

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendraye
David Boyd
Marshall Johnson
Phyllis Reha
Thomas Pugh

Chair
Commissioner
Commissioner
Commissioner
Commissioner

Ian Krygowski
enXco Development Corporation
Suite 107
10 Second Street NE
Minneapolis, MN 55413

SERVICE DATE: **JAN 15 2008**

DOCKET NO. IP-6646AVS-07-839

In the Matter of the Application of enXco Development Corporation for a Large Wind Energy Conversion System Site Permit for the Wapsipinicon Wind Farm-Mower County

The above entitled matter has been considered by the Commission and the following disposition made:

The Commission:

- 1) **Adopts the proposed Findings of Fact, Conclusions and Order for the Wapsipinicon Wind Project/Grand Meadow 205.5-Megawatt Large Wind Energy Conversion System in central Mower county, Minnesota.**
- 2) **Issues the proposed LWECS Site Permit for the 100.5-Megawatt Grand Meadow Wind Farm to enXco Development Corporation.**
- 3) **Authorizes the Commission Executive Secretary to re-issue LWECS Site Permit for the 100.5 Megawatt Grand Meadow Wind Farm to Northern States Power Company, d/b/a Xcel Energy upon submittal of a compliance filing by both enXco and Northern States Power Company pursuant to site permit condition III.K.6.**
- 4) **Withholds issuance of a LWECS Site Permit for the 105-Megawatt Wapsipinicon Wind Project until such time as enXco Development Corporation or the entity purchasing the energy or owning the facility can satisfy the requirements of Minn. Stat. § 216B.243, subd. 2 and Minn. Rules Chapter 7849. Upon satisfying those requirements the Commission will reconsider LWECS Site Permit issuance for the 105-Megawatt Wapsipinicon Wind Project**

The Commission agrees with and adopts the recommendations of the Department of Commerce which are attached and hereby incorporated in the Order.

BY ORDER OF THE COMMISSION

A handwritten signature in blue ink, appearing to read "Burl W. Haar", is written over the printed name.

Burl W. Haar
Executive Secretary

(S E A L)

This document can be made available in alternative formats (i.e. large print or audio tape) by calling 651.201.2202 (voice). Persons with hearing or speech disabilities may call us through Minnesota Relay at 1.800.627.3529 or by dialing 711.

**STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION**

In the Matter of the Application of
enXco Development Corporation for
a Site Permit for a 205.5-Megawatt
Large Wind Energy Conversion
System and Associated Facilities in Mower
County, Minnesota

**FINDINGS OF FACT, AND
CONCLUSIONS AND ORDER**

**PUC DOCKET NO.
IP6646/WS-07-839**

The above-entitled matter came before the Minnesota Public Utilities Commission (PUC), pursuant to an application by enXco Development Corporation (enXco), for a site permit to construct, operate, maintain and manage a 205.5-Megawatt (MW) nameplate capacity Large Wind Energy Conversion System (LWECS) and associated facilities in Mower County in Clayton, Marshall, Dexter, Grand Meadow, Pleasant Valley and Sargeant Townships. enXco applied for the permit on behalf of the Wapsipinicon Wind Project and the Grand Meadow Wind Farm. The first permit is to be issued in the name of Grand Meadow Wind Farm, which when completed will be sold to and owned by Northern States Power Company, a Minnesota Corporation and wholly owned subsidiary of Xcel Energy (Xcel Energy) as a complete “turnkey” project.

All of the proposed wind turbines and associated facilities will be located in Mower County. The energy from the proposed 205.5 MW project will be delivered from the project substation to the Pleasant Valley Substation located in section 19 of Pleasant Valley Township via approximately 6 miles of overhead 161 kV transmission line. Other associated facilities will include pad mounted step-up transformers for each wind turbine, access roads and a 34.5 kV electrical collection and feeder system, project substation, and permanent meteorological towers.

STATEMENT OF ISSUE

Should enXco Development Corporation, be granted a site permit under Minnesota Statutes section 216F.04 to construct in phases a 205.5-Megawatt (MW) Large Wind Energy Conversion System in Mower County, Minnesota, with the first phase identified as the 100.5 MW Grand Meadow Wind Farm, which will be sold to and owned by Northern States Power Company, upon completion of construction?

Based upon the record created in this proceeding, the Public Utilities Commission makes the following:

FINDINGS OF FACT

Background and Procedure

1. On June 25, 2007, enXco Development Corporation (enXco) filed a complete application with the Public Utilities Commission for up to 205.5 megawatts of nameplate wind power generating capacity identified as the Wapsipinicon Wind Project in Mower County in southeastern Minnesota (Exhibit 1).
2. Department of Commerce staff determined that the June 25, 2007, application complied with the application requirements of Minnesota Rules, part 4401.0450 (renumbered at Minnesota Rules, part 7836.0500). In a briefing paper to the PUC, dated July 18, 2007, DOC Energy Facility Permitting staff recommended that the PUC accept the application (Exhibit 2).
3. On August 7, 2007, a PUC Order accepted the application for the Wapsipinicon Wind Project/Grand Meadow Wind Farm and associated facilities. On August 7, 2007, the PUC also issued a draft site permit for review and comment (Exhibit 3).
4. DOC EFP staff prepared a notice for the public information and scoping meeting to receive comments on the site permit application, the draft site permit and the scope of the environmental report required for the Grand Meadow Certificate of Need Proceeding (PUC Docket # E0022/CN-07-873) (Exhibit 4).
5. enXco's site permit application was distributed to the Public Utilities Commission, the Minnesota Historical Society, the auditor of Mower County, County Commissioners and township clerks. Each landowner affected by the proposed project also received a copy of the application, notice of application acceptance and public information meeting, and a copy of the draft site permit during the week of September 2, 2007 (Exhibit 5)
6. The DOC published notice of the site permit application, DOC public information and scoping meeting and opportunity to comment on the draft site permit in the *Bluff County Reader* and *Austin Daily Herald* on September 3, 2007 (Exhibits 6 & 7). The published notice provided: a) location and date of the public information meeting; b) description of the proposed project; c) deadline for public comments and scoping comments on the application and draft site permit (October 10, 2007); d) description of the PUC site permit review process; and e) identification of the public advisor. The notice published meets the requirements of Minnesota Rules part 7836.0900 subp2.
7. On September 10, 2007, the EFP staff published in the *EOB Monitor* notice of the September 19, 2007, public information and scoping meeting in Elkton, Minnesota, and the availability of the draft site permit, Volume 31, No. 19, September 10, 2007 (Exhibit 8). The published notice contained all of the information required by Minnesota Rules part 7836.0900 subp. 1. Notice also appeared on the PUC web site.

8. The DOC EFP held a public information meeting on September 19, 2007, in Elkton, to receive comments on the site permit application, draft site permit and Scoping Comments. Approximately 50 people attended the meeting. Representatives from enXco, Inc., and Northern States Power Company were also present. DOC EFP staff responded to questions about the permitting process and enXco staff responded to questions about the project. Questions were asked about access roads, project timing, easement agreements and conditions, location of distribution and feeder lines, and project decommissioning. No significant issues or concerns were raised about the permitting process, the proposed project, or conditions in the draft site permit at the public meeting. The public comment period on the project closed on October 10, 2007.

The Permittee

9. enXco Development Corporation has been in the process of developing the Wapsipinicon site since 2001. enXco's Wapsipinicon Site Permit Application is for a 205.5 Megawatt LWECs project. At this time, the Project will be completed using a "build-transfer" approach. Xcel Energy has contracted with enXco for the development and construction of the facility, with an expected in-service date of November 1, 2008. After the facility is completed, the ownership of the project will transfer to Northern States Power Company.
10. There are two primary agreements between Xcel Energy and enXco, which cover ownership of the site and the construction and development of the project, and several supporting agreements. The two primary agreements are:
 - a. the Acquisition and Sale Agreement ("ASA"), and
 - b. the Turnkey Engineering, Procurement and Construction Agreement ("TEPC").
11. The ASA obligates enXco to complete and transfer to Xcel Energy all project development and land rights associated with the site. This agreement is effective upon execution but will not close until an extensive list of development activities has been completed by the developer and regulatory approvals have been achieved.
12. The TEPC is a traditional Turnkey Engineering, Procurement and Construction contract obligating the developer to design and build the facility at the site per the specifications. This agreement is effective upon execution, but construction will not begin at the site until after the CON and Site permit have been granted.
13. Each of these contracts set out payment schedules, completion schedules, remedies and recourses for failure by either party to perform their obligations under these agreements.
14. In addition, the parties will enter into separate agreements related to the interconnection rights associated with the project and to cover other ancillary aspects of the project. The parties are also considering entering into an Operation and Maintenance agreement but anticipate that this agreement would be negotiated at a later date.

Project Description

15. As proposed, the 205.5-megawatt Wapsipinicon Wind Project/Grand Meadow Wind Farm will consist of up to 137 General Electric 1.5-megawatt wind turbine generators or similar turbine mounted on freestanding tubular towers. The proposed turbine model and specifications may change because the project will not be built until 2008 and any other phases at a later date depending on future Certificate of Need requirements.
16. The towers will be 80-meters (262 feet) in height. The blades on the wind turbine are 38.5-meters (126 feet) long. Turbine rotor diameter will be 77 meters (253 feet) across. The overall height of the tower, nacelle and blade will be approximately (118.5 meters) 389 feet when one blade is in the vertical position. The project will also include an underground-automated supervisory control and data acquisition system (SCADA) for communication purposes. Up to five permanent meteorological towers will be used as part of the communication system. Other components of the project include a concrete and steel foundation for each tower, pad-mounted step-up transformers, all weather class 5 roads of gravel or similar material, and an underground and overhead electric energy collection system and a project substation.
17. The GE Wind 1.5 MW wind turbine is a three blade, upwind, active yaw, and active aerodynamic control regulated wind turbine with power/torque control capabilities. The rotor utilizes blade pitch regulation and variable speed operation to achieve optimum power output at all wind speeds. The variable speed operation minimizes power and torque spike delivered from the rotor to the drive train resulting in improved long-term reliability. Each turbine is equipped with a wind direction sensor. The wind direction sensor communicates with the computer system, which evaluates the measured wind parameters, and within a specified time interval, activates the yaw drives to align the nacelle to the wind direction.
18. Each turbine is interconnected through an underground electrical collection system at 34.5 kV. The 34.5 kV feeder lines from the project collection system feed the power to the independent breaker positions at the proposed project substation. The substation steps up the voltage from the 34.5 kV collection systems to the transmission system level of 161 kV. The applicant is proposing to place the 34.5 kV feeder lines on public road rights-of-way where possible. Depending on conditions the feeder lines may be either overhead or underground. All of the proposed feeder lines would connect to the proposed substation within the site permit boundaries.
19. The blades are made of fiberglass with a smooth layer of gel coat that provides ultraviolet protection. The blades will be either white or grey in color. The blades will be equipped with lightning protection. The entire turbine is also grounded and shielded to protect against lightning.
20. Each tower will be secured by a concrete foundation that will vary in size depending on the soil conditions. A control panel that houses communication and electronic circuitry is placed in each tower. In addition, a step-up, pad-mounted transformer is necessary for

each turbine to collect the power from the turbine and transfer it to a 34.5 kV collection system via underground cables.

