured as 0.13 at 50 meters at nearby Morris, Minnesota (WCROC Wind Resource Assessment, by Sustainable Automation for WCROC, Morris, MN, January 7, 2005).

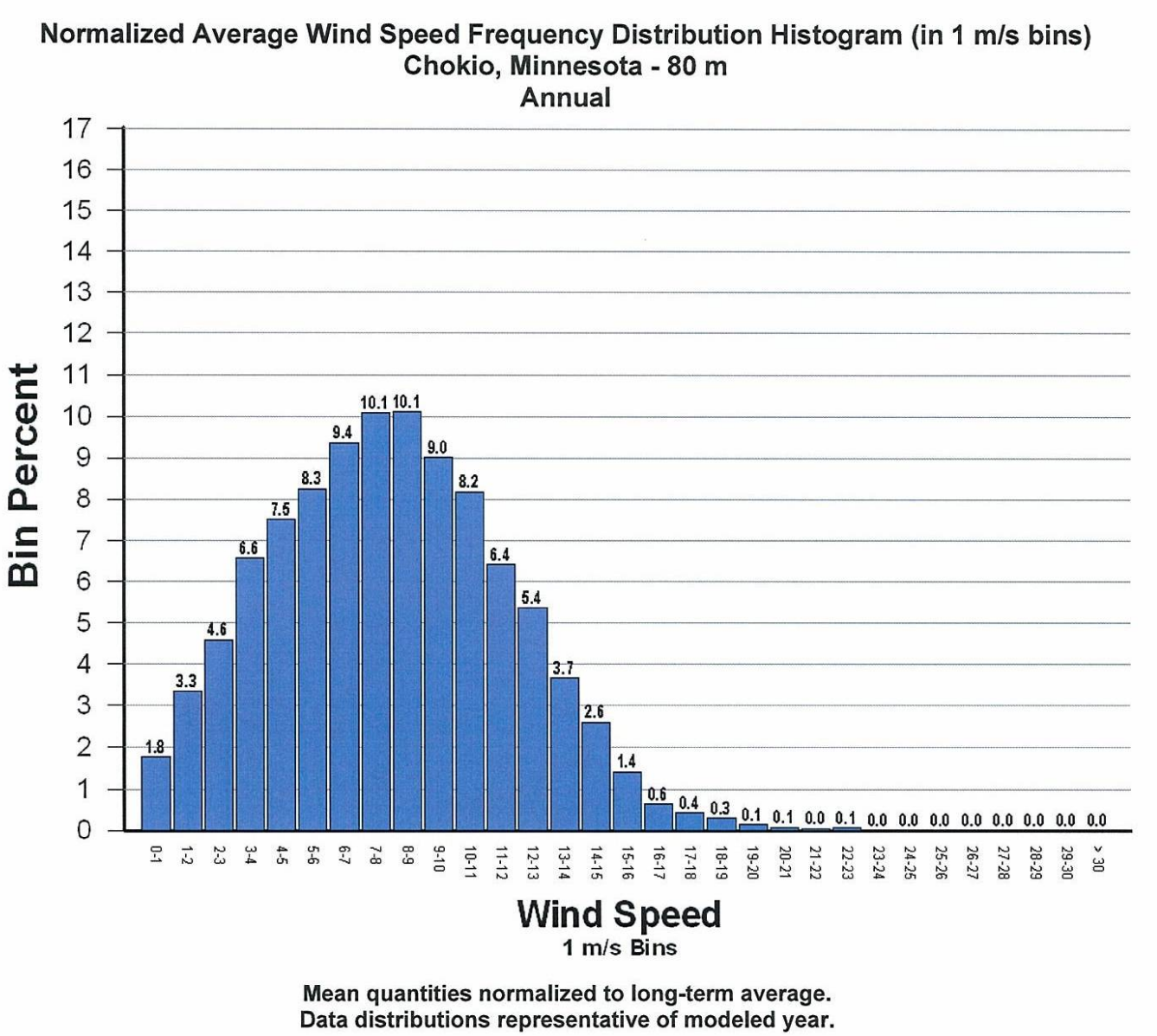
2.2.6 Extreme Wind Conditions

Extreme wind speeds may occur with winds from any of the prevailing directions and may happen during any season. The possibility of a tornado exists in the Project area, with the potential for winds of 200 miles per hour (89 m/s).

2.2.7 Speed Frequency Distribution

Figure 2-3 (next page), presents a frequency distribution of design wind speed for the Project site, based on nearby meteorological data.

Figure 2-3 – Wind Speed Frequency Distribution



2.2.8 Variation with Height

The Windlogics analysis indicates a wind shear exponent of 0.36 at the 70 to 80 meter interval.

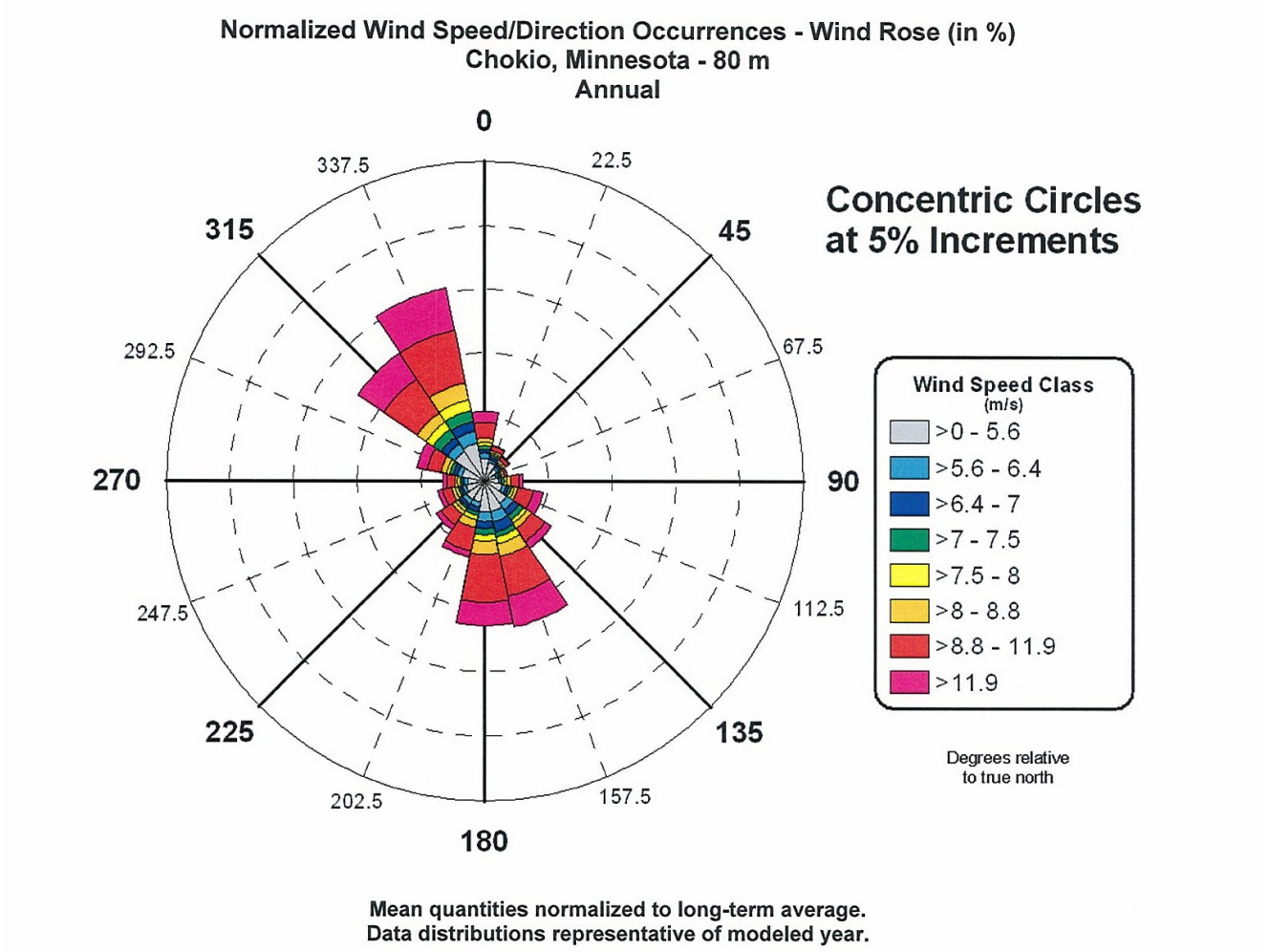
2.2.9 Spatial Wind Variation

Little wind variation exists in the Project area due to the land cover of the area which is mostly farmland and void of significant tree cover.

2.2.10 Wind Rose

Figure 2-4 depicts the directional wind rose for the Project.

Figure 2-4 - Directional Wind Rose



2.3 Other Meteorological Conditions at Proposed Site

2.3.1 Extreme Weather Conditions

Extreme weather conditions in this area are occasional and include hail, ice storms, lightening, tornados and severe thunderstorms. Due to the low frequency and short duration of these conditions, minimal effects are expected on turbine performance.

2.4 Location of Other Wind Turbines in General Area

There is one operating wind turbine in the region located at the University of Minnesota, Morris. This turbine is 15 miles east of the Project.

Section 3
Wind Rights

WSW has worked with local landowners to obtain wind leases and easement options/agreements sufficient to build this Project. The secured site lease and easement agreements will ensure access to the site for construction and operation of the Project, and prohibit landowners from any activities that might interfere with the implementation of the Project. The lease terms are for 30 years. A few additional wind leases and easement options/agreements are being obtained from property owners with land adjoining the Project. **Figure 3-1** depicts the lands for which wind leases and easement options/agreements have been obtained and are being obtained.

Figure 3-1 – Land and Wind Rights

Section 4
Project Design

4.1 Project Layout

Appendix C includes the detailed layout of the proposed wind farm. Turbines will be placed at a minimum spacing of five rotor diameters (RD) in the prevailing wind direction and three RDs in the non-prevailing wind direction. Proposed turbine locations are shown in **Appendix C**.

These locations are approximate, and are subject to change during final design. The proposed electrical collector system will be located on properties leased by WSW and will be placed underground. The WSW switches and metering equipment will be above-ground and located on land leased by WSW and adjacent to the existing Ottertail Power 41.6 KV line. The existing line lies on a west to east route along 220th Street.

4.2 Major Wind Turbine Components

The baseline project analyses used the Suzlon S.88/2100 2.0 MW turbine and assumed turbine mounting on a tower structure to provide an 80 meter hub height. The Suzlon machines will use an 80 meter rotor diameter. Power production and noise study information is presented in detail for this layout. Maps in this report show the baseline project proposed turbine locations as turbines 1 through 10.

Alternative additional sites 11 through 13 are also shown on the project drawings. These sites, for a total of 13 turbines, will be used if the alternate GE 1.5 MW sle turbines are chosen with capacity of 1.5 MW each. The GE machines will be mounted on towers for an 80 meter hub height, and will have an 77 meter rotor diameter. The GE machines will have a slightly higher total power production due to better efficiency and are quieter than the Suzlon which was modeled. The distance factor of the noise study is not significant when comparing the alternative machines because the alternative layout places the added machines at the opposite side of the project from the nearest dwellings.

Final turbine selection will be based on cost and availability of turbines at the time of construction. Turbines from Suzlon, GE, Clipper and Mitsubishi are being considered. Differences among turbines are not significant given the environmental setting and lack of immediately adjacent machines.

For any of the alternatives, the wind turbines will be mounted on single pedestal (not latticed) steel towers with the objective of an 80 meter hub height. The rotor diameter will be 80 to 83 meters, with fiberglass reinforced epoxy resin blades

A single free-standing 60-meter meteorological tower was installed at the Project site in 2007. This existing 60-meter meteorological tower will be replaced with a permanent 80-meter meteorological tower during construction of the Project.

Other system components will be designed and installed in accordance with the standards of high-voltage engineering practice to be compatible with the specified requirements of the interconnecting area transmission system as set forth by the local transmission owners, and the reliability and operating organizations.

4.3 Project Electrical System

The proposed turbine generators are each rated at a 690 volt (V) output. The electric output from each generator will be transformed to 34.5 kilovolt (kV) via pad-mounted 690 V/34.5 kV transformers at the base of each turbine.

Based on preliminary design plans, power at 34.5 kV will then be collected via an underground system of cables. Power cables and communication lines in lieu of a wireless communication system, will be buried in trenches within public road right-of-ways or in trenches adjacent to the proposed Project access roads on private property. The cable system will be routed to a nominally rated 600 ampere 34.5 kV switch at a switchyard to be constructed on the existing 41.6 KV Ottertail line from Chokio to Graceville.

The final electrical system design and interconnection details will be determined through discussions with the Midwest Independent System Operator (MISO) and Ottertail Energy. The Project will meet electrical design requirements, including power factor, voltage control, and grid system protection set forth by the MISO, Ottertail Electric, and the purchasing utilities.

4.4 Associated Facilities

The individual wind turbines will each have a gravel access road that allows access to the wind turbines year round. These roads are expected to be approximately 16 feet wide with a class-five gravel surface and geotextile fabric underlay.

WSW will continue to work with the landowners during micro-siting to reach agreements on the locations of the turbines, access roads, and collector system to minimize land use disruptions.

Foundations for the towers will include a pad foundation of approximately 2500 square feet to a depth of up to 10 feet. The specific foundation will be chosen based on soil borings conducted at each tower location. An 80 by 100 foot gravel pad will be installed at the base of each turbine to create a lay-down area for turbine components and facility construction of the turbine.

