

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David Boyd  
J. Dennis O'Brien  
Phyllis Reha  
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Chair  
Commissioner  
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Chokio, MN 56221

SERVICE DATE: February 25, 2010

DOCKET NO. IP-6824/WS-09-830

In the Matter of the Site Permit Application for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota

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

**Adopted the attached proposed Findings of Fact, Conclusion of Law and Order prepared for the 20 MW West Stevens Wind LWECS Project in Stevens County.**

**Issued the proposed LWECS Site Permit for the 20 MW West Stevens Wind project in Stevens County to West Stevens Wind, LLC with Section III. C. 2. amended.**

The Commission agrees with and adopts the recommendations of the Office of Energy Security which are attached and hereby incorporated in the Order.

BY ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary

(S E A L)

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

DOCKET NO. IP-6824/WS-09-830

Meeting Date: February 11, 2010..... Agenda Item # 4

Company: West Stevens Wind, LLC

Docket No. IP-6824/WS-09-830

In the Matter of the Site Permit Application for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota.

Issue(s): Should the Minnesota Public Utilities Commission issue a site permit for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota?

EFP Staff: Scott Ek..... (651) 296-8813

RELEVANT DOCUMENTS

Site Permit Application.....July 13, 2009
Site Permit Application Supplemental/Amended Data (Revision A)..... August 27 and 31, 2009

DOCUMENTS ATTACHED

- Figure 1 - Proposed LWECS Site Location
Proposed Findings of Fact, Conclusion of Law and Order
Proposed Site Permit
Exhibit List

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

This document can be made available in alternative formats (voice/TTY) by contacting the Minnesota Relay Service at 711 or 1-800-627-3529.

Relevant documents and additional information can be found on eDockets (09-830) or the Commission's Energy Facilities Permitting website at: <http://energyfacilities.puc.state.mn.us/Docket.html?Id=24842>.

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## **STATEMENT OF THE ISSUES**

Should the Minnesota Public Utilities Commission issue a site permit for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota?

## **INTRODUCTION AND BACKGROUND**

West Stevens Wind, LLC (WSW or applicant) made application to the Minnesota Public Utilities Commission (Commission) for a large wind energy conversion system (LWECS) site permit under the Wind Siting Act (Minnesota Statutes, Chapter 216F) on July 13, 2009. The application is for the construction, operation, and maintenance of a proposed 20 Megawatt (MW) wind farm and associated facilities. On August 27, 2009, the applicant filed supplemental and amended information to the initial application submittal.

The applicant is a Minnesota-based limited liability company owned by eight local entities. One of the eight WSW owners has a minor ownership interest in Carstensen Wind, LLC, and is the only WSW owner to have ownership or financial interest in another LWECS. WSW will own, manage and operate the project, including monitoring, maintenance, and repair activities. Mnioka, a Minnesota contracting and development company will manage construction and will be responsible for retaining general contractor services and certain specialty subcontractor for the project.

### **Project Description and Location**

The project is a proposed 20 MW wind farm to be located on approximately 2,880 acres of agricultural land just northwest of the city of Chokio in Stevens County, Minnesota (Figure 1). The project would consist of the following:

- Approximately 13 turbines (depending upon specifications)
- A permanent meteorological tower
- A project switchyard
- Transmission line interconnection point
- Permanent access roads

According to Minnesota Statute 216B.1612, subd. 2(g) the project qualifies as a community-based energy development (C-BED) project.

## **REGULATORY PROCESS AND PROCEDURES**

Pursuant to the Minnesota Wind Siting Act, a site permit from the Commission is required to construct a LWECS, which is any combination of a wind charger, windmill, or wind turbine and associated facilities with a combined nameplate capacity of five MW or more that converts wind energy to electric energy. The rules to implement the permitting requirement for LWECS are found in Minnesota Rules 7854.0100 to 7854.1500.

### **Certificate of Need**

A certificate of need from the Commission for a large electric power generating plant is not required, as the project does not exceed 50 MW in size (Minnesota Statute 216B.2421).

### **Site Permit Application Acceptance**

The applicant filed an application with the Commission for a LW ECS site permit on July 13, 2009. The Commission accepted the application as complete in an Order issued September 8, 2009.

### **Site Permit Application Contents**

The required contents of a site permit application are specified in Minnesota Rule 7854.0500. These information requirements include, but are not limited to, applicant background information, certificate of need compliance, compliance with state policy, proposed site maps, wind characteristics, other wind turbine locations, discussion of wind rights, project design and associated facilities, environmental impacts, project construction and operation, costs, schedules, energy projections, and decommissioning and restoration.

### **Notice of Application Acceptance**

On September 11 and 17, 2009, A Notice of Application Acceptance was distributed to the county board and each city council and township board in each county of the proposed LW ECS site. A Notice of Application Acceptance was also published in the *Morris Sun Tribune* on September 19, 2009.

As a part of the notice requirements of Minnesota Rule 7854.0600, the applicant must provide a copy of the application to each landowner within the proposed site and to anyone upon request. The applicant is also required to distribute the application to the Minnesota Historical Society, the regional development commission(s), the auditor of each county, and the clerk of each city and township within which the LW ECS is proposed to be located. The applicant sent a site application to the above identified parties on September 21, 2009. This notice was also published on eDockets and the Commission's Energy Facility Permitting Website.

In practice, Office of Energy Security (EFP) staff also distributes copies of the application along with a cover memo requesting comments on the application or the project to technical representatives from state agencies that may have permitting or review authority over the project. A Notice of Application Acceptance was distributed to the state agency technical representatives on September 11, 2009.

### **Public Comments**

Public comments on the site permit application were accepted during a 22-day comment period that closed on September 30, 2009. EFP staff received written comments from the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (MnDNR).

### **Preliminary Determination on Draft Site Permit**

In accordance with Minnesota Rule 7836.0800, the Commission shall make a preliminary determination on whether a permit may be issued or should be denied within 45 days after acceptance of the application. On October 23, 2009, the Commission issued an order authorizing a preliminary draft site permit and approved distribution of the proposed draft site permit for comment under the public participation process outlined in Minnesota Rule 7854.0900.

### **Public Participation Process**

Public participation in the LWECS site permitting process is guided by Minnesota Rule 7836.0900. The Commission provides public notice of the availability of the draft site permit. Notice of draft site permit availability was sent to all persons or agencies that received a copy of the permit application, was published in the *EQB Monitor* and in the *Morris Sun Tribune*, and was posted on eDockets and on the Commission's Energy Facility Permitting Website.

### **Public Meeting**

In compliance with Minnesota Rules 7854.0900, subp. 4., the EFP staff conducted a public information meeting on November 30, 2009, at the Northland Prairie Inn in Morris, Minnesota, to provide the public an opportunity to learn about the proposed project and the Commission's role in review and approval of LWECS and to ask questions of the applicant and EFP staff. The meeting was also an opportunity for the public to offer comments on the permit application and draft site permit, which serve as the environmental documents for the project.

Approximately 10 people attended the meeting. Questions were asked by two attendees at the meeting with regards to general project interconnection, project timing, and general impacts to local traffic. A complete record of the meeting including all comments, questions, and answers is documented in the public meeting transcript.

### **Public Comment Period**

A 30-day public comment period commencing with the notice of the draft site permit availability in the *EQB Monitor* and ending on December 16, 2009 afforded any interested person an opportunity to submit comments on either the site permit application or the draft site permit. Minnesota Rule 7854.0900, subp. 5, provides the opportunity for any person to request that a contested case hearing be held on the proposed LWECS project. No request for a contested case hearing on the proposed project was submitted during the prescribed comment period.

## **STAFF ANALYSIS AND COMMENTS**

EFP staff received one written letter during the 30-day comment period. The comment letter was from the MnDNR.

### **Minnesota Department of Natural Resources**

The MnDNR letter dated December 16, 2009, acknowledged that the project layout as identified in the site permit application appears to be a sufficient distance from an existing snowmobile trail that runs east/west through the proposed project boundaries. The MnDNR however recommends that a site permit include a 250-foot setback requirement from the snowmobile trail. The MnDNR comment letter did not raise any other questions or unresolved issues.

*EFP Response:* The applicant is aware of the snowmobile trail. In the projects current configuration, the closest turbine to the West Central Trailblazers Snowmobile Trail is approximately 3,850 feet. A special condition has been provided in part IV.M. of the proposed site permit to address this concern.

### **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 (Minnesota Statutes, Chapter 216F).

The wind statutes incorporate certain portions of the Power Plant Siting Act, including the environmental considerations (Minnesota Rule 7850.4000). The law also allows the Commission to place conditions in a LWECS permit (Minnesota Statutes 216F.04 (d)).

Based on the record of this proceeding, EFP staff conclude that the West Stevens Wind Project meets the procedural requirements and the criteria and standards for issuance of a site permit identified in Minnesota Statutes and Rules. The site permit application has been reviewed pursuant to the requirement of Minnesota Rules Chapter 7854 (Wind Siting Rules).

EFP staff has prepared, for consideration by the Commission, proposed findings of fact, conclusion of law and order, a proposed site permit and exhibit list for the proposed West Stevens Wind LWECS project.

The site criteria addressed in the 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, animals and 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 conditions in this proposed Site Permit are similar to conditions included in other LWECS site permits issued by the Commission.

**Proposed Findings of Fact, Conclusions of Law and Order**

The proposed findings of fact, conclusion of law and order (attached) identify the procedural requirements and process followed, describe the project and identify the environmental concerns and project considerations. The following outline identifies the categories of the findings of fact.

<b>Category</b>	<b>Finding</b>	<b>Category</b>	<b>Finding</b>
The Applicant	1	Effects on Land-Based Economies	76
Procedural History	2 - 22	Archaeological and Historical Resources	77 - 81
Project Description	23 - 34	Air and Water Emissions	82
Project Site	35 - 39	Wildlife	83 - 87
Wind Resource Considerations	40 - 43	Vegetation	88
Land Rights and Easement Agreements	44 - 45	Soil	89
Siting Criteria	46	Geologic and Ground Water Resources	90
Demographics/Human Settlement	47 - 56	Surface Water and Wetlands	91 - 92
Noise	57 - 61	Hazardous Materials	93
Visual Impacts	62	Future Development and Expansion	94
Recreational Resources	63 - 65	Maintenance	95
Public Services and Infrastructure	66 - 74	Decommissioning and Restoration	96 - 97
Community Benefits	75	Site Permit Conditions	98 - 100

**Exhibit List**

EFP staff has prepared an exhibit list of documents that are part of the record in this permit proceeding (attached).

**Proposed Site Permit**

EFP staff has prepared a site permit for the Commission’s consideration (attached).