21. All turbines and up to 5 permanent meteorological towers will be interconnected with fiber optic communication cable that will be installed underground. The communication cables will run back to a central host computer which will be located either at the Pleasant Valley Substation, the project substation or at the operations and maintenance facility where a supervisory control and data acquisition (SCADA) system will be located. Signals from the current and potential transformers at each of the delivery points will also be fed to the central SCADA host computer. The SCADA system will be able to give status indications of the individual wind turbines and the substation and allow for remote control of the wind turbines locally or from a remote computer in California. This computerized supervisory control and data acquisition network will provide detailed operating and performance information for each wind turbine. The Permittee will maintain a computer program and database for tracking each wind turbine's maintenance history and energy production.
22. Housed inside the fiberglass nacelle that sits on the top of the tower are the generator, brake system, yaw drive system and other miscellaneous components.

Wind Resource Considerations

23. The 205.5 MW Wapsipinicon/Grand Meadow Wind Farm will be located in central Mower County on both sides of I-90 and include portions of Pleasant Valley, Sargeant, Grand Meadow, Dexter, Marshall and Clayton Townships. The Grand Meadow Wind Farm portion of the Wapsipinicon Wind Project will be built on the south side of I-90 and the Wapsipinicon portion will be located on the north side of I-90. The cities of Elkton and Dexter are within the site permit boundaries for the proposed project. Land use in the project area is agricultural with intensive farming and grazing activities and, as a result, there are few trees or structures in the proposed project site to inhibit the wind as it passes over the site. The wind resource in the Mower County area is well documented by the Wind Resource Analysis Program (WRAP) Report (2002) prepared by the Minnesota Department of Commerce. The WRAP Report presents wind analysis data from monitoring stations across the state of Minnesota.
24. For this project the wind turbines will be sited in clusters along hilltops and ridgelines within the site boundaries. The wind turbines are sited so as to have good exposure to winds from all directions with emphasis on exposure to the prevailing southerly and northwesterly wind directions. The turbine spacing, according to enXco's application, maximizes use of the available wind and minimizes wake and array losses within the topographical context of the site. The turbines are typically oriented west-southwest to north-northeast, which is roughly perpendicular to the prevailing southerly and northwest winds. Turbine placement has been designed to provide 3 rotor diameters spacing in the non-prevailing (WSW/SW to NNE/NE) direction and 6 rotor diameters spacing in the north-south direction, with respect to the predominant energy production directions. Given the prevalence for southerly winds, the spacing is widest in the north-south

direction. Greater or lesser spacing between the turbine strings may be used in areas where the terrain dictates the spacing. This is addressed in the permit at III.E.5. Individual, isolated turbine sites are avoided to minimize interconnection and access costs. Sufficient spacing between the turbines is utilized to minimize wake losses when the winds are blowing parallel to the turbines.

25. The gross annual energy output per turbine is estimated to be approximately 700 GWh (gigawatt hours) or 700,000 MWh (megawatt hours). Assuming an efficiency of approximately 86 percent when the wind is blowing, the net annual energy output per turbine is expected to be 5,109 MWh. If 137 turbines are used, the project will produce approximately 700,000 MWh per year. The base energy calculation presented assumes a normal or average wind year. The maximum variation in energy is within +/- 15 percent. Based on the data, one would expect the annual variation in energy at the project site to be within 10 percent of the mean during most years.
26. Most of the land within the project site is actively farmed. Around 80 percent of the land in Mower County is used for agricultural purposes. Corn and soybeans are the dominant crops. Oats and hay are additional crops within the Project site.
27. The project site as proposed includes approximately 51,200 acres. The land is predominately agricultural, with some scattered wooded areas, and wetlands. It is estimated that the proposed facilities will result in the permanent disturbance of approximately 137 acres of land, primarily for roads and towers. Construction of the turbines sites and access roads will involve temporarily disturbing at the most approximately 5-10 acres of land per turbine. This equates to 670-1,340 acres of temporary disturbance for contractor staging areas, foundation construction, underground power lines, and tower and turbine assembly. Roads are expected to be about 16 feet wide
28. Wind turbine and road access will be sited to take into account the contours of the land and prime farmland locations to minimize impact. An erosion and sediment control plan and Storm Water Pollution Prevention Plan (SWPPP) will be prepared for the Project and the disturbed areas will be seeded after construction to stabilize the area. The Project will also be subject to the requirements of the NPDES Construction Permit.

Land Rights and Easement Agreements

29. In order to build a wind plant, a developer needs to secure site leases and easement option agreements to ensure access to the site for construction and operation of a proposed project. These lease or easement agreements also prohibit landowners from any activities that might interfere with the execution of the proposed project.
30. enXco has obtained lease and easement option agreements and/or rights to such agreements with landowners for land within the project site boundary necessary for installation of the components of the wind farm. These rights and easements will be used

to site the turbines and all associated facilities and provide the necessary buffers and setbacks.

Written Comments and Letters Received by October 10, 2007

31. No public comments or letters were received by the close of the comment period on October 10, 2007, or after the close of the comment period.

Site Criteria

32. Minnesota Rules chapter 7836 applies to the siting of Large Wind Energy Conversion Systems. The rules require applicants to provide a substantial amount of information to allow the PUC to determine the potential environmental and human impacts of the proposed project and whether the project is compatible with environmental preservation, sustainable development, and the efficient use of resources. Minn. Rules parts 7836.0500 through 7836.0600. The following analysis addresses the relevant criteria that are to be applied to a LWECs project.

Human Settlement, Public Health and Safety

33. The site is in an area of low population density, with little residential, commercial or industrial development on or near the site. As a result, the impact of the proposed LWECs on human settlement, public health and safety will be minimal. The site permit, at part III. C., has conditions for setbacks from residences and roads. The proposed wind turbine layout will meet or exceed those requirements. The proposed project is not expected to affect any water wells (used, unused or unsealed) or any rural water system that services the area. The Project is not expected to have any adverse impacts on the communities of Elkton, Dexter and Grand Meadow that are within or adjacent to the site.
34. There will be no displacement of existing residences or structures in siting the wind turbines and associated facilities.
35. The project will comply with the Federal Aviation Administration requirements with respect to lighting. See site permit condition III.E.4.
36. The Permittee will provide security during construction and operation of the project, including fencing, warning signs, and locks on equipment and facilities. The Permittee will also provide landowners and interested persons with safety information about the project and its facilities. See site permit condition III.B.15.
37. In winter months ice may accumulate on the wind turbine blades when the turbines are stopped or operating very slowly. Furthermore, the anemometer may ice up at the same time, causing the turbine to shut down during any icing event. As weather conditions change, any ice will normally drop off the blades in relatively small pieces before the turbines resume operation. This is due to flexing of the blades and the blades' smooth surface. Although turbine icing is an infrequent event, it remains important that the

turbines are not sited in areas where regular human activity is expected below the turbines or in the immediate proximity during the winter months.

38. Each turbine will be clearly labeled to identify each unit and a map of the site with the labeling system will be provided to local authorities as part of the fire protection plan.

Noise

39. Wind turbines do generate noise. GE Wind and noise consultants suggest a maximum noise threshold of 45 dBA at occupied homes. According to sound pressure level tests and estimations provided by enXco in its application for a site permit, the sound pressure level is expected to be lower than the Pollution Control Agency noise standard of 50 dBA measured at the closest residence. See Minn. Rules part 7030.0040. For this project, the site permit application indicates that at a distance of 1,000 feet from the turbines, the noise measured at a home will be less than 50 dBA.

Visual Values

40. The placement of up to 137 turbines will affect the appearance of the area. The wind turbines will be mounted on tubular towers that are up to 265 feet tall. The rotor blades will have a diameter of up to 254 feet. The turbine towers and rotor blades will be prominent features on the landscape. There will be intermittent, expansive views of the turbines to passing motorists on highways I-90, and Trunk Highway 16 between Dexter and Grand Meadow. Motorists and drivers on local township and county roads will travel within 300 feet of some turbines.
41. The visual impact of the wind turbines will be reduced by the use of a neutral paint color. The only lights will be those required by the Federal Aviation Administration. All site permits issued by the PUC require the use of tubular towers; therefore, the turbine towers will be uniform in appearance. These wind turbines will be the dominant visual features on the landscape. The turbine towers will be similar to those used on the Fenton, Chanarambie and Moraine wind projects in Murray and Nobles counties. Blades used in the proposed project will be white. The wind turbines in this project, while prominent on the landscape, also blend in with the surrounding area. The project site will retain its rural character. The turbines and associated facilities necessary to harvest the wind for energy are consistent with existing land use and agricultural practices.
42. From one perspective, the proposed project might be perceived as a visual intrusion on the natural aesthetic value on the landscape, characterized by up to 137 tubular steel structures approximately 265 -feet high, standing on formerly undisturbed ridgelines, with 126 -foot blades, for an overall height of 389 feet when one blade is in the vertical position. Wind plants have their own aesthetic quality, distinguishing them from other non-agricultural uses. In the last several years most of the overhead electric distribution lines and telephone lines in Murray and Nobles counties have been placed underground, which does open up the view shed for people traveling through the area. The existing wind plants have altered the landscape in the area from agricultural to wind

plant/agricultural. This project will add to visual impact of the area. The cumulative effect of the proposed project will increase both the industrial appearances of the wind plants on Buffalo Ridge and the areas from which they will be seen. Because wind generation development is likely to continue in Mower County, this visual impact will continue to increase the size of the wind plant/farm footprint as the turbines harvest the wind resources of Mower County for energy. To date the presence of the wind turbines in Mower County has been well accepted by the people who live and work in the area.