A 60-meter onsite meteorological tower has been installed at the Project and has been collecting data on site for 2 years. This meteorological tower will be replaced with a permanent 80-meter tower at the same location during Project construction.

Section 5
Environmental Analysis

5.1 Description of Environmental Setting

5.1.1 Project Site

The Project site consists of parcels in the following sections: Township 125 North, Range 44 West, Sections 16, 17, 28, 29, and 33, Everglade Township, Stevens County, Minnesota.

5.2 Human Settlement

5.2.1 Demographics/Homes

The Project site is located in west-central Minnesota in Stevens County near Chokio. Agricultural land use is predominant within the area, including agricultural-related businesses and dispersed rural residential use. The estimated population of the nearby City of Chokio is 415, down from the 443 of the 2000 census. In the rural area of proposed turbine construction, two residences are within one-half mile of a proposed turbine. One is about 2,600 feet from a turbine and the other is about 1,100 feet from a turbine.

The construction of the proposed Project will likely have positive impacts on area residents. Local service-related businesses will likely realize short-term benefits resulting from patronage by workers during the construction phases of the Project. The County and local government will benefit from the tax revenue generated by the Project. Additional direct local benefit will be derived from the lease monies paid to local farmers for the use of their properties and/or for wind rights. Since the Project will proceed as a C-BED project, it will also provide strong direct economic benefit to the 12 local Minnesota shareholders. Economic benefit to the State of Minnesota is anticipated through helping to satisfy the Minnesota RPS goals.

To minimize the potential for negative impacts on local citizens or homes, the minimum setbacks from residential receptors to turbines will be equal to, or greater than, those required to meet noise standards. No turbine will be closer than the minimum setbacks of 76 meters (250 feet) from roads.

5.2.2 Noise

Background noise levels in the Project area are expected to be typical of those in rural agricultural areas and are commonly in the low to mid-30 A-weighted decibel (dBA) range (equivalent to household level noise). These are relatively low background levels and are generally representative of the proposed site location. Higher levels exist near roads and other areas of regular human activity such as noise associated with agricultural practices, and activities occurring nearer to or within Chokio.

Wind turbines emit a perceptible sound when in motion. The level of this noise varies with the speed of the turbine and the distance of the noise receptor from the turbine. On relatively windy days, the turbines create more noise; however, the noise from the wind tends to override the turbine noise, especially as distance from the turbines increases. The turbines will comply with noise standards administered by the Minnesota Pollution and Control Agency. The impact to nearby residents and other potentially affected parties will be taken into consideration as part of the final siting of the turbines and design of appropriate setback distances.

Expected noise impacts for the project were calculated for the baseline 10 turbine layout by EAPC using WindPro software. The results of that calculation are included as an Appendix. In summary, expected maximum noise at any adjacent residence is less than 50 dBA. These calculations are based on turbine noise emissions provided by the Manufacturer, planning locations for turbines, and actual residence locations. The noise impacts of the alternative 13 turbine layout are expected to be less, because the alternative GE turbines produce less noise and none of the additional sites are nearer to an adjacent residence.

5.2.3 Visual Impacts

The landscape in the Project site is rural open cropland with relatively flat terrain. The area is characterized by agricultural fields and farmsteads. The most widely grown crops in the area are corn and soybeans. Farmsteads are often surrounded by trees planted as windbreaks.

Wind turbines will have a visual effect on the area. This impact is often based on a subjective response. Although a wind farm could be perceived as an intrusion to the rural landscape by introducing structures contrasting in form and color from the existing landscape, wind farms do possess a unique character all of their own. Any perceived visual impacts would likely lessen over time as residents adapt to the change in the visual setting. Population density is fairly low in this area so fewer non-participating neighbors occur adjacent to the proposed Project than would in a more densely populated area.

Other wind generation projects in southwest Minnesota have demonstrated that residents are becoming accustomed to this new form of "farming". Several wind energy projects have been built in southwestern Minnesota with similar agricultural settings, and residents perceive this renewable energy as having characteristics similar to current agricultural practices. In general, local residents and governments understand the visual impact of wind farms and are receptive to their occurrence. As noted in Section 1, Stevens County commissioners have supported WSW project development.

5.2.4 Public Services and Infrastructure

The Project is expected to have minimal effects on existing public services and infrastructure. Impacts may include the following:

- A production tax from the wind energy produced by the turbines will create local tax revenues.
- Short-term wear and tear on local roads will occur as a result of the transport of heavy equipment and other materials.
- The Project is expected to create new job opportunities within the local community, both during construction and operation.

The Project will not generate an increase in traffic volumes or daily human activity, except for a short period of time during construction and occasionally during operation and maintenance activities. Thus the rural and remote setting of the local vicinity would be left intact. The construction contractor will repair any road damage that may occur during the construction of the Project. The project owners have been in contact with the Stevens County road authorities, and have an agreement with the authorities as to road maintenance and reconstruction requirements.

5.2.5 Archaeological, Cultural, and Historic Resources

WSW has contacted the Minnesota State Historic Preservaton office for comment on the proposed project and potential impacts on cultural resources. A consulting archaeologist has also been retained to conduct an archaeological assessment of the proposed site. The consultant has completed the literature search portion of the investigation and has not identified any important historical resources in the project area. The consultant will

visit the site of each turbine before construction to make a final investigation for siginificant resources. The consultant's preliminary report is included as an Appendix. If any archaeological or historic sites are discovered in the proposed area, WSW and the assigned construction contractor will minimize impacts to archaeological and historic sites. An Unanticipated Discovery Plan will be prepared for use during the construction effort in order to provide direction to the construction workforce in the event resources are identified.

WSW also notified various Native American Tribes about the proposed development in conjunction with the Federal Grant Application process through the U.S. Department of Agriculture. A copy of the letter and a list of the tribes to whom it was sent are also included in **Appendix D**.

5.2.6 Recreational Resources

Recreational activities will not be significantly impacted by the Project as the turbines are located on agricultural lands. The impact to wild game/hunting should also not be significant because of the lack of cover for wildlife. The nearest state park recreational area is Big Stone Lake State Park, which is approximately twenty miles southwest of the site.

5.3 Effects on Public Health and Safety

5.3.1 Air Traffic

No public-use airports are located within the proposed Project area. The nearest public airport is the Morris Municipal Airport, located approximately 11 miles to the east. However, because there is agricultural land use within the Project site, aerial chemical application may occur periodically. Aerial application is typically done during the day by small aircraft. Some local aircraft applicators are familiar with application of chemicals in areas where wind turbines have been constructed. Turbines do not constitute any known impediment. In addition to the turbines, a single free-standing permanent 80 meter onsite meteorological tower will remain at the project site.

Notices of Proposed Construction (Form 7460-1) have been filed with the Federal Aviation Administration (FAA) and will be updated as needed during micro-siting. Turbines will be illuminated to meet FAA regulations.

5.3.2 Security

The proposed wind farm is located in a rural area with relatively low population. Construction and operation of the Project will have minimal impacts on the security and safety of the local population. During the Project construction period and during subsequent operation, it is expected that the Project will have no significant impact on the security and safety of the local communities and the surrounding area. Some additional risk for worker or public injury may exist during the construction phase, as it would for any large construction project. However, work plans and specifications would be prepared to address worker and community safety during Project construction.

5.3.3 Road Traffic

Other than short-term impacts, no significant permanent changes in road traffic patterns or volume are expected. Township and County officials will receive advance notice of the construction schedule, including the timing of the delivery of towers and turbines and arrival of the crane to erect Project equipment. Traffic control will comply with AASHTO standards and the requirements of local authorities.

Some wear and tear on roads is anticipated to occur as a result of the transport of heavy equipment and other materials. The Applicant will repair any road damage as required.

5.3.4 Microwave and EMF Assessments

The Project has undertaken an assessment of microwave beam pathways to ensure that the Project does not interfere with microwave paths that have been established for communications systems in the vicinity of the Project. The study, relevant portions of which are provided in **Appendix E**, indicate no interference is anticipated.

5.3.5 Hazardous Materials

During normal operation, all fluids will be contained within the wind turbine structure or the pad-mounted transformers. Leakage from the structures is not anticipated. Proper maintenance procedures and fluid-handling practices will be followed and a Spill Prevention and Countermeasure Control (SPCC) Plan will be prepared.

5.4 Effects on Land-based Economics

5.4.1 Land-Based Economics

The area in which the wind farm will be located consists of rural agricultural-based farming operations, mostly row crop. The proposed land loss due to roads and turbine sites during the time the wind farm is in operation will be approximately 15 to 20 acres. Final acreage is dependent on final site layout. It is anticipated that this Project will contribute to the local economy by way of lease payments, production tax payments, and the acquisition of local goods and services in support of the Project, as well as additional jobs. There are no known mineral or gravel deposits at the Project site or forest cover (other than minor hedgerows).

5.4.2 Tourism and Community Benefits

Tourism in Stevens County is mainly related to game, wildlife, and agriculture. It is possible that nearby Morris could experience an increase in tourism and community activities associated with the Project, as has proven to be true in other communities which host wind farms. As noted previously, the Project is proposed as a C-BED project which will provide revenues to the participating Minnesota shareholders. In addition, landowners who lease property to the Project will gain lease monies and neighbors with wind easements will benefit financially as well. Another benefit of the Project is the generation of a production tax assessed on the wind farm, which will go directly into the local government treasury and benefit the local community, e.g. fire, police, roads.

5.5 Effects on the Natural Environment

5.5.1 Topography

The majority of Stevens County is made up of low rolling hills and agricultural land, which was once prairie. The proposed Project has been sited in this area for its openness and ease of site access, as well as the presence of good wind resources. In addition to topography, land-use patterns were also considered in order to minimize or avoid any negative impacts.

No significant impacts on topography are anticipated. Access roads, wind turbine locations, and the proposed underground collector system will not require significant cut or fill. The collector system is proposed to be buried to minimize impact to existing farm operations and any drainage tile disruption will be corrected during construction. Topsoil will be segregated and replaced.

5.5.2 Soil

The soil in the project area consists primarily of a clay-loam. WSW will make every effort to minimize negative soil impacts. Topsoil will be segregated and replaced. Prior to construction a detailed sediment and erosion control plan will be developed. The plan will include Best Management Practices to minimize impacts to soil, water and vegetative resources.

WSW will be making very few changes to the landscape, and will not be significantly affecting drainage patterns. Any temporary disruption to drainage tiles that may occur will be corrected or re-routed at the expense of WSW. Plans for grading, construction and drainage of roads and turbine pads are being developed for construction, as well as a comprehensive plan to restore the site following completion of construction. Culverts will be provided in roadways to maintain existing drainage.

5.5.3 Geologic and Groundwater Resources

In the proposed Project area, the land is relatively flat, partially tiled farmland. The foundation designs cannot be completed for the wind turbines and transformers until geotechnical core sampling has been done at each turbine site. The construction of the foundations for each wind turbine and transformers will be done without affecting the local subsurface water resources.

The terrain affected by the Project has very little surface water. The project is on a ridge which drains to the north into the East Fork of Twelve mile Creek via County Ditch No 15. Impacts to geologic and groundwater resources are not anticipated. Water supply needs during construction and operation are limited and will be trucked to the site. Local and regional supplies of trucked water are adequate for construction and operational needs.

5.5.4 Surface Water and Floodplain Resources

The proposed Project will be built on relatively flat agricultural land and fields. Turbines will not be located in a designated flood plain. The Project will implement erosion, sediment and stormwater controls, including Best Management Practices, so as to minimize and control run-off during pre- and post-construction activities, as well as during decommissioning. Construction activities will not directly impact any defined drainage or surface water.

As proposed, construction of wind turbines, the electrical collection lines, and access roads will temporarily disturb approximately 10 to 20 acres of land; of this amount approximately 10 to 15 acres will be permanent. Access roads will be low-profile constructed so as not to impede natural drainage patterns.

If construction is required across drain tile, it will be conducted in a manner such that they will be not impacted or will be repaired during construction. Construction of collector lines that cross defined waterways will be conducted by boring beneath the waterway. The entire electrical collector system will be installed underground, and will not alter drainage patterns. Erosion control measures will be used throughout construction until disturbed areas have been re-vegetated.

5.5.5 Wetlands

WSW has made every effort to avoid locating any wind turbines in biologically sensitive areas such as wetlands. Construction of collector lines that cross defined waterways will be conducted by boring beneath the waterway. WSW will submit a 1026 form to the Stevens County Soil and Water Conservation District to further ensure that no wetlands will be affected by the Project. This form will be submitted to the County in accordance with the Minnesota Wetland Conservation Act and U.S. Natural Resource Conservation Service Farm Service Agency review. No permanent impacts to state public waters or state jurisdictional wetlands are anticipated. No permanent impacts to federal jurisdictional wetlands or Water of the U.S. are anticipated. Should final site layout require either temporary or permanent impacts to jurisdictional wetlands or waters, exceeding any allowable threshold and requiring either pre-construction notification or permit authority, such notification or permit authority will be obtained. Mapping in the Appendix shows the relationship between mapped wetlands and proposed construction. The proposed construction avoids all mapped wetlands. Field observation confirms good correlation between mapped and observed wetlands.

5.5.6 Vegetation

The proposed wind farm will be located on land which has been historically used for row crop production. There is no known native prairie lands located in the Project area. Tree coverage is minimal, primarily hedgerows. WSW does not foresee the removal of any trees, groves of trees or shelter belts in its present proposal. Any disturbed grasses in the right-of-ways will be re-seeded. WSW will have a revegetation agreement with the County for road rights of way and with individual landowners.

