



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**COMMENTS AND RECOMMENDATIONS OF THE
MINNESOTA OFFICE OF ENERGY SECURITY
ENERGY FACILITY PERMITTING STAFF**

DOCKET No. IP-6828/WS-09-1197

Meeting Date: October 21, 2010.....Agenda Item # 4

Company: **Pleasant Valley Wind, LLC**

Docket No. **IP-6828/WS-09-1197**

In the Matter of the Application of Pleasant Valley Wind, LLC for a Large Wind Energy Conversion System Site Permit for the 301 MW Pleasant Valley Wind Project in Dodge and Mower Counties.

Issue(s): Should the Commission grant a site permit to Pleasant Valley Wind, LLC for the 301 MW Pleasant Valley Wind Project?

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Relevant Documents

2nd Revised LWECS Site Permit ApplicationFebruary 5, 2010
Supplemental information on shadow flicker and noiseOctober 5, 2010
ALJ Summary of Public CommentsAugust 3, 2010
DNR comments.....September 27, 2010
Public comments.....August 3, 2010

The enclosed materials are the work papers of the Office of Energy Security (OES) Energy Facility Permitting Staff (EFP). They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted.

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Documents Attached

1. Pleasant Valley Wind Site Maps (constraint maps and turbine layout maps)
2. Proposed Findings of Fact, Conclusions of Law, and Order
3. OES EFP Staff Exhibit List
4. Proposed Site Permit

See eDocket filings (09-1197) at <https://www.edockets.state.mn.us/EFiling/search.jsp>, or the Commission website at: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=25724> for project related documents.

Statement of the Issues

Should the Commission grant a site permit to Pleasant Valley Wind, LLC for the 301 Pleasant Valley Wind Project?

Introduction and Background

Pleasant Valley Wind, LLC (Applicant) submitted a site permit application to construct the proposed 301 megawatt (MW) Pleasant Valley Wind Project (Project) in Dodge and Mower counties. The Applicant filed its Site Permit application on November 23, 2009, which was accepted by the Commission on January 19, 2010.

Project Location

The Project area consists of approximately 70,000 acres located in southern Dodge and northern Mower counties in Hayfield and Vernon townships of Dodge County and Waltham, Sargeant, Pleasant Valley, Red Rock, and Dexter townships of Mower County. The Project area is located six miles northeast of the city of Austin and approximately 15 miles west of Rochester. The Applicant currently has wind rights for approximately 52,000 acres within the Project area, which should be sufficient to allow siting flexibility to ensure appropriate setbacks are met. Attachment 1 shows the Project boundaries, turbines layouts, and constraint maps.

Project Description

The Project for which a permit is being requested includes the following associated facilities:

1. A turbine layout consisting of either 188 General Electric 1.5 MW wind turbine generators with WindBOOST Control System (a software upgrade that will boost output to 1.6 MW per turbine) mounted on 80 meter (262.5 foot) towers with a rotor diameter of 82.5 meters (270 feet) or 130 Siemens 2.3 MW wind turbine generators mounted on 80 meter (262.5 foot) towers with a rotor diameter of 101 meters (331 feet);
2. Gravel access roads;
3. Electrical collection system, SCADA wiring, pad mounted transformers, collector or feeder lines, and two permanent meteorological towers.

The Applicant's goal is to complete the construction of the Project and achieve commercial operation prior to December 2012.

Regulatory Process and Procedures

A site permit from the Commission is required to construct a Large Wind Energy Conversion System (LWECS), which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995.

Certificate of Need Process

A site permit cannot be granted before a Certificate of Need (CN) is issued if a CN is required. A CN is required for the Pleasant Valley Wind Project because, as a 301 MW LWECS, it qualifies as a “large energy facility” as defined by Minnesota Statutes section 216B.2421, subdivision 2(1). The Applicant applied for a CN from the Commission on October 27, 2009, prior to filing its site permit application. A Commission order accepted the application on December 23, 2009. See Docket No. IP-6828/CN-09-937.

OES EFP staff combined portions of the site permit public participation process with portions of the environmental review process in the CN proceeding for the Project, as has been done in several recent dockets to achieve efficiencies. This included combining notices, public information and environmental review scoping meetings, and comment periods. An environmental report was prepared by OES EFP staff on June 23, 2010, for the CN proceeding. Upon completion of the environmental report, OES posted notice of Public Hearing and Environmental Report Availability on eDockets and the Commissions web page. Notice was also published in the *Rochester Post-Bulletin*, *Meadow Area News*, *Star Herald*, the *Austin Daily Herald*, and *EQB Monitor*. The Office of Administrative Hearings conducted a public hearing on the CN proceeding, including the environmental report, on July 1, 2010.