43. Several other measures will also be taken to minimize visual intrusion such as: low profile access roads, project access roads will avoid cuts and fill, the areas affected by construction will be restored after construction is completed, turbines will not be illuminated unless required by FAA regulations, and the turbine rotor size will require sufficient turbine spacing to minimize wake loss. The visual scale will be similar to the other projects in Mower County.

Recreational Resources

44. Recreational opportunities in Mower County include hunting, fishing, and snowmobiling, camping, and hiking. Hunting is permitted in designated Minnesota Department of Natural Resources wildlife management areas (WMA's), unless otherwise posted.
45. Schwerin Creek Wildlife Management Area (WMA) is a 37-acre site located within the southwestern portion of the study area. Schwerin Creek flow through the WMA and hunting is allowed. Wild Indigo Scientific and Natural Area (SNA) is a 150-acre site located west of the study area and contains one of the best examples of mesic tallgrass prairie left in Southwestern Minnesota. It stretches for 12 miles between Dexter, Brownsdale, and Ramsey. Turbines will not be located within these two sites. The only impact expected is visual. WMA's are managed to provide wildlife habitat, improve wildlife production and provide public hunting and trapping opportunities. These MDNR lands were acquired and developed primarily with hunting license fees. WMA's are closed to all-terrain vehicles and horses because of detrimental effects on wildlife habitat.
46. The turbines will be noticeable to persons using the WMA's. Turbines will not be located in WMA's or in any local parks. Turbine operations are not expected to affect the natural areas in any material way and no adverse impact on wildlife management areas or practices is expected.

Infrastructure

47. The proposed wind farm is expected to have a minimal effect on the existing infrastructure. The proposed project will use underground cables for the collector lines on private property within the wind farm. The feeder lines associated with the project are currently planned to be underground. Any aboveground feeder lines, if used, would be wood-pole, 34.5 kV typical of wind project feeder lines in the area that tie into existing windfarm substations. The feeder lines will deliver the energy from the wind farm to the

Pleasant Valley Substation. Placement of collector and feeder lines is addressed in the site permit at III.E.7. and 8.

48. The project will require the use of public roads to deliver construction supplies and materials to the work site. Site permit condition III.B.8., addresses this topic. Construction of the project requires the addition of several miles of access roads that will be located on private property. The access roads will be routed along the wind turbine strings, fence lines, and field edges to minimize disturbance to agricultural activities. The typical access road will be 15 to 20 feet in width and covered in Class 5 gravel (or similar material). The access roads will be low profile roads to allow for the movement of agricultural equipment. The site permit at III.B. 8 (b) addresses this topic. During operation and maintenance of the wind plant, operation and maintenance crews, while inspecting and servicing the wind turbines, will use access roads. Periodic grading or other methods will maintain the roads necessary to maintain road integrity. The Permittee may do this work or contract it out.
49. If access roads must be installed across streams or drainage ways, the Permittee in consultation with the Minnesota Department of Natural Resources will design, shape and locate the road so as not to alter the original water flow or drainage patterns. Any work required below the ordinary high water line, such as road crossings or culvert installation, will require a permit from the Minnesota Department of Natural Resources.
50. The proposed wind farm will not affect water supplies, railroads, telecommunication facilities, and radio reception. The presence or operation of the wind plant could potentially impact the quality of television reception in the area. Previous work on television reception issues indicates that in some cases new antennas or relocation of existing antennas can restore television signal strength reception. The Permittee will address the concerns of residents in the area of the project site before and after the project construction to document and mitigate any television reception impacts that might occur. This is addressed in the site permit at III.D.3.
51. Construction, operation, and maintenance of the proposed wind plant will comply with all of the required federal and state permit requirements.

Community Benefits

52. The project will provide local tax revenues from a production tax on the wind turbines. No significant adverse impact on public services is expected. Wear and tear on roads will occur as a result of the transport of heavy equipment and other materials. The site permit at III.B.8. addresses road damages. Landowners with turbine(s) on their property will also receive payments from the Permittee for energy generated by the turbine(s).
53. To the extent that local workers and local contractors are capable, qualified, and available, enXco will seek to hire them to construct the proposed project. The hiring of local people will expand employment opportunities in this area of the state and keep

money in the local economy. Once constructed, the project will be staffed with several site technicians and a wind plant supervisor.

Effects on Land-Based Economies

54. The wind turbines and access roads will be located so that the most productive farmland will be left as intact as possible. However, the project will displace approximately 137 acres of agricultural land. The site permit at III.B. 2., 3., 4., 5., 6., 7., 8(c), 9., and 10. addresses mitigation measures for agricultural lands. The proposed project does not affect any sand or gravel operations.

Archaeological and Historical Resources

55. A review of the Minnesota State Historic Preservation Office (SHPO) computer database indicates that four recorded archaeological sites are within the project site and one adjacent to the site. Thirty-one historical structures are recorded with the Development site.
56. A Phase I Archaeology survey is recommended for all the proposed turbine locations, access roads, junction boxes and areas of construction impact for the transmission line to document any previously unrecorded archaeological sites within the project site. The site permit at III. D.2. requires the Permittee to conduct an archaeological reconnaissance survey. A Phase I archaeology survey consists of the following tasks: consultation, documentation, and identification.
57. If any archaeological sites are found during the Phase I survey, their integrity and significance should be addressed in terms of the site's potential eligibility for placement on the National Register of Historic Places (NRHP). If such sites are found to be eligible for the NRHP, appropriate mitigative measures will need to be developed in consultation with the Minnesota State Historic Preservation Officer (SHPO), the State Archaeologist, and consulting American Indian communities. The site permit also requires the Permittee to stop work and notify the Minnesota Historical Society and PUC if any unrecorded cultural resources are found during construction.

Air and Water Emissions

58. No harmful air or water emissions are expected from the construction and operation of the LWECS.

Animals and Wildlife

59. Neither construction nor operation of the Project is expected to impact wildlife. Based on studies of existing wind power projects in the United States and Europe, the only impact of concern to wildlife would primarily be to avian and bat populations. The final report on avian monitoring studies at Buffalo Ridge, Minnesota "Final Report-Avian

Monitoring Studies at the Buffalo Ridge, Minnesota Resource Area: Results of a 4-Year Study" (September 2000) identified the following impacts:

60. Following construction of the wind turbines, there is a reduction in the use of the area within 100 meters of the turbines by seven of 22 species of grassland breeding birds. It was hypothesized that lower avian use may be associated with avoidance of turbine noise, maintenance activities, and less available habitat. The researchers stated "on a large scale basis, reduced use by birds associated with wind power development appears to be relatively minor and would not likely have any population consequences on a regional level."(p. 44)
61. Avian mortality appears to be low on Buffalo Ridge, compared to other wind facilities in the United States, and is primarily related to nocturnal migrants. Resident bird mortality is very low and involves common species. The researchers stated that "based on the estimated number of birds that migrate through Buffalo Ridge each year, the number of wind plant related avian fatalities at Buffalo Ridge is likely inconsequential from a population standpoint." (p. iv)
62. Bat mortality was also studied at Buffalo Ridge, instigated by bat collision victims found during the avian monitoring studies. The bat study was conducted in 2001 and 2002. ("Bat Interactions with Wind Turbines at the Buffalo Ridge, Minnesota Wind Resource Area," November 2003). The overall conclusion is that bat activity at turbines and the numbers of bat fatalities do not share a statistical relationship. Bat collisions were found to be very rare, given the amount of bat activity documented at the turbines. Most fatalities involving migrating or dispersing bats occur in the fall. Fatality estimates at Buffalo Ridge indicate that the population of bats susceptible to turbine collisions is large, and that the observed number of fatalities "is possibly not sufficient to cause significant, large-scale population declines." (p. 6-1)
63. Mitigation measures are also prescribed in the site permit and include but are not limited to: a) a pre-construction inventory of existing biological resources, native prairie, state listed and threatened species and wetlands in the project area; b) turbines and associated facilities will not be constructed in wildlife management areas, recreation and state scientific and natural areas; c) trees and shrubs that are important to the wildlife present in the area will not be disturbed; d) sound water and soil conservation practices will be implemented during construction and operation of the project to protect topsoil and adjacent resources and to minimize soil erosion. This also applies to any work in proximity to watercourses.

Vegetation

64. No public waters, wetlands or forested land are expected to be affected by the project. No groves of trees or shelterbelts will need to be removed to construct and operate the system. Native prairie will also be avoided. If native prairie cannot be avoided, the site permit, at III. C.6. provides for preparation of a prairie protection and management plan.

Soils

65. Construction of the wind turbines and access roads increases the potential for erosion during construction and converts prime farmland to industrial use. The site permit at III. B. 9. requires a soil erosion and sediment control plan. The project will also require a storm water run-off permit from the Minnesota Pollution Control Agency.

