

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Valerie Means
Matthew Schuerger
Joseph K. Sullivan
John A. Tuma

Chair
Commissioner
Commissioner
Commissioner
Commissioner

Christina K. Brusven
Fredrikson & Byron, P.A.
200 South Sixth Street, Suite 4000
Minneapolis, MN 55402-1425

SERVICE DATE: January 14, 2022

DOCKET NO. IP-6997/WS-18-700

In the Matter of the Application of Plum Creek Wind Farm, LLC for a Site Permit for an up to 414 MW Large Wind Energy Conversion System in Cottonwood, Murray, and Redwood Counties, Minnesota

The above-entitled matter was considered by the Commission on January 13, 2022 and the following disposition made:

- 1. Accepted the amendments to Section 7.2 of the site permit as proposed by EERA.**
- 2. Included the additional language proposed by staff on pages 5-6 of the Briefing Papers concerning annual reporting requirements.**

The Commission agrees with and adopts the recommendations of the Department of Commerce, which are attached and hereby incorporated into the Order.¹ This Order shall become effective immediately.

BY ORDER OF THE COMMISSION



Will Seuffert
Executive Secretary



To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

¹ In addition to the Department's recommendations, the Commission adopts ordering paragraph 2. This item carries forward a reporting requirement that is in the existing site permit. At the Commission meeting, parties agreed on the language.

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**COMMENTS AND RECOMMENDATIONS OF THE
MINNESOTA DEPARTMENT OF COMMERCE
ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS**

DOCKET NO. IP6997/WS-18-700

DateDecember 15, 2021
EERA Staff William Cole Storm | 651-539-1844 | bill.storm@state.mn.us

In the Matter of Plum Creek Wind Farm, LLC's *Request for Clarification* concerning language regarding the Shadow Flicker Management Plan contained within the LWECS Site Permit issued for the Plum Creek Wind Farm Project in Cottonwood, Murray, and Redwood counties in Minnesota

Relevant Documents:

1. Plum Creek's Request for Clarification.¹
2. PUC Order granting certificate of need and issuing LWECS site permit.²

Relevant documents and additional information can be found on the eDockets website at <https://www.edockets.state.mn.us/EFiling/search.jsp> (enter the year "18" and the number "700" for the LWECS Site Permit docket).

This document can be made available in alternative formats (i.e., large print or audio) by calling 651-539-1530 (voice).

Introduction and Background

Plum Creek Wind Farm, LLC (Plum Creek or Permittee) filed three separate applications in support of its proposed up to 414-megawatt (MW) Plum Creek Wind Farm and 31-mile 345 kilovolt (kV) transmission line to be located in Cottonwood, Murray, and Redwood counties (collectively, the Project):

- a certificate of need application for the wind farm and the associated 345 kV transmission line (Docket No. IP6997/CN-18-699),³
- a large wind energy conversion system (LWECS) site permit application, (Docket No. IP6997/WS-18-700)⁴ and

¹ Plum Creek Wind Farm, LLC's Request for Clarification, October 13, 2021. eDocket ID 202110-178767-01, & -02.

² PUC Order granting certificate of need and issuing site permit, September 23, 2021. eDocket ID 20219-178198-03, & -06.

³ Plum Creek Wind Farm, LLC, *Application for a Certificate of Need*, November 12, 2018. eDocket ID: 201911-1157472-01, -02, -03, -04 [hereinafter Certificate of Need Application].

⁴ Plum Creek Wind Farm, LLC, *Application for a Large Wind Energy Conversion System Site Permit*. November 12, 2018. eDocket ID: 201911-157475-01, -02, -03, -04, -05, -06, -07, 08, -09, -10, 201911-157576-01, -02. [hereinafter Site Permit Application]

- a high-voltage transmission line (HVTL) route permit application for the proposed 345 kV transmission line (Docket No. IP6997/TL-18-701).⁵

On September 23, 2021, the Commission issued an Order granting the certificate of need and issuing an LWECS site permit.⁶

Project Purpose

The Project will generate up to 414 MW of electric energy at the Plum Creek Wind Farm; the Applicant stated that the Project is needed to meet the growing demand for additional renewable resources required to meet energy sector needs, consumer demand, and renewable and other clean energy requirements in Minnesota and neighboring states.⁷ The Applicant continued that given the demand for renewable energy, a market exists for independently produced electricity generated from wind and other renewables, including the up to 414 MW to be generated by the Project.⁸

Plum Creek also proposed to build a new 345 kV transmission line and associated facilities to connect the Wind Farm to the existing Brookings-to-Hampton 345-kV transmission line in Redwood County, Minnesota.

Project Description

The Project consists of two major components, a LWECS of up to 414 MW, and the 345 kV HVTL of approximately 31 miles. The LWECS Site Permit is the subject of Plum Creek's request for clarification.

414 MW LWECS

The Project will be located in northwestern Cottonwood, northeastern Murray, and southern Redwood counties, Minnesota. The Project will have up to 414 MW of nameplate capacity. Plum Creek continues to assess its turbine options, and for the site permit application evaluated wind turbines with rated nameplate power outputs ranging from 2.8 MW to 5.6 MW, corresponding to between 110 and 74 wind turbines at the site.⁹

A number of facilities will be constructed to support the operation of the wind turbines and facilitate the delivery of the electricity to consumers; these include the following associated facilities: permanent meteorological towers and other data collection systems, up to two ADLS radars, an electrical collection and communications system, access roads, temporary laydown, and staging areas, two collector substations and associated equipment, and an operations and maintenance facility.¹⁰

Regulatory Process and Procedures

The Plum Creek Wind Project required three approvals from the Commission — 1) a certificate of need (covering both the wind farm and the transmission line), 2) a route permit for the transmission line, and 3) a site permit for the wind farm.

Item 3 and the language contained in the LWECS Site Permit are the subject of these comments and recommendations. The regulatory review process laid out in Minnesota Statutes, Chapter 216F-Wind Energy Conversion Systems, and

⁵ Plum Creek Wind Farm, LLC, *Application to the Minnesota Public Utilities Commission for a Route Permit for a 345 kV High Voltage Transmission Line*, November 20, 2018, eDocket ID: [201911-57483-01](#), -02, -03, -04, -05, -06, -07, 08. [hereinafter Route Permit Application].

⁶ Plum Creek Wind Farm, LLC's Request for Clarification, October 13, 2021. eDocket ID 202110-178767-01, & -02.

⁷ Certificate of Need Application, at p. 5.

⁸ Certificate of Need Application, at p. 7.

⁹ Site Permit Application, at Section 4.0.

¹⁰ Site Permit Application, at Section 4.0.

Minnesota Rules, Chapter 7854-Site Permit, Large Wind Energy System were followed and culminated in the issuing of an LWECS Site Permit on September 23, 2021.

Following issuance of the LWECS Site Permit, Plum Creek requested clarification of the LWECS Site Permit language concerning the *Shadow Flicker Management Plan*, and suggested changes to the language.¹¹

EERA Staff Analysis and Recommendations

In response to the PUC's *Notice of Comment Period on Request for Clarification*,¹² issued on December 1, 2021, EERA staff reviewed Plum Creek's request, along with language contained in recent LWECS permits concerning *Shadow Flicker Management Plans*.

As was discussed, before the bench during the Commission's August 12, 2021, meeting regarding the final decision on Plum Creek's LWECS Site Permit, while shadow flicker is not a new notion, incorporating the concept of a *Shadow Flicker Management Plan* into LWECS Site Permits and the corresponding language (and the plans themselves) is evolving and will continue to evolve as the program gains more expertise balancing the needs of proponents and the host communities. The advent of larger and larger turbines, while more efficient, quieter, and smaller in footprint, will certainly be a factor in the consideration of shadow flicker.

Below is a summary of the permit language regarding shadow flicker from recent LWECS Site Permits:

Language from the Walleye LWECS Site Permit contained in the Commission Order dated September 17, 2021.¹³

7.2 Shadow Flicker

At least 14 days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used, assumptions made, and the anticipated levels of exposure from turbine shadow flicker for each residence. The Permittee shall provide documentation on its efforts to avoid, minimize and mitigate shadow flicker exposure. The Permittee shall prepare a Shadow Flicker Management Plan detailing the results of any shadow flicker modeling, assumptions made, levels of exposure prior to implementation of planned minimization and mitigation efforts, planned minimization and mitigation efforts, and planned communication and follow up with residents. Mutual agreements between the permittee and landowners shall be considered a mitigation measure. The Shadow Flicker Management Plan shall be filed with the Commission at least 14 days prior to the preconstruction meeting to confirm compliance with conditions of this permit. Mutual agreements with landowners finalized after the preconstruction meeting shall be filed as amendments to the Shadow Flicker Management Plan.

¹¹ Plum Creek Wind Farm, LLC's Request for Clarification, October 13, 2021. eDocket ID 202110-178767-01, & -02.

¹² PUC Notice of Comment Period on request for Clarification, December 1, 2021. eDocket ID 202112-180271-01.

¹³ PUC Order granting certificate of need and issuing site permit, September 17, 2021. eDocket ID 20219-178050-01.

Should shadow flicker modeling identify any residence of a non-participating landowner that will experience in 30 hours, or more, of shadow flicker per year, the Permittee must specifically identify these residences in the Shadow Flicker Management Plan. If through minimization and mitigation efforts identified in the Shadow Flicker Management Plan the Permittee is not able to reduce anticipated shadow flicker exposure at a nonparticipating landowner's residence to less than 30 hours per year a shadow flicker detection systems will be utilized during project operations to monitor shadow flicker exposure at the residence. The Shadow Flicker Management Plan will detail the placement and use of any shadow flicker detection systems, how the monitoring data will be used to inform turbine operations, and a detailed plan of when and how turbine operations will be adjusted to mitigate shadow flicker exposure exceeding 30 hours per year at any one receptor. The results of any shadow flicker monitoring and mitigation implementation shall be reported by the Permittee in the Annual Project Energy Production Report identified in Section 10.9 of this Permit.