5.5.7 Wildlife

The wildlife found in the Project area is typical of that found in agriculture-related habitats. The resident species are representative of Minnesota game and non-game wildlife that are associated with roadside ditches, fencerows, wetlands, streams, and areas of native grasses and shrubs.

The turbine sites and roads are lacking in cover vegetation for wildlife, therefore it is anticipated that wind farm development will have minimal impact on any resident wildlife. Operation of the wind farm will not change the existing land use.

The following measures will be used to help avoid potential impacts to wildlife in the project area during construction and subsequent development and operation.

- Avoid disturbance of individual wetlands or drainage systems during construction of the Project.
- Protect existing trees and shrubs that are important to the wildlife present in the area.
  Follow Best Management Practices for water and soil conservation during construction and operation of the Project. Protect topsoil and minimize soil erosion. Practices may include containing excavated material, segregating topsoil, protecting exposed soil, and stabilizing restored material.
- Re-vegetate non-cropland and range areas with native species.
- Use silt zone fences and other measures as required by NPDES regulations.

Based on the history of existing wind power projects in the United States, an additional impact of concern to wildlife, and there effect on avian and bat populations.

Birds and bats have been documented to occasionally collide with wind turbines at other sites. This same potential exists in the current proposed wind farm. A comprehensive avian and bat study has been conducted for an area recognized as Buffalo Ridge in Minnesota. This report has been made available to the Minnesota Public Utilities Commission in past cases. Anticipated impacts associated with the Project would be similar to findings identified in the Buffalo Ridge report. The primary avian species that frequent the project area are migratory and song birds, none of which are known to be endangered species. Those species that occur in Stevens County that are considered endangered have not been known to frequently occur specifically within the Project area.

Based on correspondence with the U.S. Fish and Wildlife Service (USFWS) and the Minnesota DNR, there are no specific species of concern within the site area. WSW has provided Minnesota DNR and USFWS with properties descriptions and a USGS topographical map identifying four recently added parcels and requesting an assessment to determine that no other wildlife impacts will result at the Project site.

5.6 Rare and Unique Natural Features

The Endangered Species Act of 1973, as amended, requires protection of those species federally listed as threatened or endangered, as well as protection of habitat designated as critical to the recovery of those listed species. Projects that could potentially have an adverse effect on federally listed species or critical habitat require consultation with the USFWS. The Minnesota DNR's Natural Heritage Database maintains records of documented occurrences of state-listed species or other rare and unique species.

Though no species were known to occur at the site, WSW has communicated with both the USFWS and the Minnesota DNR since early phases of Project development to ensure that no impacts to threatened or endangered species would occur. The results of both the USFWS and DNR communications indicated that the no protected species are known or observed within the site area. The Minnesota DNR has requested that NPDES stormwater runoff permitting be obtained before construction, which WSW will adhere to. In addition, WSW has made the decision to bore beneath stream crossings (for placement of underground electric collector lines) to further ensure that there will be no adverse effects on the environment.

[Correspondence with Responsible Agencies]

The applicant has prepared and transmitted letters to the State Historic Preservation Office, Tribal Councils, the Minnesota Department of Natural Resources, and the U.S. Fish and Wildlife Service to request agency review of the Project site. Correspondence and agency responses are presented in **Appendices D, F, and G** to this application.

Correspondence include:

- Letter to State Historic Preservation Office 03/17/09 Response Received: 04/02/09
  Stemper Literature Report Response Received: 05/10/09
  All State Historic Preservation Correspondence Located in Appendix D

- Notice Letter to Tribal Councils 03/17/09 Response Received: 03/31/09
  Follow-up Letter to Tribal Councils 04/17/09 Response Received: None
  All Tribal Council Correspondence Located in Appendix D

- Letter to Minnesota DNR 03/17/09 Response Received: 04/13/09
  Follow-up Letter to DNR 05/22/09 Response Received: 06/29/09
  All Minnesota DNR Correspondence Located in Appendix F

- Letter to U.S. Fish and Wildlife Service 03/17/09 Response Received: None
  Follow-up Letter to USFWS None Response Received: None
  All U.S. Fish and Wildlife Service Correspondence Located in Appendix G

Section 6
Project Construction

A schedule of preconstruction, construction, and post-construction activities involved in the development of a wind energy project would list hundreds of individual tasks. In order to efficiently work through these processes, WSW will work with a construction contractor. WSW, in cooperation with the selected financing entity, will have an experienced team in place to perform all of the necessary functions that are required to bring the Project into commercial operation. The following is an overview of the manner and sequence in which the Project and associated facilities will be constructed.

Turbines are currently available for the Project through the Project's preferred equity financing partner.

A qualified electrical contractor will assist with the procurement of transformers, design the underground transmission systems, and design the substation for interconnection to the transmission grid system. A qualified electrical contractor will be involved in the installation of the underground transmission systems and the substation for interconnection of the transmission grid.

The soil qualification work for the Project will be contracted through a Minnesota state-licensed engineering firm. This firm will coordinate the soil borings necessary for the Project and design work for the foundations and roads. Boring will be required for some of the underground transmission lines as well, and engineering will also be responsible for concrete testing during onsite foundation inspection during construction. Local contractors in the Minnesota area will be solicited for the road construction process. Access road design will be based on previous road experience from projects in this area and will accommodate a road matting and local aggregate combination with an overall capacity rating exceeding nine tons. Rather than provide for more comprehensive design features in the preconstruction phase, the constructed roads will be survey as-built to eliminate the doubling of costs for this phase.

As previously stated, land surveys will be completed prior to construction of the Project. This will assist contractors during the construction phase, and will be amended after construction to more accurately define the final Project as built.

Independent contractors will be solicited for the erection of the turbines onsite. These companies may include foundation construction, in-tower wiring, erection of the tower and nacelle, and commissioning of the turbine, in their scope of work for the project. A Minnesota-based contractor has been selected and a scope of work is nearly final.

Commissioning will be within the scope of work of the turbine manufacturer. This team will work closely with the erector of the turbines and to ensure that the turbines achieve commercial operation in a timely basis.

6.1 Construction Management

Construction management will be handled using the prior experience of the construction contractor and the investors in the Project. Daily site inspection services can be provided by WSW as requested by investors. Other contractors may be hired for particular areas of expertise, such as civil work, electrical work, and turbine erection. The services of local contractors to assist in Project construction will be secured where possible.

WSW and the investors will also oversee the installation of roads, concrete foundations, towers, turbines and blades, electrical infrastructure, as well as the coordination of material receipt, inventory, and distribution.

The construction team will be onsite to handle materials purchasing, construction, and quality control. An onsite project manager will coordinate all aspects of the work, including ongoing communication with local officials, citizens groups, and landowners.

6.2 Civil Work

Completion of the Project will require various types of civil work and physical improvements to the land. This civil work may include improvement of existing roads, construction of access roads adjacent to the wind turbines; clearing and grading of land, trenching for, and installation of underground electric cables and communication wires, and foundation work. Improvements to existing access roads will typically consist of re-grading and filling of the gravel surface to allow access even in inclement weather. Access roads will be built adjacent to the towers, allowing access both during and after construction. The final roads will be approximately 16 feet wide with a Class-5 gravel surface and fabric underlay. During construction only, those roads will be temporarily widened by an additional 16 feet of compacted soil, covered with geotextile/gravel, if required, to support the size and weight of heavy-duty cranes and turbine delivery vehicles. The final road design will be dependent on geotechnical information obtained during the engineering phase.

During the construction phase, several types of light, medium, and heavy-duty construction vehicles will travel to and from the site, as well as private vehicles used by the construction personnel. The busiest traffic will occur when the majority of the foundation and tower assembly is taking place.

Temporary road radii at intersections will be required during the construction phase to allow the over-length and over-width loads to navigate the intersections. When construction is completed these intersections will be returned to pre-construction radiuses and road ditches restored.

The specific turbine placement will determine the amount of roadway that will be constructed for this Project. These roads will be sited in consultation with local landowners and completed in accordance with specified design requirements, and will be located to facilitate both construction (cranes) and continued operation and maintenance. Siting roads in areas with unstable soil will be avoided wherever possible. Roads may include appropriate drainage and culverts while still allowing for the crossing of farm equipment. The roads will consist of graded soil, overlain with geotextile and covered with gravel. Once construction is completed, the roads will be re-graded, filled, and dressed as needed. Local requirements will be followed wherever access roads join state or local roadways.

Underground concrete foundations will be constructed to support the steel tubular towers of the turbines. Geotechnical surveys, turbine tower load specifications, and cost considerations will dictate final design parameters of the foundations.

6.3 Commissioning

The Project will be commissioned after completion of the construction and testing phases. Inspection and testing will occur for each component of the wind turbines, as well as the communication system, meteorological system, the low- and high-voltage collector system, and the SCADA system. These commissioning procedures ensure that the generation units are performing to guaranteed levels and that the Project meets electrical system requirements. The turbine manufacturer will provide technical engineers to assist in the commissioning process. The engineers from the turbine manufacturer will continue until the turbine is capable of more than 72 hours of continuous operation.

Section 7
Project Operations and Maintenance

7.1 Project Operations

WSW will enter into a contractual agreement with the turbine vendor to provide service and maintenance for the Project at least through the warranty period given by the turbine vendor. Thereafter, WSW will contract with a qualified contractor for service and maintenance for the Project. The service and maintenance activities will be performed by qualified technicians, trained specifically on the applicable wind turbines. WSW may choose to use a qualified operations manager. A determination has not been made at this time if this will be performed in-house or under a separate contract. The operations manager will oversee the maintenance and service program, ensure utility interconnection and respond to turbine outages. The operations manager will be responsible for all management, administration, service and maintenance activities. After the initial warranty period, West Stevens Wind (WSW), LLC and the turbine vendor may elect to take over service and maintenance duties.

No onsite operations and maintenance building is anticipated as a component of the Project. Leased off-site storage may be used. Spare parts in relation to the electrical infrastructure will be maintained based on similar historic project demands. The Project staff will be complemented with the necessary service vehicles—light trucks, boom trucks, cranes, etc.—to ensure timely response. Turbine maintenance will be accomplished as an ongoing cyclical function during the life of the Project, so as to minimize downtime. Transformer maintenance will be accomplished on an annual basis and will be scheduled and performed during non- or low-wind periods.

Onsite service and maintenance activities include routine inspections, regular preventive maintenance on all turbines and related facilities, and unscheduled maintenance and repair. Routine minor maintenance on the wind turbines, electrical power system, and communications system may include maintenance of oil levels and filters, tightening of bolts, minor electrical repairs, upgrading of computer software, and system testing. Civil maintenance includes maintaining Project structures, access roads, drainage systems, and other facilities. The third party may also provide labor, services, consumables, and parts required to perform scheduled and unscheduled major maintenance on the wind farm, including repairs and replacement of parts and removal of failed parts.

Other maintenance activities include management of lubricants, solvents, and other hazardous materials; the hiring, training, and supervision of personnel; and the implementation of appropriate security methods. An operations and maintenance building may be leased offsite to house consumables, spare parts, and some control functions.

7.2 Maintenance Schedule

During turbine commissioning and initial commercial operation, the Project will be inspected onsite daily to see that it is operating within expected parameters. Following the "break-in" period, the turbines will be remotely monitored on a daily basis with planned service and maintenance at the following anticipated intervals:

1. ***First service inspection.*** The first service inspection will take place one to three months after the turbines have been commissioned. Activities include tightening bolts, greasing bearings, and filtering gear oil.

2. ***Semiannual service inspection.*** Routine service inspections commence six months after the first inspection. The semiannual inspection consists of lubrication and a safety test of the turbine.

3. ***Annual service inspection.*** The annual service inspection consists of a semiannual inspection plus a full component check.

4. ***Two-year service inspection.*** The two-year service inspection consists of the annual inspection, plus the checking and tightening of terminal connectors.

5. ***Five-year service inspection.*** The five-year inspection consists of the annual inspection, an extensive inspection of the wind braking system, the checking and testing of oil and grease, a balance check and the tightening of terminal connectors.

Section 8
Costs

Specific cost information is confidential to the business of WSW. Final costs for the Project have not yet been confirmed. Based on previous experience, WSW estimates that the installed capital cost for wind farm design and construction will be approximately $1,900.00 per kilowatt. Operating costs are expected to be about two percent of the capital costs per year.

The actual cost of the project will be finalized after final design, procurement, construction, and contractual arrangements are complete. The project has been selected by and is in the final stages of renegotiating Power Purchase Agreements with a creditworthy Minnesota-based utility with wind energy experience. The existing Power Purchase Agreement is for 10 turbines totalling 20 MW which was executed in March of 2007. The terms of the Agreement are being revisited due to the impact of inflation of project costs and revision of turbine locations and capacities since the Agreement was executed.

Section 9
Project Schedule

9.1 Land Acquisition

WSW will obtain land leases and wind rights options for all of the property required to support the Project. The applicant anticipates exercising these and remaining options by July of 2009. A limited number of agreements are currently being negotiated and are expected to be finalized by the end of 2009. Approximately 2,880 acres will be involved in the lease arrangements. The proposed Project site requested for the Site Permit consists of parcels in the following sections: Township 125 North, Range 44 West, Sections 16, 17, 28, 29, and 33. Land rights will also be obtained for wind easements in adjacent sections.