Surface Water and Wetlands

66. No towers, access roads or utility lines will be located in surface water or wetlands. See site permit at III.C.5.

Future Development and Expansion

67. Other wind projects (High Prairie I and High Prairie II) have been installed in Mower County. Current information suggests Mower County's windy areas are large enough to accommodate more wind facilities. In the future, turbines used in Mower County likely will consist of several types and sizes supplied by different vendors and installed at different times.
68. While large-scale projects have occurred elsewhere (California, Texas and Iowa), little systematic study of the cumulative impact has occurred. Research on the total impact of many different projects in one area has not occurred. DOC EFP staff will continue to monitor for impacts and issues related to wind energy development.
69. The PUC anticipates more site permit applications under Minnesota Statutes section 216F.04 (a). The PUC is responsible for siting of LWECS "in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources." Minnesota Statutes section 216F.03.
70. Minnesota Statutes section 216E.03, subd. 7 requires consideration of design options that might minimize adverse environmental impacts. By using larger turbines, fewer turbines are required, reducing siting needs for turbines and related facilities. Turbines must also be designed to minimize noise and aesthetic impacts. Buffers between strings of turbines are designed to protect the turbines' production potential. The site permit also provides for buffers between adjacent wind generation projects to protect production potential. See site permit at III.C.1.
71. The location and spacing of the turbines are critical to the issues of orderly development and the efficient use of wind resources. Turbines are likely to be located in the best winds, and the spacing dictates, among other factors, how much land area the project occupies. There is strong public support for orderly development.
72. One efficiency issue is the loss of wind in the wake of turbines. When wind is converted to rotational energy by the blades of a wind turbine, energy is extracted from the wind. Consequently, the wind flow behind the turbine is not as fast and is more turbulent than

the free-flowing wind. This condition persists for some distance behind the turbine as normal wind flow is gradually restored. If a turbine is spaced too close downwind of another, it produces less energy and is less cost-effective. This is the wake loss effect. If the spacing is too far, wind resources are wasted and the projects' footprint on the land is unnecessarily large.

73. For this project, turbine spacing maximizes use of the available wind resources and minimizes wake and array losses within the topographical context of the site. Site topography and wind resources did not lead to a layout involving long strips of turbines running parallel to each other and perpendicular to the prevailing wind. Instead, the site uses shorter strings. The objective was to capture the most net energy possible from the best available wind resource. Allowing for setback from roads and residences and avoiding native prairie and other sensitive areas, enXco Development Corporation arrived at a nominal turbine spacing of 3 rotor diameters in the non-prevailing wind directions and 6 rotor diameters in the prevailing wind directions, north-south direction, with respect to the predominant energy production directions. Given the prevalence for southerly winds, the spacing between turbines will be greater in the prevailing winds in the north-south direction for projects in Mower County. enXco's wake investigation shows that the estimated wake losses for the proposed Wapsipinicon Wind Project, which includes the Grand Meadow Wind Farm will be around 5 to 6 percent.
74. Other factors that lead to discounts were assumed to be identical for all arrays and include turbine availability (2 %); blade soiling (1%), icing (1%), high wind hysteresis (0.20), cold weather shutdown (1.40 %), electrical efficiency (2%), parasitic 0.90 %). Total losses are calculated at 14 to 15 percent.

Maintenance

75. Maintenance of the turbines will be on a scheduled, rotating basis with one or two units normally off for maintenance each day, if necessary. Maintenance on the interconnection points will be scheduled for low wind periods and coordinated with Xcel Energy. The Wapsipinicon Wind Project will be staffed with six to eight technicians and a wind plant supervisor. An operations and maintenance facility will also be built in Mower County.

Decommissioning and Restoration

76. The estimated decommissioning cost for the Wapsipinicon Wind project is approximately one million dollars. Decommissioning activities will include (1) removal of all turbines and towers; (2) removal of all pad mounted transformers; (3) removal of all above-ground distribution facilities; (4) removal of foundations to a depth of three feet below grade; and (5) removal of surface road material and restoration of the roads and turbine sites to previous conditions to the extent feasible. The Permit requires the Permittee to submit a Decommissioning Plan to the PUC that describes how the Permittee will ensure that the resources are available to pay for decommissioning the project at the appropriate time. Decommissioning funds will be set aside as specific budget item. A set-aside guarantee will be executed on behalf of the project owner with an independent

administrator for the funds. During year 20 of operation of the wind power plant, approximately \$5,000 per turbine will be set aside for decommissioning. The independent administrator will report annually to the project owner on the status of decommissioning funds. The project owner will report every eight years to the independent administrator with an updated budget for the cost of decommissioning the plant in current-year and decommissioning-year dollars. See Exhibit 1, page 39.

Site Permit Conditions

77. All of the above findings pertain to the Applicant's requested permit for a 205.5 megawatt wind project. Xcel Energy has obtained a Certificate of Need for 100.5 megawatts that will be generated by the initial phase of the Wapsipinicon/Grand Meadow Wind Farm Project. Currently there is no Certificate of Need application pending for the 105 megawatts that is not part of the Grand Meadow Wind Farm, and the Applicant has provided no power purchase agreement or other enforceable mechanism for sale of the power to be generated by the second phase of the project. Expansion of the Project to include this additional 105 megawatts will require proof of compliance with all rules of the Public Utilities Commission. Final action on this future phase of the project should be delayed until the Applicant has complied with Minn. R. 7836.1000, subp. 3 (requiring compliance with Chapter 7836), and Minn. R. 7836.0500, subp. 2 (requiring a certificate of need or other commitment).
78. All of the other conditions contained in this site permit were established as part of the site permit proceedings of other wind turbine projects permitted by the Environmental Quality Board and the Public Utilities Commission. No significant comments were received concerning the requirements in the draft site permit distributed for comment on July 26, 2007. Minor changes that provide for clarifications of the draft site permit conditions have been made.
79. The site permit contains conditions that apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning and all other aspects of the Project.

Based on the foregoing findings, the Minnesota Public Utilities Commission makes the following:

CONCLUSIONS OF LAW

1. Any of the foregoing findings, which more properly should be designated as conclusions, are hereby adopted as such.
2. The Minnesota Public Utilities Commission has jurisdiction under Minnesota Statute 216F.04 over the site permit applied for by enXco Development Corporation for the 205.5-megawatt Wapsipinicon Wind Project of which 100.5-megawatts is the Grand Meadow Wind Farm which will be sold to Northern States Power Company as a turnkey project upon completion of construction.

3. The enXco Development Corporation application for a site permit was properly filed and noticed as required by Minnesota Statutes 216F.04 and Minnesota Rules 7836.0600 subp 2 and 7836.0900 subp 2.
4. The Minnesota Public Utilities Commission has afforded all interested persons an opportunity to participate in the development of the site permit and has complied with all applicable procedural requirements of Minnesota Statutes Chapter 216F and Minnesota Rules Chapter 7836.
5. No objections were filed with the Minnesota Public Utilities Commission by any governmental unit, affected landowner or any other interested person during the 30-day comment period and no public hearing was requested or is required.
6. The Minnesota Public Utilities Commission is the agency directed to carry out the legislative mandate to site LWECS in an orderly manner compatible with environmental preservation, sustainable development and the efficient use of resources. The proposed 205.5-megawatt LWECS Wapsipinicon Wind Project, which includes the 100.5 Grand Meadow Wind Farm, will not create significant human or environmental impacts and is compatible with environmental preservation, sustainable development, and the efficient use of resources.
7. The Minnesota Public Utilities Commission has the authority under Minnesota Statutes section 216F.04 to establish conditions in site permits relating to site layout and construction and operation and maintenance of an LWECS. The conditions contained in the site permit issued to enXco Development Corporation for the Grand Meadow Wind Farm are appropriate and necessary and within the Minnesota Public Utilities Commission's authority.

Based on the foregoing Findings of Fact and Conclusions of Law, the Minnesota Public Utilities Commission issues the following:

ORDER

The Public Utilities Commission hereby issues a site permit to enXco Development Corporation in the form attached hereto. The site permit issued by the PUC authorizes enXco Development Corporation to construct and operate 100.5-megawatt Grand Meadow Wind Farm Large Wind Energy Conversion System in Mower County in accordance with the conditions contained in the site permit and in compliance with the requirements of Minnesota Statute 216F.04 and Minnesota Rules Chapter 7836 for PUC Docket No. PT 6646/WS-07-839.

Approved and adopted this 15th day of January

BY THE ORDER OF THE COMMISSION



Burl W. Haar
Executive Secretary

**DOC EFP STAFF
EXHIBIT LIST
PUC DOCKET NO. IP6646/WS-07-839
WAPSIPINICON WIND PROJECT/GRAND MEADOW WIND FARM**

1. Site Permit Application for Large Wind Energy Conversion System by enXco Development Corporation for the Wapsipinicon Wind Project, Mower County, Minnesota, dated June 25, 2007.
2. Briefing Paper by DOC EFP Staff for PUC Commissioners regarding staff review of application for a Large Wind Energy Conversion System by enXco Development Corporation for the Wapsipinicon Wind Project, recommending the PUC accept the application as complete and make a preliminary determination to issue a draft site permit, dated July 18, 2007.
3. PUC Order, dated August 7, 2007, accepting the enXco Development Corporation application for the Wapsipinicon Wind Project, appointing a public advisor and authorizing a draft site permit.
4. Notice of the Department of Commerce Public Information and Scoping Meeting on Application by enXco Development Corporation for the Wapsipinicon Wind Project and Draft Site Permit Availability, dated August 20, 2007.
5. List of landowners and governmental agencies receiving site permit application, notice of DOC public information meeting and Draft Site Permit from WSB on behalf of enXco. Mailings took place on August 31, 2007.
6. Affidavit of Publication by the *Bluff County Reader* on September 3, 2007, of the Notice of Public Information and Scoping Meeting on September 19, 2007 and Availability of the Draft Site Permit.
7. Affidavit of Publication by the *Austin Daly Herald* on September 3, 2007, of the Notice of Public Information and Scoping Meeting on September 19, 2007 and Availability of Draft Site Permit.
8. Notice of Public Information and Scoping Meeting on September 19, 2007 and availability of Draft Site Permit published in *EQB Monitor*, September 10, 2007, Vol. 31, No. 19.

**LARGE WIND ENERGY CONVERSION SYSTEM
SITE PERMIT**

**FOR
GRAND MEADOW WIND FARM**

**IN
MOWER COUNTY**

ISSUED TO

ENXCO DEVELOPMENT CORPORATION

PUC DOCKET NO. IP-6646/WS-07-839

In accordance with Minnesota Statutes Section 216F.04 this Site Permit is hereby issued to:

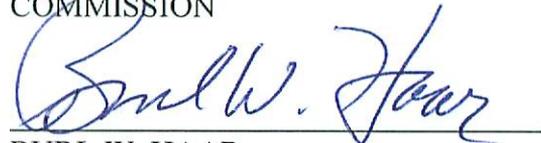
ENXCO DEVELOPMENT CORPORATION

enXco Development Corporation is authorized to construct and operate up to a 100.5 Megawatt Large Wind Energy Conversion System and Associated Facilities on the site identified in this Site Permit and in compliance with the conditions contained in this Permit.