Commission staff and EERA staff will be responsible for the review and approval of the Shadow Flicker Management Plan. The Commission may require the Permittee to conduct shadow flicker monitoring at any time during the life of this Permit.

Language from the Plum Creek LWECs Site Permit contained in the Commission Order dated September 23, 2021.¹⁴

7.2 Shadow Flicker

The Permittee shall prepare a Shadow Flicker Management Plan. The plan shall be filed at least 14 days prior to the pre-operation meeting. The plan shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used; assumptions made; the anticipated levels of exposure from turbine shadow flicker for each residence; and documentation on the proposed methods to avoid, minimize, and mitigate shadow flicker exposure, including relevant communications with residents.

Should modeling identify any residence that will experience 30 hours or more of shadow flicker per year, the residence must be specifically identified in the Shadow Flicker Management Plan. If through minimization and mitigation efforts identified in the plan the Permittee is not able to reduce a residence's anticipated shadow flicker exposure to less than 30 hours per year, a shadow flicker detection system will be utilized during project operations to monitor shadow flicker exposure at the residence. The plan must detail the placement and use of any shadow flicker detection systems, describe how the monitoring data will be used to inform turbine operations, and include a detailed plan of when and how turbine operations will be adjusted to mitigate shadow flicker exposure exceeding 30 hours per year at any one residence. The Permittee may exclude from the Shadow Flicker Management Plan residences that exceed 30 hours per year by providing documentation that the landowners have reached an alternative agreement or a waiver as it relates to shadow flicker. If agreement is reached with a landowner regarding shadow flicker after the pre-construction meeting the Permittee may remove that residence from coverage under the plan.

¹⁴ PUC Order granting certificate of need and issuing site permit, September 23, 2021. eDocket ID 20219-178198-03, & -06.

The results of any shadow flicker monitoring, mitigation implementation, and notice of later agreements will be reported by the Permittee in the Annual Project Energy Production Report identified in Section 10.8 of this Permit. The Commission may require the Permittee to conduct shadow flicker monitoring and mitigation at any time during the life of this permit.

Language from the Grand Meadow LWECS Site Permit (Repower) contained in the Commission Order dated October 13, 2021.¹⁵

7.2 Shadow Flicker

At least 14 days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used, assumptions made, and the anticipated levels of exposure from turbine shadow flicker for each residence. The Permittee shall provide documentation on its efforts to avoid, minimize and mitigate shadow flicker exposure. The results of any modeling shall be filed with the Commission at least 14 days prior to the pre-construction meeting to confirm compliance with conditions of this permit.

The Permittee shall develop a project wide Shadow Flicker Management Plan that reduces shadow flicker exposure to less than 30 hours per year for all occupied residences. The Permittee may exclude from the Shadow Flicker Management Plan residences that exceed 30 hours per year by providing documentation that the landowners have reached an alternative agreement as it relates to shadow flicker. If agreement is reached with a landowner regarding shadow flicker after the pre-construction meeting the Permittee may remove that residence from coverage under the plan.

Plum Creek requested the following language changes to its LWECS Site Permit to “more closely match the Commission’s decision, reduce ambiguity, and clarify compliance expectations related to the required shadow flicker management plan”:

Language from the Plum Creek Request for Reconsideration (Permit Modification) dated August 13, 2021.

7.2 Shadow Flicker

The Permittee shall prepare a Shadow Flicker Management Plan. The plan shall be filed at least 14 days prior to the pre-operation meeting. The plan shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used; assumptions made; the anticipated levels of exposure from turbine shadow flicker for each residence; and documentation on the proposed methods to avoid, minimize, and mitigate shadow flicker exposure, including relevant communications with residents.

Should modeling identify any residence that will experience 30 hours or more of shadow flicker per year, the residence must be specifically identified in the Shadow Flicker Management Plan. If through minimization and mitigation efforts identified in the plan the Permittee is not able

¹⁵ PUC Order issuing site permit, October 13, 2021. eDocket ID 202110-178766-01.

to reduce a residence's anticipated shadow flicker exposure to less than 30 hours per year, ~~a shadow flicker detection system will be utilized during project operations to monitor shadow flicker exposure at the residence. The plan must detail the placement and use of any shadow flicker detection systems, describe how the monitoring data will be used to inform turbine operations, and include~~ the Permittee must include a detailed plan of when and how turbine operations will be adjusted to mitigate shadow flicker exposure exceeding 30 hours per year at any one residence.

The Permittee may exclude from the Shadow Flicker Management Plan residences that exceed 30 hours per year by providing documentation that the landowners have reached an alternative agreement or a waiver as it relates to shadow flicker. If a waiver is obtained or an agreement is reached with a landowner regarding shadow flicker after the pre-construction meeting the Permittee may remove that residence from coverage under the plan.

The results of any shadow flicker management plan ~~monitoring, mitigation implementation,~~ and notice of later agreements will be reported by the Permittee in the Annual Project Energy Production Report identified in Section 10.8 of this Permit. ~~The Commission may require the Permittee to conduct shadow flicker monitoring and mitigation at any time during the life of this permit.~~

Having processed a few LWECS dockets incorporating the requirement of a *Shadow Flicker Management Plan* through the issuing of a site permit, the Department favors the language used in the Grand Meadow docket (see above). Comparing the Grand Meadow language with that contained in both the original Plum Creek LWECS site permit and that proposed in the request for clarification, EERA staff makes the following notations:

1. First paragraph, EERA believes requiring the submittal prior to the pre-construction meeting, rather than the pre-operation meeting allows for ample time to make slight adjustments to the project to accommodate unknown related issues before the site is physically developed.
2. Second paragraph, EERA believes the terms or issues in this paragraph are better dealt with inside the *Shadow Flicker Management Plan*, in fact they must be laid out in such a plan. The plan is a post-permit compliance deliverable that must be approved before construction can begin.
3. Third paragraph, the term "waiver" implies a right and adds unnecessary confusion when the term agreement is sufficient.

Department Recommendations

The Department recommends that if the Commission decides to modify the language in the LWECS Site Permit for the Plum Creek Wind Farm, it delete the existing language and incorporate the language from the Grand Meadows LWECS Site Permit with one minor modification to clarify EERA's role:

7.2 Shadow Flicker

At least 14 days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used, assumptions made, and the anticipated levels of exposure from turbine shadow flicker for each residence. The Permittee shall provide documentation on its efforts to avoid, minimize and mitigate shadow flicker exposure. The results of any modeling shall be filed with the Commission at least 14 days prior to the pre-construction meeting to confirm compliance with conditions of this permit.

The Permittee shall develop a project wide Shadow Flicker Management Plan that reduces shadow flicker exposure to less than 30 hours per year for all occupied residences. The Permittee may exclude from the Shadow Flicker Management Plan residences that exceed 30 hours per year by providing documentation that the landowners have reached an alternative agreement as it relates to shadow flicker. If agreement is reached with a landowner regarding shadow flicker after the pre-construction meeting the Permittee may remove that residence from coverage under the plan.

Commission staff and EERA staff will be responsible for the review and approval of the Shadow Flicker Management Plan.

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**SITE PERMIT FOR A
LARGE WIND ENERGY CONVERSION SYSTEM**

**IN
COTTONWOOD, MURRAY, AND REDWOOD COUNTIES**

**ISSUED TO
PLUM CREEK WIND FARM, LLC**

PUC DOCKET NO. IP-6997/WS-18-700

In accordance with the requirements of Minnesota Statutes Chapter 216F and Minnesota Rules Chapter 7854 this site permit is hereby issued to:

Plum Creek Wind Farm, LLC

Plum Creek Wind Farm, LLC is authorized by this site permit to construct and operate a Large Wind Energy Conversion System of up to 414 megawatts (MW) consisting of up to 74 turbines. The Large Wind Energy Conversion System and associated facilities shall be built within the site identified in this permit and as portrayed on the site maps and in compliance with the conditions specified in this permit.

This **amended** site permit shall expire on September 23, 2051, thirty (30) years from September 23, 2021, the date this site permit was first approved.