9.2 Permits

WSW will be responsible for undertaking all required environmental review and permits, and seeks to obtain a LWECS Site Permit by August of 2009. This includes all permits indicated in Section 12. Any additional permits required beyond the state site permit will be obtained prior to construction.

9.3 Equipment Procurement, Manufacture, and Delivery

Mnioka has ongoing negotiations for delivery of wind turbine equipment. These negotiations involve parties who have equipment on order with multiple manufacturers. Delivery of the turbines is anticipated by spring 2010. The switching and metering equipment for the substation will arrive within approximately six months after ordering. Collector system cable will arrive approximately four months after ordering.

9.4 Construction

It is estimated that the construction and commissioning phase will take approximately six to eight months to complete. Construction will likely commence in fall 2009 and must be completed by May 1, 2010.

9.5 Financing

WSW is responsible for financing predevelopment, development, and construction activities. WSW is financing the cost of predevelopment activities through internal shareholder funds. USDA grants are also being considered. Permanent financing is being arranged with partner investors and will be completed prior to commercial operation. The Project will be owned by local Minnesota resident shareholders who have planned to admit a financial investor who will own the majority of the equity interests in the Project for a certain period of time, after which time, the local investors will own a majority of such equity interests. The financial investor will fund capital costs with regard to turbine purchase, construction costs, and project management.

9.6 Expected Commercial Operation Date

WSW anticipates that the Project will begin operation no later than May 2010.

Section 10
Energy Projections

A preliminary analysis of the net energy output based on typical turbine types and locations indicate that approximately 60,107 MWH (66,785 MWH gross) will be delivered annually to the point of interconnection. Final energy estimates will be developed once the wind farm final design and turbine selection is complete.

Projections for WSW Annual Energy Production were completed by EAPC Engineers on May 10, 2007 using onsite meteorological tower data and Minnesota Department of Commerce data.

Table 10.1 provides estimated annual energy production for individual turbines. Reference numbers are for turbine location numbers shown on the project layout drawings. The information presented is for the baseline design of 10, Suzlon S88 2.1 MW machines. Other machines, including the alternative GE 1.5 MW turbines, would have similar total energy production.

Table 10.1 Estimated Energy Production

Estimated Wind Energy Production by Turbine Location		
Turbine Location Number	**Calculated Gross Production**	**Calculated Net Delivery (10% Estimated Loss)**
1	**6699.3**	**6029**
2	**6635.2**	**5972**
3	**6644.3**	**5980**
4	**6703.1**	**6033**
5	**6727.3**	**6055**
6	**6652.7**	**5987**
7	**6658.4**	**5993**
8	**6699.3**	**6029**
9	**6664.3**	**5998**
10	**6701.1**	**6031**
Data based on Suzlon S88 wind generators. **Source: West Stevens Wind Farm, MN, Wind Resource Assessment, EAPC Architects and Engineers, May 10, 2007.**		

Section 11
Decommissioning and Restoration

At the end of commercial operation, the WSW Project owners will be responsible for removing wind facilities, and removing the turbine foundations to a depth of 48 inches. WSW owners reserve the right to extend options instead of decommissioning at the end of the site permit term. These options may include applying for an extension of the site permit, if necessary, and continuing operation of the Project. In this case, a decision may be made on whether to continue operation with existing equipment or to retrofit the turbines and power system with upgrades based on newer technologies.

11.1 Anticipated Life of the Project

The anticipated Project life is 30 years beyond the date of first commercial operation for each respective phase.

11.2 Decommissioning

The owner will be responsible for costs to decommission the Project and associated facilities. In the event any wind turbine has exhausted its useful life and is decommissioned, the site will be excavated back to four feet below grade.

11.3 List of Decommissioning and Restoration Activities

In addition to any requirements under the site permit, each individual land lease requires proper decommissioning of turbines. Decommissioning of the site would include removal of turbines and related facilities. Removal of related facilities would include access roads, equipment, towers, buildings, transformers, and cables or wires. Foundations will be removed to a depth of four feet below grade and buried back to grade. Additionally, any disturbed surface would be graded, reseeded, and restored as nearly as possible to its preconstruction condition.

WSW has anticipated decommissioning and restoration costs in the Project's financial performance. It is expected that the Project will continue to operate for approximately 30 years. The cost to dismantle and remove the equipment involves the expense of a crane and crew to dismantle the towers and remove the concrete base to a level of at least four feet below grade – plus restoration costs. These costs are offset by the salvage value of the tower and generator.

Section 12
Identification of
Required Permits/Approvals

Signed resolutions of support have been obtained from Stevens County. See **Appendix B**.

A preliminary list of required permits and approvals identified for the project are listed below in **Table 12.1**.

Table 12.1 – Potentially Required Permits or Approvals

Permit, Review, Approval or Compliance Requirement	Permitting Agency	Item of Consideration	Permit Required
Federal			
Notice of Proposed Construction or Alteration	Federal Aviation Administration	Facility safety lighting	Yes
Determination of No Hazard	Federal Aviation Administration	Turbines and facility safety lighting	Yes
Exempt Wholesale Generator Status	Federal Energy Regulatory Commission	Seeking status as an exempt wholesale generator must file with the Commission	Yes
Market-based Rate Authorization (Petitions for Rate Approval pursuant to Section 284.123(b)(2) 18 C.F.R. Section 381.403)	Federal Energy Regulatory Commission	Delivery of test power	Yes
RGP-003-MN (Regional General Permit)	United States Army Corps of Engineers	Impacts to wetlands or waters	Yes
State of Minnesota			
Site Permit	Minnesota Public Utilities Commission (PUC)	Construction of a Large Wind Energy Conversion System (LWECS) defined as a system capable of generating over 5MW	Yes
General NPDES Permit for Storm water Discharges Associated with Construction Activities	Minnesota Pollution Control Agency (MPCA)	Disturbance of greater than one acre of ground	Yes

Permit, Review, Approval or Compliance Requirement	Permitting Agency	Item of Consideration	Permit Required
State of Minnesota			
License for Crossing Public Lands and Waters	Minnesota DNR	Any wind farm facilities that require crossing of or location on State administered Public Lands or Waters	Yes
Public Waters Work Permit	Minnesota DNR	Any construction activities that impact waterways, including Wetlands, applies to public waters that are identified on DNR public waters inventory maps	Yes
Wetland Conservation Act Compliance	Stevens County Soil and Water Conservation District – MN Board of Soil and Water Resources (rules)	Construction activities that impact non-state wetlands	Yes
Utility Access Permit	Minnesota Dept. of Transportation	Utility construction impacts to state roads	Yes
Oversize and Overweight Permit	Minnesota Dept. of Transportation	Use of oversize and overweight vehicles	Yes
Local			
Stevens County	Conditional Use Permit	Meteorological Tower, wind turbines	Yes
	Access Roads		Yes
	County Road Use		Yes
	Township Right-of-Way		Yes
	Building Permit	Meteorological tower, Wind Turbines	Yes

STEVENS COUNTY BOARD OF COMMISSIONERS

RESOLUTION

WHEREAS, Minn. Stat. Section 216B.1612 was enacted in 2005 to encourage the development and operation of community-based wind energy ("CBED") projects owned by local owners;

WHEREAS, CBED projects must be owned by qualifying owners, meaning either a Minnesota resident; a limited liability company whose members are Minnesota residents; a Minnesota nonprofit organization; certain Minnesota local governments; or certain cooperatives or tribal councils;

WHEREAS, CBED projects consisting of only one or two turbines must ensure that the qualifying owners receive at least 51 percent of the total financial benefits of the project measured over the project life;

WHEREAS, West Stevens Wind, LLC, a wind developer located in western Minnesota, is developing a wind energy project comprised of eight Minnesota limited liability companies, each of which will own one or two turbines, and each of which will be owned by Minnesota and Stevens County residents, and the limited liability companies are CAF Wind, LLC; KCZ Wind, LLC; LKM Wind, LLC; Macalester Wind, LLC; MJC Wind, LLC; MLB Wind, LLC; MT Wind, LLC; and RC Wind, LLC. The individual owners of each company will receive at least 51 percent of the total financial benefits of their respective projects, therefore keeping those benefits local;

WHEREAS, the eight limited liability companies, through West Stevens Wind, LLC, have entered into a power purchase agreement with Northern States Power Company ("NSP") for a term of 20 years;

WHEREAS, Minn. Stat. Section 216B.1612, subd. 2(f)(3) and the power purchase agreement require that the projects receive a resolution of support from the County board of the County in which the projects are located in order to qualify as CBED projects;

WHEREAS, the eight proposed projects will be locally-owned and operated and will utilize local services and materials in their construction and operation, and otherwise contribute to economic development within Stevens County;

THEREFORE, BE IT RESOLVED, that the Stevens County Board of Commissioners supports the development, construction and operation of the small wind projects to be located in Stevens County and to be owned by CAF Wind, LLC; KCZ Wind, LLC; LKM Wind, LLC; Macalester Wind, LLC; MJC Wind, LLC; MLB Wind, LLC; MT Wind, LLC; and RC Wind, LLC pursuant to Minn. Stat. Section 216B.1612, the power purchase agreement with NSP and related laws and agreements.

Date: November 21, 2006

By: Robert M. Stevenson

STEVENS COUNTY COURT HOUSE

STEVENS COUNTY • MORRIS, MINNESOTA 56267

400 Colorado Ave.
COUNTY COORDINATOR

Phone (320) 589-7417
Phone (320) 589-2141 TDD
Fax (320) 589-2036

August 6, 2007

Keith Thorstad
West Stevens Wind, LLC
PO Box 321
Chokio MN 56221

Dear Keith:

Enclosed is the original copy of the order granting a Conditional Use from the July 30th, 2007, public hearing, in which you were granted said Conditional Use Permit.

This document has been filed at the Stevens County Recorders Office (in accordance with Section 15-E-1 of the Stevens County Zoning Ordinance) so that the action of the Stevens County Planning Commission will become part of the official record of this property. This document should be kept with other important documents relevant to this property for safe keeping.

Sincerely,

Jan Gomér
Administrative Assistant

Enc. 2

182738

VIRGINIA MAHONEY
RECORDER
STEVENS COUNTY, MN
RECORDED ON
08/02/2007 12:57PM

REC FEE: 506.00
PAGES: 3 RECEIPT #: 1127

STATE OF MINNESOTA STEVENS COUNTY PLANNING COMMISSION

COUNTY OF STEVENS CONDITIONAL USE PROCEEDINGS

In the Matter of **West Stevens Wind, LLC**

REQUEST: Authorize construction of 10 wind turbines and 1 substation in the A-1 zone district in accordance with Section 6 of the Stevens County Wind Energy Conversion System Interim Ordinance.

ORDER GRANTING

CONDITIONAL USE

Keith Thorstad: Applicant

The above entitled matter came on to be heard before Stevens County Planning Commission of the 30th day of July, 2007, a petition for a conditional use pursuant to the Stevens County Zoning Ordinance, for the following described property:

Turbine #1: SE¼ Section 17, T125N, R44W, Everglade Township, Stevens County.
Turbine #2: SW¼ Section 16, T125N, R44W, Everglade Township, Stevens County.
Turbine #3: SE¼ Section 16, T125N, R44W, Everglade Township, Stevens County.
Turbine #4: SE¼ Section 16, T125N, R44W, Everglade Township, Stevens County.
Turbine #5: NW¼ Section 29, T125N, R44W, Everglade Township, Stevens County.
Turbine #6: NE¼ Section 29, T125N, R44W, Everglade Township, Stevens County.
Turbine #7: NW¼ Section 28, T125N, R44W, Everglade Township, Stevens County.
Turbine #8: NE¼ Section 28, T125N, R44W, Everglade Township, Stevens County.
Turbine #9: SW¼ Section 33, T125N, R44W, Everglade Township, Stevens County.
Turbine #10: SW¼ Section 33, T125N, R44W, Everglade Township, Stevens County.
Substation: SW¼ Section 33, T125N, R44W, Everglade Township, Stevens County.

IT IS ORDERED that a conditional use be granted as upon the following conditions or reasons:

a. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the immediate vicinity, and is compatible with the existing neighborhood;

b. That the establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant in the area; and conforms to the comprehensive land use plan of the County;

c. That adequate utilities, access roads, drainage, and other necessary facilities have been or are being provided;

d. That adequate measures have been or will be taken to provide sufficient off-street parking and loading space to serve the proposed use;

e. That adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, and vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result;

f. That soil conditions are adequate to accommodate the proposed use; and

g. That proper facilities are provided which would eliminate any traffic congestion or traffic hazard which may result from the proposed use.

h. That any septic system will be designed, installed and inspected by those holding a Minnesota Pollution Control Agency License.

The Stevens County Planning Commission approved the issuance of a Conditional Use Permit for the above described property subject to the following conditions:

DATED this **30th day of July, 2007.**

Chairman of Stevens County Planning Commission
Knute Christensen

STATE OF MINNESOTA)
) ss.
County of Stevens)

STEVENS COUNTY OFFICE
OF PLANNING AND ZONING

I, James Thoreen, Zoning Administrator for the County of Stevens, with and in for said County, do hereby certify that I have compared the foregoing copy and Order granting a conditional use with the original record thereof preserved in my office, and have found the same to be a correct and true transcript of the whole thereof.