This Permit shall expire on January 31, 2038

Dated: January 15, 2008

BY ORDER OF THE
COMMISSION



BURL W. HAAR
Executive Secretary

(S E A L)

This document can be made available in alternative formats (i.e., large print or audio tape) by calling 651-201-2202 (Voice), 651-297-1200 (TTY).

TABLE OF CONTENTS

I. SITE PERMIT	1
II. PROJECT DESCRIPTION	1
III. CONDITIONS	1
A. GENERAL CONSTRUCTION CONDITIONS	1
1. SITE PLAN	1
2. FIELD REPRESENTATIVE	1
3. PRECONSTRUCTION MEETING	2
4. NOTICE OF PERMIT CONDITIONS	2
B. MITIGATION MEASURES	2
1. SITE CLEARANCE.....	2
2. TOPSOIL PROTECTION.....	2
3. SOIL COMPACTION.....	2
4. LIVESTOCK PROTECTION	2
5. FENCES	2
6. DRAINAGE TILES	2
7. EQUIPMENT STORAGE.....	2
8. ROADS.....	3
9. SOIL EROSION AND SEDIMENT CONTROL	3
10. CLEANUP.....	4
11. TREE REMOVAL	4
12. RESTORATION	4
13. HAZARDOUS WASTE.....	4
14. APPLICATION OF HERBICIDES	4
15. PUBLIC SAFETY.....	4
16. FIRE PROTECTION.....	5
17. TOWER IDENTIFICATION.....	5
C. SETBACKS	5
1. WIND ACCESS BUFFER.....	5
2. RESIDENCES.....	5
3. ROADS.....	5
4. WILDLIFE MANAGEMENT AREAS	5
5. WETLANDS	5
6. NATIVE PRAIRIE.....	6
7. SAND AND GRAVEL OPERATIONS.....	6
D. PRECONSTRUCTION SURVEYS	6
1. BIOLOGICAL PRESERVATION SURVEY	6
2. ARCHAEOLOGICAL RESOURCES	6
3. ELECTROMAGNETIC INTERFERENCE.....	7
E. SITE LAYOUT RESTRICTIONS	7
1. WIND TURBINE TOWERS.....	7
2. METEOROLOGICAL TOWERS	7
3. NOISE	8
4. FEDERAL AVIATION ADMINISTRATION	8
5. TURBINE SPACING.....	8
6. FOOTPRINT MINIMIZATION	8

7. ELECTRICAL CABLES	8
8. FEEDER LINES.....	9
F. STUDIES.....	9
1. WAKE LOSS STUDIES	9
2. NOISE	9
G. DECOMMISSIONING/RESTORATION/ABANDONMENT	9
1. DECOMMISSIONING PLAN.....	9
2. SITE RESTORATION	10
3. ABANDONED TURBINES	10
H. REPORTING	10
1. PROJECT ENERGY PRODUCTION	10
2. WIND RESOURCE USE.....	10
3. EXTRAORDINARY EVENTS	11
4. COMPLAINTS.....	11
I. FINAL CONSTRUCTION.....	11
1. AS-BUILT PLANS AND SPECIFICATIONS	11
2. FINAL BOUNDARIES.....	11
3. EXPANSION OF SITE BOUNDARIES	11
J. AUTHORITY TO CONSTRUCT LWECS	11
1. WIND RIGHTS	11
2. OTHER PERMIT APPLICATIONS	12
3. PREEMPTION OF OTHER LAWS	12
4. POWER PURCHASE AGREEMENT	12
K. MISCELLANEOUS	12
1. PERIODIC REVIEW	12
2. FAILURE TO COMMENCE CONSTRUCTION	12
3. MODIFICATION OF CONDITIONS	12
4. REVOCATION OR SUSPENSION OF THE PERMIT	13
5. PROPRIETARY INFORMATION	13
6. TRANSFER OF PERMIT	13
7. OTHER PERMITS	13
8. SITE MANAGER.....	14
9. NOTICE TO LOCAL RESIDENTS	14
10. RIGHT OF ENTRY.....	14
11. MORE STRINGENT RULES	14
L. EXPIRATION DATE.....	14
M. SPECIAL CONDITIONS	14

ATTACHMENT 1: SITE BOUNDARY MAP

ATTACHMENT 2: COMPLAINT REPORT AND HANDLING PROCEDURES

I. SITE PERMIT

This Large Wind Energy Conversion System Site Permit authorizes enXco Development Corporation (herein after, "Permittee") to construct up to a 100.5-Megawatt (MW) Large Wind Energy Conversion System (LWECS) and associated facilities known as the Grand Meadow Wind Farm (herein after, "Project") in Mower County, on a site of approximately 25,600 acres (40 square miles) in accordance with the conditions contained in this Permit. The site boundary is shown on the map that is attached hereto as Attachment 1.

II. PROJECT DESCRIPTION

The 100.5-MW Grand Meadow LWECS and associated facilities authorized to be constructed in this site permit will be designed and built by enXco and that after it is built, the Grand Meadow Wind Farm will be purchased and owned by Northern States Power Company. The Project will consist of up to 67 1.5-MW wind turbines (or comparable utility grade wind turbines) with a combined nominal nameplate capacity of no more than 100.5 MW. Turbines are interconnected by communication and electrical power collection facilities within the wind farm. Energy from the Project will be delivered to the grid at the Pleasant Valley Substation, located in Section 19 of Pleasant Valley Township in Mower County. Associated facilities will include but not be limited to pad mounted transformers, wind turbine access roads, a project substation and permanent meteorological towers.

III. CONDITIONS

The following conditions shall apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning and all other phases of the LWECS. The PUC preserves all available remedies for violation of any of these Permit conditions, including revocation or modification of the Permit.

A. GENERAL CONSTRUCTION CONDITIONS

1. SITE PLAN

Prior to commencing construction, the Permittee shall submit to the PUC or Commission a site plan for all turbines, roads, electrical equipment, collector and feeder lines and other associated facilities to be constructed and engineering drawings for site preparation, construction of the facilities, and a plan for restoration of the site due to construction. The Permittee may submit a site plan and engineering drawings for only a portion of the LWECS if the Permittee is prepared to commence construction on certain parts of the Project before completing the site plan and engineering drawings for other parts of the LWECS. In the event that previously unidentified environmental conditions are discovered during construction which by law or pursuant to conditions outlined in this Permit would preclude the use of that site as a turbine site, the Permittee shall have the right to move or relocate turbine sites. The Permittee shall notify the PUC of any turbines that are to be relocated before the turbine is constructed on the new site.

2. FIELD REPRESENTATIVE

Prior to the start of construction and continuously throughout construction and site restoration, the Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this Permit. This person (or a designee) shall be accessible by telephone during normal business hours. This person's address, phone number and emergency phone number shall be provided to the PUC, who may make the number available to local residents and officials and

other interested persons. The Permittee may change the field representative by notification to the PUC.

3. PRECONSTRUCTION MEETING

Prior to the start of any construction, the Permittee shall conduct a preconstruction meeting with the person designated by the PUC to coordinate field monitoring of construction activities.

4. NOTICE OF PERMIT CONDITIONS

The Permittee shall inform all employees, contractors, and other persons involved in the construction and ongoing operation of the LWECS of the terms and conditions of this Permit.

B. MITIGATION MEASURES

1. SITE CLEARANCE

The Permittee shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the LWECS.

2. TOPSOIL PROTECTION

The Permittee shall implement measures to protect and segregate topsoil from subsoil in cultivated lands unless otherwise negotiated with the affected landowner.

3. SOIL COMPACTION

The Permittee shall implement measures to minimize soil compaction of all lands during all phases of the Project's life and shall confine compaction to as small an area as practicable.

4. LIVESTOCK PROTECTION

The Permittee shall take precautions to protect livestock during all phases of the Project's life.

5. FENCES

The Permittee shall promptly replace or repair all fences and gates removed or damaged during all phases of the Project's life unless otherwise negotiated with the affected landowner. When the Permittee installs a gate where electric fences are present, the Permittee shall provide for continuity in the electric fence circuit.

6. DRAINAGE TILES

The Permittee shall take into account the location of drainage tiles during project layout and construction. The Permittee shall promptly repair or replace all drainage tiles broken or damaged during all phases of the Project's life unless otherwise negotiated with the affected landowner.

7. EQUIPMENT STORAGE

The Permittee shall not locate temporary equipment staging areas for site construction and restoration on cultivated land unless otherwise negotiated with the affected landowner. Temporary staging areas shall not be located in wetlands or native prairie.

8. ROADS

(a) Public Roads

Prior to commencement of construction, the Permittee shall identify all state, county or township roads that will be used for the LWECS Project and shall notify the PUC and the state, county or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. Where practical, existing roadways shall be used for all activities associated with the LWECS. Where practical, all-weather roads shall be used to deliver cement, turbines, towers, assembled nacelles and all other heavy components to and from the turbine sites.

The Permittee shall, prior to the use of such roads, make satisfactory arrangements with the appropriate state, county or township governmental body having jurisdiction over roads to be used for construction of the LWECS for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and LWECS components. The Permittee shall notify the PUC of such arrangements upon request of the PUC.

(b) Turbine Access Roads

The Permittee shall construct the smallest number of turbine access roads it can. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class 5 gravel or similar material. Access roads shall not be constructed across streams and drainage ways without required permits and approvals from DNR, FWS and/or USACOE. When access roads are constructed across streams and drainage ways, the access roads shall be designed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed. Access roads shall also be constructed in accordance with all necessary township, county or state road requirements and permits.

(c) Private Roads

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.