## **Commission Decision Options**

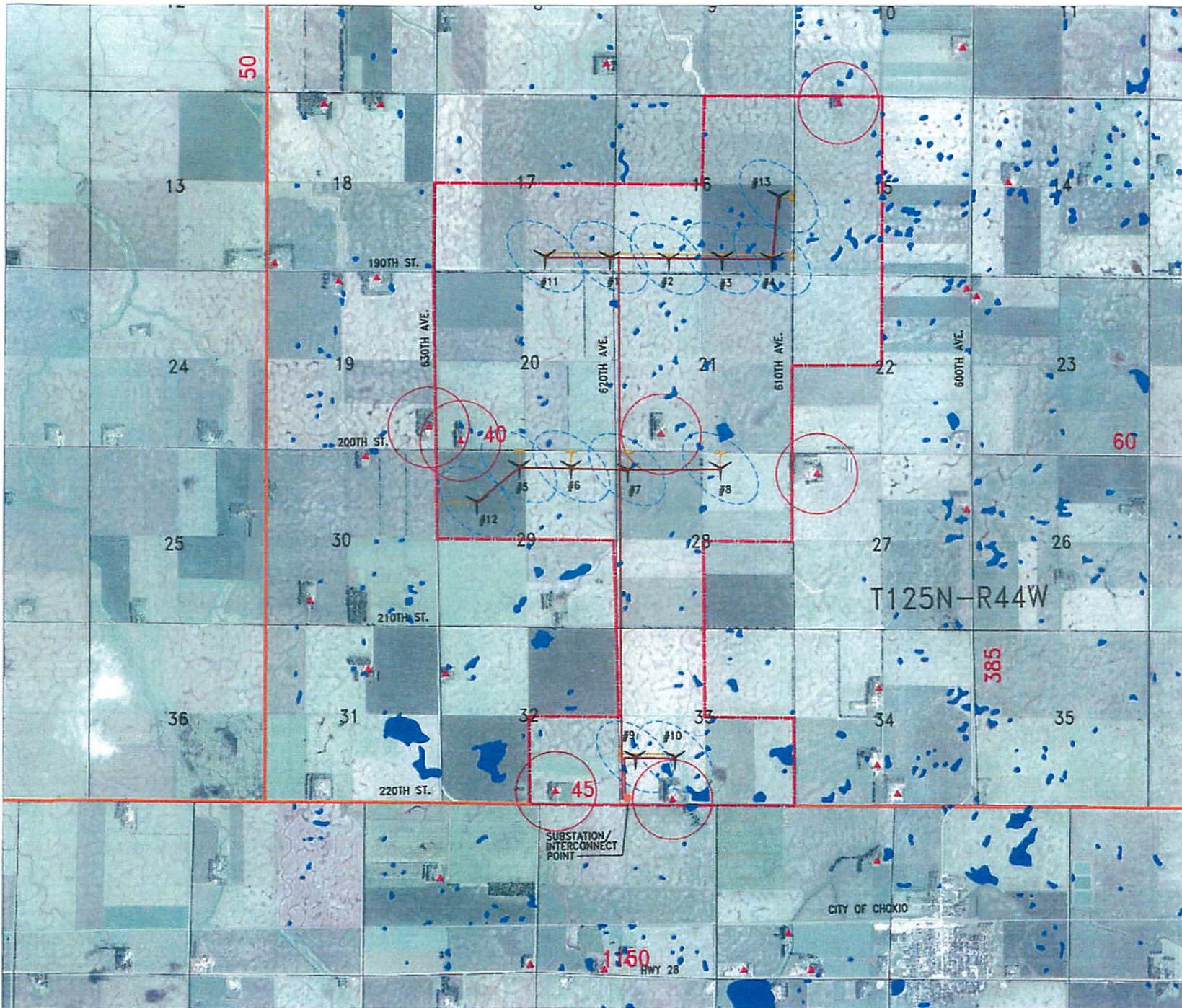
### **A. West Stevens Wind Project Findings of Fact, Conclusion of Law and Order**

1. Adopt the attached proposed Findings of Fact, Conclusion of Law and Order prepared for the 20 MW West Stevens Wind LWECS Project in Stevens County.
2. Amend the proposed Findings of Fact, Conclusion of Law and Order as deemed appropriate.
3. Make some other decision deemed more appropriate.

### **B. LWECS Site Permit for the 20 MW West Stevens Wind Project in Stevens County**

1. Issue the proposed LWECS Site Permit for the 20 MW West Stevens Wind project in Stevens County to West Stevens 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.

**EFP Staff Recommendation:** The staff recommends options A.1. and B.1.



- LEGEND**
- PROPOSED PROJECT BOUNDARY
  - TURBINE LOCATION
  - SECTION LINE
  - TOWNSHIP LINE
  - ▲ HOME RESIDENCE
  - HOME RESIDENCES 1200' RADIUS SETBACK
  - TURBINE SETBACKS
  - ACCESS ROAD
  - COLLECTION LINE
  - NATIONAL WETLAND INVENTORY WETLANDS
  - SUBSTATION/INTERCONNECT POINT
  - 60 ANNUAL AVERAGE DAILY TRAFFIC (AADT) (HWY-2004 DATA) (COUNTY-2005 DATA)

**NOTES:**

LAND USE: ALL LAND IS CROP LANDS UNLESS NOTED OTHERWISE

CULTURAL RESOURCES: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

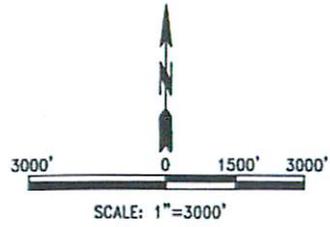
FLOOD PLAINS: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

NATURAL HERITAGE: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

**DATA SOURCES:**

AADT-MnDOT

WETLANDS-MN DEPARTMENT OF NATURAL RESOURCES



Source: West Stevens Wind. Revision "A" to Application for a Site Permit for a Large Wind Energy Conversion System. August 15, 2009.

West Steven Wind LWECS Project (Docket # 09-830)  
 Steven County  
 Chokio, Minnesota

**Figure 1**

# BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David Boyd	Chair
J. Dennis O'Brien	Commissioner
Phyllis Reha	Commissioner
Thomas Pugh	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Site Permit Application for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota.	ISSUE DATE: February 25, 2010 DOCKET NO. IP-6824/WS-09-830 FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER ISSUING A SITE PERMIT TO WEST STEVENS WIND, LLC FOR A 20 MEGAWATT LARGE WIND ENERGY CONVERSION SYSTEM
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The above-entitled matter came before the Minnesota Public Utilities Commission (Commission) on August 21, 2009, acting on an application submitted by West Stevens Wind, LLC (applicant), for a site permit to construct, operate, and maintain a 20 Megawatt (MW) large wind energy conversion system (LWECS) and associated facilities in Stevens County, Minnesota (project).

The project is a proposed 20 MW wind farm to be located on approximately 2,880 acres of agricultural land just northwest of the city of Chokio in Stevens County, Minnesota. The project would consist of the following: Approximately 13 turbines (depending upon specifications), a permanent meteorological tower, an underground communication system, an underground low- and high- voltage collector system, a supervisory control and data acquisition (SCADA) system, pad mounted turbine transformers, a project switchyard, transmission line interconnection point, and permanent access roads. The underground electric power collection facilities (feeder lines) will be routed to a switchyard constructed on the existing Ottertail Power 41.6 kV line (interconnection point) from Chokio to Graceville, Minnesota.

## STATEMENT OF ISSUE

Should the Minnesota Public Utilities Commission issue a site permit for a 20 Megawatt Large Wind Energy Conversion System in Stevens County, Minnesota?

Based upon all of the record created in this proceeding, the Commission makes the following:

## **FINDINGS OF FACT**

### **The Applicant**

1. West Stevens Wind, LLC (WSW) is a Minnesota-based limited liability company owned by eight local entities. One of the eight WSW owners has a minor ownership interest in Carstensen Wind, LLC, and is the only WSW owner to have ownership or financial interest in another LWECS. Mnioka, a Minnesota contracting and development company will manage construction and will be responsible for retaining general contractor services and certain specialty subcontractor for the project. WSW will own, manage and operate the project, including monitoring, maintenance, and repair activities. Following is the contact information for WSW: Mr. Keith Thorstad, West Stevens Wind, LLC, P.O. Box 321, Chokio, Minnesota 56221.<sup>1</sup>

### **Procedural History**

2. On July 13, 2009, West Stevens Wind, LLC, made application to the Commission for a LWECS site permit under the Wind Siting Act (Minnesota Statutes, Chapter 216F) for the construction, operation, and maintenance of a proposed 20 MW nameplate capacity wind farm and associated facilities in Stevens County, Minnesota.<sup>2,3</sup>
3. Office of Energy Security, Energy Facility Permitting (EFP) staff reviewed the July 13, 2009, site permit application and found that the permit application did not provide all the necessary information required by Minnesota Rule 7854.0500. The EFP staff notified the applicant that the following deficiencies must be addressed before recommending that the Commission accept the site permit application as complete:
  - Appendix C (Project Layout) of the application should not be filed in eDockets as trade secret. Staff believed that the information was a necessary component of the public review process.
  - The figures/maps provided in the application should be revised and re-submitted as they did not adequately depict the project layout, turbine spacing, noise setbacks, electrical system configurations, project substation, transformers, transmission grid interconnection, access roads, wetland locations, legends, and scales.
  - Noise impact calculations should be provided in the application.
  - Wetland maps should be provided in the application.
  - The anticipated project schedule identified in the application should be adjusted to incorporate the required timelines of the state's wind siting process.

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<sup>1</sup> Exhibit 6 at 5.

<sup>2</sup> Exhibit 1.

<sup>3</sup> Exhibit 2.

4. On August 21, 2009, a notice of commission meeting was sent to individuals on the Commission's service list, the Department of Commerce mailing list, and to the technical representatives from state agencies with permitting or review authority.<sup>4</sup> A revised notice of commission meeting was sent to the same lists as above on August 25, 2009.<sup>5</sup>
5. On August 27 and 31, 2009, the applicant submitted a revised LWECS site permit application to the Commission that included the deficiencies as identified in Finding 3.<sup>6,7</sup>
6. The EFP staff recommended that the July 13, 2009, site permit application combined with the August 27, 2009, supplemental/amended application data should be accepted as complete in comments and recommendations to the Commission dated September 2, 2009.<sup>8</sup>
7. On September 8, 2009, the Commission issued an order accepting the WSW site permit application as complete upon correction of the identified deficiencies and submission of identified supplementary data; authorized the EFP staff to name a public advisor the project; and found that a certificate of need is not required.<sup>9</sup>
8. On September 11 and 17, 2009, the EFP staff issued a notice of application acceptance seeking comments on issues that should be considered in developing a draft site permit for the project and items that may be missing or mischaracterized in the site permit application. The notice was distributed to the Stevens County board, the city of Chokio, and each township board in Stevens County, in compliance with Minnesota Rule 7854.0600, subp. 2. The notice was also sent to individuals on the Department of Commerce mailing list.<sup>10,11</sup>
9. On September 11, 2009, EFP staff distributed copies of the site permit application along with a cover memo requesting comments on issues that should be considered in developing a draft site permit for the project and items that may be missing or mischaracterized in the site permit application to technical representatives from state agencies that may have permitting or review authority over the project.<sup>12</sup>
10. The applicant, on behalf of the EFP, published a notice of site permit application acceptance in the *Morris Sun Tribune* (September 19, 2009) in compliance with Minnesota Rules 7854.0600, subp. 2.<sup>13</sup>
11. The applicant distributed a cover letter with a copy of the site permit application to each landowner within the proposed site; the Minnesota Historical Society; the regional development commission; the auditor of each county; and the clerk of each city and township within which the LWECS is proposed to be located. The applicant sent a site application to the above identified parties on September 21, 2009, in compliance with Minnesota Rule 7854.0600, subp. 3.<sup>14</sup>

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<sup>4</sup> Exhibit 3.

<sup>5</sup> Exhibit 4.

<sup>6</sup> Exhibit 6.

<sup>7</sup> Exhibit 7.

<sup>8</sup> Exhibit 5.

<sup>9</sup> Exhibit 8.

<sup>10</sup> Exhibit 9.

<sup>11</sup> Exhibit 11.

<sup>12</sup> Exhibit 10.

<sup>13</sup> Exhibit 14.

<sup>14</sup> Exhibit 12.