IN TESTIMONY WHEREOF, I have hereunto subscribed my hand at Morris, Minnesota, in the County of Stevens on the **30th day of July 2007.**

Stevens County Zoning Administrator
James Thoreen

The foregoing instrument was acknowledged before me this **30th day of July, 2007.**

Notary Public - Stevens County Auditor
Stevens County Auditor
County Auditor Seal Affixed

This Instrument Was Drafted By:

NAME: Stevens County Office of Planning & Zoning
ADDRESS: 400 Colorado Ave., P.O. Box 530, Morris, MN 56267
PHONE NUMBER (320) 589-7417

Appendix D
Historical and Tribal Consultations and Correspondence

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Dennis Gimmestad
Government Programs & Compliance Officer
State Historic Preservation Office
Minnesota State Historical Society
345 Kellogg Blvd. West
St. Paul, MN 55102

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Gimmestad:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. We request your review of the proposed project area and provide comment regarding any known historic sites in the project area as part of the environmental review process. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

Enclosures

P:\08\508\02\Environmental\Historical.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. Sheldon Wolfschild
Lower Sioux Indian Community Council
39527 Res. Highway 1, PO Box 308
Morton, MN 56270

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Wolfschild:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

Enclosures

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. Roger Trudell
Santee Sioux Nation
108 Spirit Lake Avenue West
Niobrara, NE 68760

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Trudell:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Ms. Myra Pearson
Spirit Lake Tribal Council
PO Box 359
Fort Totten, ND 58335

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Ms. Pearson:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. Mark Allen
Flandreau Santee Sioux Executive Committee
PO Box 103
Flandreau, SD 57010

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Allen:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Ms. Audrey Bennett
Prairie Island Indian Community
5636 Sturgeon Lake Road
Welch, MN 55089

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Ms. Bennett:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. James "JC" Crawford
Sisseton-Wahpeton Oyate of the Lake Traverse Reservation
PO Box 509
Agency Village, SD 57262

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Crawford:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. Kevin Jensvold
Upper Sioux Community of Minnesota
PO Box 147
Granite Falls, MN 56241-0147

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Jensvold:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known historic and cultural resources, any information regarding any religiously significant archaeological or cultural resources important to you that have yet to be identified, or the potential effect to any such properties and recommended mitigation measures. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

P:\08\508\02\Environmental\Tribal.wpd

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. John Schladweiler, Assistant Regional Wildlife Manager
Minnesota Department of Natural Resources
Division of Wildlife
261 Hwy. 15 South
New Ulm, MN 56073

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Schladweiler:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known impacts on wildlife and endangered species in the project area as part of the environmental review process. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

Enclosures

P:\08\508\02\Environmental\DNR.wpd

Minnesota Historical Society
STATE HISTORIC PRESERVATION OFFICE

April 2, 2009

Mr. Bruce Jennings
DeWild Grant Reckert and Associates
1302 South Union Street
PO Box 511
Rock Rapids, IA 51246

RE: West Stevens Wind, LLC – Construction of Thirteen Wind Turbines for Wind Farm
T125 R44 S16, 17, 28, 29, 33, Stevens County
DGR Project Number: 850802
SHPO Number: 2009-1486

Dear Mr. Jennings:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800).

Due to the nature of the proposed project, we recommend that an archaeological survey be completed. The survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation, and should include an evaluation of National Register eligibility for any properties that are identified. For your information, we have enclosed a list of consultants who have expressed an interest in undertaking such surveys.

If the project area can be documented as previously disturbed or previously surveyed, we will re-evaluate the need for survey. Previously disturbed areas are those where the naturally occurring post-glacial soils and sediments have been recently removed. Any previous survey work must meet contemporary standards.

If you have any questions on our review of this project, please contact me at (651) 259-3456.

Sincerely,

Dennis A. Gimmestad
Government Programs and Compliance Officer

Enclosure: List of Consultants

MINNESOTA HISTORICAL SOCIETY
State Historic Preservation Office
Contract Archaeologists
Last Updated: 3/10/09

This listing is comprised of individuals and firms who have expressed an interest in undertaking contract archaeology in the State of Minnesota. It is provided for informational purposes to those who may require the services of an archaeological consultant. Inclusion on the list does not constitute an endorsement of the consultant's professional qualifications or past performance. The SHPO may remove contractors from the list if no work is completed in Minnesota over a two year period. The SHPO reserves the right to reject contract reports if the principal investigator or other contract personnel do not meet certain minimal qualifications such as the Secretary of the Interior's professional qualifications standards (Federal Register 9/29/83).

It is recommended that work references be checked and multiple bids be obtained before initiating a contractual agreement. The SHPO will not recommend specific contractors, but may be able to comment on previous work reviewed pursuant to state and federal standards and guidelines. The SHPO can be contacted at the Minnesota History Center, 345 Kellogg Boulevard West, St. Paul, MN 55102, 651/259-3450.

10,000 Lakes Archaeology, Inc.
220 9th Avenue South
South St. Paul, MN 55075
612/670-6431
gronhovd@10000lakesarchaeology.com
www.10000lakesarchaeology.com

The 106 Group Limited
370 Selby Avenue
St. Paul, MN 55102
651/290-0977
Fax 290-0979
anneketz@106group.com
www.106group.com

ALO Environmental Associates
Amy L. Ollendorf, Ph.D.
111 Pratt Street
Minneapolis, MN 55419
612/227-6697
Fax 612/866-7546
amy@aloenviro.com
www.aloenviro.com

AMEC Earth and Environmental
109 Woodward Avenue
Jefferson City, MO 65109
573/301-6084

Anthropology Research
University of North Dakota
236 Centennial Drive Stop 7094
Dennis L. Toom
Grand Forks, ND 58202
701/777-2436

ARCH3, LLC
Daniel R. Pratt, M.A.
1386 Idaho Avenue West
St. Paul, MN 55108
651/308-8749
Fax 651/917-9291
arch3llc@gmail.com
www.arch3llc.com

Archaeological Research Services
1812 15th Avenue South
Minneapolis, MN 55404
612/870-9775

Archaeology Laboratory
Augustana College
2032 South Grange Avenue
Sioux Falls, SD 57105
605/274-5493

307/742-4371 or 701/696-2236

Leech Lake Heritage Sites Program
115 6th Street NW
Suite E
Cass Lake, MN 56633
218/335-8095

McFarlane Consulting, LLC
318 Goodhue Street
St. Paul, MN 55102
651/699-1921

Metcalf Archaeological Consultants
PO Box 2154
Bismarck, ND 58501
701/258-1215

Minnesota State University Moorhead
Michael Michlovic or George Holley
Department of Anthropology & Earth Science
Moorhead, MN 56560
218/477-2035 or 218/477-2680
michlovc@mnstate.edu
holley@mnstate.edu

Mississippi Valley Archaeology Center
1725 State Street
LaCrosse, WI 54601
608/785-8463
boszhard.robe@uwlax.edu
www.uwlax.edu/mnvac/contracts.htm

Parsons Engineering Science Inc.
400 Woods Mill Road
Chesterfield, MO 63017
314/576-7330

Pathfinder CRM
Robert Vogel
168 West Main Street
P.O. Box 503
Spring Grove, MN 55974
507/498-3810

Quality Services
3459 Jet Drive
Rapid City, SD 57703
605/388-5309 or
605/209-0265

Rolling Hills Consulting Services, LLC
Chad A. Goings
1221 East 3rd Street
Washington, IA 52353
319/461-7427
cagoings@aol.com

St. Cloud State University
Mark P. Muñiz, Ph.D., RPA
Assistant Professor
Director CRM Archaeology Graduate Program
Department of Sociology and Anthropology
262 Stewart Hall
720 Fourth Avenue South
St. Cloud, MN 56301
320/308-4162
Fax 320/308-1694
mpmuniz@stcloudstate.edu

SOILS Consulting
PO Box 121
Longville, MN 56655
218/682-2110

Stemper and Associates
24505 Hardeggers Drive
Cleveland, MN 56017
507/931-0823
Fax 507/931-5356

Summit Envirosolutions
Andrea Vermeer
1217 Bandana Boulevard North
St. Paul, MN 55108
651/644-8080

Robert Thompson
13367 87th Place North
Maple Grove, MN 55369
612-788-7412

TRC Mariah
605 Skyline Drive
Laramie, WY 82070
307/742-3843

Trefoil Cultural & Environmental Heritage
Richard Rothaus, PHD
1965 W. Highview Drive
Sauk Rapids, MN 56379
320/761-9090
rothaus@trefoilcultural.com

Two Pines Resource Group
17711 260th Street
Shafer, MN 55074
651/257-4766

University of South Dakota Archaeology Laboratory
Contact: Richard Fox
414 Clark Street

From: Bruce Jennings
Sent: Friday, April 17, 2009 1:56 PM
To: 'PamelaHalverson@hotmail.com'
Subject: West Stevens wind

Attachments: topo_sheet1.pdf
Pam –

I have attached a turbine layout drawing with a quadrangle map background. Hopefully this is what you were looking for.

The turbines will all be erected at sites within currently farmed fields. Each turbine will have a permanent site of under 2 acres. The total land used for the project, including access roads, will be less than 20 acres.

Bruce Jennings
DeWild Grant Reckert and Associates Company
1302 South Union Street
Rock Rapids, IA 51246
Ph. 712-472-2531

From: Beth O'Keefe [bokeefe@lowersioux.com]
Sent: Tuesday, March 31, 2009 10:36 AM
To: Bruce Jennings
Cc: pamelahalverson@hotmail.com
Subject: Lower Sioux Indian Community-Tribal Employment Rights Office

Good Morning Bruce

Yesterday I received your letter, dated 3-17-2009, from Tribal Council. I will be passing along your information to Pam Halverson our THPO, Tribal Historic Preservation Office. Pam can be reached at 507. 697.2528 office or by email pamelahalverson@hotmail.com.

Please feel free to contact me if you have any questions regarding Native Employment, 507.430.5945 cell or email bokeefe@lowersioux.com . Have a great Day!

Regards, Beth O'Keefe

TERO Director
Lower Sioux Indian Community
39527 Reservation Highway 1
Morton, MN 56270
507.697.8627 Office
507.697.8617 Fax
bokeefe@lowersioux.com

Stemper and Associates
Consulting Archaeologists

Clifford A. Stemper
Archaeologist and Director
Phone: (507) 931-0823

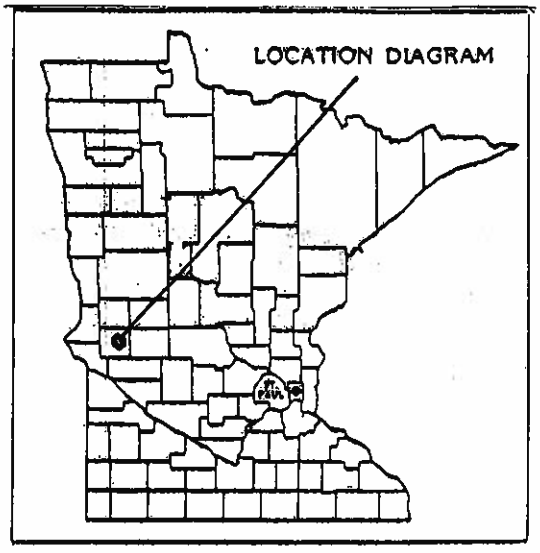
24505 Hardeggers Drive
Cleveland, MN 56017
Fax: (507) 931-5356

ARCHIVAL/LITERATURE RESEARCH FOR PARTS OF T125N-R44W, WEST STEVENS WIND, STEVENS COUNTY, MINNESOTA

CULTURAL RESOURCE MANAGEMENT REPORT

No. 476

By
Stemper & Associates
24505 Hardeggers Dr
Cleveland, MN 56017



For
DeWild Grant Reckert and Associates, Co.
1302 South Union Street
PO Box 511
Rock Rapids, IA 51246

May 2009
Project No.: 09054761

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

This report represents an archival and literature research for parts of Everglades Township (T125N-R44W) in Stevens County, Minnesota. The purpose of the background check for the area within this report is to determine what prehistoric, historic or architectural properties exist or do not exist on the proposed area of potential effect. The archival and literature research was conducted for DeWild Grant Reckert and Associates Company in Rock Rapids, Iowa.

Proposed Project: The future proposed project is the construction of 13 wind turbines in Everglades Township, Stevens County, Minnesota (See map inserts).

Location: The wind turbines are tentatively proposed to be constructed on parts of Sections 16, 17, 28, 29, 33, T125N, R44W. The records check included these sections and the area within 1 mile of the proposed wind turbine sites. See figure 1 below for the archival and literature research boundaries.