Approved and adopted this 14th day of January, 2022

BY ORDER OF THE COMMISSION



Will Seuffert,
Executive Secretary

CONTENTS

1	SITE PERMIT	1
1.1	Preemption	1
2	PROJECT DESCRIPTION	1
2.1	Associated Facilities	1
2.2	Project Location	2
3	DESIGNATED SITE	2
3.1	Turbine Layout	2
4	SETBACKS AND SITE LAYOUT RESTRICTIONS	3
4.1	Wind Access Buffer	3
4.2	Residences	3
4.3	Noise	3
4.4	Roads	3
4.5	Public Lands	4
4.6	Wetlands	4
4.7	Native Prairie	4
4.8	Sand and Gravel Operations	5
4.9	Wind Turbine Towers	5
4.10	Turbine Spacing	5
4.11	Meteorological Towers	5
4.12	Aviation	6
4.13	Footprint Minimization	6
5	GENERAL CONDITIONS	6
5.1	Permit Distribution	7
5.2	Access to Property	7
5.3	Construction and Operation Practices	7
5.3.1	Field Representative	7
5.3.2	Site Manager	8
5.3.3	Employee Training and Education of Permit Terms and Conditions	8
5.3.4	Public Services and Public Utilities	8
5.3.5	Topsoil Protection	8
5.3.6	Soil Compaction	8
5.3.7	Soil Erosion and Sediment Control	9
5.3.8	Wetlands and Water Resources	9
5.3.9	Vegetation Removal	9
5.3.10	Application of Pesticides	10
5.3.11	Invasive Species	10
5.3.12	Noxious Weeds	10

5.3.13	Public Roads.....	10
5.3.14	Turbine Access Roads	11
5.3.15	Private Roads	11
5.3.16	Archaeological and Historic Resources.....	11
5.3.17	Interference	12
5.3.18	Livestock Protection	12
5.3.19	Fences.....	12
5.3.20	Drainage Tiles	12
5.3.21	Equipment Storage	13
5.3.22	Restoration	13
5.3.23	Cleanup.....	13
5.3.24	Pollution and Hazardous Waste	13
5.3.25	Damages	13
5.3.26	Public Safety	13
5.3.27	Tower Identification	14
5.3.28	Federal Aviation Administration Lighting	14
5.4	Communication Cables.....	14
5.5	Electrical Collector and Feeder Lines.....	14
5.6	Other Requirements	15
5.6.1	Safety Codes and Design Requirements	15
5.6.2	Other Permits and Regulations.....	15
6	SPECIAL CONDITIONS	15
6.1	Soil and Water Conservation District (SWCD) and Landowner Review of Plans	16
6.2	Henslow’s Sparrow	16
6.3	Archaeological Assessment	16
7	SURVEYS AND REPORTING	16
7.1	Biological and Natural Resource Inventories.....	16
7.2	Shadow Flicker.....	17
7.3	Wake Loss Studies	17
7.4	Noise Studies	17
7.5	Avian and Bat Protection.....	18
7.5.1	Operational Phase Fatality Monitoring	18
7.5.2	Avian and Bat Protection Plan	18
7.5.3	Quarterly Incident Reports	19
7.5.4	Immediate Incident Reports	19
7.5.5	Turbine Operational Curtailment	19
8	AUTHORITY TO CONSTRUCT LWECS.....	20
8.1	Wind Rights	20
8.2	Power Purchase Agreement.....	20

8.3	Failure to Commence Construction	20
9	COMPLAINT PROCEDURES.....	21
10	COMPLIANCE REQUIREMENTS.....	21
10.1	Pre-Construction Meeting	21
10.2	Pre-Operation Meeting	21
10.3	Site Plan	21
10.4	Status Reports	22
10.5	Labor Statistic Reporting	23
10.6	In-Service Date	23
10.7	As-Builts	23
10.8	GPS Data	23
10.9	Project Energy Production	23
10.10	Wind Resource Use.....	24
10.11	Emergency Response.....	24
10.12	Extraordinary Events	24
11	DECOMMISSIONING, RESTORATION, AND ABANDONMENT	25
11.1	Decommissioning Plan.....	25
11.2	Site Restoration	25
11.3	Abandoned Turbines	26
12	COMMISSION AUTHORITY AFTER PERMIT ISSUANCE.....	26
12.1	Final Boundaries	26
12.2	Expansion of Site Boundaries	26
12.3	Periodic Review	26
12.4	Modification of Conditions.....	26
12.5	More Stringent Rules.....	27
12.6	Right of Entry	27
12.7	Proprietary Information	27
13	PERMIT AMENDMENT	27
14	TRANSFER OF PERMIT	28
15	REVOCATION OR SUSPENSION OF PERMIT	29
16	EXPIRATION DATE	29

ATTACHMENTS

Attachment 1 – Complaint Handling Procedures for Permitted Energy Facilities

Attachment 2 – Compliance Filing Procedure for Permitted Energy Facilities

Attachment 3 – Site Maps

1 SITE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to Plum Creek Wind Farm, LLC (Permittee) pursuant to Minnesota Statutes Chapter 216F and Minnesota Rules Chapter 7854. This permit authorizes the Permittee to construct and operate the Plum Creek Wind Farm, an up to 414-megawatt (MW) nameplate capacity Large Wind Energy Conversion System (LWECS) and associated facilities in Cottonwood, Murray, and Redwood counties. The LWECS and associated facilities shall be built within the site identified in this permit and as identified in the attached site maps, hereby incorporated into this document.

1.1 Preemption

Pursuant to Minn. Stat. § 216F.07, this permit shall be the sole site approval required for the location, construction, and operation 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.

2 PROJECT DESCRIPTION

The Plum Creek Wind Farm will be an up to 414 MW nameplate capacity LWECS in Cottonwood, Murray, and Redwood counties, Minnesota. The LWECS will consist of either 74 Vestas V162 5.6 MW turbines or 67 Siemens Gamesa SG170 6.2 MW turbines. The project also includes up to six alternate turbine locations for the Vestas model and 11 alternate turbine locations for the Siemens Gamesa model that can be used should any of the primary turbine locations be determined not adequate for construction or operation.

The project area includes approximately 73,000 acres of land. The Permittee currently holds easements and participation agreements on up to 53,223 acres of land within the project area. Upon completion of project construction and restoration, the project site will include no more than 113.1 acres of land converted to wind turbines and associated facilities approved by this site permit.

2.1 Associated Facilities

Associated facilities for the project will include the following:

- aboveground and belowground electric collection and communications lines;
- aboveground electrical feeder lines;
- two collector substations;
- four permanent meteorological towers;
- a sonic detection and ranging unit or light detection and ranging unit;

- two aircraft detection lighting system radars;
- an operation and maintenance building;
- new gravel access roads; and
- up to three laydown areas and two temporary batch plant areas.

2.2 Project Location

The project is located in the following:

County	Township Name	Township	Range	Sections
Cottonwood	Germantown	108	36	7, 18
	Highwater	108	37	1-14, 16-18, 20, 21, 24, 25
	Ann	108	38	1-36
	Westbrook	107	38	2-9
Murray	Holly	108	39	1, 2, 11-15, 21-28, 30-36
	Dovray	107	39	1-16, 19-24, 28-33
	Murray	107	40	1, 12, 23-26, 36
	Des Moines River	106	39	4, 5
Redwood	North Hero	109	38	27-36
	Lamberton	109	37	31-36

3 DESIGNATED SITE

The site designated by the Commission for the Plum Creek Wind Farm is the site depicted on the site maps attached to this permit. The project area encompasses approximately 73,000 acres. Upon completion, the project will occupy no more than 113.1 acres of land converted to wind turbines and associated facilities approved by this permit. Within the project boundary, the LWECS and associated facilities shall be located on lands for which the Permittee has obtained wind rights.

3.1 Turbine Layout

The preliminary wind turbine and associated facility layouts are shown on the site maps attached to this permit. The preliminary layout represents the approximate location of wind turbines and associated facilities within the project boundary and identifies a layout that seeks to minimize the overall potential human and environmental impacts of the project, which were evaluated in the permitting process.

The final layout depicting the location of each wind turbine and associated facility shall be located within the project boundary. The project boundary serves to provide the Permittee with the flexibility to make minor adjustments to the preliminary layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. Any modification to the location of a wind turbine and associated facility depicted in the preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts and shall be specifically identified in the site plan pursuant to Section 10.3.

4 SETBACKS AND SITE LAYOUT RESTRICTIONS

4.1 Wind Access Buffer

Wind turbine towers shall not be placed less than five rotor diameters on the prevailing wind directions and three rotor diameters on the non-prevailing wind directions from the perimeter of the property where the Permittee does not hold the wind rights, without the approval of the Commission. This section does not apply to public roads and trails.

4.2 Residences

Wind turbine towers shall not be located closer than 1,000 feet from all residences or the distance required to comply with the noise standards pursuant to Minn. R. 7030.0040, established by the Minnesota Pollution Control Agency (MPCA), whichever is greater.

4.3 Noise

The wind turbine towers shall be placed such that the Permittee shall, at all times, comply with noise standards established by the MPCA as of the date of this permit and at all appropriate locations. The noise standards are found in Minnesota Rules Chapter 7030. Turbine operation shall be modified, or turbines shall be removed from service if necessary to comply with these noise standards. 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.

4.4 Roads

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

4.5 Public Lands

Wind turbines and associated facilities including foundations, access roads, underground cable, and transformers, shall not be located in publicly-owned lands that have been designated for recreational or conservation purposes, including, but not limited to, Waterfowl Production Areas, State Wildlife Management Areas, Scientific and Natural Areas or county parks, except in the event that the public entity owning those lands enters into a land lease and easement with the Permittee. Wind turbines towers shall also comply with the setbacks of Section 4.1.

4.6 Wetlands

Wind turbines and associated facilities including foundations, access roads, underground cable and transformers, shall not be placed in public waters wetlands, as shown on the public water inventory maps prescribed by Minnesota Statutes Chapter 103G, except that electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to permits and approvals by the Minnesota Department of Natural Resources (DNR) and the United States Army Corps of Engineers (USACE), and local units of government as implementers of the Minnesota Wetlands Conservation Act.

4.7 Native Prairie

Wind turbines and associated facilities including foundations, access roads, collector and feeder lines, underground cable, and transformers shall not be placed in native prairie, as defined in Minn. Stat. § 84.02, subd. 5, unless addressed in a prairie protection and management plan and shall not be located in areas enrolled in the Native Prairie Bank Program. Construction activities, as defined in Minn. Stat. § 216E.01, shall not impact native prairie unless addressed in a Prairie Protection and Management Plan.

The Permittee shall prepare a Prairie Protection and Management Plan in consultation with the DNR if native prairie, as defined in Minn. Stat. § 84.02, subd. 5, is identified within the site boundaries. The Permittee shall file the plan 30 days prior to submitting the site plan required by Section 10.3 of this permit. The plan shall address steps that will be taken to avoid impacts to native prairie and mitigation to unavoidable impacts to native prairie by restoration or management of other native prairie areas that are in degraded condition, by conveyance of conservation easements, or by other means agreed to by the Permittee, the DNR, and the Commission.