12. Public comments on the proposed content of a draft site permit and completeness of the site permit application were accepted during a 22-day comment period that closed on September 30, 2009. EFP staff received written comments from the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (MnDNR). EFP staff responses to the two (2) comment letters were provided in the comments and recommendations to the Commission in conjunction with the request for issuance of a draft site permit.<sup>15</sup>
13. On October 9, 2009, a notice of commission meeting was sent to individuals on the Commission's service list, the Department of Commerce mailing list, and to the technical representatives from state agencies with permitting or review authority.<sup>16</sup>
14. The EFP staff recommended that a draft site permit be issued for the project and requested the authority to distribute the proposed draft site permit for public comment and to implement the public participation process under Minnesota Rules 7854.0900, in comments and recommendations dated October 22, 2009.<sup>17</sup>
15. On October 23, 2009, the Commission issued an order authorizing a preliminary draft site permit and approved distribution of the proposed draft site permit for comment under the public participation process outlined in Minnesota Rule 7854.0900.<sup>18</sup>
16. On November 3, 2009, EFP staff distributed copies of the proposed draft site permit to the city of Chokio, Everglade Township, Stevens County, and the city of Morris public library.<sup>19</sup>
17. On November 5, 2009, and in accordance with Minnesota Rule 7854.0900, subp. 1., EFP issued a notice of draft site permit issuance and public information meeting. The notice was posted on eDockets and the energy facilities permitting website and sent to individuals on the Department of Commerce mailing list and to the state agency technical representatives.<sup>20</sup>
18. The applicant, on behalf of the EFP, published a notice of draft site permit issuance and public information meeting in the *Morris Sun Tribune* (November 7, 2009) in compliance with Minnesota Rules 7854.0900, subp. 2. The notice contained all the information required by Minnesota Rules 7854.0900, subp. 1.<sup>21</sup>
19. Pursuant to Minnesota Rule 7854.0900, subp.2, a notice of draft site permit issuance and public information meeting was published in the *EQB Monitor* (Volume 33, Number 23) on November 16, 2009. The notice contained all the information required by Minnesota Rules 7854.0900, subp. 1.<sup>22</sup>

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<sup>15</sup> Exhibit 13.

<sup>16</sup> Exhibit 15.

<sup>17</sup> Exhibit 16.

<sup>18</sup> Exhibit 17.

<sup>19</sup> Exhibit 18.

<sup>20</sup> Exhibit 19.

<sup>21</sup> Exhibit 20.

<sup>22</sup> Exhibit 22.

20. In compliance with Minnesota Rules 7854.0900, subp. 4., the EFP staff conducted a public information meeting on November 30, 2009, at the Northland Prairie Inn in Morris, Minnesota, to provide the public an opportunity to learn about the proposed project and the Commission's role in review and approval of LWECs and to ask questions of the applicant and EFP staff. The meeting was also an opportunity for the public to offer comments on the permit application and draft site permit, which serve as the environmental documents for the project. Approximately 10 people attended the meeting.
21. Questions were asked by two attendees at the public meeting with regards to general project interconnection, project timing, and general impacts to local traffic. A complete record of the meeting including all comments, questions, and answers is documented in the public meeting transcript.<sup>23</sup>
22. Public comments on the content of the proposed draft site permit and completeness of the site permit application were accepted during a minimum 30-day public comment period commencing with the notice of the draft site permit availability in the *EQB Monitor* and ending on December 16, 2009 afforded any interested person an opportunity to submit comments on either the site permit application or the draft site permit. The EFP staff received one written letter during the comment period. The comment letter was from the MnDNR and acknowledged that the project layout as identified in the site permit application appears to be a sufficient distance from an existing snowmobile trail that runs east/west through the proposed project boundaries. The MnDNR however recommends that a site permit include a 250-foot setback requirement from the snowmobile trail. The MnDNR comment letter did not raise any other questions or unresolved issues.<sup>24</sup> Further discussion of the snowmobile trail is provided in Finding 69.

### **Project Description**

23. Depending on turbine specification, the project would consist of up to thirteen (13) wind turbine generators with the total output not exceeding 20 MW.<sup>25</sup>
24. Because a turbine type has not been selected the applicant requests that a site permit for the project allow for a range in turbine sizes from 1.5 to 2.5 MW, not to exceed a project nameplate capacity of 20 MW. The applicant has indicated that the final turbine size and vendor will be based on cost and availability of turbines at the time of construction.<sup>26</sup>
25. The applicant anticipates using ten (10) Suzlon S.88/2100 turbines, at 2 MW each, with a total output not exceeding 20 MW (baseline layout).<sup>27</sup> The information provided in the applicant's site permit application and relevant studies are derived assuming this baseline layout.

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<sup>23</sup> Exhibit 23.

<sup>24</sup> Exhibit 21.

<sup>25</sup> Exhibit 6 at 8.

<sup>26</sup> Exhibit 6 at 5.

<sup>27</sup> Exhibit 6 at 8.

26. Two alternative designs would consist of up to thirteen (13) GE 1.5 MW sle turbines, or eight (8) Clipper Liberty 2.5 MW turbines, with the total output not exceeding 20 megawatts.<sup>28</sup> The applicant indicates, for the two alternative layouts, the affected landowners and the affected tracts of land would be the same as the baseline layout. Turbine spacing would also be the same with the numbers of turbines (3 total) incrementally added or removed at the edges of the proposed project array.<sup>29</sup> The environmental setting is the same for both the baseline and alternate layouts.<sup>30</sup>
27. The wind turbines would be mounted on single pedestal steel towers with the objective of an 80 meter (262 foot) hub height. The rotor diameters would be 80 to 83 meters (262 to 272 feet), with fiberglass reinforced epoxy resin blades.<sup>31</sup>
28. Foundations for the towers would consist of a 2,500 square foot concrete pad foundation - excavated to a minimum depth of approximately 10 feet below ground surface. Foundation excavation depths as indicated by the applicant would be based on soil conditions at each proposed tower location.<sup>32</sup> Geotechnical surveys, turbine tower load specifications, and cost considerations would dictate final design parameters of the foundations.<sup>33</sup>
29. An 80 foot by 100 foot gravel pad would be installed at the base of each turbine to create a lay-down area for turbine components and facility construction.<sup>34</sup>
30. As indicated in the site permit application, associated project facilities would include wind turbine access roads, an underground communication system, an underground low- and high-voltage collector system, a supervisory control and data acquisition (SCADA) system, pad mounted turbine transformers, and one (1) permanent meteorological tower.<sup>35</sup>
31. The newly constructed gravel roads would allow for year-round access to each wind turbine location. The access roads are expected to be approximately 16-foot wide with a class-five gravel surface and geotextile fabric underlay.<sup>36</sup>
32. The applicant's proposed turbine generators are each rated at a 690 volt (V) output. Electric output from each turbine generator would be transformed to 34.5 kilovolt (kV) utilizing pad-mounted 690 V/34.5 kV transformers at the base of each turbine.<sup>37</sup>
33. Applicant's preliminary design plans indicate the transformed 34.5 kV power from each turbine would be collected via an underground system of both electric and communication cables in lieu of a wireless communication system. The underground electric power collection facilities (feeder lines) would be routed to a switchyard constructed on the existing Ottertail Power 41.6 kV line from Chokio to Graceville, Minnesota.<sup>38</sup>

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<sup>28</sup> Exhibit 6 at 8.

<sup>29</sup> Exhibit 6 at 8.

<sup>30</sup> Exhibit 6 at 6.

<sup>31</sup> Exhibit 6 at 16.

<sup>32</sup> Exhibit 6 at 17.

<sup>33</sup> Exhibit 6 at 26.

<sup>34</sup> Exhibit 6 at 17.

<sup>35</sup> Exhibit 6 at 16 and 17.

<sup>36</sup> Exhibit 6 at 17.

<sup>37</sup> Exhibit 6 at 16.

<sup>38</sup> Exhibit 6 at 17.

34. As identified in the site permit application, an existing 60-meter onsite meteorological tower would be replaced with a permanent free-standing 80-meter tower at the same location.<sup>39</sup>

### **Project Site**

35. The proposed Project has been sited in this area for its openness and ease of site access, as well as the presence of good wind resources. In addition to topography, land-use patterns were also considered in order to minimize or avoid any negative impacts.<sup>40</sup>
36. The proposed 20 MW LWECS site would be located on approximately 2,880 acres of agricultural land three miles northwest of the city of Chokio in Stevens County, Minnesota. The proposed site of the project would specifically be located in sections 16, 17, 28, 29, and 33 of Everglade Township (T125N, RW44).<sup>41</sup>
37. The proposed land loss due to roads and turbine sites during the time the wind farm is in operation would be approximately 15 to 20 acres total. Final acreage would be dependent on final micro siting.<sup>42</sup>
38. The landscape within and around the proposed project site is mainly rural open cropland with relatively flat terrain. The area is dominated by agricultural fields and farmsteads with corn and soybean being the most widely grown crops. Farmsteads in the area are typically sheltered by tree groves that serve as wind breaks and snow fences. The estimated 2009 population of the nearby city of Chokio is 415.<sup>43</sup> There are five (5) residences located within the proposed project site boundaries, with two (2) residences located just outside the proposed boundaries (500 feet or less).<sup>44</sup>
39. The proposed project site boundary is intersected north-south by 610<sup>th</sup> Avenue, 620<sup>th</sup> Avenue, and County Road (CR) 17 (630<sup>th</sup> Avenue); and east-west by CR 12 (220<sup>th</sup> Street), 210<sup>th</sup> Street, CR 14 (200<sup>th</sup> Street), 190<sup>th</sup> Street, and CR 16. East-west running State Highway 28 is approximately one mile south of the proposed project boundaries.<sup>45</sup>

### **Wind Resource Considerations**

40. Information in the site permit application indicates that the wind speeds at 80 meters in the proposed project area average 6.94 to 8.94 meters per second (m/s) or 15.5 to 20 miles per hour (mph) with an average annual estimated wind speed of 7.94 m/s (17.9 mph), which classifies the proposed project as a Class 3 wind site.<sup>46</sup> Regionally, the prevailing wind directions are generally south-southeast and northwest.<sup>47</sup> Typically the highest wind speeds occur in the spring, fall, and winter months, decreasing during the summer months. Diurnal conditions with regards to wind speeds at the proposed site generally lowest in the morning and begin to increase through afternoon and after sunset.<sup>48</sup>

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<sup>39</sup> Exhibit 6 at 20.

<sup>40</sup> Exhibit 6 at 21.

<sup>41</sup> Exhibit 6 at 8.

<sup>42</sup> Exhibit 6 at 21.

<sup>43</sup> Exhibit 6 at 18.

<sup>44</sup> Exhibit 7.

<sup>45</sup> Exhibit 7.

<sup>46</sup> Exhibit 6 at 11.

<sup>47</sup> Exhibit 6 at 14.

<sup>48</sup> Exhibit 6 at 11.

41. As indicated in the site application, atmospheric stability data has not been compiled for the proposed site. However, it is expected to be “moderately stable” in the general area, since stability conditions for the open and relatively flat terrain in the west-central Minnesota region do not vary significantly. In general, the turbulence intensity for this part of west-central Minnesota is reasonably anticipated to be low. The 10-minute turbulence intensity (standard deviation of wind speed divided by average wind speed) was measured as 0.13 at 50 meters at nearby Morris, Minnesota. Extreme wind speeds may occur with winds from any of the prevailing directions and may happen during any season. The possibility of a tornado exists in the proposed project area, with the potential for winds of 200 mph (89 m/s).<sup>49</sup> Other extreme weather conditions in this area are occasional and include hail, ice storms, lightening, tornados and severe thunderstorms. Due to the low frequency and short duration of these conditions, minimal effects are expected on turbine performance.<sup>50</sup>
42. The applicant indicates the turbines will be spaced at a minimum of five rotor diameters (RD) in the prevailing wind direction and three RDs in the non-prevailing wind direction. As depicted in Appendix C of the site permit application, the turbines would generally be arranged and sited in three linear arrays paralleling the east-west roads within the proposed project area. The turbines are typically oriented west-southwest to east-northeast, which is roughly perpendicular to the prevailing south and northwest winds. Turbine placement, aside from other resource features where setbacks or wind access buffers are required, will be designed to provide sufficient spacing between the turbines to minimize internal wake losses. Greater or lesser spacing between the turbines or turbine strings may be used in areas where the terrain and other factors dictate the spacing. This is addressed in the permit at III.E.5.
43. The estimated energy production was projected using the baseline layout of thirteen (13) Suzlon S.88/1200 wind turbines. The preliminary analysis of net energy output as indicated by the applicant is that approximately 60,107 Megawatt hour (MWh) (66,785 MWh gross) will be delivered annually to the point of interconnection, assuming a 10 percent estimated net delivery loss. The applicant indicates similar estimates for the alternative layouts described in Finding 26.<sup>51</sup> The base energy calculation presented assumes a normal or average wind year.