Site Permit Application and Acceptance

The Applicant filed a site permit application for the Pleasant Valley Wind Project with the Commission on November 23, 2009, and filed its second revised application on February 5, 2010. The Commission accepted the application on January 19, 2010. An OES notice of site permit application acceptance was issued on February 3, 2010. The Applicant distributed the site permit application and notice of application acceptance to local, state, and federal government agencies and to landowners.

Preliminary Determination on Draft Site Permit

On April 23, 2010, a Commission order made a preliminary determination that a draft site permit may be issued for the Pleasant Valley Wind Project. This allowed EFP staff to proceed with the notice requirements of Minnesota Rules 7854.0800 and 7854.0900. Notice of the July 1, 2010, public information and CN hearing was published in the *Rochester Post-Bulletin*, *Meadow Area News*, *Star Herald*, the *Austin Daily Herald*, and the *EQB Monitor* and also mailed to persons and governmental agencies required by rule.

Public Participation Process and Public Comments

The rules provide opportunities for the public to participate in deliberations on the LWECS site permit application. The public was advised of the submission of the site permit application after the site permit application was accepted. Public comments on information in the application and issues to be considered in development of a draft site permit were accepted through March 15,

2010. OES EFP staff received 26 comments on the site permit application in addition to the scope of the Environmental Report as part of the CN proceeding. Further, two public meetings (attendance was approximately 125 people each meeting) were held on issues to be considered in developing the draft site permit and the scope of the environmental report. OES EFP staff submitted comments and recommendations to the Commission on issuance of the draft site permit and summarized the issues raised by the public and government officials.

A public hearing on the Pleasant Valley Wind Project was held on July 1, 2010, presided over by Administrative Law Judge Manuel Cervantes. Approximately 85 people attended the public hearing. On August 3, 2010, Administrative Law Judge Cervantes filed his "Summary of Public Testimony." The summary provides an overview of project background and development and comments from 26 people. Some people spoke in favor of the Project while others had questions or concerns. Many comments related to the certificate of need. Few people commented on site permit issues; however, issues regarding property values and visual landscape were raised.

The deadline for submitting comments following the hearing was July 16, 2010. Eleven comments were received within the comment period, including a comment from the Department of Natural Resources that was received on July 16, 2010, by OES EFP staff and e-filed on September 27, 2010. Concerns regarding airports, wildlife, turbine lighting impacts on birds, trails, noise, shadow flicker, loss of productive farm land, transmission lines, property values, visual pollution, overstatement of job creation by the Applicant, and notice procedures were raised in the written comments.

Standard for Permit Issuance

The test for issuing a site permit for a LWECS is to determine whether a project is compatible with environmental preservation, sustainable development, and the efficient use of resources. Pursuant to Minnesota Statutes section 216F.02, certain sections of Minnesota Statutes chapter 216E (Minnesota Power Plant Siting Act) apply to siting LWECS, including section 216E.03, subdivision 7 (considerations in designating sites and routes). Minnesota Statutes section 216F.04(d) allows the Commission to place conditions in LWECS permits.

OES EFP Staff Analysis and Comments

The OES EFP staff addresses oral and written comments below and the proposed findings.

Minnesota Department of Natural Resources

The Minnesota Department of Natural Resources (DNR) provided comments regarding the Wild Indigo Scientific and Natural Area (SNA), Blanding's turtle, and Grant in Aid snowmobile trails in addition to other topics.

Grant in Aid Trails: The DNR requests that turbines be placed a sufficient distance from the trails to avoid falling ice through a setback requirement or requiring coordination with trail contacts regarding trail locations.

OES EFP Response: Grant in Aid trails are located on private property and their location can vary from year to year. As discussed in Finding 73, the Applicant will coordinate with the trail contacts regarding trail locations during the micro-siting process. Finding 55 addresses the issue of ice on turbine blades.

Wild Indigo SNA: The Wild Indigo SNA is a linear SNA located in the southern portion of the Project area in an east-west direction from Dexter to Brownsdale. The DNR requested a setback of 5 RD from the Wild Indigo SNA due to the prevailing wind direction. The Applicant initially did not have a setback from the Wild Indigo SNA, but has incorporated the 5 RD setback in the updated turbine layout maps (Exhibit 17). Several participating landowners will not be able to have turbines on their property due to relocation of turbines as a result of this setback.