4.8 Sand and Gravel Operations

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

4.9 Wind Turbine Towers

Structures for wind turbines shall be self-supporting tubular towers. The towers may be up to 125 meters (410 feet) above grade measured at hub height. The wind turbine specifications in the table below were provided in the Permittee's *August 28, 2020 Supplemental and Amended Site Permit Application for a Large wind Energy Conversion System*.

Design Feature	Turbine	
	Vestas V162	Siemens Gamesa SG170
Capacity (MW)	5.6	6.2
Total Height (m)	200	200
Hub Height (m)	119	115
Rotor Diameter (m)	162	170
Cut-in Wind Speed (m/s)	3	3
Rated Capacity Wind Speed (m/s)	12	11
Cut-out Wind Speed (m/s)	24	25
Maximum Sustained Wind Speed (m/s)	52.5	52.5
Wind Swept Area (m ²)	21,520	22,698
Rotor Speed (rpm)	4.3 – 12.1	3.8 – 8.5
Primary Turbine Positions	74	67
Alternate Turbine Positions	6	11

4.10 Turbine Spacing

The turbine towers shall be constructed within the site boundary as shown on the site maps. The turbine towers shall be spaced no closer than three rotor diameters in the non-prevailing wind directions and five rotor diameters on the prevailing wind directions. If required, 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.

4.11 Meteorological Towers

Permanent towers for meteorological equipment shall be free standing. Permanent meteorological towers shall not be placed less than 250 feet from the edge of the nearest

public road right-of-way and from the boundary of the Permittee's site control, or in compliance with the county ordinance regulating meteorological towers in the county the tower is built, whichever is more restrictive. Meteorological towers shall be placed on property 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.

4.12 Aviation

The Permittee shall not place wind turbines or associated facilities in a location that could create an obstruction to navigable airspace of private and public airports (as defined in Minn. R. 8800.0100, subp. 24(a) and 24(b)) in Minnesota, adjacent states, or provinces. The Permittee shall apply the minimum obstruction clearance for private airports pursuant to Minn. R. 8800.1900, subp. 5. Setbacks or other limitations shall be followed in accordance with the Minnesota Department of Transportation (MnDOT) Aeronautics and Aviation and the FAA. The Permittee shall notify owners of all known airports within six miles of the project of the project's anticipated construction start date at least 14 days prior to the pre-construction meeting. The Permittee shall obtain the necessary permits for structures that are considered to be an obstruction to safety of flight from MnDOT Aeronautics and Aviation and the FAA, as applicable, at least 14 days prior to the pre-operation meeting.

4.13 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.

5 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the LWECS and associated facilities over the life of this permit.

5.1 Permit Distribution

Within 30 days of permit issuance, the Permittee shall send a copy of the permit and the complaint procedures to any regional development commission, county auditor and environmental office, and city and township clerk in which any part of the site is located.

Within 30 days of permit issuance, the Permittee shall provide all affected landowners with a copy of this permit and the complaint procedures. In no case shall the landowner receive this site permit and complaint procedures less than five days prior to the start of construction on their property. An affected landowner is any landowner or designee that is within or adjacent to the permitted site.

5.2 Access to Property

The Permittee shall contact landowners prior to entering the property or conducting maintenance within the site, unless otherwise negotiated with the affected landowner.

5.3 Construction and Operation Practices

The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in its *August 28, 2020 Supplemental and Amended Site Permit Application for a Large Wind Energy Conversion System* and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

5.3.1 Field Representative

The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during construction of the project. This person shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons 14 days prior to commencing construction. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, local government units and other interested persons.

5.3.2 Site Manager

The Permittee shall designate a site manager responsible for overseeing compliance with the conditions of this permit during the commercial operation and decommissioning phases of the project. This person shall be accessible by telephone or other means during normal business hours for the life of this permit.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the site manager 14 days prior to commercial operation of the facility. The Permittee shall provide the site manager's contact information to affected landowners, residents, local government units and other interested persons 14 days prior to commercial operation of the facility. The Permittee may change the site manager at any time upon notice to the Commission, affected landowners, local government units and other interested persons.

5.3.3 Employee Training and Education of Permit Terms and Conditions

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

5.3.4 Public Services and Public Utilities

During construction, the Permittee shall minimize any disruption to public services and public utilities. To the extent disruptions to public services or public utilities occur these will be temporary, and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate mitigation measures if not already considered as part of this permit.

5.3.5 Topsoil Protection

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

5.3.6 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. Soil decompaction measures shall be utilized on all lands utilized for project construction and

travelled on by heavy equipment (*e.g.*, cranes and heavy trucks); even when soil compaction minimization measures are used.

5.3.7 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the MPCA Construction Stormwater Program. If construction of the facility disturbs more than one acre of land, or is sited in an area designated by the MPCA as having potential for impacts to water resources, the Permittee shall obtain a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit from the MPCA that provides for the development of a Stormwater Pollution Prevention Plan (SWPPP) that describes methods to control erosion and runoff.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to pre-construction conditions.

5.3.8 Wetlands and Water Resources

Construction in wetland areas shall occur during frozen ground conditions to minimize impacts, to the extent feasible. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and managed in accordance with all applicable wetland permits. Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts.

Wetland and water resource areas disturbed by construction activities shall be restored to pre-construction conditions in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. All requirements of the USACE, DNR, Minnesota Board of Water and Soil Resources, and local units of government shall be met.

5.3.9 Vegetation Removal

The Permittee shall disturb or clear vegetation on the project site only to the extent necessary to assure suitable access for construction, and for safe operation and maintenance of the project. The Permittee shall minimize the number of trees removed in selecting the site layout

specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and other vegetation, to the extent that such actions do not violate sound engineering principles.

5.3.10 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture (MDA), the DNR, and the U.S. Environmental Protection Agency (EPA). Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner or designee to obtain approval for the use of pesticide at least 14 days prior to any application on their property. The landowner may request that there be no application of pesticides on any part of the site within the landowner's property. The Permittee shall provide notice of pesticide application to affected landowners and known beekeepers operating apiaries within three miles of the project site at least 14 days prior to such application.

5.3.11 Invasive Species

The Permittee shall employ best management practices to avoid the potential introduction and spread of invasive species on lands disturbed by project construction activities. The Permittee shall develop an Invasive Species Prevention Plan to prevent the introduction and spread of invasive species on lands disturbed by project construction activities and file with the Commission 14 days prior to the pre-construction meeting.

5.3.12 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil, the Permittee shall select site appropriate seed certified to be free of noxious weeds. The Permittee shall consult with landowners on the selection and use of seed for replanting. To the extent possible, the Permittee shall use native seed mixes.

5.3.13 Public Roads

At least 14 days prior to the pre-construction meeting, 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 (i.e., approved permits, written authorizations, road use agreements, or development agreements) 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 may be subject to increased impacts due to transportation of equipment and project components. The Permittee shall notify the Commission of such arrangements upon request.

5.3.14 Turbine Access Roads

The Permittee shall construct the least number of turbine access roads necessary to safely and efficiently operate the project and satisfy landowner requests. Access roads shall be low profile roads so that farming equipment can cross them and shall be covered with Class 5 gravel or similar material. Access roads shall not be constructed across streams and drainage ditches without required permits and approvals. When access roads are constructed across streams, drainage ways, or drainage ditches, the access roads shall be designed and constructed in a manner so runoff from the upper portions of the watershed can readily flow to the lower portion of the watershed. Any access roads that are constructed across streams or drainage ditches shall be designed and constructed in a manner that maintains existing fish passage. Access roads that are constructed across grassed waterways, which provide drainage for surface waters that are ephemeral in nature, are not required to maintain or provide fish passage. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

5.3.15 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.

5.3.16 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the facility. In the event that a resource is encountered, the Permittee shall consult with the State Historic Preservation Office (SHPO) and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.

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

5.3.17 Interference

At least 14 days prior to the pre-construction meeting, the Permittee shall submit to the Commission an assessment of television and radio signal reception, microwave signal patterns, and telecommunications in the project area. The assessment shall be designed to provide data that can be used in the future to determine whether the turbines and associated facilities are the cause of disruption or interference of television or radio reception, microwave patterns, or telecommunications in the event residents should complain about such disruption or interference after the turbines are placed in operation. The Permittee shall be responsible for alleviating any disruption or interference of these services caused by the turbines or any associated facilities.

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

5.3.18 Livestock Protection

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

5.3.19 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.

5.3.20 Drainage Tiles

The Permittee shall take into account, avoid, 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.

5.3.21 Equipment Storage

The Permittee shall not locate temporary equipment staging areas on lands under its control unless negotiated with affected landowner. Temporary equipment staging areas shall not be located in wetlands or native prairie as defined in Sections 4.6 and 4.7.

5.3.22 Restoration

The Permittee shall, as soon as practical following construction of each turbine, restore the areas affected by construction to the condition that existed immediately before construction began, to the extent possible. The time period to complete restoration may be no longer than 12 months after the completion of construction, unless otherwise negotiated with the affected landowner. Restoration shall be compatible with the safe operation, maintenance and inspection of the project. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such activities.

5.3.23 Cleanup

All waste and scrap that is the product of construction shall be removed from the site and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

5.3.24 Pollution and Hazardous Waste

All appropriate precautions to protect against pollution of the environment shall be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction, restoration, and operation of the facility.

5.3.25 Damages

The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction.