#### **Land Rights and Easement Agreements**

44. The applicant indicates in the site permit application that they have worked with local landowners to obtain wind leases and easement options/agreements sufficient to build the proposed LWECS. The secured site lease and easement agreements ensure access to the site for construction and operation of the proposed project, and prohibit landowners from any activities that might interfere with the implementation of the project.<sup>52</sup>
45. Within the project site boundary there are approximately 17 landowners and approximately 4,000 acres of land. WSW has obtained lease and easement option agreements and/or rights to such agreements with 9 different property owners of 12 parcels totaling approximately 2,320 acres of land within the project site boundary. The lease terms are for 30 years.<sup>53</sup> The applicant has contacted all 17 landowners and has received commitments from 14 of the landowners that they are willing to sign lease and easement agreements with the applicant if their land is needed.

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<sup>49</sup> Exhibit 6 at 12.

<sup>50</sup> Exhibit 6 at 14.

<sup>51</sup> Exhibit 6 at 31.

<sup>52</sup> Exhibit 6 at 15.

<sup>53</sup> Exhibit 6 at 15.

## Siting Criteria

46. Minnesota Rules, Chapter 7854 applies to the siting of LWECS. The rules require an applicant to provide a substantial amount of information to allow the Commission 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 (Minnesota Rules 7854.0500). The following analysis addresses the relevant criteria that are to be applied to a LWECS project.

## Demographics/Human Settlement

47. Stevens County encompasses an area of 575 square miles with a 2008 estimated population of Stevens County is 9,661 which equates to 0.06 person per square mile. Everglade Township located within Stevens County and the area of the proposed project site has a land area of 36 square miles with a population (year 2000 data) of 128, which equates to a population density of 0.3 people per square mile.<sup>54</sup>
48. The applicant has established a minimum setback of 1,200 feet to any residence, whether that landowner is a participating or a non-participating landowner, as depicted in Appendix C, Sheet 1.<sup>55</sup> Information in the site permit also indicates that to minimize the potential for negative impacts on local citizens or homes, the minimum setbacks from residential receptors to turbines will be equal to, or greater than, those required to meet state noise standards. Also, no turbine will be sited closer than the minimum setbacks of 76 meters (250 feet) from roads.<sup>56</sup>
49. The applicant will be required to set back its turbines a minimum of five rotor diameters (1,300 to 1,360 feet) on the prevailing wind axis from non-participating landowner's property lines and three rotor diameters on the non-prevailing wind axis (786 to 816 feet).
50. The applicant's proposed project design will be required to comply with the Minnesota Pollution Control Agency (MPCA) noise standards. The applicant indicates that potential impact to nearby residents and other potentially affected parties would be taken into consideration as part of the final micro siting of the turbines and design of appropriate setback distances.<sup>57</sup> The site permit, at part III.C.2. conditions for setbacks from residences. The proposed wind turbine layout will meet or exceed those requirements.
51. The proposed project is not expected to affect any water wells (used, unused or unsealed) or any rural water system that services the area.
52. There will be no displacement of existing residences or structures in siting the wind turbines and associated facilities.

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<sup>54</sup> U.S. Census Bureau, Table 4: Annual Estimates of the Resident Population for Incorporated Places in Minnesota, Listed Alphabetically: April 1, 2000 to July 1, 2008, <http://quickfacts.census.gov/qfd/states/270001k.html> (Accessed Feb. 2010).

<sup>55</sup> Exhibit 7.

<sup>56</sup> Exhibit 6 at 18.

<sup>57</sup> Exhibit 6 at 18.

53. The applicant has indicated that there are no public-use airports located within or near the proposed project site. The closest airport is the Morris Municipal Airport located approximately 11 miles to the east of the site. There is the potential for aerial chemical application due to the agricultural nature of the area. No known impediments to crop spraying due to LWECs is known at this time. The applicant has filed Notices of Proposed Construction (Form 7460-1) with the Federal Aviation Administration and would be updated as needed during final micro-siting. Turbines will be illuminated to meet required FAA regulations. See site permit condition III.E.4.
54. The applicant would provide security during construction and operation of the project, including fencing, warning signs, and locks on equipment and facilities. The applicant would also provide landowners and interested persons with safety information about the project and its facilities. See site permit condition III.B.15.
55. In winter months ice may accumulate on the wind turbine blades when the turbines are stopped or operating very slowly. Furthermore, the turbine 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 during the winter months. See permit condition III.C. and IV.M.
56. 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. See permit condition III.B.17.

## Noise

57. Background noise levels in the project area are typical of those in a rural setting, where existing nighttime noise levels are commonly in the low to mid-30 dBA (equivalent to household level noise). The dBA scale represents A-weighted decibels based on the range of human hearing. Higher levels exist near roads and other areas of human activity. Wind conditions in the Project Area also tend to increase ambient noise levels when the wind is blowing.
58. Noise levels predicted by noise modeling program, such as Windfarm and WindPRO 2, will be compared to the MPCA Daytime and Nighttime  $L_{10}$  and  $L_{50}$  Limits as stated in Minnesota Rule 7030.0040. These standards describe the limiting levels of sound established on the basis of present knowledge for the preservation of public health and welfare. These standards are consistent with speech, sleep, annoyance, and hearing conversation requirements for receivers within areas grouped according to land activities by the Noise Area Classification (NAC) system established in Minnesota Rule 7030.0050. The NAC-1 was chosen for receivers in the project area since this classification includes farm houses as household units. Daytime and nighttime limits for this classification are (1) an  $L_{50}$  limit of 60 dBA and an  $L_{10}$  limit of 65 dBA in daytime, and (2) an  $L_{50}$  limit of 50 dBA and an  $L_{10}$  limit of 55 dBA at nighttime. The nighttime  $L_{50}$  limit of 50 dBA is the most stringent state limit.

59. As stated in the site permit application, wind turbines emit a perceptible sound when in motion. The level of this noise varies with the speed of the turbine and the distance of the noise receptor from the turbine. On relatively windy days, the turbines create more noise; however, the noise from the wind tends to override the turbine noise, especially as distance from the turbines increases. The turbines will comply with noise standards administered by the MPCA.<sup>58</sup> See proposed permit conditions III.C.2. and III.E.3.
60. Cumulative noise impacts to nearby residents and other potentially affected parties will be factored into the turbine micrositing process.
61. To insure proper placement of the turbines with respect to residences the proposed site permit also requires the applicant to submit a proposal upon request of the Commission for the conduct of a noise study designed to determine the noise levels at different frequencies and at various distances from the turbines at various wind directions and speeds as well as the cumulative noise impacts from the LWECs site . The applicant must ensure compliance with MPCA noise standards. See proposed site permit conditions III.E.3 and III.F.2.

### **Visual Impacts**

62. The placement of wind turbines at this proposed site will have a visual effect on the general area. The population density in this area is very low so fewer non-participating neighbors occur adjacent to the proposed project site than would in a more densely populated area. The visual impact is usual based on a subjective response. A wind farm could be perceived as an intrusion to the rural landscape by introducing structures that contrast in form and shape. At the same time wind farms poses a character all of their own. Any perceived visual impact would typically lessen over time as residents adapt to the change in the visual setting and become accustomed to this new form of "farming".<sup>59</sup> In general, the applicant has indicated that local residents and government understand the visual impact of wind farms and are receptive to their occurrence. Stevens County commissioners have provided support for the proposed project development.<sup>60</sup>

### **Recreational Resources**

63. As indicated in the site permit application recreational activities will not be impacted by the proposed project as the turbines are exclusively located on agricultural lands.<sup>61</sup>
64. The potential for impact to wild game/hunting should also not be significant because of the lack of cover for wildlife.<sup>62</sup> Any disturbance to wildlife native to the specific area would happen during the construction phase of the project and would be temporary in nature. See proposed site permit condition III.C.4.

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<sup>58</sup> Exhibit 6 at 18.

<sup>59</sup> Exhibit 2 at 19.

<sup>60</sup> Exhibit 1.

<sup>61</sup> Exhibit 6 at 20.

<sup>62</sup> Exhibit 6 at 20.

65. A snowmobile trails identified by the MnDNR in their comment letter runs east/west across the middle of the proposed project boundaries, between the north-south boundaries of sections 33/28 and 32/29. The MnDNR acknowledge in their letter that the proposed turbine configuration for the project appears to be a sufficient distance from the existing snowmobile trail, however recommended that the permit include a requirement for at least a 250 foot setback from the snowmobile trail due to concerns over ice shedding from the turbines should they be relocated.<sup>63</sup> No turbine is anticipated in the portion of the project. In the projects current configuration, the closest turbine to the West Central Trailblazers Snowmobile Trail is approximately 3,850 feet. See proposed site permit condition IV.M.

### **Public Services and Infrastructure**

66. The proposed project is expected to have minimal effects on existing public infrastructure. The proposed project would not generate an increase in traffic volumes or daily human activity, except for a short period of time during construction and occasionally during operation and maintenance activities. The construction contractor will repair any road damage that may occur during the construction of the project. The project owners have been in contact with the Stevens County road authorities, and have an agreement with the authorities as to road maintenance and reconstruction requirements.<sup>64</sup> See proposed permit condition III.B.8.
67. Other than short-term impacts, no significant permanent changes in road traffic patterns or volume are expected. The busiest traffic would occur when the majority of the foundation and tower assembly is taking place. Township and county officials will receive advance notice of the construction schedule, including the timing of the delivery of towers and turbines and arrival of the crane to erect Project equipment. Traffic control will comply with American Association of State Highway and Transportation Officials standards and the requirements of local authorities.<sup>65</sup> See proposed permit condition III.B.8.
68. Temporary road radii at intersections will be required during the construction phase to allow the over-length and over-width loads to navigate the intersections. When construction is completed these intersections will be returned to pre-construction radiuses and road ditches restored.<sup>66</sup> See proposed permit condition III.B.8.(d.)
69. Construction of the proposed project requires the addition of access roads that will be located on private property. Access roads would be built adjacent to the turbine towers, allowing access both during and after construction. The access roads will be sited in consultation with local landowners and completed in accordance with specified design requirements, and will be located to facilitate both construction (cranes) and continued operation and maintenance. Siting roads in areas with unstable soil will be avoided wherever possible. Roads may include appropriate drainage and culverts while still allowing for the crossing of farm equipment. The final roads would be approximately 16 feet wide with a Class-5 gravel surface and geotextile underlay. Local requirements would be followed wherever access roads join state or local roadways. During construction only, the access roads would be temporarily widened by an additional 16 feet of compacted soil, covered with geotextile/gravel, if required, to support the size and weight of heavy-duty cranes and turbine delivery vehicles. Once construction is completed, the roads will be re-graded, filled, and dressed as needed.

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<sup>63</sup> Exhibit 21.

<sup>64</sup> Exhibit 6 at 19.

<sup>65</sup> Exhibit 6 at 20.

<sup>66</sup> Exhibit 6 at 26.

The final road design would be dependent on geotechnical information obtained during the engineering phase.<sup>67</sup> See proposed permit condition III.B.8.(b.)

70. If access roads are installed across streams or drainage ways, the applicant in consultation with the MnDNR 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 MnDNR. See proposed site permit condition III.K.7.
71. 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. Prior to commencing construction, the applicant would submit a plan to the Commission for conducting an assessment of television signal reception and microwave signal patterns in the proposed project area. The applicant would be responsible for correcting any disruption or interference of these services caused by the turbines or any associated facilities. See proposed site permit condition III.D.3.
72. The applicant has undertaken an assessment of microwave beam pathways to ensure that the proposed project would not interfere with existing microwave paths that have been established for communications systems in the vicinity of the project site. The concluded that no interference is anticipated.<sup>68</sup>
73. The proposed electrical collector system and communication lines in lieu of a wireless communication system will be located on properties leased by the applicant and will be placed underground. The underground cable system will be routed to a nominally rated 600 ampere 34.5 kV switch. Switches and metering equipment will be above-ground and located on land leased by the applicant and adjacent to the existing Ottertail Power 41.6 KV line. The existing line lies on a west to east route along 220<sup>th</sup> Street.<sup>69</sup> The placement of collector and feeder lines is addressed in the proposed site permit at III.E.7 and 8.
74. Construction, operation, and maintenance of the proposed wind plant will comply with all of the required federal and state permit requirements. See proposed site permit condition III.K.7.