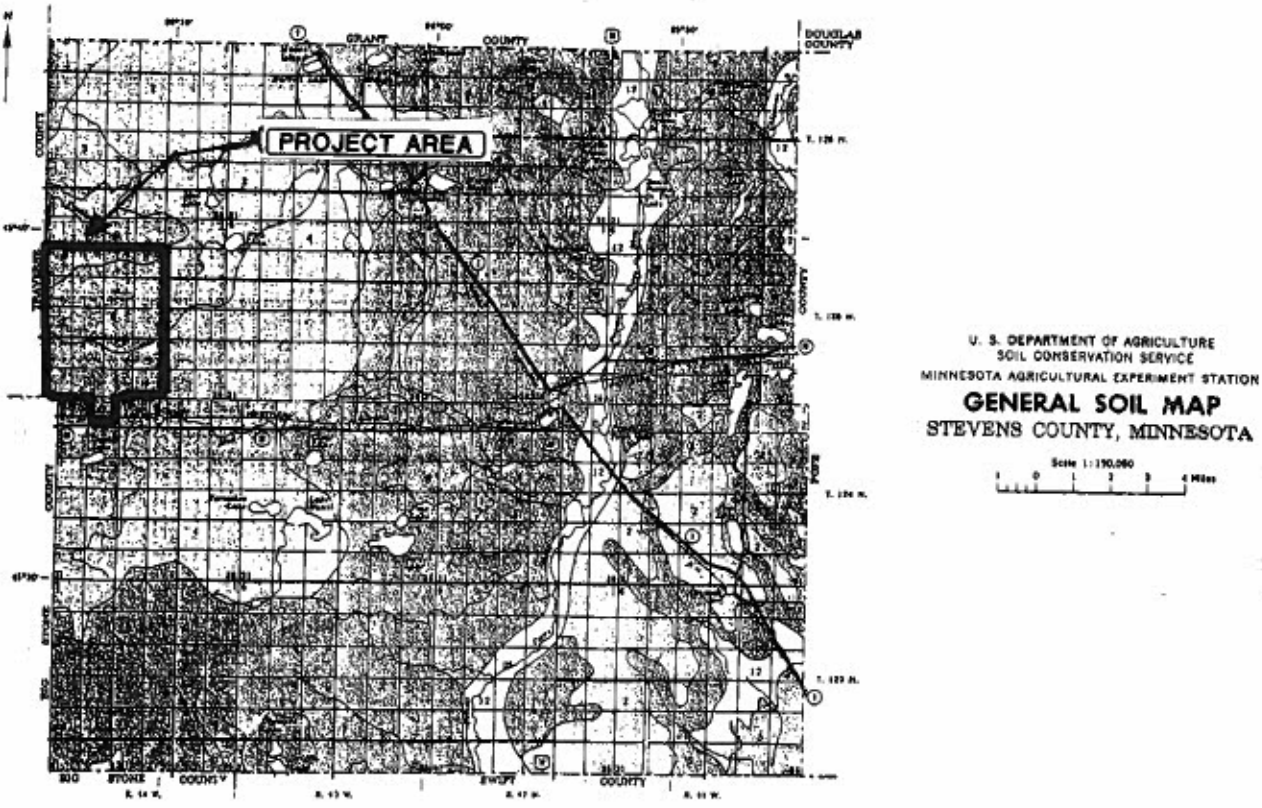


Figure 1. Soil map shows the area on which an archival records check was conducted (USDA: 1971).

County:	Stevens
Project:	Wind turbines
Watershed:	Mustinka River
Geomorphic Region:	Des Moines Lobe
Parent Material:	Glacial till
Soil Associates:	McIntosh-Winger, and Bearden-Glyndon
Presettlement Vegetation:	Tall prairie grasses, legumes and treed waterways
Soil Age:	<12,000 years old

RESULTS OF ARCHIVAL / LITERATURE RESEARCH

A prior record and archival search was conducted at the Office of the State Archaeologist (OSA) in St. Paul, Minnesota, regarding previously surveyed areas, previously recorded archaeological properties, plat map review and the National Register of Historic Places (NRHP) for the project area within this report.

Previous Archaeological Field Investigations: There are no state site forms recorded that indicate the area of potential effect was field investigated.

Previously Recorded Prehistoric Properties 9500BC-1700AD: There are no previously recorded prehistoric properties located within the study area.

Previously Recorded Historic Properties 1700AD-1985AD: There are no previously recorded historic properties located within the study area.

National Register of Historic Places (NRHP): There are no National Register of Historic Places properties within 300 feet of the area of potential effect.

Plat Maps: Maps reviewed between the years 1851 (Trygg), 1874 (Andreas), 1909 (Ogle), 1985 (USDOT) and USGS maps from 1914 show no rural cemeteries, isolated gravesites, family plots, rural post offices, abandoned townsites, rural businesses, or miscellaneous historic structures on the direct proposed project areas. USGS maps from 1910 show 3 rural schools located within the study area boundaries and are listed below. They are not located on the proposed direct project area.

Map Number:	47601 (See Appendix A)
Type:	Rural School No. 55
Location:	E ¼ Corner Section 6-124-44

Map Number:	47602 (See Appendix A)
Type:	Rural School No. 56
Location:	NW ¼ NE ¼ Section 9-125-44

Map Number:	47603 (See Appendix A)
Type:	Rural School No. 43
Location:	NE Corner Section 10-125-44

SUMMARY

In summary, the background research found no previously recorded archaeological sites within the study area. And, there are no National Register of Historic Places sites within the area researched. Plat maps from 1910 show three rural schools on the project area boundaries and not within 500 feet of the direct proposed wind turbine sites.

REFERENCES CITED

Andreas, A. T.
1874 *Illustrated Historical Atlas of the State of Minnesota.* A. T. Andreas, 1874. On file Minnesota State University, Mankato, MN.

Busch, E. M.
1977 *The History of Stevens County.* Minnesota State University, Mankato, MN.

DeWild Grant Reckert Co.
2009 Proposed Building Maps. DeWild Grant Reckert Co., Engineers and Surveyors, Rock Rapids, IA.

Office of the State Archaeologist
2009 Stevens County Site Files. On file with the Office of the State Archaeologist, St. Paul, MN.

Trygg, J. W.
1964 *c.1851 Composite Map of the United States Land Surveyors Original Plats and Field Notes.* Sheet No. 2, Minnesota Series, J. W. Trygg, Ely, MN. On file Minnesota State University, Mankato, MN.

USDA
1971 *Soil Survey of Stevens County, Minnesota.* United States Dept of Agriculture, Washington, D.C. Dept of Soil Conservation, Minnesota.

USDOT
1985 *Polyconic Projection General Highway and Transportation Map of Stevens County, Minnesota.* Minnesota State Highway Commission.

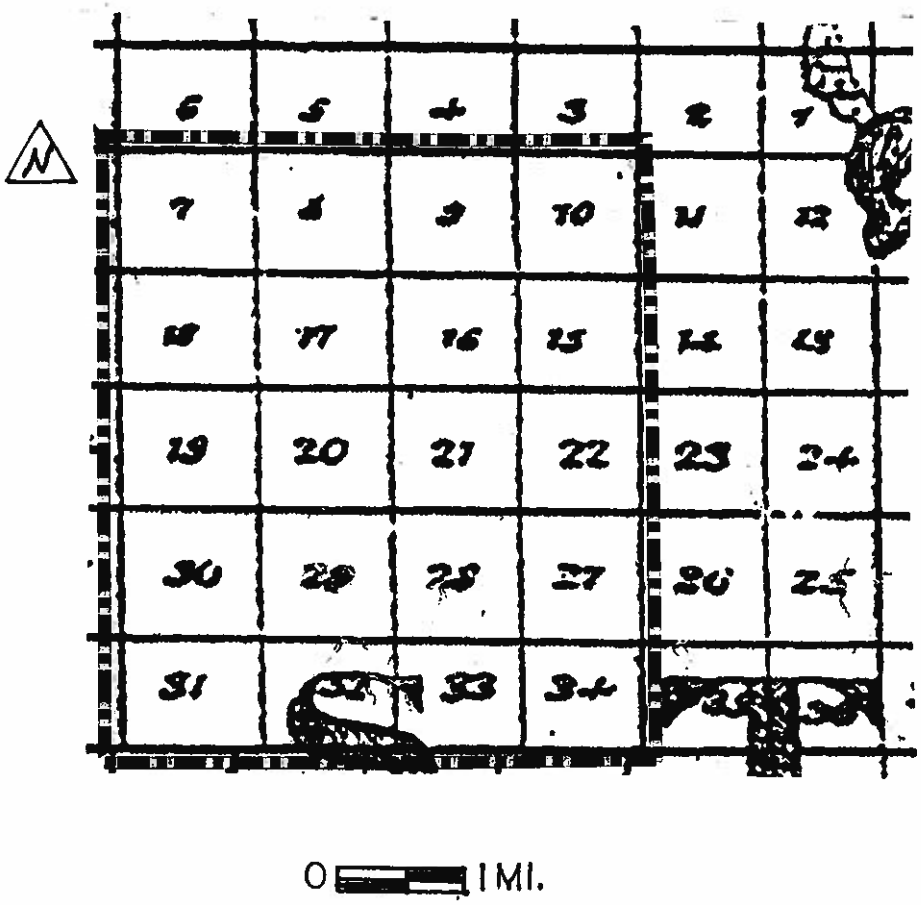
USGS
1973 *Chokio NW, Minnesota.* 7.5' series quad map, USGS, Denver, CO.
1973 *Chokio, Minnesota.* 7.5' series quad map, USGS, Denver, CO.
1910 *Chokio, Minnesota. 15'* series quad map, USGS, Denver, CO.

Winchell, N. H.
1911 *Aborigines of Minnesota-1906-1911.* Collections of Brower, Hill and Lewis. Published by the Minnesota Historical Society, St. Paul, MN.

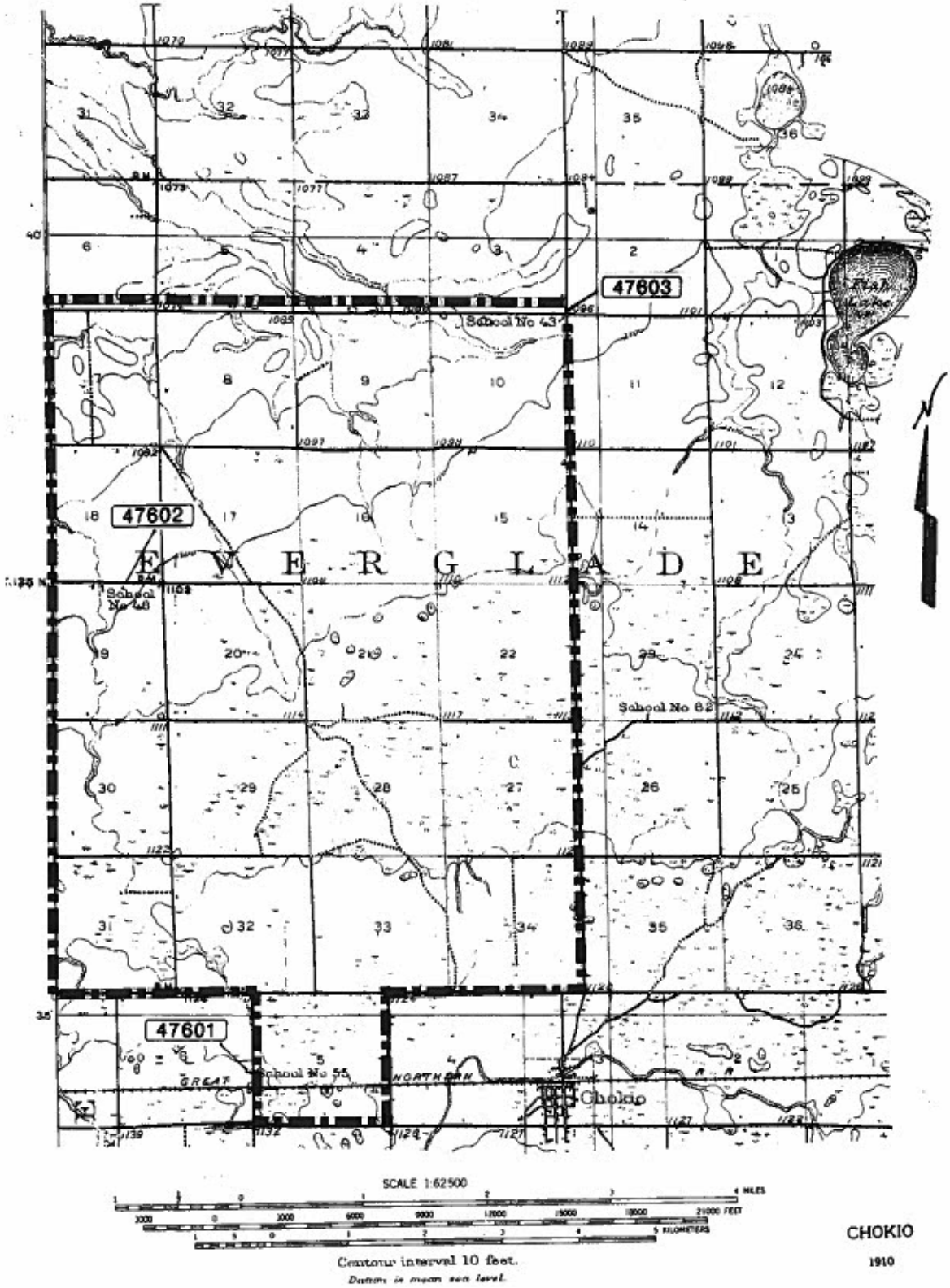
APPENDIX A

Plat Maps

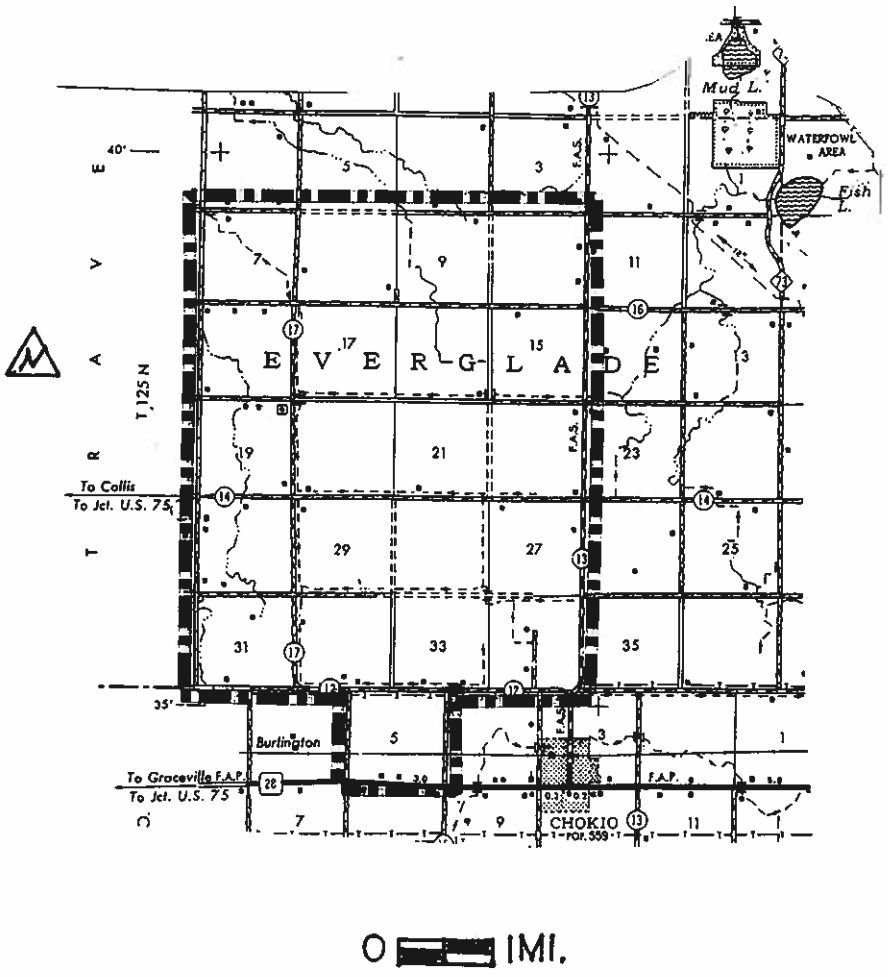
1874-1985



The 1874 map shows the project study area boundaries (Andreas: 1874).