5.3.26 Public Safety

The Permittee shall provide educational materials to landowners adjacent to the site and, upon request, to interested persons about the project and any restrictions or dangers associated with the 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 Minn. Stat. § 216D.01, subd. 11, to Gopher State One Call following the completion of construction at the site.

5.3.27 Tower Identification

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

5.3.28 Federal Aviation Administration Lighting

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. The Permittee shall install and employ an FAA-approved lighting mitigation system, such as an aircraft detection lighting system (ADLS), light intensity dimming solution (LIDS), or other FAA-approved mitigation method. The Permittee shall describe the lighting mitigation system used for the project in its site plan.

5.4 Communication Cables

The Permittee shall place all communication and supervisory control and data acquisition cables underground and within or adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner.

5.5 Electrical Collector and Feeder Lines

Collector lines that carry electrical power from each individual transformer associated with a wind turbine to an internal project interconnection point shall be buried underground. Collector lines shall be placed within or adjacent to the land necessary for turbine access roads unless otherwise negotiated with the affected landowner.

Feeder lines that carry power from an internal project interconnection point to the project substation or interconnection point on the electrical grid may be overhead or underground. Feeder line locations shall be negotiated with the affected landowner. Any overhead or underground feeder lines that parallel public roads shall be placed within the public rights-of-way or on private land immediately adjacent to public roads. If overhead feeder lines are located within public rights-of-way, the Permittee shall obtain approval from the governmental unit responsible for the affected right-of-way.

Collector and feeder line locations shall be located in such a manner as to minimize interference with agricultural operations including, but not limited to, existing drainage patterns, drain tile, future tiling plans, and ditches. Safety shields shall be placed on all guy

wires associated with overhead feeder lines. The Permittee shall submit the engineering drawings of all collector and feeder lines in the site plan pursuant to Section 10.3.

5.6 Other Requirements

5.6.1 Safety Codes and Design Requirements

The LWECS and associated facilities shall be designed to meet or exceed all relevant local and state codes, Institute of Electrical and Electronics Engineers, Inc. (IEEE) standards, the National Electric Safety Code (NESC), and North American Electric Reliability Corporation (NERC) requirements. The Permittee shall report to the Commission on compliance with these standards upon request.

5.6.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. A list of the permits known to be required is included in the permit application.

At least 14 days prior to the pre-construction meeting, the Permittee shall submit a filing with a detailed status update of all permits, authorizations, and approvals. The detailed status update shall include the permitting agency or authority, the name of the permit, a description of the authorization or approval being sought, contact person and contact information for the permitting agency or authority, application submittal date, and the date the permit, authorization, or approval was issued or is anticipated to be issued.

The Permittee shall demonstrate that it has obtained all necessary permits, authorizations, and approvals by filing an affidavit stating as such, prior to commencing project construction for that portion of the project. The Permittee shall provide a copy of any such permits, authorizations, and approvals upon Commission request.

The Permittee shall comply with all terms and conditions of permits or licenses issued by the counties, cities, and municipalities affected by the project that do not conflict with or are not preempted by federal or state permits and regulations.

6 SPECIAL CONDITIONS

Special conditions shall take precedence over other conditions of this permit should there be a conflict.

6.1 Soil and Water Conservation District (SWCD) and Landowner Review of Plans

The Permittee, prior to finalization and installation, shall provide the local SWCD and participating landowners with the opportunity to review and comment on access road plans and all other infrastructure plans and designs in order to minimize the potential for water ponding, gully erosion, and damage or failure to existing conservation practices, such as terraces, sediment control basins or diversions. The Permittee shall file documentation that this condition has been complied with at least 14 days prior to the pre-construction meeting.

6.2 Henslow's Sparrow

To avoid impacts to the state-listed Henslow's sparrow, no construction may take place within undisturbed mesic and dry prairie areas between May 15 and July 15 unless presence/absence studies have been performed during the same nesting season as the construction activities and ruled out the actual presence of the Henslow's sparrow.

6.3 Archaeological Assessment

The Permittee shall complete a Phase 1a archaeological assessment due to the nature and location of the project as recommended by SHPO. The Permittee shall complete a Phase I archaeological survey if the Phase 1a archaeological assessment determines that such a survey is needed or otherwise required. If performed, the Phase archaeological I survey must meet the requirements of the Secretary of the Interior's Standards for Identification and Evaluation and should include an evaluation of National Register eligibility for any properties that are identified.

7 SURVEYS AND REPORTING

7.1 Biological and Natural Resource Inventories

The Permittee, in consultation with the Commission and the DNR, shall design and conduct pre-construction desktop and field inventories of existing wildlife management areas, scientific and natural areas, recreation areas, native prairies and forests, wetlands, and any other biologically sensitive areas within the project site and assess the presence of state- or federally-listed or threatened species. The results of the inventories shall be filed with the Commission at least 30 days prior to the pre-construction meeting to confirm compliance of conditions in this permit. The Permittee shall file with the Commission, any biological surveys or studies conducted on this project, including those not required under this permit.

7.2 Shadow Flicker

At least 14 days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker for each residence of non-participating landowners and participating landowners within and outside of the project boundary potentially subject to turbine shadow flicker exposure. Information shall include the results of modeling used, assumptions made, and the anticipated levels of exposure from turbine shadow flicker for each residence. The Permittee shall provide documentation on its efforts to avoid, minimize and mitigate shadow flicker exposure. The results of any modeling shall be filed with the Commission at least 14 days prior to the pre-construction meeting to confirm compliance with conditions of this permit.

The Permittee shall develop a project wide Shadow Flicker Management Plan that reduces shadow flicker exposure to less than 30 hours per year for all occupied residences. The Permittee may exclude from the Shadow Flicker Management Plan residences that exceed 30 hours per year by providing documentation that the landowners have reached an alternative agreement as it relates to shadow flicker. If agreement is reached with a landowner regarding shadow flicker after the pre-construction meeting the Permittee may remove that residence from coverage under the plan.

Commission staff and EERA staff will be responsible for the review and approval of the Shadow Flicker Management Plan. The Shadow Flicker Management Plan shall contain annual reporting filing requirements to monitor compliance and receipt of notices of any later agreements.

7.3 Wake Loss Studies

At least 14 days prior to the pre-construction meeting, the Permittee shall file with the Commission the pre-construction micro-siting analysis leading to the final tower locations and an estimate of total project wake losses. As part of the annual report on project energy production required under Section 10.8 of the permit the Permittee shall file with the Commission any operational wake loss studies conducted on this project during the calendar year preceding the report.

7.4 Noise Studies

The Permittee shall file a proposed methodology for the conduct of a post-construction noise study at least 14 days prior to the pre-construction meeting. The Permittee shall develop the post-construction noise study methodology in consultation with the Department of Commerce (Department). The study must incorporate the Department's Noise Study Protocol to determine the operating LWECs noise levels at different frequencies and at various distances from the turbines at various wind directions and speeds. The Permittee must conduct the post-

construction noise study and file with the Commission the completed post-construction noise study within 18 months of commencing commercial operation.

7.5 Avian and Bat Protection

7.5.1 Operational Phase Fatality Monitoring

The Permittee shall utilize a qualified third party to conduct a minimum of two full years of avian and bat fatality monitoring following the commencement of the operational phase of the facility. Monitoring activities and results will be coordinated directly with the DNR, the USFWS, the Department, and the Commission. Detailed monitoring protocols, agency coordination, and any avoidance and minimization measures will be detailed in the Avian and Bat Protection Plan (ABPP).

7.5.2 Avian and Bat Protection Plan

The Permittee shall comply with the provisions of the most recently filed and accepted version of the ABPP. The initial version of the ABPP submitted for this project as part of the *August 28, 2020 Supplemental and Amended Site Permit Application for a Large wind Energy Conversion System*, and all necessary revisions that occur during the permitting process will be incorporated into a permit version. The permit version of the ABPP shall be filed with the Commission 14 days before the pre-construction meeting, and revisions must include any updates associated with final construction plans and site plans.

The ABPP must address steps to be taken to identify and mitigate impacts to avian and bat species during the construction phase and the operation phase of the facility. The ABPP shall also include formal and incidental post-construction fatality monitoring, training, wildlife handling, documentation (*e.g.*, photographs), and reporting protocols for each phase of the project.

The Permittee shall, by the 15th of March following each complete or partial calendar year of operation, file with the Commission an annual report detailing findings of its annual audit of ABPP practices. The annual report shall include summarized and raw data of bird and bat fatalities and injuries and shall include bird and bat fatality estimates for the project using agreed upon estimators from the prior calendar year. The annual report shall also identify any deficiencies or recommended changes in the operation of the project or in the ABPP to reduce avian and bat fatalities and shall provide a schedule for implementing the corrective or modified actions. The Permittee shall provide a copy of the report to the Department, the DNR, and the USFWS at the time of filing with the Commission.

7.5.3 Quarterly Incident Reports

The Permittee shall submit quarterly avian and bat reports to the Commission. Quarterly reports are due by the 15th of January, April, July, and October commencing the day following commercial operation and terminating upon the expiration of this permit. Each report shall identify any dead or injured avian and bat species, location of find by turbine number, and date of find for the reporting period in accordance with the reporting protocols. If a dead or injured avian or bat species is found, the report shall describe the potential cause of the occurrence (if known) and the steps taken to address future occurrences. The Permittee shall provide a copy of the report to the DNR and to the FWS at the time of filing with the Commission.

7.5.4 Immediate Incident Reports

The Permittee shall notify the Commission, the Department, the USFWS, and the DNR within 24 hours of the discovery of any of the following:

- (a) five or more dead or injured birds or bats, at an individual turbine location, within a five day reporting period;
- (b) twenty or more dead or injured birds or bats, across the entire facility, within a five day reporting period;
- (c) one or more dead or injured state threatened, endangered, or species of special concern;
- (d) one or more dead or injured federally listed species, including species proposed for listing; or
- (e) one or more dead or injured bald or golden eagle(s).