### **Community Benefits**

75. The proposed project may possibly increase tourism and community activities associated with the project, as has proven to be true in other communities which host wind farms. The project is proposed as a C-BED project which would provide revenues to the participating Minnesota shareholders. Landowners who lease property to the applicant for the project would gain lease monies and neighbors with wind easements would benefit financially as well. Another benefit of the project is the generation of a production tax assessed on the wind farm, which would go directly into the local government treasury and benefit the local community, e.g. fire, police, roads. The project is also expected to create new job opportunities within the local community, both during construction and operation.<sup>70</sup>

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<sup>67</sup> Exhibit 6 at 26.

<sup>68</sup> Exhibit 2.

<sup>69</sup> Exhibit 6 at 16.

<sup>70</sup> Exhibit 6 at 21.

## **Effects on Land-Based Economies**

76. The wind turbines and access roads will be located so that the most productive farmland will be left as intact as possible. The access roads will be sited in consultation with local landowners. The proposed land loss due to roads and turbine sites during the time the wind farm is in operation would be approximately 15 to 20 acres total. The site permit at III.B. 2., 3., 4., 5., 6., 7., 8(b.), 8(c), 9., and 11. addresses mitigation measures for agricultural lands. The proposed project does not adversely affect any sand or gravel operations. There are no known mineral or gravel deposits at the project site or forest cover (other than minor hedgerows).

## **Archaeological and Historical Resources**

77. The applicant contracted Stemper and Associates to perform an Archival/Literature Research of the proposed project area. A cultural Resource Management Report was prepared and included in the site permit application (App D). The background research found no previously recorded archaeological sites or National Register of Historical Places sites within the proposed project site (study area). Plat maps from 1910 showed three rural school sites on the project area boundaries and not within 500 feet of the proposed wind turbine locations. (App D).
78. An archaeology survey is recommended for all the proposed turbine locations, access roads, conduit trenching to document any previously unrecorded archaeological sites within the project site. A Phase I archaeology survey consists of the following tasks: consultation, documentation, and identification. A Phase I survey provides enough information to allow consideration of avoidance if a site is to be impacted by an undertaking and to gather enough information to allow for reasonable recommendations for more detailed work should it be necessary. See proposed site permit condition III.D.2.
79. The applicant contracted Stemper and Associates to perform a Phase I Archaeological Field Investigation of the proposed site. The Phase I archaeological field investigation found no new prehistoric or historic properties within the survey area boundary dimensions. The shed review for potentially eligible properties within one-half mile of the wind turbine locations included structures all of which are within a secondary context or modified beyond their original construction and would not be eligible for the National Register of Historic Places. The reports concludes that the proposed project area would warrant no further work on the boundary areas shown within the report.<sup>71</sup>
80. Should any prehistoric or historic properties not located during the pre-survey be encountered during the implementation of the proposed construction activities, the Office of the State Archaeologist should be notified. It is the responsibility of the applicant to protect the prehistoric or historic properties until a professional examination can be made and authorization to proceed is granted. See proposed site permit condition III.D.2.
81. The applicant also notified various Native American Tribes about the proposed development in conjunction with the Federal Grant Application process through the U.S. Department of Agriculture.<sup>72</sup>

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<sup>71</sup> Exhibit 25 at 15.

<sup>72</sup> Exhibit 2.

## **Air and Water Emissions**

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

## **Wildlife**

83. The wildlife found in the proposed project area is typical of that found in agriculture-related habitats. The resident species are representative of Minnesota game and non-game wildlife that are associated with roadside ditches, fencerows, wetlands, streams, and areas of native grasses and shrubs. The turbine sites and roads are lacking in cover vegetation for wildlife, therefore it is anticipated that wind farm development will have minimal impact on any resident wildlife. Operation of the wind farm will not change the existing land use.<sup>73</sup>
84. Information from the site permit application indicates the following measures will be used by the applicant to help avoid potential impacts to wildlife in the project area during construction and subsequent development and operation.<sup>74</sup>
- Avoid disturbance of individual wetlands or drainage systems during construction of the Project.
  - Protect existing trees and shrubs that are important to the wildlife present in the area.
  - Follow Best Management Practices for water and soil conservation during construction and operation of the proposed project.
  - Protect topsoil and minimize soil erosion using practices such as containing excavated material, segregating topsoil, protecting exposed soil, and stabilizing restored material.
  - Re-vegetate non-cropland and range areas with native species.
  - Use silt zone fences and other measures as required by NPDES regulations.
85. Based on the history of existing wind power projects in the United States, an additional impact of concern to wildlife is their potential effect on avian and bat populations. Birds and bats have been documented to occasionally collide with wind turbines at other sites. This same potential exists in the proposed wind farm. A comprehensive avian and bat study has been conducted for an area recognized as Buffalo Ridge in Minnesota. This report has been made available to the Commission in past cases. Anticipated impacts associated with the proposed project would be similar to findings identified in the Buffalo Ridge report. The primary avian species that frequent the project area are migratory and song birds, none of which are known to be endangered species. Those species that occur in Stevens County that are considered endangered have not been known to frequently occur within the proposed project area.
86. Mitigation measures are prescribed in the proposed site permit and include but are not limited to: a) a biological preservation survey consisting of 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 in the project area (proposed site permit III.D.1.); b) Wind turbines and associated facilities including foundations, access roads, underground cable, and transformers, shall not be located in waterfowl production areas, state wildlife management areas or scientific and natural areas or in state/county parks (proposed site permit III.C.4.); c) a 3 RD by 5 RD setback is provided (proposed site permit III.C.1.); and

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<sup>73</sup> Exhibit 6 at 23.

<sup>74</sup> Exhibit 6 at 23.

d) upon request of the Commission, prepare a native prairie protection and management plan in consultation with the MnDNR (proposed site permit III.C.6.).

87. The applicant indicates that based on correspondence with the MnDNR, there are no known or observed specific species of concern or protected species within the site area. The applicant will obtain and adhere to a National Pollutant Discharge Elimination System (NPDES) stormwater prior to project construction. In addition, the applicant has made the decision to bore beneath stream crossings (for placement of underground electric collector lines) to further ensure that there will be no adverse effects on the environment.<sup>75</sup>

### **Vegetation**

88. The proposed site would be located on land which has been historically used for row crop production. Tree coverage is minimal, primarily hedgerows. The applicant does not foresee the removal of any trees, groves of trees or shelter belts in its present proposal. Any disturbed grasses in the right-of-ways will be re-seeded. The applicant has indicated they would have a re-vegetation agreement with the County for road rights-of-way and with individual landowners. There is no known native prairie lands located in the proposed project site, in the case a native prairie is discovered, the proposed site permit at III. C.6., provides for preparation of a native prairie protection and management plan.

### **Soils**

89. The soil in the proposed project area consists primarily of a clay-loam. The applicant intends on making every effort to minimize negative soil impacts. The applicant indicates, topsoil will be segregated and replaced. Prior to construction a detailed sediment and erosion control plan will be developed. The plan will include Best Management Practices to minimize impacts to soil, water and vegetative resources. The site permit at III.B.9. requires a soil erosion and sediment control plan. The applicant states they would be making very few changes to the landscape, and will not be significantly affecting drainage patterns. Any temporary disruption to drainage tiles that may occur would be corrected or re-routed at the expense of the applicant. Plans for grading, construction and drainage of roads and turbine pads are being developed for construction, as well as a comprehensive plan to restore the site following completion of construction. Culverts would be provided in roadways to maintain existing drainage.<sup>76</sup>

### **Geologic and Ground Water Resources**

90. The proposed project area is relatively flat, partially tiled farmland. The construction of the foundations for each wind turbine and transformers will be done without affecting the local subsurface water resources. The terrain affected by the proposed project has very little surface water. The project is on a ridge which drains to the north into the East Fork of Twelve mile Creek via County Ditch No 15. Impacts to geologic and groundwater resources are not anticipated.<sup>77</sup>

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<sup>75</sup> Exhibit 6 at 24.

<sup>76</sup> Exhibit 6 at 22.

<sup>77</sup> Exhibit 6 at 22.

## Surface Water and Wetlands

91. No permanent impacts to state public waters or state jurisdictional wetlands are anticipated. Access roads or utility lines would not be located in surface water, wetlands, or a flood plain unless authorized by the appropriate permitting agency. The site permit application indicates that the entire electrical collector system will be installed underground, and would not alter drainage patterns. Erosion control measures would be used throughout construction until disturbed areas have been re-vegetated. The proposed site layout avoids all mapped wetlands. Field observation confirms good correlation between mapped and observed wetlands.<sup>78</sup> See also proposed site permit condition III.C.5.
92. The applicant contracted West Central Environmental Consultants to perform a wetland assessment of the site. The wetland assessment report indicates visual onsite inspection identified six (6) potential areas found to have evidence of potential wetland conditions. The report further states that a number of the observed locations were partially drained via tile lines and ditching, which may alter the hydrology indicators for these locations. Further investigation of these areas may be required to determine if these areas meet the wetland criteria outlined by the Army Corp of Engineers.<sup>79</sup> The applicant will submit a 1026 form to the Stevens County Soil and Water Conservation District to further ensure that no wetlands will be affected by the proposed project.<sup>80</sup> See also proposed site permit condition III.C.5.

## Hazardous Materials

93. During normal operation of the LWECs, all fluids will be contained within the wind turbine structure or the pad-mounted transformers. Leakage from the structures is not anticipated. Proper maintenance procedures and fluid-handling practices would be followed and a Spill Prevention and Countermeasure Control (SPCC) Plan will be prepared in accordance with MPCA requirements (proposed site permit condition III.B.13.).<sup>81</sup>

## Future Development and Expansion

94. The applicant has not indicated any plans for future development or expansion of this proposed LWECs site.

## Maintenance

95. Information in the site permit application indicates that during turbine commissioning and initial operation, the project would be inspected onsite daily to ensure that it is operating within expected parameters. Following this initial period of monitoring the applicant anticipates the following maintenance intervals.<sup>82</sup>
  - First service inspection: The first service inspection will take place one to three months after the turbines have been commissioned. Activities include tightening bolts, greasing bearings, and filtering gear oil.

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<sup>78</sup> Exhibit 6 at 23.

<sup>79</sup> Exhibit 24 at 1-2.

<sup>80</sup> Exhibit 6 at 23.

<sup>81</sup> Exhibit 6 at 21.

<sup>82</sup> Exhibit 6 at 27-28.

- Semiannual service inspection: Routine service inspections commence six months after the first inspection. The semiannual inspection consists of lubrication and a safety test of the turbine.
- Annual service inspection: The annual service inspection consists of a semiannual inspection plus a full component check.
- Two-year service inspection: The two-year service inspection consists of the annual inspection, plus the checking and tightening of terminal connectors.
- Five-year service inspection: The five-year inspection consists of the annual inspection, an extensive inspection of the wind braking system, the checking and testing of oil and grease, a balance check and the tightening of terminal connectors.

### **Decommissioning and Restoration**

96. The applicant expects that the life of the proposed LWECS project will be no less than 30 years. The land easement documents obtained provide for this 30-year life. As provided in proposed permit condition III.G.1., the applicant will 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 proposed site permit (III.G.1.) requires the applicant to submit a Decommissioning Plan to the Commission prior to commercial operation. In addition to any requirements under the site permit, each individual land lease requires proper decommissioning of turbines. The owner will be responsible for costs to decommission the project and associated facilities.<sup>83</sup>
97. Upon expiration of the permit, or upon earlier termination of operation of the proposed LWECS, the applicant would 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 minimum depth of four feet. To the extent possible the applicant will restore and reclaim the site to its pre-project topography and topsoil quality. All access roads will 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 will show the locations of all such foundations. The project site would be restored within 18 months after project expiration (proposed site permit condition III.G.2.).