9. SOIL EROSION AND SEDIMENT CONTROL

The Permittee shall develop a Soil Erosion and Sediment Control Plan prior to construction and submit the Plan to the PUC. This Plan may be the same as the Storm Water Pollution Prevention Plan (SWPP) submitted to the Minnesota Pollution Control Agency (MPCA) as part of the National Pollutant Discharge Elimination System (NPDES) permit application. The goal of the Soil Erosion and Sediment Control Plan is to minimize soil erosion, to revegetate non-cropland and range areas disturbed by construction with wildlife conservation species, and wherever possible, to plant appropriate native species in cooperation with landowners.

The Soil Erosion and Sediment Control Plan shall address what types of erosion control measures will be implemented during each Project phase, and shall at a minimum identify plans for grading, construction and drainage of roads and turbine pads; necessary soil information; detailed design features to maintain downstream water quality; a comprehensive re-vegetation plan to maintain and ensure adequate erosion control and slope stability and to restore the site after temporary Project activities; and measures to minimize the area of surface disturbance. Other practices shall include containing excavated material, protecting exposed soil, and

stabilizing restored material and removal of silt fences or barriers when the area is stabilized. The plan shall identify methods for disposal or storage of excavated material. Erosion and sedimentation control measures shall be installed prior to construction and maintained throughout the Project's life.

10. CLEANUP

The Permittee shall remove all waste and scrap that is the product of construction, operation, restoration and maintenance from the site and properly dispose of it upon completion of each task. Personal litter, bottles, and paper deposited by site personnel shall be removed on a daily basis.

11. TREE REMOVAL

The Permittee shall minimize the removal of trees and the Permittee shall not remove groves of trees or shelter belts without notification to the PUC and the approval of the affected landowner.

12. RESTORATION

The Permittee shall, as soon as practical following construction of each turbine, considering the weather and preferences of the landowner, restore the area affected by any LWECS activities to the condition that existed immediately before construction began, to the extent possible. The time period may be no longer than eight months after completion of construction of the turbine. Restoration shall be compatible with the safe operation, maintenance, and inspection of the LWECS.

13. HAZARDOUS WASTE

The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of hazardous wastes generated during any phase of the Project's life.

14. APPLICATION OF HERBICIDES

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of herbicide prior to any application on their property. The landowner may request that there be no application of herbicides on any part of the site within the landowner's property. All herbicides shall be applied in a safe and cautious manner so as to not damage crops, orchards, tree farms, or gardens. The Permittee shall also, at least ten days prior to the application, notify beekeepers with an active apiary within one mile of the proposed application site of the day the company intends to apply herbicide so that precautionary measures may be taken by the beekeeper.

15. PUBLIC SAFETY

The Permittee shall provide educational materials to landowners within the site boundaries and, upon request, to interested persons, about the Project and any restrictions or dangers associated with the LWECS Project. The Permittee shall also provide any necessary safety measures, such as warning signs and gates for traffic control or to restrict public access. The Permittee shall

submit the location of all “underground facilities,” as defined in Minnesota Statute 216D.01, Subdivision 11, to Gopher State One Call.

16. FIRE PROTECTION

The Permittee shall prepare a fire protection and medical emergency plan in consultation with the fire department having jurisdiction over the area prior to LWECS construction. The Permittee shall submit a copy of the plan to the PUC upon request. The Permittee shall also register the LWECS with the local governments’ emergency 911 services.

17. TOWER IDENTIFICATION

All turbine towers shall be marked with a visible identification number.

C. SETBACKS

1. WIND ACCESS BUFFER

Wind turbine towers shall not be placed less than 5 rotor diameters (RD) on the prevailing wind directions and 3 RD on the non-prevailing wind directions from the perimeter of the lands where the Permittee does not hold the wind rights, without the approval of the PUC.

2. RESIDENCES

Wind turbine towers shall not be located closer than 500 feet from the nearest occupied dwelling, or the distance required to comply with the noise standards established by the Minnesota Pollution Control Agency (MPCA) at paragraph III.E.3, whichever is greater.

3. ROADS

Wind turbine towers shall not be located closer than 250 feet from the edge of the nearest public road right-of-way.

4. WILDLIFE MANAGEMENT AREAS

Wind turbines and associated facilities including foundations, access roads, underground cable, and transformers, shall not be located in Waterfowl Protection Areas, State Wildlife Management Areas or Scientific and Natural Areas or in county parks.

5. WETLANDS

Wind turbines and associated facilities including foundations, access roads, underground cable and transformers, shall not be placed in public waters wetlands, as defined in Minnesota Statutes section 103G.005, subp. 15a. However, electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to DNR, United States Fish and Wildlife Service (FWS) and/or United States Army Corps of Engineers (USACE) permits and approvals.

6. NATIVE PRAIRIE

Upon request of the PUC, the Permittee shall, with the advice of the DNR and any others selected by the Permittee, prepare a prairie protection and management plan and submit it to the PUC and DNR Commissioner 60 days prior to the start of Project construction. The plan shall address steps to be taken to identify native prairie within the Project area, measure to avoid impacts to native prairie, and measures to mitigate for impacts if unavoidable. Wind turbines and all associated facilities, including foundations, access roads, underground cable and transformers, shall not be placed in native prairie unless addressed in the prairie protection and management plan. Unavoidable impacts to native prairie shall be mitigated by restoration or management of other native prairie areas that are in degraded condition, or by conveyance of conservation easements, or by other means agreed to by the Permittee and PUC.

7. SAND AND GRAVEL OPERATIONS

Wind turbines and all associated facilities, including foundations, access roads, underground cable, and transformers shall not be located within active sand and gravel operations, unless otherwise negotiated with the owner of the sand and gravel operation.

D. PRECONSTRUCTION SURVEYS

1. BIOLOGICAL PRESERVATION SURVEY

The Permittee, in consultation with DNR and other interested parties, shall conduct a pre-construction inventory of existing wildlife management areas, scientific and natural areas, recreation areas, native prairies and forests, wetlands, and any other biologically sensitive areas within the site and assess the presence of state- or federally-listed or threatened species. The results of the survey shall be submitted to the PUC and DNR prior to the commencement of construction.

2. ARCHAEOLOGICAL RESOURCES

The Permittee shall work with the State Historic Preservation Office (SHPO) at the Minnesota Historical Society (MHS) and the State Archaeologist as early as possible in the planning process to determine whether an archaeological survey is recommended for any part of the proposed Project. The Permittee will contract with a qualified archaeologist to complete such surveys, and will submit the results to the PUC, the SHPO and the State Archaeologist. The SHPO and the State Archaeologist will make recommendations for the treatment of any significant archaeological sites which are identified. Any issues in the implementation of these recommendations will be resolved by PUC in consultation with SHPO and the State Archaeologist. In addition, the Permittee shall mark and preserve any previously unrecorded archaeological sites that are found during construction and shall promptly notify the SHPO, the State Archaeologist, and the PUC of such discovery. The Permittee shall not excavate at such locations until so authorized by the PUC in consultation with the SHPO and the State Archaeologist.

If human remains are encountered during construction, the Permittee shall immediately halt construction at that location and promptly notify local law enforcement authorities and the State Archaeologist. Construction at the human remains location shall not proceed until authorized by local law enforcement authorities or the State Archaeologist.

If any federal funding, permit or license is involved or required, the Permittee shall notify the MHS as soon as possible in the planning process to coordinate section 106 (36 C.F.R 800) review.

Prior to construction, construction workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If any archaeological sites are found during construction, the Permittee shall immediately stop work at the site and shall mark and preserve the site and notify the PUC and the MHS about the discovery. The PUC and the MHS shall have three working days from the time the agency is notified to conduct an inspection of the site if either agency shall choose to do so. On the fourth day after notification, the Permittee may begin work on the site unless the MHS has directed that work shall cease. In such event, work shall not continue until the MHS determines that construction can proceed.

3. ELECTROMAGNETIC INTERFERENCE

Prior to the start of construction, the Permittee shall submit a plan to the PUC for conducting an assessment of television signal reception and microwave signal patterns in the Project area prior to commencement of construction of the Project. The assessment shall be designed to provide data that can be used in the future to determine whether the turbines and associated facilities are the cause of disruption or interference of television reception or microwave patterns in the event residents should complain about such disruption or interference after the turbines are placed in operation. The assessment shall be completed prior to installation of the turbines. The Permittee shall be responsible for alleviating any disruption or interference of these services caused by the turbines or any associated facilities.

The Permittee shall not operate the LWECS and associated facilities so as to cause microwave, television, radio, telecommunications or navigation interference contrary to Federal Communications Commission (FCC) regulations or other law. In the event the LWECS and its associated facilities or its operations cause such interference, the Permittee shall take timely measures necessary to correct the problem.

E. SITE LAYOUT RESTRICTIONS

1. WIND TURBINE TOWERS

Structures for wind turbines shall be self-supporting tubular towers. The towers shall not be more than 262 feet (80 meters) above grade at hub height.

2. METEOROLOGICAL TOWERS

Permanent towers up to 100 feet high for meteorological equipment shall be free standing. Temporary meteorological towers, which are those that will be removed no more than one year after the Project's in-service date, and all meteorological towers over 100 feet high may be guyed if the landowner has given written permission and the guys are properly marked with safety shields.

New temporary and permanent meteorological towers shall not be placed less than 250 feet from the edge of the nearest public road right-of-way and from the boundary of the Permittee's site control, or in compliance with the county ordinance regulating meteorological towers in the

county the tower is built, whichever is more restrictive. Meteorological towers shall be placed on lands the Permittee holds the wind or other development rights.

Meteorological towers shall be marked as required by the Federal Aviation Administration (FAA). There shall be no lights on the meteorological towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment.

3. NOISE

The wind turbine towers shall be placed such that the Permittee shall comply with noise standards established as of the date of this permit by the MPCA at all times at all appropriate locations. Turbines shall be moved or modified or removed from service if necessary to comply with this condition. The Permittee or its contractor may install and operate turbines, as close as the minimum setback required in this Permit but in all cases shall comply with MPCA standards. The Permittee shall be required to comply with this condition with respect to all homes or other receptors in place as of the time of construction, but not with respect to such receptors built after erection of the towers.