In the event that one of the four discoveries listed above should be made, the Permittee must file with the Commission within seven days, a compliance report identifying the details of what was discovered, the turbine where the discovery was made, a detailed log of agencies and individuals contacted, and current plans being undertaken to address the issue.

7.5.5 Turbine Operational Curtailment

The Permittee shall operate all facility turbines so that all turbines are locked or feathered up to the manufacturer's standard cut-in speed from one-half hour before sunset to one-half hour after sunrise of the following day from April 1 to October 31 of each year of operation. All

operating turbines at the facility must be equipped with operational software that is capable of allowing for adjustment of turbine cut-in speeds.

8 AUTHORITY TO CONSTRUCT LWECS

8.1 Wind Rights

At least 14 days prior to the pre-construction meeting, the Permittee shall demonstrate that it has obtained the wind rights and any other rights necessary to construct and operate the project within the boundaries authorized by this permit. Nothing in this permit shall be construed to preclude any other person from seeking a permit to construct a wind energy conversion system in any area within the boundaries of the project covered by this permit if the Permittee does not hold exclusive wind rights for such areas.

8.2 Power Purchase Agreement

In the event the Permittee does not have a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the project at the time this permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for purchase of the power. 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 commitment. 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 Minn. R. 7854.1300.

8.3 Failure to Commence Construction

If the Permittee has not completed the pre-construction surveys required under this permit 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 shall make a determination as to 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 Minn. R. 7854.1300.

9 COMPLAINT PROCEDURES

At least 14 days prior to the pre-construction meeting, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

Upon request, the Permittee shall assist the Commission with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

10 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.

10.1 Pre-Construction Meeting

Prior to the start of any construction, the Permittee shall participate in a pre-construction meeting with Department and Commission staff to review pre-construction filing requirements, scheduling, and to coordinate monitoring of construction and site restoration activities. Within 14 days following the pre-construction meeting, the Permittee shall file with the Commission, a summary of the topics reviewed and discussed and a list of attendees. The Permittee shall indicate in the filing the construction start date.

10.2 Pre-Operation Meeting

At least 14 days prior to commercial operation of the facility, the Permittee shall participate in a pre-operation meeting with Department and Commission staff to coordinate field monitoring of operation activities for the project. Within 14 days following the pre-operation meeting, the Permittee shall file with the Commission, a summary of the topics reviewed and discussed and a list of attendees.

10.3 Site Plan

At least 14 days prior to the pre-construction meeting, the Permittee shall provide the Commission, the Department, and the environmental services and public works departments of Cottonwood, Murray, and Redwood counties with a site plan that includes specifications and drawings for site preparation and grading; specifications and locations of all turbines and other structures to be constructed including all electrical equipment, collector and feeder lines,

pollution control equipment, fencing, roads, and other associated facilities; and procedures for cleanup and restoration. The documentation shall include maps depicting the site boundary and layout in relation to that approved by this permit. The Permittee shall document, through GIS mapping, compliance with the setbacks and site layout restrictions required by this permit, including compliance with the noise standards pursuant to Minnesota Rules Chapter 7030. At the same time, the Permittee shall notify affected landowners and city and town clerks that the site plan is on file with the Commission and the environmental services and public works departments of Cottonwood, Murray, and Redwood counties. The Permittee may submit a site plan and engineering drawings for only a portion of the project if the Permittee intends to commence construction on certain parts of the project before completing the site plan and engineering drawings for other parts of the project.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes to its site plan or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission, the Department, the environmental services and public works departments of Cottonwood, Murray, and Redwood counties, city and town clerks, and the affected landowners at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

In the event that previously unidentified human and environmental conditions are discovered during construction that 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 site. Under these circumstances, the Permittee shall notify the Commission, the Department, the MPCA, the DNR, the environmental services and public works departments of Cottonwood, Murray, and Redwood counties, city and town clerks, and the affected landowners of any turbines that are to be relocated, and provide the previously unidentified environmental conditions and how the movement of the turbine mitigates the human and environmental impact at least five days before implementing the changes. No changes shall be made that would be in violation of any terms of this permit.

10.4 Status Reports

The Permittee shall file status reports with the Commission on progress regarding site construction. The Permittee need not report more frequently than monthly. Reports shall begin with the commencement of site construction and continue until completion of restoration. Reports shall describe construction activities and progress and activities undertaken in compliance with this permit. Reports shall include text and photographs.

10.5 Labor Statistic Reporting

The Permittee shall file quarterly reports with the Commission within 45 days of the end of the quarter regarding construction workers that participated in the construction of the project. The reports shall (a) detail the Permittee's efforts and the site contractor's efforts to hire Minnesota workers, and (b) provide an account of: (i) the gross number of hours worked by or full-time equivalent workers who are Minnesota residents, as defined in Minn. Stat. § 290.01, subd. 7; (ii) the gross number of hours worked by or full-time equivalent workers who are residents of other states, but maintain a permanent residence within 150 miles of the project; and (iii) the total gross hours worked or total full-time equivalent workers. Permittee shall work with its contractor to determine the suitable reporting metric. The report may not include personally identifiable data.

10.6 In-Service Date

At least three days before the facility is to be placed into service, the Permittee shall notify the Commission of the date on which the facility will be placed into service and the date on which construction was completed.

10.7 As-Built

Within 90 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the project.

10.8 GPS Data

Within 90 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (*e.g.*, ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the LWECS.

10.9 Project Energy Production

The Permittee shall, by February 1st following each complete or partial year of project operation, file a report with the Commission on the monthly energy production of the project including:

- (a) the installed nameplate capacity of the permitted project;
- (b) the total monthly energy generated by the project in MW hours;

- (c) the monthly capacity factor of the project;
- (d) yearly energy production and capacity factor for the project;
- (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.

The permittee shall file this information in a format recommended in the Department's guidance on energy production reporting. This information shall be considered public and must be filed electronically.

10.10 Wind Resource Use

The Permittee shall, by February 1st following each complete or partial calendar year of operation, file with the Commission the average monthly and average annual wind speed collected at one permanent meteorological tower during the preceding year or partial year of operation. This information shall be considered public and must be filed electronically.

10.11 Emergency Response

The Permittee shall prepare an Emergency Response Plan in consultation with the emergency responders having jurisdiction over the facility prior to project construction. The Permittee shall submit a copy of the plan, along with any comments from emergency responders, to the Commission at least 14 days prior to the pre-construction meeting and a revised plan, if any, at least 14 days prior to the pre-operation meeting. The Permittee shall provide as a compliance filing confirmation that the Emergency Response Plan was provided to the emergency responders and Public Safety Answering Points (PSAP) with jurisdiction over the facility prior to commencement of construction. The Permittee shall obtain and register the facility address or other location indicators acceptable to the emergency responders and PSAP having jurisdiction over the facility.

10.12 Extraordinary Events

Within 24 hours of discovery 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, acts of sabotage, collector or feeder line failure, and injured worker or private person. The Permittee shall, within 30 days of the occurrence, file a report with the Commission describing the cause of the occurrence and the steps taken to avoid future occurrences.

11 DECOMMISSIONING, RESTORATION, AND ABANDONMENT

11.1 Decommissioning Plan

The Permittee shall comply with the provisions of the most recently filed and accepted decommissioning plan. The initial version of the decommissioning plan was submitted for this project as part of the August 28, 2020 Supplemental and Amended Site Permit Application for a Large wind Energy Conversion System. The Permittee shall file an updated decommissioning plan, incorporating comments and information from the permitting process and any updates associated with the final construction plans, with the Commission 14 days before the pre-construction meeting. The decommissioning plan shall be updated every five years following the commercial operation date.

The decommissioning plan shall provide information identifying all surety and financial securities established for decommissioning and site restoration of the project in accordance with the requirements of Minn. R. 7854.0500, subp. 13. The decommissioning plan shall provide an itemized breakdown of costs of decommissioning all project components, which shall include labor and equipment. The plan shall identify cost estimates for the removal of turbines, turbine foundations, underground collection cables, access roads, crane pads, substations, and other project components. The plan may also include anticipated costs for the replacement of turbines or repowering the project by upgrading equipment.

The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the area in which the project is located. 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.

11.2 Site Restoration

Upon expiration of this permit, or upon earlier termination of operation of the project, or any turbine within the project, the Permittee shall have the obligation to dismantle and remove from the site all towers, turbine generators, transformers, overhead and underground cables and lines, foundations, buildings, and ancillary equipment to a depth of four feet. Any agreement for removal to a lesser depth or no removal shall be recorded with the county and shall show the locations of all such foundations. To the extent feasible, the Permittee shall restore and reclaim the site to pre-project conditions, including topography and topsoil conditions. 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. 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 of termination.

11.3 Abandoned Turbines

The Permittee shall advise the Commission of any turbines that are abandoned prior to termination of operation of the project. The project, or any turbine within the project, shall be considered abandoned after one year without energy production and the land restored pursuant to Section 11.2 unless a plan is submitted to and approved by the Commission outlining the steps and schedule for returning the project, or any turbine within the project, to service.

12 COMMISSION AUTHORITY AFTER PERMIT ISSUANCE

12.1 Final Boundaries

After completion of construction, the Commission shall determine the need to adjust the final boundaries of the site required for this project in accordance with Minn. R. 7854.1300, subp. 1.

12.2 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 project. The Commission will respond to the requested change in accordance with applicable statutes and rules.

12.3 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 this permit. No modification may be made except in accordance with applicable statutes and rules.