### **Site Permit Conditions**

98. All of the above findings pertain to the applicant's requested permit for a 20 MW LWECS project.
99. Most of the 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. Comments received by the Commission have been considered in development of the site permit. Minor changes and special condition additions that provide for clarification or additional requirements have been made.
100. The proposed site permit contains conditions that apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning and all other aspects of the project.

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<sup>83</sup> Exhibit 6 at 32.

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 West Stevens Wind, LLC, for the 20 MW LWECS project.
3. The West Stevens Wind, LLC, application for a site permit was properly filed and noticed as required by Minnesota Statutes 216F.04 and Minnesota Rules 7854.0600, subp. 2. and 7854.0900, 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 7854.
5. 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 20 MW LWECS West Stevens Wind Project will not create significant human or environmental impacts and is compatible with environmental preservation, sustainable development, and the efficient use of resources.
6. The Minnesota Public Utilities Commission has the authority under Minnesota Statutes section 216F.04 to establish conditions in site permits relating to site layout, construction and operation and maintenance of an LWECS. The conditions contained in the site permit issued to West Stevens Wind, LLC, for the West Stevens Wind Project are appropriate and necessary and within the Minnesota Public Utilities Commission's authority.
7. In accordance with Minnesota Rule 7854.0500, subp. 2., a site permit may not be issued until the certificate of need or other commitment requirement has been satisfied.

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

**ORDER**

A LWECS Site Permit is hereby issued to West Stevens Wind, LLC, to construct and operate the 20 Megawatt West Stevens Wind Project in Stevens 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 7854 for PUC Docket No. IP-6824/WS-09-830.

The site permit is attached hereto, with a map showing the approved site.

BY THE ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary

( S E A L )

**STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION**

**LARGE WIND ENERGY CONVERSION SYSTEM  
SITE PERMIT FOR WEST STEVENS WIND PROJECT**

**IN  
STEVENS COUNTY, MINNESOTA**

**ISSUED TO  
WEST STEVENS WIND, LLC**

**PUC DOCKET NO. IP-6824/WS-09-830**

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

West Stevens Wind, LLC

West Stevens Wind, LLC is authorized to construct and operate up to a 20 Megawatt Large Wind Energy Conversion System on the site identified in this site permit and in compliance with the conditions contained in this permit.

This permit shall expire on:

Approved and adopted this 25<sup>th</sup> day of February 2010

BY ORDER OF THE COMMISSION

  
\_\_\_\_\_  
BURL W. HAAR  
Executive Secretary

(S E A L)

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## **I. SITE PERMIT**

This site permit for a Large Wind Energy Conversion System (LWECS) authorizes West Stevens Wind, LLC to construct up to a 20 Megawatt (MW) LWECS and associated facilities in Stevens County, on a site of approximately 2,880 acres (4.5 square miles) in accordance with the conditions contained in this permit. The site boundary is shown on the map that is attached.

## **II. PROJECT DESCRIPTION**

This permit authorizes West Stevens Wind, LLC (permittee) to construct and operate a 20 MW LWECS to be located in Everglade Township, Stevens County, Minnesota (project). The project will consist of up to 13 wind turbine generators, depending on turbine specifications. The permittee anticipates using ten (10) Suzlon S.88/2100 turbines, at 2 MW each, with a total output of approximately 20 MW. In addition, two alternative designs are under consideration which would consist of up to thirteen (13) GE 1.5 MW sle turbines, or eight (8) Clipper Liberty 2.5 MW turbines, with the total output not exceeding 20 megawatts. Final turbine selection will be based on cost and availability of turbines at the time of construction. The wind turbines will be mounted on single pedestal (not latticed) steel towers with the objective of an 80 meter hub height. Foundations for the towers will consist of a 2,500 square foot a concrete pad foundation excavated to a depth of approximately 10 feet below ground surface. The rotor diameter will be 80 to 83 meters, with fiberglass reinforced epoxy resin blades.

Associated facilities will include wind turbine access roads, an underground communication system, an underground low- and high- voltage collector system, a supervisory control and data acquisition (SCADA) system, pad mounted turbine transformers, and a permanent meteorological tower. The underground electric power collection facilities (feeder lines) will be routed to a switchyard constructed on the existing Ottertail Power 41.6 kV line from Chokio to Graceville, Minnesota.

## **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 Minnesota Public Utilities Commission (Commission) 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 Commission, a site plan for all turbines, roads, electrical equipment, collector and feeder lines and other associated facilities to be constructed. The permittee shall also submit to the Commission, engineering drawings for site preparation, construction of the facilities, and a plan for restoration of the site due to construction.

The permittee shall document compliance with the setbacks and site layout restrictions required by the permit. 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 Commission 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 Commission, 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 Commission.

## **3. PRECONSTRUCTION MEETING**

Prior to the start of any construction, the permittee shall conduct a preconstruction meeting with the person designated by the Commission 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, segregate, and replace topsoil from subsoil on all 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 the necessary 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 on lands under its control unless negotiated with 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 project and shall notify the Commission 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 project. 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 project for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and project components. The permittee shall notify the Commission of such arrangements upon request of the Commission.

**(b) Turbine Access Roads**

The permittee shall limit the construction of turbine access roads to only those required for the construction and operation of the project. Siting roads in areas with unstable soil will be avoided wherever possible. 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 over a fabric overlay. Access roads shall not be constructed across streams, wetlands, and drainage ways without required permits and approvals from the Minnesota Department of Natural Resources (MnDNR), the U.S. Fish and Wildlife Service (USFWS), and/or U.S. Army Corps of Engineers (Corps). 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.

**(d) Temporary Road Radii**

The permittee shall promptly repair and return to pre-construction condition, any temporary road radii backfills required to allow over-length and over-width project component deliveries through road intersections.

**9. SOIL EROSION AND SEDIMENT CONTROL**

Prior to construction the permittee shall develop and submit to the Commission, a detailed soil erosion and sediment control plan that includes Best Management Practices to minimize impacts to soil, water, and vegetative resources. This plan may be the same as the Storm Water Pollution Prevention Plan (SWPPP) submitted to the Minnesota Pollution Control Agency (MPCA) as part of the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit application. Additionally, if the project will result in over 50 acres of disturbed area and has a discharge point within one mile of an impaired water, the permittee is required to submit their SWPPP to the MPCA for review at least 30 days prior to commencing land disturbing activities.

A goal of the soil erosion and sediment control plan is to minimize soil erosion, to re-vegetate non-cropland and range land disturbed by construction in areas supporting wildlife conservation species, and wherever possible, to plant appropriate native species in cooperation with landowners and the MnDNR.

The soil erosion and sediment control plan shall address what types of erosion control measures will be implemented during each phase of the project and shall at a minimum identify plans for grading; construction and drainage of roads and turbine pads; identify necessary soil information; provide detailed design features to maintain downstream water quality; include a comprehensive re-vegetation plan to maintain and ensure adequate erosion control and slope stability; include plans to restore the site after temporary project activities; and provide 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 once the area is established and 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 from the site all waste and scrap that is the product of construction, operation, or restoration and maintenance 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 shall not remove groves of trees or shelter belts without notification to the Commission and the approval of the affected landowner.

#### **12. RESTORATION**

The permittee shall, as soon as practical following construction of each turbine, and considering the weather and preferences of the landowner, restore the area affected by any project activities to the condition that existed immediately before construction began, to the extent possible. The time period for restoration may be no longer than 12 months after completion of construction of the turbine, unless otherwise negotiated with the landowner. Restoration shall be compatible with the safe operation, maintenance, and inspection of the project.

#### **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. A Spill Prevention and Countermeasure Control (SPCC) Plan will be prepared and submitted to the Commission and MPCA prior to commencement of construction.

#### **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 designee to obtain approval for the use of herbicide prior to any application on the 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 other 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, subd. 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 project construction. The permittee shall submit a copy of the plan to the Commission upon request. The permittee shall also register the project with local government 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 be placed at a minimum spacing of five rotor diameters (RD) in the prevailing wind direction and a minimum of three RDs in the non-prevailing wind direction from the perimeter of the lands where the permittee does not hold the wind rights, unless otherwise approved by of the Commission.

#### **2. RESIDENCES**

Wind turbine towers shall be located at a minimum of 500 feet from the nearest participating residence and 1,200 feet from the nearest non-participating residence, or the distance required to comply with the MPCA Rules (Minnesota Rules 7030.0010) for Noise Area Classification 1, whichever is greater (see also paragraph III.E.3).

### **3. ROADS**

Wind turbine and meteorological 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 production 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 or public waters wetlands, as defined in Minnesota Statutes section 103G.005, subd. 15 and 15a. However, electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to MnDNR, USFWS and/or Corps permits and approvals.

### **6. NATIVE PRAIRIE**

Upon request of the Commission, the permittee shall, with the guidance of the MnDNR and any others selected by the permittee, prepare a prairie protection and management plan and submit it to the Commission and MnDNR 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 Commission.

## **D. PRE-CONSTRUCTION SURVEYS AND STUDIES**

### **1. BIOLOGICAL PRESERVATION INVENTORY**

Upon request of the Commission, the permittee, in consultation with MnDNR and other interested parties, shall conduct a pre-construction inventory of existing 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 Commission 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.

Prior to 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.

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 Commission 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 Commission of such discovery. The permittee shall not excavate at such locations until so authorized by the Commission 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. The Commission 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. INTERFERENCE**

The permittee shall be responsible for correcting any disruption  
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 laws. In the event the LWECs and its associated facilities or its operations cause such interference, the permittee shall be responsible for correcting any disruption or interference of these services caused by the turbines or any associated facilities.

## **4. WETLAND DELINEATION**

The permittee shall provide data for preconstruction micro siting analysis and final site plan and for purposes of the Minnesota Wetland Conservation Act, Section 401 and 404 of the Clean Water Act and will submit the results the Board of Soil and Water Resources (BWSR), the local Soil and Water Resource District, and the Corps, as appropriate.

In addition, the applicant will submit a 1026 form to the Stevens County Soil and Water Conservation District to further ensure that no wetlands will be affected by the proposed project.

## **E. SITE LAYOUT AND DESIGN RESTRICTIONS**

### **1. WIND TURBINE TOWERS**

Structures for wind turbines shall be self-supporting tubular towers. The towers may be between 60 meters (197 feet) and 80 meters (262 feet) above grade measured at the hub.

### **2. METEOROLOGICAL TOWERS**

Permanent meteorological towers shall be free standing (no guy wires) and no taller than 80 meters in height. Temporary meteorological towers, which are those that will be removed no more than one year after the project in-service date, 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 be placed at a minimum of 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 only be placed on lands on which 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.

One permanent meteorological tower is authorized to be constructed for the project by this permit.

### **3. NOISE**

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. The noise standards are found in Minnesota Rules, Chapter 7030. 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 noise 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 construction of the towers.

#### **4. FEDERAL AVIATION ADMINISTRATION**

Towers shall be marked as required by the 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 project boundaries as shown in Figure 2. The turbine towers shall be spaced no closer than three RD in the non-prevailing wind directions and five RD in 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 landowner. 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 inventories 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 National Electric Safety Code (NESC) standards and 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 Commission, the permittee shall report to the Commission on compliance with these standards.

## **F. POST-CONSTRUCTION STUDIES**

### **1. WAKE LOSS STUDIES**

The permittee shall provide to the Commission, along 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 Commission any operational wake loss studies conducted on this project.

### **2. NOISE**

Upon request of the Commission, the permittee shall submit a proposal to the Commission for the conduct of a noise study. Upon the approval of the Commission, 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 as well as the cumulative noise impacts from the LWECS site.

## **G. DECOMMISSIONING/RESTORATION/ABANDONMENT**

### **1. DECOMMISSIONING PLAN**

Prior to commencement of construction, the permittee shall submit to the Commission a Decommissioning Plan describing the manner in which the permittee anticipates decommissioning the project in accordance with the requirements of Minnesota Rules part 7854.0500, 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 Commission may at any time request the permittee to file a report with the Commission 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 minimum 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 Commission prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within 18 months after project expiration.