The 1910 map shows the project study area boundaries and three rural school locations (USGS: 1910).



The 1985 map shows the project study area boundaries (USDOT: 1985).

Appendix E
Microwave Study

ENGINEERING REPORT
CONCERNING THE EFFECTS UPON
FCC-LICENSED MICROWAVE FACILITIES
DUE TO CONSTRUCTION OF THE
WEST STEVENS WIND PROJECT
IN STEVENS COUNTY, MINNESOTA

Prepared for:
Mnioka Construction, LLC
Chokio, Minnesota

July 27, 2009

By: B. Benjamin Evans, P.E.
Evans Associates
216 N. Green Bay Road, #205
Thiensville, WI 53092
262-242-6000 PHONE
262-242-6045 FAX
www.evansassoc.com

**ENGINEERING REPORT
CONCERNING THE EFFECTS UPON
FCC-LICENSED MICROWAVE FACILITIES
DUE TO CONSTRUCTION OF THE
WEST STEVENS WIND PROJECT
IN STEVENS COUNTY, MINNESOTA**

Mnioka Construction, LLC

I. INTRODUCTION

This engineering report describes the results of a study and analysis to determine the locations of federally licensed (FCC) point-to-point microwave paths that may be adversely impacted as a result of the construction of the West Stevens Wind Turbine Project. The project involves an area just northwest of the city of Chokio in Stevens County, Minnesota. This document describes impact zones and any necessary mitigation procedures, along with recommendations concerning individual wind turbine siting. All illustrations, calculations and conclusions contained in this document are subject to on-site verification[1].

Wind turbines located on land parcels near federally licensed radio frequency facilities can cause one or more modes of RF impact, due to aperture blockage and/or re-radiation. An iterative procedure is frequently necessary to minimize adverse effects. Information provided in this document will minimize the chances that disruption of the studied facilities either does not occur or, in the alternative, that mitigation procedures will be effective. The purpose of this study is to facilitate the siting of turbines to avoid unacceptable impact.

The West Stevens Wind project involves the construction of thirteen (13) new turbines. The wind turbines will have a hub height of 80 meters above ground and a blade radius of 40 meters. Thus, the total height will be about 120 meters above ground level to the tip of one blade at the 12:00 position.

Using industry standard procedures and FCC databases, a search was conducted to determine the presence of any existing microwave paths crossing the subject property. A specific turbine layout has been submitted for analysis. The rough outline of the general area of the wind project is shown in the following Figure 1.

[1] The databases used in creating the attached tables and maps are generally accurate, but anomalies have been known to occur. An on-site verification survey is suggested as part of the due diligence process.

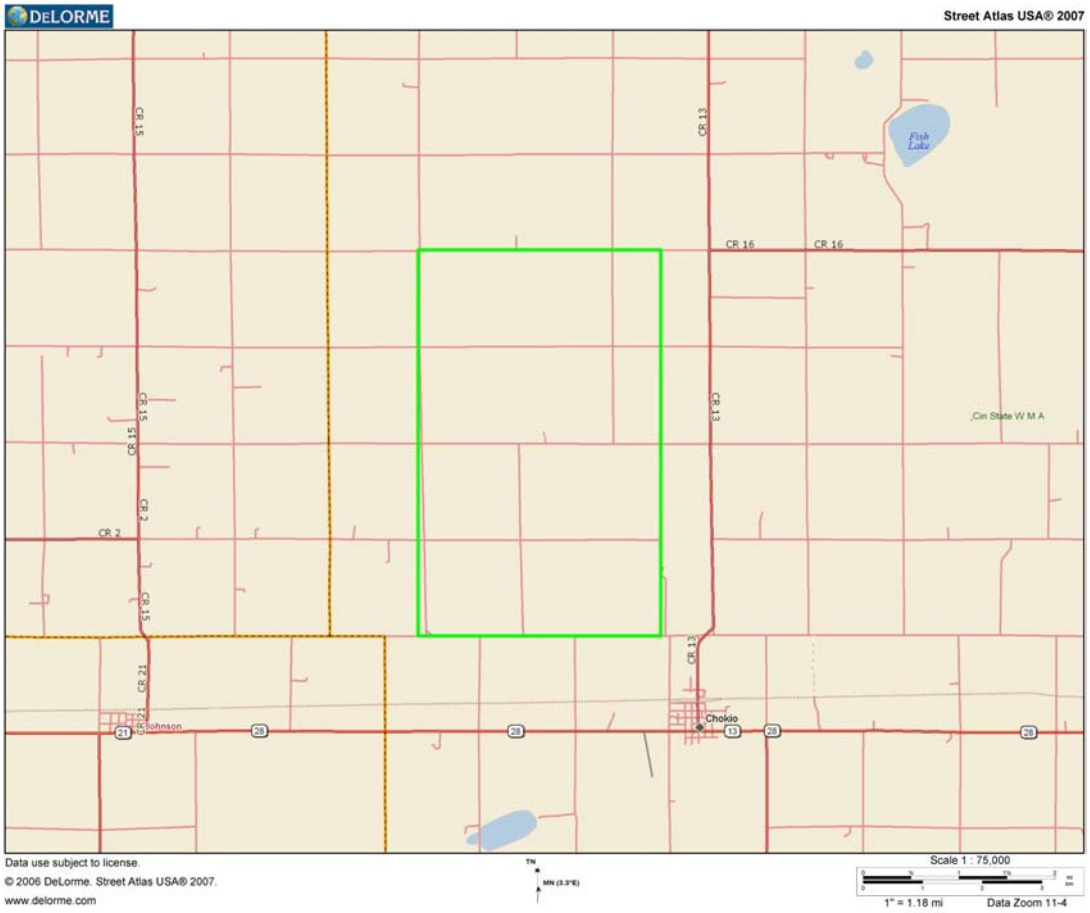


Figure 1 – West Stevens Wind Project Area

This report addresses the impact of known microwave point-to-point paths only.

The attached maps were generated based upon the operating parameters of the FCC-licensed microwave stations as contained in FCC databases.

The analysis included herein examines the pertinent FCC licensed services in the area for potential impact according to generally accepted engineering standards. This analysis assumes that all licensed services have been designed and constructed according to FCC requirements and good engineering practice. If this is not the case, the impacted facility must share responsibility with the wind turbine company for the costs of any mitigation measures[2].

[2] For instance, some microwave paths may have insufficient ground clearances as they are presently configured.

II. ANALYSIS OF MICROWAVE LINKS

An extensive analysis was undertaken to determine the likely effect of the new wind turbine farm upon the existing microwave paths, consisting of a Fresnel x/y axis study and a z-axis (height) evaluation. The microwave paths have been overlaid on Google Earth™ maps, and the images of the microwave paths and the proposed turbines also available as KMZ and GIS shape files.

Important Note: Microwave path studies are based upon third party and FCC databases that normally exhibit a high degree of accuracy and reliability. Although Evans performs due diligence to ensure that all existing microwave facilities are represented, we cannot be responsible for errors that may lead to incomplete results. However, should such situations occur, Evans would perform an engineering analysis to determine how the additional facilities can be accommodated or, if wind turbine structures are already built, determine a method to re-direct the offending beam path. It is recommended that a consultant visit the site to visually check for anomalies.

For this microwave study, *Worse Case Fresnel Zones* (WCFZ) were calculated for each microwave path. The mid-point of a microwave path is the location where the widest (or worst case) Fresnel zone occurs. Possible geographic coordinate errors must be added to the Fresnel zone clearance numbers[3]. The radius *R* of the Worst Case Fresnel Zone, in meters, is calculated for each path using the following formula:

$$R \cong 8.65\sqrt{\frac{D}{F_{GHz}}}$$

where D is the microwave path length in kilometers and F_{GHz} is the frequency in gigahertz.

In general, the WCFZ is defined by the cylindrical area whose axis is the direct line between the microwave link endpoints and whose radius is *R* as calculated above. This is the zone where the siting of obstructions should be avoided. Evans Associates has identified two microwave links transmitting over one unique path existing in the FCC database that come close to the project area. These paths are tabulated below in Table 1 and are shown in Figure 2.

ID	Call Sign	Status	Name Xmit	Dist/Bear (km/°T))	Ant. Elevation (m AMSL)	Freq. (MHz)	Licensee	WCFZ (m)
1	WNTV962	A	STATION	38.0@317.1	406.9	954.4	Great River Energy	54.6
2	WNTV965	A	STATION	38.0@136.9	434.3	958.0	Great River Energy	54.5

Table 1 – Microwave Links Near Wind Project Area

[3] Many microwave facilities were built before accurate methods were available to establish exact geographic coordinates (such as GPS). It is not unusual for database errors of up to 4 or 5 seconds to occur, which can effect the positioning of critical turbines located near Fresnel paths.

Neither of the above paths create blackout zones through the project area. In fact, neither approach the 10-square mile turbine area to within 700 meters. Therefore, as of this date, there are no FCC-licensed microwave paths that would impede the construction of the planned West Stevens wind turbines.

The Google Earth™ map below shows all known active FCC-licensed microwave facilities near the turbines. The turbines are shown as blue dots with yellow "pushpins".

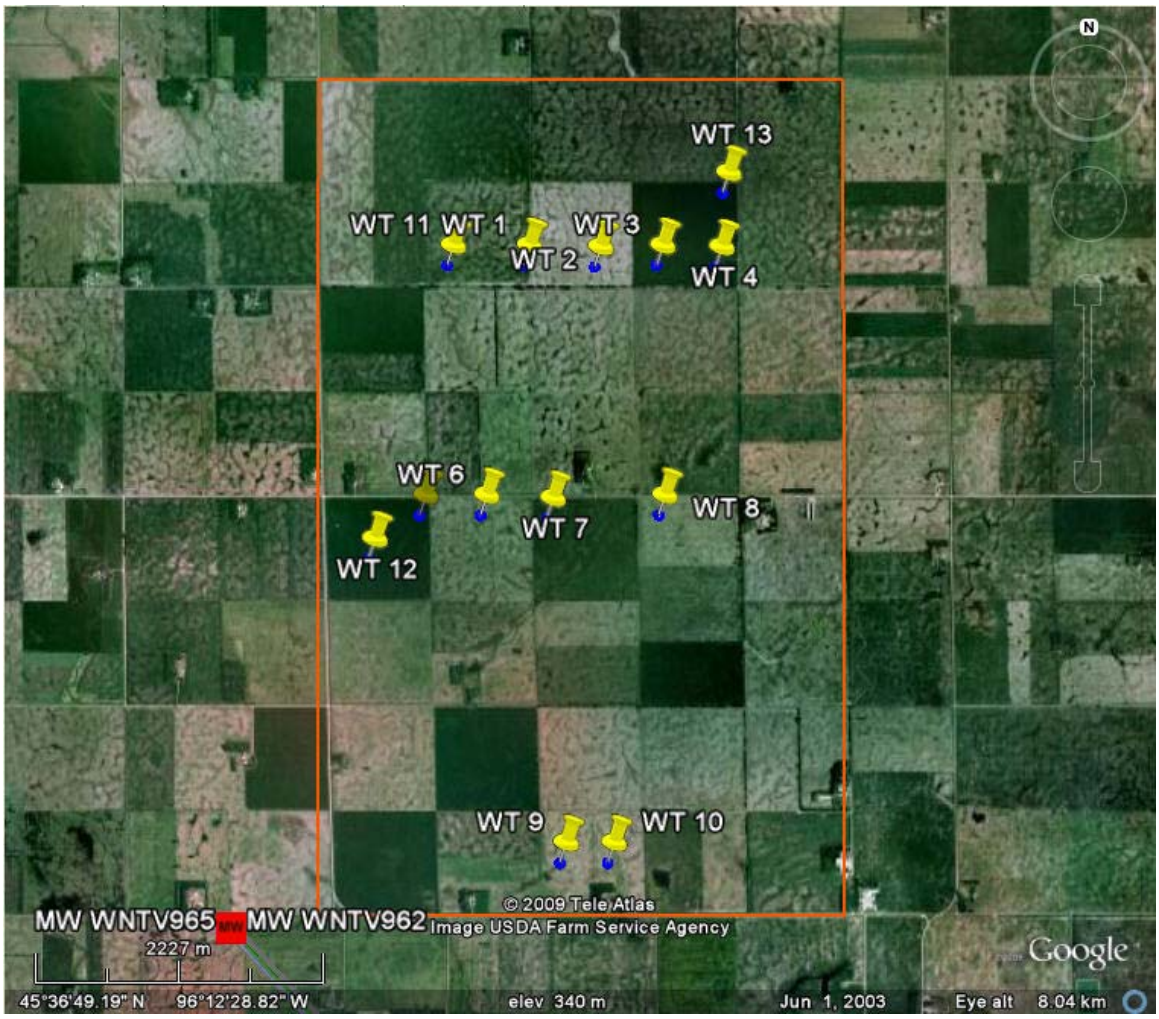


Figure 2 – West Stevens Wind Turbine Project Area Showing Active Facilities

If an excessive amount of time goes by before the turbines are to be constructed, it is recommended that this study be updated in case new paths have been added to the FCC's database.