OES EFP Response: Setbacks from SNAs are found at sections 4.1 and 4.5 of the site permit. As a result of the permit conditions, the setback from the Wild Indigo SNA would be 5 RD. Findings 71 and 72 address the Wild Indigo SNA.

Blanding's Turtle: The DNR requested that a permit condition address mitigation measures to avoid the threatened Blanding's turtle.

OES EFP Response: Section 13.1 of the site permit contains a special condition that requires Pleasant Valley to follow the fact sheet prepared by the DNR regarding recommendations for avoiding and minimizing impacts to the Blanding's turtle and distribute a summary of recommendations to all contractors and its employees. The fact sheet and summary are attached to the permit. This issue is also addressed in Finding 89.

Bird and Bat Reporting: The DNR requests that the permit define "large" with respect to the reporting of a "kill of migratory, threatened or endangered species, or the discovery of a large number of dead bird or bats of any variety on site," which was in the extraordinary events provision of the draft site permit.

OES EFP Response: This issue is now addressed in section 6.7 of the site permit. As addressed in Finding 87, section 6.7 requires the Applicant to prepare an avian and bat protection plan, submit quarterly avian and bat reports, and report five or more dead or injured non-protected avian or bat species or a single dead or injured migratory, state threatened, endangered, or species of special concern, or federally listed species discovered in the vicinity of the rotor swept area within 24 hours of discovery.

NHIS Review: The DNR requests that an updated Natural Heritage Information System (NHIS) review be performed on the Project.

OES EFP Response: Section 6.1 of the site permit requires the Applicant to conduct pre-construction desktop and field inventories of potentially impacted, if any, native prairies, wetlands, and any other biologically sensitive areas within the site and assess the presence of state threatened, endangered, or species of special concern or federally listed species. The desktop inventory will include an updated NHIS report. Further, section 13.2 of the site permit requires the avian and bat surveys, which the Applicant has committed to conducting, to be submitted at least 30 days prior to the pre-construction meeting.

Project Area Residents

Residents raised a wide variety of concerns, primarily in written comments. The issues raised by the public include impacts to airports, turbine lighting impacts on birds, noise, shadow flicker,

loss of productive farm land, transmission lines, property values, visual landscape, overstatement of job creation by the Applicant, and inadequate notice procedures.

OES EFP Response: Many of these issues are addressed in the Findings of Fact. For example, Findings 37 – 40 address noise, Findings 41 – 44 address shadow flicker, Findings 45 – 48 address visual values, Findings 49 – 51 address airports, Findings 77- 78 address loss of cropland, Findings 85 – 87 and 89 address wildlife, and Findings 52 – 54 address transmission lines from a public health perspective. Certain issues that warrant special note are discussed below.

- Lighting Impacts on Birds: Three people requested that the Project be exempt from warning lights required by the FAA or install a collision avoidance system to reduce impacts to birds.

OES EFP Response: The wind turbines will be lighted in compliance with Federal Aviation Administration requirements as set forth in section 7.18 of the site permit. Findings 85 through 87 address impacts of the Project on birds. The Project is not known to be within a migratory flyway and the Applicant is currently conducting an avian survey, which will be used to inform micro-siting pursuant to section 13.2 of the site permit.

- Notice Procedures: One person expressed concern that she did not receive notification for the public hearing, which incorporated the public information meeting required under Minnesota Rule 7854.0900, subpart 4.

OES EFP Response: The notice for the hearing was distributed pursuant to the requirements of Minnesota Rule 7854.0900, subpart 2, which requires that notice be distributed to persons known to be interested in the proposed project in addition to other required recipients. OES EFP maintains a list of persons who have signed up to receive notices due to their interest in the project. The notice for the public hearing included those persons on the OES EFP list. The notice was also published in four local newspapers. Findings 12 and 13 address notice for the comment period and public hearing.

- Impacts on Airports: The city of Austin requested that the Applicant address any impacts that might occur to the Austin Municipal Airport and an owner of an airport located two miles from the Project boundary expressed concern that the Project would create obstruction to navigable space.

OES EFP Response: Section 4.12 of the site permit requires the applicant to avoid placing wind turbines or associated facilities in a location that could create an obstruction to navigable airspace of public and private airports as defined in Minnesota Rule 8800.0100, subparts 24a and 24b. The Applicant will conduct aeronautical studies, in consultation with the Federal Aviation Administration, prior to Project construction to determine if the proposed turbine locations will cause interference to Austin Municipal Airport. Finding 49 addresses this issue. The Applicant will also follow Minnesota Department of Transportation, Department of Aviation, and the Federal Aviation Administration setbacks and other limitations, which apply to public airports.