## **3. ABANDONED TURBINES**

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

# **H. REPORTING**

## **1. PROJECT ENERGY PRODUCTION**

The permittee shall submit a report no later than February 1<sup>st</sup> following each complete year of project operation. The report shall include: a) the rated nameplate capacity of the permitted LWECS project; b) the total monthly energy generated by the LWECS in Megawatt hours; c) the monthly capacity factor; d) yearly energy production and capacity factor; e) the operational status of the project and any major outages, major repairs, or turbine performance improvements occurring in the previous year; and f) any other information reasonably requested by the Commission. This information will be considered public and must be submitted electronically.

## **2. WIND RESOURCE USE**

The permittee shall upon request of the Commission report to the Commission on the monthly energy production of the project and the average monthly wind speed collected at one permanent meteorological tower selected by the Commission during the preceding year or partial year of operation.

The provisions of paragraph III.K.5 shall apply to the Commission's review of data provided pursuant III.H.2.

### **3. EXTRAORDINARY EVENTS**

Within 24 hours of an occurrence, the permittee shall notify the Commission 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 bat and/or 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 Commission 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 Commission the company's procedures to be used to receive and respond to complaints. The permittee shall report to the Commission all complaints received concerning any part of the LWECS in accordance with the procedures provided in Attachments 2 and 3 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 Commission 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 Commission can place it into the Minnesota Geospatial Information Office (MnGeo) data clearinghouse located in the Office of Geographic and Demographic Analysis.

### **2. FINAL BOUNDARIES**

After completion of construction, the Commission shall determine the 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 Commission. The permittee may submit to the Commission a request for a change in the boundaries of the site for the LWECS. The Commission will respond to the requested change in accordance with applicable statutes and rules.

## **J. AUTHORITY TO CONSTRUCT LWECS**

### **1. WIND RIGHTS.**

The permittee shall submit documentation to the Commission of exclusive wind rights obtained within the boundaries of the LWECS authorized by this permit within 30 days of receiving such wind rights.

## **2. OTHER PERMIT APPLICATIONS.**

Nothing in this Permit shall be construed to preclude any other person from seeking a site permit to construct a LWECs 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 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**

This permit does not authorize construction of the project until the permittee has obtained a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the project. 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 two years of the issuance of this permit, the permittee must advise the Commission of the reason for not having such power purchase agreement or enforceable mechanism. In such event, the Commission 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 7854.1300.

## **K. MISCELLANEOUS**

### **1. PERIODIC REVIEW**

The Commission 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 Commission, 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 and studies required in paragraph III.D. and commenced construction of the project within two years of the issuance of this permit, the permittee must advise the Commission of the reason construction has not commenced. In such event, the Commission may determine whether this permit should be amended or revoked. No revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minnesota Statute 216F.05 and Minnesota Rule 7854.1300.

## **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:

- Violation of any condition in this permit;
- Endangerment of human health or the environment by operation of the facility; or
- Existence of other grounds established by rule.

## **4. REVOCATION OR SUSPENSION OF THE PERMIT**

The Commission may take action to suspend or revoke this permit upon the grounds that:

- A false statement was knowingly made in the application or in accompanying statements or studies required of the permittee, and a true statement would have warranted a change in the Commission's findings;
- 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
- There has been a material violation of a provision of an applicable statute, rule or an order of the Commission.

In the event the Commission shall determine that it is appropriate to consider revocation or suspension of this permit, the Commission shall proceed in accordance with the requirements of Minnesota Statute 216F.05 to determine the appropriate action. Upon a finding of any of the above, the Commission 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 Commission 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 Commission. 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 Commission. If the permittee desires to transfer this permit, the holder shall advise the Commission in writing of such desire. The permittee shall provide the Commission with such information about the transfer as the Commission requires to reach a decision. The Commission 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 Commission upon request.

## **8. SITE MANAGER**

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

## **9. NOTICE TO LOCAL RESIDENTS**

The permittee shall, within ten (10) 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 ten 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 Commission to perform the following, upon reasonable notice, upon presentation of credentials, and at all times in compliance with the permittee's site safety standards:

- To enter upon the facilities easement of the site property for the purpose of obtaining information, examining records, and conducting surveys or investigations.
- To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.

- To sample and monitor upon the facilities easement of the property; and
- To examine and copy any documents pertaining to compliance with the conditions of this permit.

#### **11. MORE STRINGENT RULES**

The Commission's issuance of this site permit does not prevent the future adoption by the Commission 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.

#### **12. PERMIT COMPLIANCE MEETING**

Prior to the start of commercial operation, the permittee shall conduct a permit compliance meeting with the person designated by the Commission to coordinate permit compliance activities.

#### **L. EXPIRATION DATE**

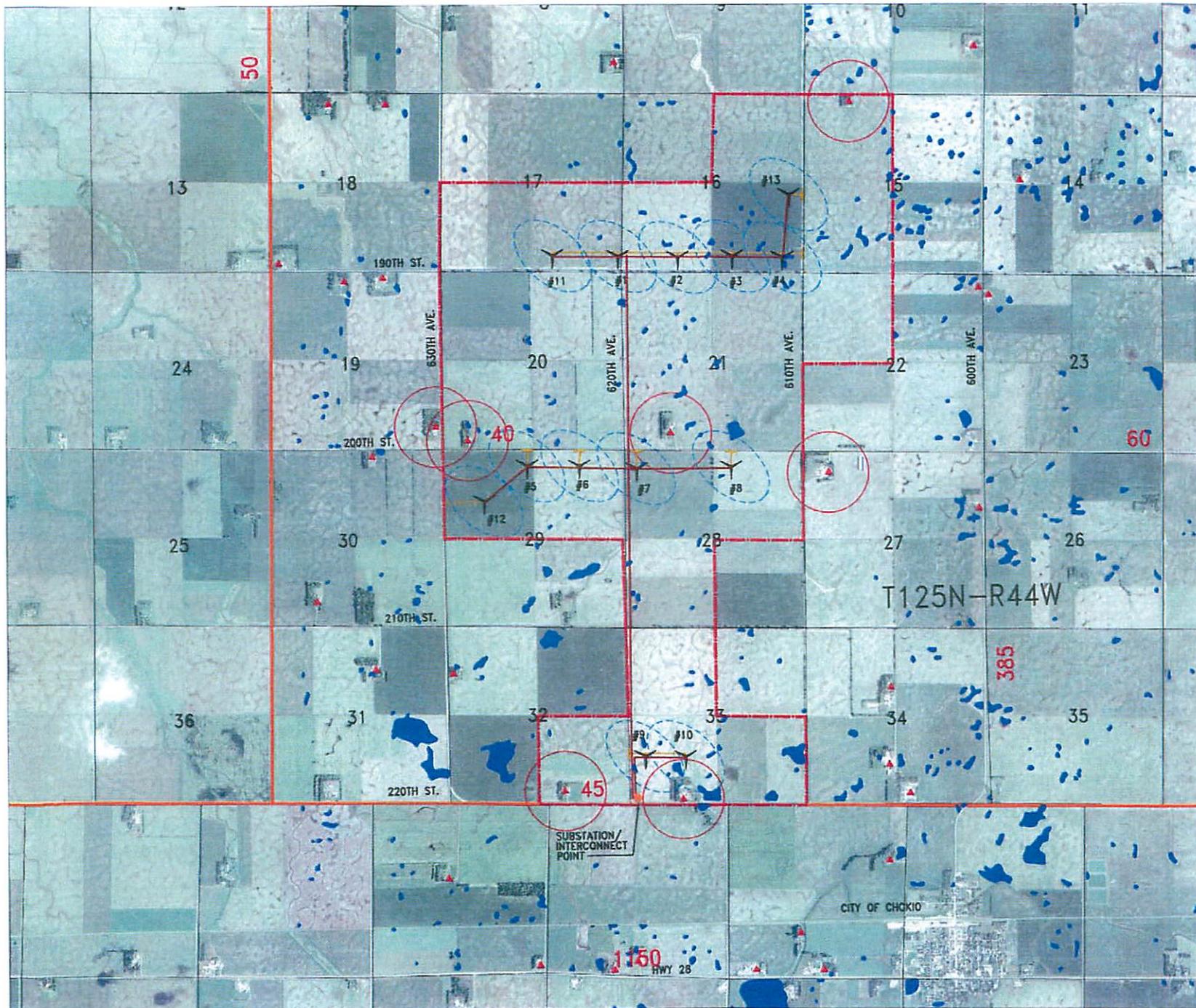
This permit shall expire on \_\_\_\_\_

#### **IV. 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.

#### **M. SETBACKS FROM SNOWMOBILE TRAIL**

The permittee shall comply with its commitment to provide a minimum setback of 250 feet from roads including the existing West Central Trailblazers snowmobile trail located in the project boundaries. Adoption of this special condition is based on facts associated with this docket and provides no precedent or prediction regarding the size of setback that the Commission may deem appropriate and reasonable to require in future dockets.



- LEGEND**
- PROPOSED PROJECT BOUNDARY
  - TURBINE LOCATION
  - SECTION LINE
  - TOWNSHIP LINE
  - ▲ HOME RESIDENCE
  - HOME RESIDENCES 1200' RADIUS SETBACK
  - TURBINE SETBACKS
  - ACCESS ROAD
  - COLLECTION LINE
  - NATIONAL WETLAND INVENTORY WETLANDS
  - SUBSTATION/INTERCONNECT POINT
  - 60 ANNUAL AVERAGE DAILY TRAFFIC (AADT) (HWY-2004 DATA) (COUNTY-2005 DATA)

**NOTES:**

LAND USE: ALL LAND IS CROP LANDS UNLESS NOTED OTHERWISE

CULTURAL RESOURCES: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

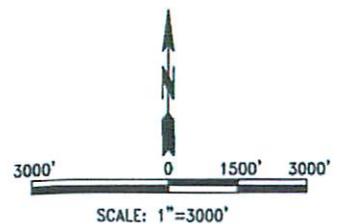
FLOOD PLAINS: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

NATURAL HERITAGE: NONE FOUND WITHIN PROPOSED PROJECT BOUNDARY

**DATA SOURCES:**

AADT-MnDOT

WETLANDS-MN DEPARTMENT OF NATURAL RESOURCES



Source: West Stevens Wind. Revision "A" to Application for a Site Permit for a Large Wind Energy Conversion System. August 15, 2009.

West Steven Wind LWECs Project (Docket # 09-830)  
 Steven County  
 Chokio, Minnesota

**Attachment 1**

**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLAINT HANDLING PROCEDURES  
FOR  
LARGE WIND ENERGY CONVERSION SYSTEMS**

**A. Purpose:**

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

**B. Scope:**

This document describes Complaint reporting procedures and frequency.

**C. Applicability:**

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

**D. Definitions:**

**Complaint:** A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other large wind energy conversion systems (LWECS) and associated facilities site permit conditions. Complaints do not include requests, inquiries, questions or general comments.

**Substantial Complaint:** A written Complaint alleging a violation of a specific Site Permit condition that, if substantiated, could result in Permit modification or suspension pursuant to the applicable regulations.

**Unresolved Complaint:** A Complaint which, despite the good faith efforts of the permittee and a person(s), remains to both or one of the parties unresolved or unsatisfactorily resolved.

**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.

**E. Complaint Documentation and Processing:**

1. The Permittee shall document all Complaints by maintaining a record of all applicable information concerning the Complaint, including the following:

- a. Name of complainant, address, phone number, and e-mail address.
  - b. Precise property description or parcel number.
  - c. Name of Permittee representative receiving Complaint and date of receipt.
  - d. Nature of Complaint and the applicable Site Permit conditions(s).
  - e. Activities undertaken to resolve the Complaint.
  - f. Final disposition of the Complaint.
2. The Permittee shall designate an individual to summarize Complaints for substantial to the Commission. This person's name, phone number and e-mail address shall accompany all complaint submittals.
  3. A Person presenting the Complaint should to the extent possible, include the following information in their communications:
    - a. Name, address, phone number, and e-mail address.
    - b. Date
    - c. Tract or parcel
    - d. Whether the complaint relates to (1) a Site Permit matter, (2) a LWECS and associated facility issue, or (3) a compliance issue.