12.4 Modification of Conditions

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

- (a) violation of any condition in this permit;
- (b) endangerment of human health or the environment by operation of the project; or

- (c) existence of other grounds established by rule.

12.5 More Stringent Rules

The issuance of this 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.

12.6 Right of Entry

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

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

12.7 Proprietary Information

Certain information required to be filed with the Commission under this permit may constitute trade secret information or other type of proprietary information under the Data Practices Act or other law. The Permittee must satisfy requirements of applicable law to obtain the protection afforded by the law.

13 PERMIT AMENDMENT

This permit may be amended at any time by the Commission in accordance with Minn. R. 7854.1300, subp. 2. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

14 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new permittee, and interested persons such process as is required. The Commission may impose additional conditions on any new permittee as part of the approval of the transfer.

At least 14 days prior to commercial operation, the Permittee shall file a letter describing its ownership structure, identifying, as applicable:

- (a) the owner(s) of the financial and governance interests of the Permittee;
- (b) the owner(s) of the majority financial and governance interests of the Permittee's owners; and
- (c) the Permittee's ultimate parent entity (meaning the entity which is not controlled by any other entity).

The Permittee shall immediately notify the Commission of:

- (a) a change in owner(s) of the majority* financial or governance interests in the Permittee;
- (b) a change in owner(s) of the majority* financial or governance interests of the Permittee's owners; or
- (c) a sale which changes the parent entity of the Permittee.

**When there are only co-equal 50/50 percent interests, any change shall be considered a change in majority interest.*

The Permittee shall notify the Commission of:

- (a) the sale of a parent entity or a majority interest in the Permittee;

- (b) the sale of a majority interest of the Permittee's owners or majority interest of the owners; or
- (c) a sale which changes the entity with ultimate control over the Permittee.

15 REVOCATION OR SUSPENSION OF PERMIT

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

- (a) a false statement was knowingly made in the application or in accompanying statements or studies required of the Permittee, and a true statement would have warranted a change in the Commission's findings;
- (b) there has been a failure to comply with material conditions of this permit, or there has been a failure to maintain health and safety standards;
- (c) there has been a material violation of a provision of an applicable statute, rule, or an order of the Commission; or
- (d) the Permittee has filed a petition with the Commission requesting that the permit be revoked or terminated.

In the event the Commission determines that it is appropriate to consider revocation or suspension of this permit, the Commission shall proceed in accordance with the requirements of Minn. R. 7854.1300 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 this permit suspended or revoked.

16 EXPIRATION DATE

This permit shall expire 30 years after the date this permit was approved and adopted.

ATTACHMENT 1

Complaint Handling Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of reporting and resolving complaints received by the permittee concerning permit conditions for site or route preparation, construction, cleanup, restoration, operation, and maintenance.

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

D. Definitions

Complaint: A verbal or written statement presented to the permittee by a person expressing dissatisfaction or concern regarding site or route preparation, cleanup or restoration, or other permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written complaint alleging a violation of a specific 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, remains unresolved or unsatisfactorily resolved to one or both of the parties.

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 designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.
2. A person presenting the complaint should, to the extent possible, include the following information in their communications:
 - a. name, address, phone number, and email address;
 - b. initial date of the complaint;
 - c. tract, parcel number, or address of the complaint;
 - d. a summary of the complaint; and
 - e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.
3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - a. docket number and project name;
 - b. name of complainant, address, phone number and email address;
 - c. precise description of property or parcel number;
 - d. name of permittee representative receiving complaint and date of receipt;
 - e. nature of complaint and the applicable permit condition(s);
 - f. summary of activities undertaken to resolve the complaint; and
 - g. a statement on the final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. 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 the Commission's Public Advisor at 1-800-657-3782 (voice messages are acceptable) or publicadvisor.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

Monthly Reports: During project construction, restoration, and operation, a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Will Seuffert, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: <https://www.edockets.state.mn.us/EFiling/home.jsp>. If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

If a project has submitted twelve consecutive months of complaint reports with no complaints, monthly reports can terminate by a letter to eDockets notifying the Commission of such action. If a substantial complaint is received (by the company or the Commission) following termination of the monthly complaint report, as noted above, the monthly reporting should commence for a period of one year following the most recent complaint or upon resolution of all pending complaints.

If a permittee is found to be in violation of this section, the Commission may reinstate monthly complaint reporting for the remaining permit term or enact some other commensurate requirement via notification by the Executive Secretary or some other action as decided by the Commission.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding the permit or issues related to site or route preparation, construction, cleanup, restoration, or operation and maintenance will be promptly sent to the permittee.

The permittee shall notify the Commission when the issue has been resolved. The permittee will add the complaint to the monthly reports of all complaints. If the permittee is unable to find resolution, the Commission will use the process outlined in the Unresolved Complaints Section to process the issue.

H. Commission Process for Unresolved Complaints

Complaints raising substantial and unresolved permit issues will be investigated by the Commission. Staff will notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, the permittee and complainant shall be required to submit a written summary of the complaint and its current position on the issues to the Commission. Staff will set a deadline for comments. As necessary, the complaint will be presented to the Commission for consideration.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may be filed by mail or email to the permittee's designated complaint representative, or to the Commission's Public Advisor at 1-800-657-3782 or publicadvisor.puc@state.mn.us. The name and contact information for the permittee's designated complaint representative shall be kept current in the Commission's eDocket system.

ATTACHMENT 2

Compliance Filing Procedures for Permitted Energy Facilities

**MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE FOR
PERMITTED ENERGY FACILITIES**

A. Purpose

To establish a uniform and timely method of submitting information required by Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all known compliance filings required by permit.

C. Definitions

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

D. Responsibilities

1. The permittee shall file all compliance filings with Will Seuffert, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at:
<https://www.edockets.state.mn.us/EFiling/home.jsp>

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

2. All filings must have a cover sheet that includes:
 - a. Date
 - b. Name of submitter/permittee
 - c. Type of permit (site or route)
 - d. Project location
 - e. Project docket number
 - f. Permit section under which the filing is made
 - g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Will Seuffert, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Plum Creek Wind Farm, LLC

PERMIT TYPE: LWECS Site Permit

PROJECT LOCATION: Cottonwood, Murray, and Redwood Counties

PUC DOCKET NUMBER: IP-6997/WS-18-700

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	4.7	Prairie Protection and Management Plan	30 days prior to submitting the site plan
	4.12	Notification to Airports	14 days prior to pre-construction meeting
	5.1	Notification of Permit and Complaint Procedures	30 days after permit issuance
	5.3.1	Field Representative	14 days prior to commencing construction
	5.3.2	Site Manager	14 days prior to commercial operation
	5.3.10	Application of Pesticides	Notice 14 days prior to pesticide application
	5.3.11	Invasive Species Prevention Plan	14 days prior to pre-construction meeting
	5.3.13	Identification of Roads	14 days prior to pre-construction meeting
	5.3.17	Assessment of Television and Radio Signal Reception, Microwave Signal Patterns, and Telecommunications	14 days prior to pre-construction meeting

¹ This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit. The language of the permit controls.

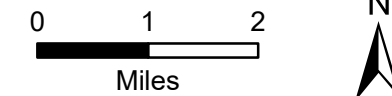
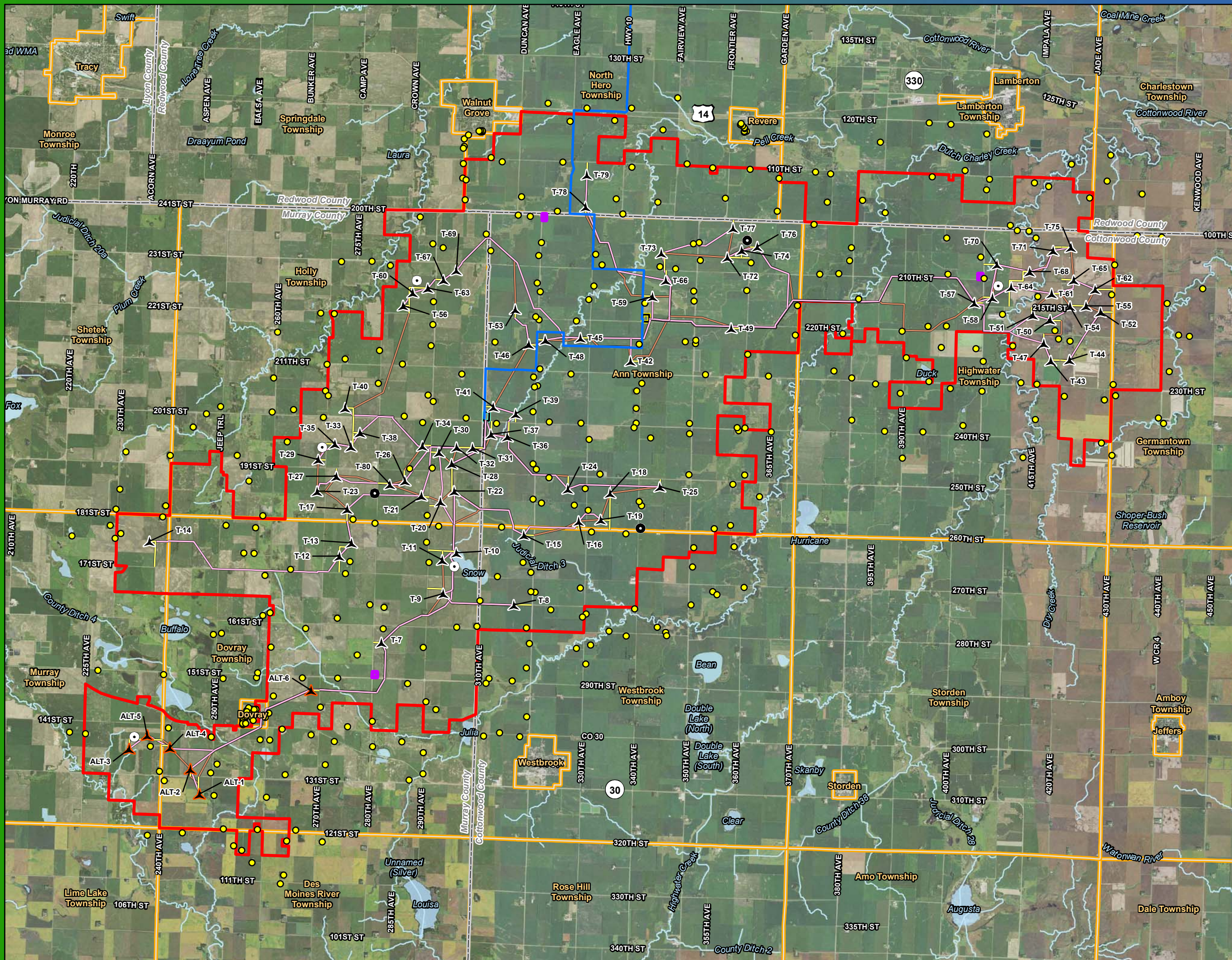
Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.3.22	Site Restoration Report	60 days after completion of all restoration activities
	5.3.26	Public Safety and Education Materials	Upon request
	5.3.28	FAA Lighting	Submit with site plan
	5.5	Engineered Drawings of Collector and Feeder Lines	Submit with site plan
	5.6.2	Other Required Permits	14 days prior to pre-construction meeting
	6.1	SWCD and Landowner Plan Review	14 days prior to pre-construction meeting
	7.1	Biological and Natural Resource Inventories	30 days prior to pre-construction meeting
	7.2	Shadow Flicker Management Plan	14 days prior to pre-construction meeting. Annual updates.
	7.3	Wake Loss Studies	14 days prior to pre-construction meeting and as part of annual report
	7.4	Post-construction Noise Study Methodology	14 days prior to pre-construction meeting
	7.4	Post-construction Noise Study	18 months of commencing commercial operation
	7.5.2	Permit version of ABPP	14 days prior to pre-construction meeting