A private airport is a restricted airport that could be privately or publicly owned, but persons who may use the airport are determined by the owner of the airport. In contrast, Minnesota Rule 8800.0100, subpart 22a, defines a personal-use airport as one intended for the personal use of the owner of the airport. Section 4.12 requires the Applicant to apply the minimum obstruction clearance for private airports pursuant to Minnesota Rule 8800.1900, subpart 5, which is the license requirement for private airports. Personal-use airports are not addressed in the site permit. It is not known whether the commenter's airport meets the private airport definition. Finding 50 also addresses this issue.

- Noise: Members of the public expressed concern regarding noise produced from the wind turbines.

OES EFP Response: On March 8, 2010, OES EFP requested additional noise data regarding cumulative noise impacts as referenced, but not provided, in the Applicant's second revised LWECs site permit application. In response to concerns by the public, the Comments and Recommendations of the OES EFP, dated April 15, 2010, stated its request that the Applicant e-file additional noise data. The Applicant submitted additional noise data on October 5, 2010, which demonstrates the cumulative noise impacts of the Siemens 2.3 MW turbine and the GE 1.5 MW turbine with WindBOOST. The WindBOOST software creates additional noise impacts that were not anticipated at the time of the application was submitted. The supplemental filing includes an analysis of the GE 1.5 MW turbine with WindBOOST. Because the comment period had closed by the date of the filing, the public did not have the opportunity to comment on the cumulative noise data. However, OES EFP staff reviewed maps provided in Exhibit 23, which show that all receptors are within acceptable limits imposed by the noise standard. Findings 37 through 40 address noise.

Based on the record of this proceeding, OES EFP staff concludes that the Pleasant Valley Wind Project meets the procedural requirements and the considerations and standards for issuance of a site permit identified in Minnesota statutes and rules. The site permit application and the record has been reviewed pursuant to the requirements of Minnesota Statutes chapter 216F and Minnesota Rules chapter 7854.

In accordance with Minnesota Rule 7854.0500, subpart 2, the Commission may not issue a site permit for an LWECs that requires a certificate of need until an applicant obtains a certificate of need from the Commission.

OES EFP staff has prepared for Commission consideration proposed Findings of Fact, Conclusions of Law, and Order (Attachment 2), an Exhibit List (Attachment 3) for the Pleasant Valley Wind Project, and a proposed Site Permit (Attachment 4) for the 301 MW Pleasant Valley Wind Project.

Proposed Findings of Fact

The proposed Findings of Fact address the procedural aspects the process followed, describe the Project, and address the environmental and other considerations of the Project. See Attachment 2. The proposed Findings of Fact reflect some findings that were also made for other LWECs projects. The site considerations addressed in the proposed Findings of Fact (such as human settlement, public health and safety, noise, recreational resources, community benefits, effects on land based economies, archaeological and historical resources, wildlife, and surface water) track the factors described in the Commission’s rules for other types of power plants that are pertinent to wind projects. The following outline identifies the categories of the Findings of Fact.

<u>Category</u>	<u>Findings</u>
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Exhibit List

OES EFP staff has prepared an exhibit list of documents that are part of the record in this permit proceeding. See Attachment 3.

Proposed Site Permit

The OES EFP Staff has prepared a site permit for the Commission's consideration. See Attachment 4. The conditions in this proposed site permit are consistent with conditions included in other LWECS site permits issued by the Commission.

The proposed site permit is different from the draft site permit issued by the Commission. The site permit headings and requirements have been reorganized and modified for clarity and conditions were added consistent with the findings for this Project.

Commission Decision Options

A. Pleasant Valley Wind Project Findings of Fact, Conclusions of Law, and Order

1. Adopt the attached Findings of Fact, Conclusions of Law, and Order prepared for the 301 MW Pleasant Valley Wind Project in Dodge and Mower counties.
2. Amend the Findings of Fact, Conclusions of Law, and Order as deemed appropriate.
3. Make some other decision deemed more appropriate.

B. LWECS Site Permit for the 301 MW Pleasant Valley Wind Project

1. Issue the proposed LWECS Site Permit for the 301 MW Pleasant Valley Wind Project to Pleasant Valley Wind, LLC.
2. Amend the proposed LWECS Site Permit as deemed appropriate.
3. Deny the LWECS Site Permit.
4. Make some other decision deemed more appropriate.

OES EFP Staff Recommendation: The staff recommends options A1 and B1.