4. FEDERAL AVIATION ADMINISTRATION

Towers shall be marked as required by the Federal Aviation Administration (FAA). There shall be no lights on the towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment.

5. TURBINE SPACING

The turbine towers shall be constructed within the site boundaries as shown in Attachment 1. The turbine towers shall be spaced no closer than 3 RD in the non-prevailing wind directions and 5 RD on the prevailing wind directions. If required during final micro siting of the turbine towers to account for topographic conditions, up to 20 percent of the towers may be sited closer than the above spacing but the Permittee shall minimize the need to site the turbine towers closer.

6. FOOTPRINT MINIMIZATION

The Permittee shall design and construct the LWECs so as to minimize the amount of land that is impacted by the LWECs. Associated facilities in the vicinity of turbines such as electrical/electronic boxes, transformers and monitoring systems shall, to the greatest extent feasible, be mounted on the foundations used for turbine towers or inside the towers unless otherwise negotiated with the affected landowner.

7. ELECTRICAL CABLES

The Permittee shall place electrical lines, known as collectors, and communication cables underground when located on private property. Collectors and cables shall also be placed within or adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner. This paragraph does not apply to feeder lines.

8. FEEDER LINES

The Permittee shall place overhead or underground 34.5 kV electric lines, known as feeders, within public rights-of-way or on private land immediately adjacent to public rights-of-way if a public right-of-way exists, except as necessary to avoid or minimize human, agricultural, or environmental impacts. A change in feeder line locations may be made as long as feeders remain on public rights-of-way and approval has been obtained from the governmental unit responsible for the affected right-of-way. When placing feeders on private property, the Permittee shall place the feeder in accordance with easements negotiated with the affected landowners. In all cases, the Permittee shall avoid routing feeder lines in locations which may interfere with agricultural operations. Notwithstanding any of the requirements in paragraph III.D. to conduct surveys before any construction can commence, the Permittee may begin immediately upon issuance of this permit to construct the 34.5 kV feeder lines that will be required as part of this Project. The Permittee shall submit the site plan and engineering drawings required under paragraph III.A.1. for the feeder lines before commencing construction. Any guy wires on the structures for feeder lines shall be marked with safety shields.

The Permittee must fulfill, comply with, and satisfy all Institute of Electrical and Electronics Engineers, Inc. (IEEE) standards applicable to this Project, including but not limited to IEEE 776, IEEE 519, and IEEE 367, provided the telephone service provider(s) have complied with any obligations imposed on it pursuant to these standards. Upon request by the PUC, the Permittee shall report to the PUC on compliance with these standards.

F. STUDIES

1. WAKE LOSS STUDIES

The Permittee shall provide the PUC with the site plan required by paragraph III.A.1. the preconstruction micro siting analysis leading to the final tower locations and an estimate of total Project wake losses. The Permittee shall provide to the PUC any operational wake loss studies conducted on this Project.

2. NOISE

On request of the PUC, the Permittee shall submit a proposal to the PUC for the conduct of a noise study. Upon the approval of the PUC the Permittee shall carry out the study. The study shall be designed to determine the noise levels at various distances from the turbines at various wind directions and speeds.

G. DECOMMISSIONING/RESTORATION/ABANDONMENT

1. DECOMMISSIONING PLAN

Prior to commencement of construction, the Permittee shall submit to the PUC a Decommissioning Plan describing the manner in which the Permittee anticipates decommissioning the Project in accordance with the requirements of Minnesota Rules part 7836.0500, subp.13. The Permittee shall ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the Project at the appropriate time. The PUC may at any time request the Permittee to file a report with the PUC describing how the Permittee is fulfilling this obligation.

2. SITE RESTORATION

Upon expiration of this Permit, or upon earlier termination of operation of the LWECS, the Permittee shall have the obligation to dismantle and remove from the site all towers, turbine generators, transformers, overhead and underground cables, foundations, buildings and ancillary equipment to a depth of four feet. To the extent possible the Permittee shall restore and reclaim the site to its pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. Any agreement for removal to a lesser depth or for no removal shall be recorded with the county and shall show the locations of all such foundations. All such agreements between the Permittee and the affected landowner shall be submitted to the PUC prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within 18 months after expiration.

3. ABANDONED TURBINES

The Permittee shall advise the PUC of any turbines that are abandoned prior to termination of operation of the LWECS. The PUC may require the Permittee to decommission any abandoned turbine.

H. REPORTING

1. PROJECT ENERGY PRODUCTION

The Permittee shall, by July 15 of each year, report to the PUC on the monthly energy production of the Project and the average monthly wind speed collected at one permanent meteorological tower selected by the PUC during the preceding year or partial year of operation. The report shall include copies of any project production reports filed with the Midwest Independent System Operator (MISO), Midwest Area Power Pool (MAPP), the Federal Energy Regulatory Commission (FERC), or any other public regulatory agency. The Permittee shall describe the operational status and availability of the Project and any major outages, major repairs, or turbine performance improvements occurring in the previous year.

2. WIND RESOURCE USE

Beginning the first full quarter following the commercial operation of the wind farm, the Permittee shall file a quarterly report (due January 15, April 15, July 15, and October 15) with the PUC with the following average hourly data for each hour of commercial operation in printed format or electronic format capable of computerized analysis as specified by the PUC. That data entails:

- (a) The power output of each turbine;
- (b) The wind speed and direction measured at all monitored heights at any temporary and permanent meteorological towers, connected to the SCADA system, owned or operated by the Permittee, in or within three miles of the Project site boundary; and
- (c) Temperature and any other meteorological parameters recorded at one permanent meteorological tower selected by the PUC.

After two years of commercial operation, the PUC may reduce or eliminate the requirements of this condition. The provisions of paragraph III.K.5, shall apply to the PUC's review of this data.

3. EXTRAORDINARY EVENTS

Within 24 hours of an occurrence, the Permittee shall notify the PUC of any extraordinary event. Extraordinary events include but shall not be limited to: fires, tower collapse, thrown blade, collector or feeder line failure, injured LWECs worker or private person, kills of migratory, threatened or endangered species, or discovery of a large number dead birds or bats of any variety on site. In the event of avian mortality the DNR shall also be notified within 24 hours. The Permittee shall, within 30 days of the occurrence, submit a report to the PUC describing the cause of the occurrence and the steps taken to avoid future occurrences.

4. COMPLAINTS

Prior to the start of construction, the Permittee shall submit to the PUC the company's procedures to be used to receive and respond to complaints. The Permittee shall report to the PUC all complaints received concerning any part of the LWECs in accordance with the procedures provided in Attachment 2 of this Permit.

I. FINAL CONSTRUCTION

1. AS-BUILT PLANS AND SPECIFICATIONS

Within 60 days after completion of construction, the Permittee shall submit to the PUC a copy of the as-built plans and specifications. The Permittee must also submit this data in a geographic information system (GIS) compatible format so that the PUC can place it into the Land Management Information Center's geographic data clearinghouse located in the Office of Geographic and Demographic Analysis.

2. FINAL BOUNDARIES

After completion of construction, the PUC may determine a need to adjust the final boundaries of the site required for this Project. If done, this Permit may be modified, after notice and opportunity for public hearing, to represent the actual site required by the Permittee to operate the Project authorized by this Permit.

3. EXPANSION OF SITE BOUNDARIES

No expansion of the site boundaries described in this Permit shall be authorized without the approval of the PUC. The Permittee may submit to the PUC a request for a change in the boundaries of the site for the LWECs. The PUC will respond to the requested change in accordance with applicable statutes and rules.

J. AUTHORITY TO CONSTRUCT LWECs

1. WIND RIGHTS.

The Permittee shall advise the PUC of the obtaining of exclusive wind rights within the boundaries of the LWECs authorized by this Permit within 30 days of receiving such wind rights. The Permittee shall submit documentation of such exclusive wind rights if requested by the PUC.

2. OTHER PERMIT APPLICATIONS

Nothing in this Permit shall be construed to preclude any other person from seeking a site permit to construct a large wind energy conversion system in any area within the boundaries of the Project covered by this Permit if the Permittee does not hold exclusive wind rights for such areas.

3. PREEMPTION OF OTHER LAWS

Pursuant to Minnesota Statute section 216F.07, this Site Permit shall be the only site approval required for the location of this Project, and this Permit shall supersede and preempt all zoning, building, and land use rules, regulations, and ordinances adopted by regional, county, local, and special purpose governments. Nothing in this Permit shall release the Permittee from any obligation imposed by law that is not superseded or preempted by law.

4. POWER PURCHASE AGREEMENT

The issuance of a Certificate of Need for the Project satisfies the terms and requirements of Minnesota Rule 7836.1100, subp. 3, therefore no Power Purchase Agreement is required. In the event the Permittee does not obtain a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the Project within three years of the issuance of this Permit, the Permittee must advise the PUC of the reason for not having such power purchase agreement or enforceable mechanism. In such event, the PUC may determine whether this Permit should be amended or revoked. No amendment or revocation of this Permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Statute 216F.05 and Minnesota Rule 7836.1300.

K. MISCELLANEOUS

1. PERIODIC REVIEW

The PUC shall initiate a review of this Permit and the applicable conditions at least once every five years. The purpose of the periodic review is to allow the PUC, the Permittee, and other interested persons an opportunity to consider modifications in the conditions of the Permit. No modification may be made except in accordance with applicable statutes and rules.

2. FAILURE TO COMMENCE CONSTRUCTION

If the Permittee has not completed the pre-construction surveys required in paragraph III.D. and commenced construction of the LWECs within three years of the issuance of this Permit, the Permittee must advise the PUC of the reason construction has not commenced. In such event, the PUC may determine whether this Permit should be revoked. No revocation of this Permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Statute section 216F.05 and Minnesota Rule 7836.1300.

3. MODIFICATION OF CONDITIONS

After notice and opportunity for hearing, this Permit may be modified or amended for cause including but not limited to the following:

- (a) Violation of any condition in this Permit;

(b) Endangerment of human health or the environment by operation of the facility: or

(c) Existence of other grounds established by rule.