The reader is referred to the provided KMZ and GIS shape files for more magnification and closer inspection. A spreadsheet is also provided tabulating additional information concerning each microwave facility found in the study. The spreadsheet contains additional microwave paths found during the search which are much farther from the project area than the two paths shown in this report.

III. CONCLUSIONS

1. The proposed turbines, including the blades, are located so as to not penetrate the WCFZs (Worst-Case Fresnel Zones) of any known microwave path. Two microwave links transmitted over one unique path were found in the FCC databases that are near the West Stevens Wind project area, but neither has been determined to create a blackout zone in the area.

2. An on-site inspection of the West Stevens Wind project area should be done to determine the existence of any undocumented communications towers.

Respectfully Submitted,

B. Benjamin Evans, P.E.
RF Impact Consultant

July 27, 2009

E:\EA\Client Services\Windmills\Mnioka Construction\RFImpactStudyReportWestStevensWind,Chokio,MN61009.doc

Appendix F
DNR Consultations and Correspondence

Minnesota Department of Natural Resources

Division of Ecological Resources – Reg. 4
261 Hwy 15 South
New Ulm, MN 56073-8915
Phone: (507) 359-6073 Fax: (507) 359-6018 E-mail: kevin.mixon@dnr.state.mn.us

April 13, 2009

Mr. Bruce Jennings
DeWild Grant Reckert and Associates Company
1302 South Union Street
PO Box 511
Rock Rapids, IA 51246

In re: West Stevens Wind LWECS
Preliminary Review
Stevens County, MN

Dear Mr. Jennings:

The Minnesota Department of Natural Resources (DNR) has received information concerning the above referenced wind project located in Stevens County, MN. The DNR is providing the following comments as a mechanism to collaboratively work together to identify potential natural resource issues that should be considered during project development.

Our regional office review of the Natural Heritage Information System does not indicate that any known rare features exist in or adjacent to your project area. However, an official review should be submitted and any issues resolved prior to applying for the permit. A NHIS request form can be found at the following web link, **http://files.dnr.state.mn.us/eco/nhnrp/nhis_data_request.pdf.** The NHIS tracks important information on the distribution of rare natural plants, animals and biological communities throughout Minnesota. This information will assist in the planning of your wind project. Please contact Lisa Joyal (651-259-5109) if more detailed information is needed to ensure the known locations of rare features are avoided.

National Wetland Inventory mapping indicates the presence of wetlands near turbine locations 4, 7, 9, 10, and on the access road between turbine 2 and 3. A qualified wetland scientist should review all turbine locations, access roads, and transmission lines, and substations for potential wetland impacts. The impacts should be avoided, however if avoidance is not possible then you need to contact the Board of Water and Soil Resources (www.bwsr.state.mn.us) to determine if a Wetland Conservation Act (WCA) permit is required. The wetland information should be submitted as part of your Site Application with the Public Utilities Commission. In addition, careful consideration should be given to the drainage patterns and ditches that will be intercepted by the access roads to ensure the hydrology to existing wetlands is maintained.

The Minnesota Pollution Control Agency issues the National Pollution Discharge and Elimination System/State Disposal System permit in order to control stormwater runoff from construction sites. Information on the permit process can be obtained at: http://www.pca.state.mn.us/water/stormwater/stormwater-c.html.

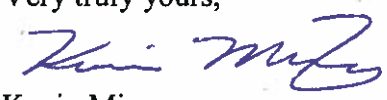
Minnesota Administrative Rules 7836.0500, Subpart 7, requires the applicant to analyze potential environmental impacts of the project, proposed mitigative measures, and any adverse environmental effects that cannot be avoided. Groundwater resources, surface waters, wetlands, vegetation, wildlife, rare and unique natural resources, etc. are included. In order to address the potential environmental impacts the applicant should resolve all outstanding issues with the DNR prior to applying for the Large Wind Energy Conversion System permit from the Public Utilities Commission.

Wind projects disturb soils, surface water and associated ground cover. These disturbances create openings for invasive species that quickly colonize these sites putting adjoining lands and habitat at risk. In addition, this can cause erosion and sedimentation into adjacent waters. The DNR, Soil and Water Conservation District, Minnesota Pollution Control Agency or the Department of Agriculture may recommend Best Management Practices (BMP's) for different areas of the project. The BMP's help address construction and maintenances activities to minimize impacts to soil, water and existing ground cover. The BMP's may also provide site restoration recommendations.

The US Fish and Wildlife Service guidelines to avoid and minimize impacts to wildlife from wind development should be adhered to as part of the project. The guidelines and additional information can be found at the following site:
http://www.fws.gov/habitatconservation/Service Interim Guidelines. PDF

The DNR looks forward to working in a positive and collaborative manner on this project to ensure that sustainable energy sources are developed while protecting Minnesota's natural resources. Please contact me directly at 507-359-6073 if you have any questions.

Very truly yours,



Kevin Mixon
Regional Environmental Assessment Ecologist
Division of Ecological Services

Cc: Mark Matuska, DNR
Lisa Joyal, DNR
Matt Langan, DNR
John Schladweiler, DNR
Ken Varland, DNR
Curt Vacek, DNR
David Trauba, DNR
Kevin Kotts, DNR
Peter Beusseler, DNR
Jill Utrup, U.S. FWS

NO STAPLES
PLEASE

For Agency Use Only:
Received _____ Due _____ RUSH
Related ERDB# _____
Search Radius _____mi. ER/All Map'd _____ EOs _____
NoR/ NoC/ NoE/ Std/ Sub Let ____ Inv _____ Log out ____

MINNESOTA NATURAL HERITAGE INFORMATION SYSTEM (NHIS) DATA REQUEST FORM

DATE OF REQUEST May 22, 2009

WHO IS REQUESTING THE INFORMATION?

Name and Title Bruce Jennings

Agency/Company DeWild Grant Reckert and Associates Company

Mailing Address 1302 South Union St, PO Box 511 (Street) Rock Rapidsq (City) IA (State) 51246 (Zip Code)

Phone 712-472-2531 FAX 712-472-2710 e-mail bjennings@dgrnet.com

WHAT INFORMATION DO YOU NEED? Preferred Reply Method: Email ☑ US Mail ☐

☑ Printouts of known occurrences of federally and state listed plants and animals; native plant communities; and aggregation sites such as bat hibernacula, colonial waterbird nesting sites, and prairie chicken booming grounds.
- ☑ With Environmental Review
- ☐ Printouts Only; No Review Needed

☑ Printouts of information listed above, plus geological features and state rare species with no legal status.
- ☑ With Environmental Review
- ☐ Printouts Only; No Review Needed

☐ Other (describe) _____

INFORMATION WE NEED FROM YOU:

1) **Enclose a map** of the project boundary (topographic maps or aerial photos are preferred).
2) If possible, please **provide a GIS shapefile** (NAD 83, UTM Zone 15N) of the project area.
3) List the following locational information (attach additional sheets if necessary):

For Agency Use Only:

County	Township #	Range #	Section(s) (please list **all** sections)
Stevens	T125N	R44W	16, 17, 28, 29, and 33

4) Please provide the following information (attach additional sheets if necessary):

Project Name West Stevens Wind

Project Proposer West Stevens Wind, LLC

Detailed Project Description (see instructions, please)

Construction of 13 wind turbines and associated access roads and buried power lines. Wind machines will be mounted on steel towers with concrete foundations, and will occupy less than one acre per machine. Power lines will be buried approximately four feet below grade. Temporary roadways will be constructed for machinery and equipment during construction, and minor permanent roadways will provide access.

Current/Past Land-Use of Project Site

Tilled agriculture

5) You will be provided with a response letter, an index database printout, and a detailed database printout. **Describe how you plan to use this information**, including in what form and detail, if any, you wish to publish this information. (Please note that we do not generally give permission to publish the detailed database printout.)

This information will be used to select specific sites for wind turbines which avoid to the extent practicable impacts on other resources, and to design mitigation for impacts which can not be avoided. Information will be published only to the extent needed to define or describe mitigation.

TURN-AROUND TIME

Requests generally take **3 weeks** from date of receipt to process, and are processed in the order received. Rush requests are processed in 2 weeks or less, and include an extra fee.

FEES

For-profit organizations, including consultants working for governmental agencies, are charged a fee for this service. In addition, **a fee may be charged for large requests from any source. A surcharge of $50 is applied for ALL rush orders;** if this is a rush order, please check the blank below. All fees are subject to change. Please do not include payment with your request; an invoice will be sent to you.

☐ **Rush - ($50 fee for ALL rush orders)**

"The information supplied above is complete and accurate. I understand that material supplied to me from the Minnesota Natural Heritage Information System is copyrighted and that I am not permitted to reproduce or publish any of this copyrighted material without prior written permission from the Minnesota DNR. Further, if permission to publish is given, I understand that I must credit the Minnesota Natural Heritage and Nongame Research Program, Minnesota Department of Natural Resources as the source of the material."

Signature **(required)** _____

Mail or email completed forms to:

Lisa Joyal *(for projects associated with environmental reviews; e.g., EAWs)* (651) 259-5109
Endangered Species Environmental Review Coordinator
lisa.joyal@dnr.state.mn.us
or
Sharron Nelson *(for general requests)* (651) 259-5123
Assistant Database Manager
sharron.nelson@dnr.state.mn.us
at
Natural Heritage and Nongame Research Program
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, Minnesota 55155

For further information call:

Or FAX completed forms to: (651) 296-1811

Additional information about the Natural Heritage & Nongame Research Program is available at http://www.dnr.state.mn.us/eco/nhnrp/

For Agency Use Only:

EO's requiring comment _____

Sources contacted	Topic	Response

Response Summary _____

Responder _____

Revised May 2007

Minnesota Department of Natural Resources
Division of Ecological Resources, Box 25
500 Lafayette Road
St. Paul, Minnesota 55155-4025
Phone: (651) 259-5107 Fax: (651) 296-1811 E-mail: heidi.cyr@dnr.state.mn.us

June 29, 2009 **Correspondence # ERDB 20090903**

Mr. Bruce Jennings
DeWild Grant Reckert & Associates Co.
1302 South Union Street
Rock Rapids, IA 51246

RE: Natural Heritage information in the vicinity of the proposed West Stevens Wind; T125N R44W Section 16, 17, 28, 29, & 33; Stevens County

Dear Mr. Jennings,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, there are no known occurrences of rare features in the area searched.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area.

This letter does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. Additional rare features for which we have no data may be present in the project area, or there may be other natural resource concerns associated with the proposed project. For these concerns, please contact your DNR Regional Environmental Assessment Ecologist, Nathan Kestner at 218-308-2672. Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,

Heidi Cyr
Endangered Species Environmental Review Specialist

Appendix G
FWS Consultations and Correspondence

DeWild Grant Reckert and Associates Company
CONSULTING ENGINEERS AND LAND SURVEYORS
1302 South Union Street
P.O. Box 511
Rock Rapids, IA 51246
(712)472-2531
Fax (712)472-2710

March 17, 2009

Mr. Tony Sullins, Field Supervisor
U.S. Fish and Wildlife Service
4101 American Blvd. East
Bloomington, MN 55425

Re: West Stevens Wind, LLC
Large Wind Energy Conversion System
DGR Project 850802

Dear Mr. Sullins:

West Stevens Wind, LLC proposes construction of 13 wind turbines for a Large Wind Energy Conversion System in Stevens County, Minnesota. It is expected that these turbines may be financed in part with funds from USDA Rural Development. As part of the environmental review process, we request your review of the proposed project area and ask that you provide comment regarding any known impacts on wildlife and endangered species in the project area as part of the environmental review process. Please note where your comments may apply to an individual turbine or to the overall project.

I have attached maps of the proposed sites, with the townships and sections noted.

If you have any questions or need further information please call me at 712-472-2531 or e-mail me at bjennings@dgrnet.com. Thank you for your review.

Sincerely,

DEWILD GRANT RECKERT
& ASSOCIATES COMPANY

Bruce Jennings, P.E.

BJ:jkv

Enclosures

P:\08\508\02\Environmental\FishandWildlife.wpd