**F. Reporting Requirements:**

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

**Immediate Reports:** All substantial complaints shall be reported to the Commission 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, 1-800-657-3794, or by e-mail to: [DOC.energypermitcompliance@state.mn.us](mailto:DOC.energypermitcompliance@state.mn.us), or. 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 Filed to Dr. Burl W. Haar, Executive Secretary, Public Utilities Commission, using the Minnesota Department of Commerce eDocket system (see eFiling instructions attached to this permit).

If no Complaints were received during the preceding month, the permittee shall submit (eFile) a summary indicating that no complaints were received.

**G. Complaints Received by the Commission or OES:**

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

**H. Commission Process for Unresolved Complaints:**

**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 appropriate person(s) 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.

**I. Permittee Contacts for Complaints:**

**Mailing Address:** Complaints filed by mail shall be sent to:

ATTN: Keith L. Thorstad  
West Stevens Wind, LLC  
P.O. BOX 321  
Chokio, MN 56221  
(320) 324-7122  
[Mnioka@fedtel.net](mailto:Mnioka@fedtel.net)

**MINNESOTA PUBLIC UTILITIES COMMISSION  
COMPLIANCE FILING PROCEDURE  
FOR PERMITTED LARGE WIND ENERGY CONVERSION SYSTEMS**

**1. Purpose**

To establish a uniform and timely method of submitting information required by the Commission large wind energy conversion systems (LWECS) site permits.

**2. Scope and Applicability**

This procedure encompasses all compliance filings required by permit.

**3. Definitions**

Compliance Filing – A sending (filing) of information to the Commission, where the information is required by a Commission site or route permit.

**4. Responsibilities**

- A) The permittee shall eFile all compliance filings with Dr. Burl Haar, Executive Secretary, Public Utilities Commission, through the Department of Commerce (DOC) eDocket system. The system is located on the DOC website:  
<https://www.edockets.state.mn.us/EFiling/home.jsp>

General instructions are provided on the website. Permittees must register on the website to eFile documents.

- B) All filings must have a cover sheet that includes:

- 1) Date
- 2) Name of submitter / permittee
- 3) Type of Permit (Site or Route)
- 4) Project Location
- 5) Project Docket Number
- 6) Permit Section Under Which the Filing is Made
- 7) Short Description of the Filing

- C) Filings that are graphic intensive (e.g., maps, plan and profile) must, in addition to being eFiled, be submitted as paper copies and on CD. Copies and CDs should be sent to: 1) Dr. Burl W. Haar, Executive Secretary, Minnesota Public Utilities Commission, 121 7<sup>th</sup> Place East, Suite 350, St. Paul, MN, 55101-2147, and 2) Department of Commerce, Energy Facility Permitting, 85 7<sup>th</sup> Place East, Suite 500, St. Paul, MN, 55101-2198. Additionally, the Commission may request a paper copy of any eFiled document.

**PERMIT COMPLIANCE FILINGS<sup>1</sup>**

**PERMITTEE:** West Stevens Wind, LLC  
**PERMIT TYPE:** LWECs Site Permit  
**PROJECT LOCATION:** Stevens County  
**DOCKET NUMBER:** IP-6824/WS-09-830

<b>Filing Number</b>	<b>Condition</b>	<b>Description</b>	<b>Due Date</b>	<b>Notes</b>
1	A.1.	Site Plan	Prior to starting construction	
2	A.1.	Engineering Drawings	Prior to starting construction	Site Preparation, Facility Construction, and Site Restoration
3	A.2.	Field Representative	Prior to and throughout construction	
4	B.8.	Roads	Prior to starting construction	Identify access roads and obtain road damage agreements before starting construction
5	B.9.	Soil and Sediment Control Plan	Prior to starting construction	Storm Water Pollution Prevention Plan
6	B.13.	Spill Prevention and Countermeasure Control Plan	Prior to starting construction	
7	B.15.	Educational Materials	Submit Upon Request	
8	B.15.	Submit Location of all underground utilities	Prior to and throughout construction	Gopher State One Call
9	B.16	Fire Protection Plan	Submit Upon Request.	Must Register in 911 Program
10	C.6.	Native Prairie Protection Plan	60 days prior to the start of construction, if required	

<sup>1</sup> This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. However, it is not a substitute for the permit; the language of the permit controls.

<b>Filing Number</b>	<b>Condition</b>	<b>Description</b>	<b>Due Date</b>	<b>Notes</b>
11	D.1.	Biological Survey	Prior to starting construction	
12	D.3.	Interference	Prior to starting construction	
13	F.1.	Operational Wake Loss Studies	Include with site plan or operation studies if performed	
14	F.2.	Noise Study Proposal and Noise Study	Post construction	
15	G.1.	Decommissioning Plan	Prior to starting construction	
17	H.1.	Project Energy Production	February 1st of each year	
18	H.2.	Commercial Operation Data Report (Wind Resource Use)	Upon Commission Request	
19	I.1.	As-Built Plans	Within 60 days after completion of construction	Also in GIS format to MnGeo
20	J.1.	Wind Rights	Within 30 days of Acquiring. Upon Request.	
21	K.2.	Failure to Start Construction	Within 2 years of Permit Issuance	
22	K.8	Site Manager	Prior to Operation	
23	Complaints	Report	Due Each Month or within 24 hours	



In the Matter of the Site Permit Application for a  
 20 Megawatt (MW) Large Wind Energy  
 Conversion System (LWECS) in Stevens County,  
 Minnesota.

**EXHIBIT LIST**  
 PUC Docket No. IP-6824/WS-09-830

Exhibit Number	Date	Description	eDockets
1.	July 13, 2009	LWECS Site Permit Application with Appendix A, B, and C	<u>20097-39545-04</u> <u>20097-39545-03</u> <u>20097-39545-01</u> <u>20097-39545-02</u>
2.	August 6, 2009	Appendix D, E, F, and G	<u>20098-40510-02</u> <u>20098-40510-03</u> <u>20098-40510-01</u> <u>20098-40510-04</u>
3.	August 21, 2009	Notice of Commission Meeting	<u>20098-41008-01</u>
4.	August 25, 2009	REVISED Notice of Commission Meeting	<u>20098-41143-04</u>
5.	September 2, 2009	Comments and Recommendations of the Minnesota Office of Energy Security Energy Facility Permitting Staff	<u>20098-41235-01</u>
6.	August 27, 2009	REVISED LWECS Site Permit Application with Appendix C and H	<u>20098-41197-01</u> <u>20098-41197-02</u> <u>20098-41197-03</u>
7.	August 31, 2009	CORRECTION to Revised Appendix C	<u>20098-41281-01</u>
8.	September 8, 2009	Public Utility Commission Order Accepting Site Permit Application	<u>20098-41569-01</u>
9.	September 11, 2009	Notice of Site Permit Application Acceptance	<u>20099-41708-01</u>
10.	September 11, 2009	Memo to Tech Reps Soliciting Comments	<u>20099-41735-01</u>

Exhibit Number	Date	Description	eDockets
11.	September 17, 2009	Notice of Site Permit Application Acceptance (LGUs)	<u>20099-41959-01</u>
12.	September 21, 2009	Distribution List of Site Permit Application and Affidavit of Service	<u>20099-42023-01</u>
13.	September 21, 2009	Initial Comments on LWECS Draft Site Permit	<u>200910-42821-01</u>
14.	September 19, 2009	Notice of Site Permit Application Acceptance (Newspaper)	<u>20099-42232-01</u>
15.	October 9, 2009	Notice of Commission Meeting	<u>200910-42644-01</u>
16.	October 22, 2009	Comments and Recommendations of the Minnesota Office of Energy Security Energy Facility Permitting Staff	<u>200910-42820-01</u>
17.	October 23, 2009	Public Utility Commission Order Accepting Draft Site Permit and Approving Distribution for Comment	<u>200910-43175-01</u>
18.	November 3, 2009	Draft Site Permit Distribution List and Affidavit of Service	<u>200911-43591-01</u>
19.	November 5, 2009	Notice of Draft Site Permit Issuance and Public Information Meeting	<u>200911-43644-01</u>
20.	November 7, 2009	Notice of Draft Site Permit Issuance and Public Information Meeting (Newspaper)	<u>200911-43997-01</u>
21.	December 16, 2009	Comments on LWECS Draft Site Permit	<u>20101-46011-01</u>
22.	November 16, 2009	Notice of Draft Site Permit Issuance and Public Information Meeting ( <i>EQB Monitor</i> )	<u>20101-46015-01</u>
23.	November 23, 2009	Public Meeting Transcript of Comments	<u>20101-46421-01</u>

Exhibit Number	Date	Description	eDockets
24.	September 18, 2009	Wetland Assessment Report	<a href="#">20102-46747-01</a>
25.	August 1, 2009	Phase I Archaeological Field Investigation	<a href="#">20102-46746-01</a>

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
OFF_SL_9-830_West Stevens Wind, LLC	Burl W.	Haar	burl.haar@state.mn.us	MN Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No
OFF_SL_9-830_West Stevens Wind, LLC	Elise	Doucette	elise.doucette@pca.state. mn.us	Minnesota Pollution Control Agency	520 Lafayette Road St. Paul, MN 55155	Electronic Service	No
OFF_SL_9-830_West Stevens Wind, LLC	John	Lindell	agorud.ecf@state.mn.us	OAG-RUD	900 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No
OFF_SL_9-830_West Stevens Wind, LLC	Julia	Anderson	Julia.Anderson@state.mn.us	MN Office Of The Attorney General	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	No
OFF_SL_9-830_West Stevens Wind, LLC	Keith	Thorstad	N/A	West Stevens Wind, LLC	PO Box 321 Chokia, MN 56221	Paper Service	No
OFF_SL_9-830_West Stevens Wind, LLC	Randall	Doneen	randall.doneen@dnr.state. mn.us	Department of Natural Resources	500 Lafayette Road  St. Paul, MN 55155	Electronic Service	No
OFF_SL_9-830_West Stevens Wind, LLC	Sharon	Ferguson	sharon.ferguson@state.mn .us	State of MN - DOC	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No

West Stevens Wind

09-830

BRIAN ABELD  
MORTENSON CONSTRUCTION  
700 MEADOW LANE NORTH  
MINNEAPOLIS, MN 55422

JULIA ANDERSON  
MINNESOTA OFFICE OF THE ATTORNEY  
GENERAL  
1400 BRM TOWER  
445 MINNESOTA ST  
ST. PAUL, MN 55101

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PO BOX 53  
CHOKIO, MN 56221

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SCOTT TOWNSHIP  
27570 CO RD 9  
ALBERTA, MN 56207

JASON DEVITA  
STEVENS TOWNSHIP  
63501 300TH ST  
CHOKIO, MN 56221

VERNON FISHER  
PO BOX 170  
CHOKIO, MN 56221

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MORRIS, MN 56267

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DICKINGSON, ND 58601

ROGER HILL  
62384 220TH ST  
CHOKIO, MN 56221

DARRELL JOHNSON  
PEPPER TOWNSHIP  
20616 565TH AVE  
MORRIS, MN 56267

CRAIG AFFELDT  
MINNESOTA POLLUTION CONTROL  
AGENCY  
520 LAFAYETTE RD NORTH  
ST. PAUL, MN 55155

SANDY ANDERSON  
CITY OF MORRIS  
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SHAKOPEE, MN 55379

JOE BUTNER  
THE STRESSCRETE GROUP  
14503 WALLICK RD.  
ATCHISON, MN 66002

DONALD DURST  
63794 210TH ST  
CHOKIO, MN 56221

TRAVIS GERMUNDSON  
MINNESOTA BOARD OF WATER AND  
SOIL RESOURCES  
520 LAFAYETTE RD  
ST. PAUL, MN 55155

MICHELE GREINER  
HODGES TOWNSHIP  
40878 280TH ST  
HANCOCK, MN 56244

LOWELL HAUGEN  
1510 279TH AVE NW  
BELGRADE, MN 56312

SHERYL HOLSTEN  
1715 S OAK KNOLL  
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