4. REVOCATION OR SUSPENSION OF THE PERMIT

The PUC may take action to suspend or revoke this Permit upon the grounds that:

(a) A false statement was knowingly made in the application or in accompanying statements or studies required of the applicant, and a true statement would have warranted a change in the PUC's findings;

(b) There has been a failure to comply with material conditions of this Permit, or there has been a failure to maintain health and safety standards; or

(c) There has been a material violation of a provision of an applicable statute or rule or an order of the PUC.

In the event the PUC shall determine that it is appropriate to consider revocation or suspension of this Permit, the PUC shall proceed in accordance with the requirements of Minnesota Statute section 216F.05 to determine the appropriate action. Upon a finding of any of the above, the PUC may require the Permittee to undertake corrective measures in lieu of having the Permit suspended or revoked.

5. PROPRIETARY INFORMATION

Certain information required to be submitted to the PUC under this Permit, including energy production and wake loss data, may constitute trade secret information or other type of proprietary information under the Data Practices Act or other law and is not to be made available by the PUC. The Permittee must satisfy requirements of applicable law to obtain the protection afforded by the law.

6. TRANSFER OF PERMIT

The Permittee may not transfer this Permit without the approval of the PUC. If the Permittee desires to transfer this Permit, the holder shall advise the PUC in writing of such desire. The Permittee shall provide the PUC with such information about the transfer as the PUC requires to reach a decision. The PUC may impose additional conditions on any new Permittee as part of the approval of the transfer.

7. OTHER PERMITS

The Permittee shall be responsible for acquiring any other federal, state, or local permits or authorizations that may be required to construct and operate a LWECs within the authorized site. The Permittee shall submit a copy of such permits and authorizations to the PUC upon request.

8. SITE MANAGER

The Permittee shall designate a site manager who shall be the contact person for the PUC to contact with questions about the LWECs. The Permittee shall provide the PUC with the name, address, and phone numbers of the Project's site manager prior to placing any turbine into operation. This information shall be maintained current by informing the PUC of any changes, as they become effective.

9. NOTICE TO LOCAL RESIDENTS

The Permittee shall, within ten working days of receipt of this Permit, send a copy of the Permit to the office of the auditor of each county in which the site is located and to the clerk of each city and township within the site boundaries. If applicable, the Permittee shall also, within 10 working days of issuance, send a copy of this Permit to each regional development commission, local fire district, soil and water conservation district, watershed district, and watershed management district office with jurisdiction in the county where the site is located. Within 30 days of issuance of this Permit, the Permittee shall send a copy of the Permit to each affected landowner within the site. In no case shall the affected landowner receive the site permit less than five days prior to the start of construction on their property.

10. RIGHT OF ENTRY

The Permittee shall allow representatives of the PUC to perform the following, upon reasonable notice, upon presentation of credentials and at all times in compliance with the Permittee's site safety standards:

- (a) To enter upon the facilities easement of the site property for the purpose of obtaining information, examining records, and conducting surveys or investigations;
- (b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations;
- (c) To sample and monitor upon the facilities easement of the property; and
- (d) To examine and copy any documents pertaining to compliance with the conditions of this Permit.

11. MORE STRINGENT RULES

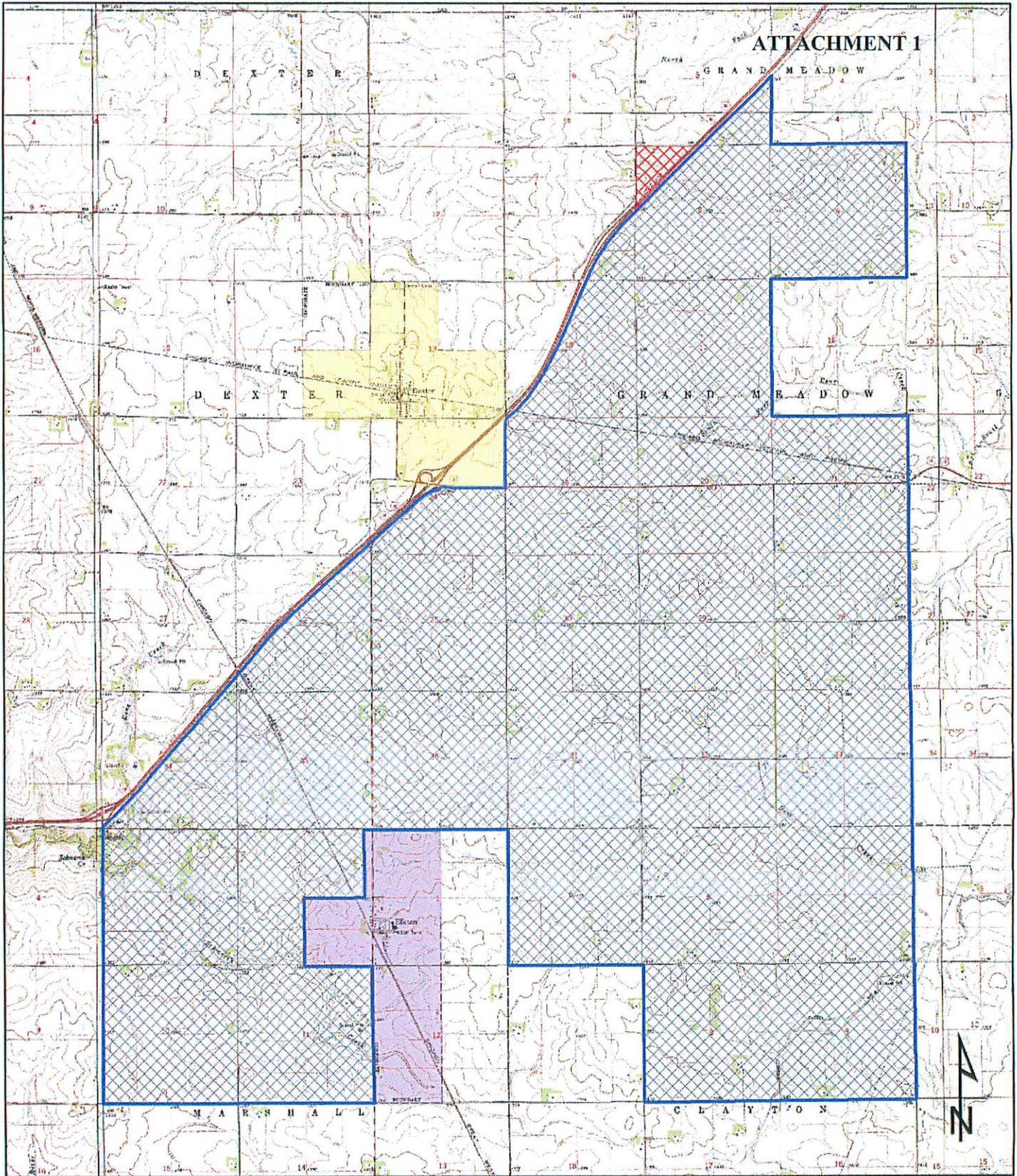
The PUC's issuance of this Site Permit does not prevent the future adoption by the PUC of rules or orders more stringent than those now in existence and does not prevent the enforcement of these more stringent rules and orders against the Permittee.

L. EXPIRATION DATE

This Permit shall expire on January 31, 2038.

M. SPECIAL CONDITIONS

Special conditions shall take precedence over any of the other conditions of this Permit if there should be a conflict between the two. No special conditions have been identified.



ATTACHMENT 1

**USGS Map
Grand Meadow
Wind Project
Mower County, MN**



Project Boundary		Substation Land		Minor Civil Divisions	
	Grand Meadow		Wapsipicon & Grand Meadow		Dexter
					Elkton



**COMPLAINT REPORT AND HANDLING PROCEDURES
OF THE
MINNESOTA PUBLIC UTILITIES COMMISSION
FOR
LARGE WIND ENERGY CONVERSION SYSTEMS**

1. Purpose

To establish a uniform and timely method of reporting complaints received by the Permittee concerning the Permit conditions for site preparation, construction, cleanup and restoration, and resolution of such complaints.

2. Scope

This reporting plan encompasses complaint report procedures and frequency.

3. Applicability

The procedures shall be used for all complaints received by the Permittee.

4. Definitions

Complaint - A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of the LWECs and associated facilities. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint - Written complaints alleging a violation of a specific Site Permit condition that, if substantiated, could result in Permit modification or suspension pursuant to the applicable regulations.

Person - An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

5. Responsibilities

Everyone involved with any phase of the LWECs is responsible to ensure expeditious and equitable resolution of all complaints. It is therefore necessary to establish a uniform method for documenting and handling complaints related to this LWECs Project. The following procedures will satisfy this requirement:

- A. The Permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
1. Name of the Permittee and Project.
 2. Name of complainant, address and phone number.
 3. Precise property description or tract numbers (where applicable).
 4. Nature of complaint.
 5. Response given.
 6. Name of person receiving complaint and date of receipt.
 7. Name of person reporting complaint to the PUC and phone number.
 8. Final disposition and date.
- B. The Permittee shall assign an individual to summarize complaints for transmittal to the PUC.

6. Requirements

The Permittee shall report all complaints to the PUC according to the following schedule:

Immediate Reports - All substantial complaints shall be reported to the PUC the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to Wind Permit Compliance at the following: DOC.energypermitcompliance@state.mn.us, or 1-800-657-3794. Voice messages are acceptable.

Monthly Reports – By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be sent to Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN, 55101-2147. A copy of each complaint shall be sent to Wind Permit Compliance, Minnesota Department of Commerce, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

7. Complaints Received by the PUC

Copies of complaints received directly by the PUC from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the Permittee.

Unresolved Complaints: - The Permittee shall submit all unresolved complaints to the PUC for resolution by the PUC, where appropriate, no later than 45 days after the date of the submission.

Initial Screening: - Commission Staff shall perform an initial evaluation of unresolved Complaints submitted to the Commission. Complaints raising substantial LWECS Site Permit issues shall be processed and resolved by the Commission. Staff shall notify

Permittee and the Complainant if it determines that the Complaint is a Substantial Complaint. With respect to such Complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the Staff notification. Staff shall present Briefing Papers to the Commission, which shall resolve the Complaint within twenty days of submission of the Briefing Papers.