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	7.5.2	ABPP Annual Report	March 15th each year or partial year
	7.5.3	Quarterly Avian and Bat Incident Reports	15th of January, April, July, and October commencing the day following commercial operation
	7.5.4	Immediate Avian and Bat Incident Reports	24 hours of the discovery and a compliance report within seven days
	8.1	Demonstration of Wind Rights	14 days prior to pre-construction meeting
	8.2	Proof of Power Purchase Agreement	Prior to construction or notification to Commission if not obtained within two years of permit issuance
	8.3	Failure to Construct	Notification to Commission if construction has not commenced within two years of permit issuance
	9	Complaint Procedures	14 days prior to pre-construction meeting
	10.1	Pre-construction Meeting Summary	14 days following meeting
	10.2	Pre-operation Meeting Summary	14 days following meeting
	10.3	Site Plan	14 days prior to pre-construction meeting
	10.4	Construction Status Reports	Monthly through restoration

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	10.5	Labor Statistic Reporting	Quarterly within 45 days of the end of each quarter
	10.6	In-Service date	Three days prior to commercial operation
	10.7	As-Builts	90 days after construction is complete
	10.8	GPS Data	90 days after construction is complete
	10.9	Project Energy Production	February 1st each year or partial year
	10.10	Wind Resource	February 1st each year or partial year
	10.11	Emergency Response Plan	14 days prior to pre-construction meeting and revisions 14 days prior to pre-operation meeting
	10.12	Extraordinary Events	24 hours of the discovery or occurrence
	11.1	Decommissioning Plan	14 days prior to pre-construction meeting and updated every five years
	11.2	Site Restoration	Within 18 months after expiration of this permit or upon earlier termination of operation or decommissioning of any turbine within the project
	11.3	Abandoned Turbines	Per occurrence

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	14	Ownership Structure	14 days prior to commercial operation
	Complaint Reporting	Monthly Complaint Reports	See Site Permit Attachment 1
	Complaint Reporting	Immediate Complaint Reports	By the following day throughout the life of the permit

ATTACHMENT 3
Site Maps



Service Layer Credits: MNGeo, FSA 2017
Data Source: Geronimo Energy, US Census, ESRI,

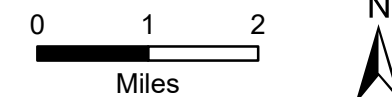
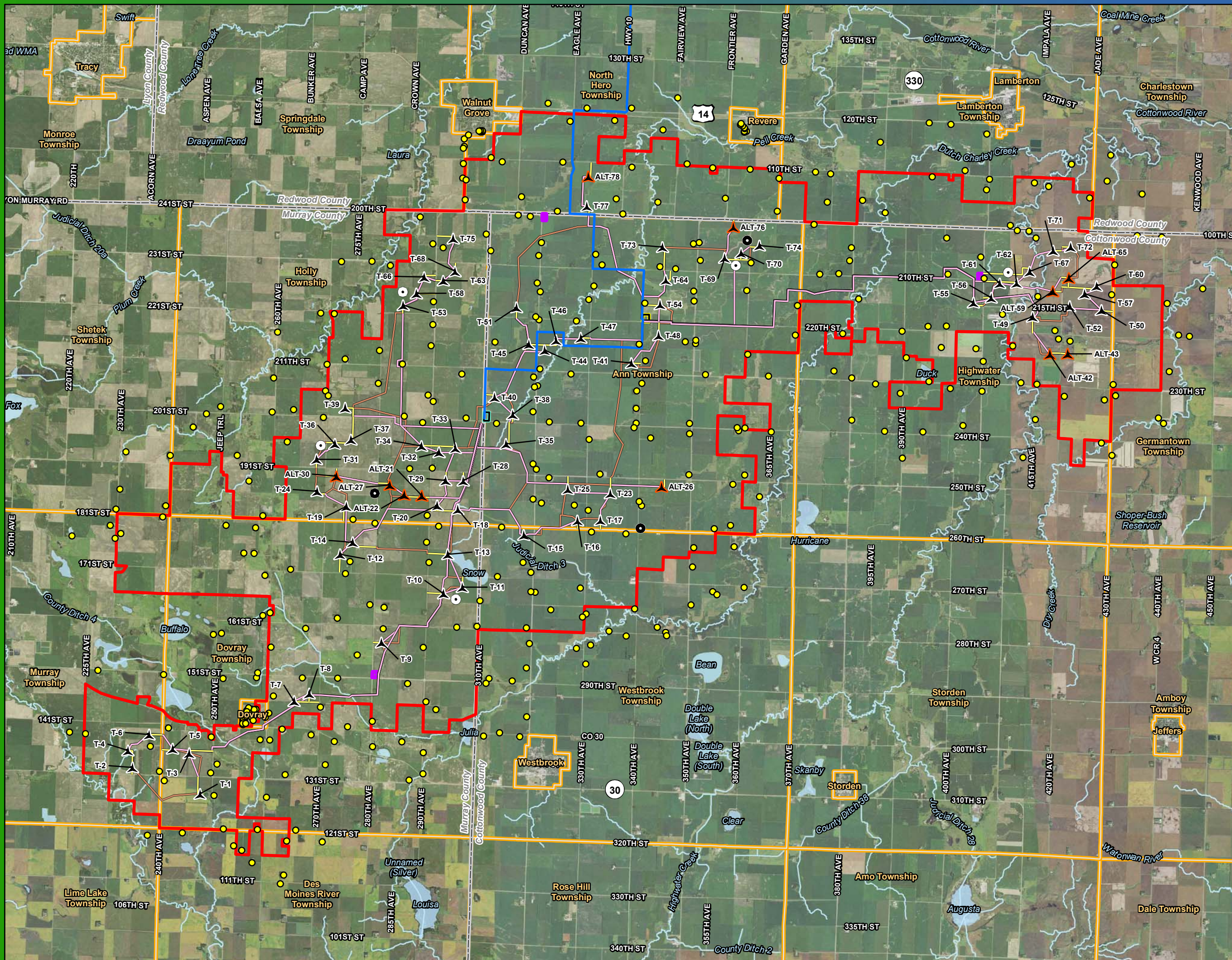
- ▲ V162 Proposed Turbine (Primary)
- ▲ V162 Proposed Turbine (Alternate)
- Access Road
- Collection Line
- Crane Path
- 345 kV Transmission Line Route
- Permanent Met Tower
- Temporary Met Tower
- Residential Structure (within 1 mile of Project Area)
- Laydown Area
- Collector Substation 1
- Collector Substation 2/ O&M Facility
- Project Area Boundary
- City/Township
- County Boundary
- River/Stream
- Lake, Pond or Reservoir

*Turbines not to scale

Figure 1
Site Map
Vestas V162
Configuration

Plum Creek Wind Project

Docket No. IP-6997/WS-18-700



Service Layer Credits: MNGeo, FSA 2017
Data Source: Geronimo Energy, US Census, ESRI,

- ▲ SG170 Proposed Turbine (Primary)
- ▲ SG170 Proposed Turbine (Alternate)
- Access Road
- Collection Line
- Crane Path
- 345 kV Transmission Line Route
- Permanent Met Tower
- Temporary Met Tower
- Residential Structure (within 1 mile of Project Area)
- Laydown Area
- Collector Substation 1
- Collector Substation 2/
O&M Facility
- Project Area Boundary
- City/Township
- County Boundary
- River/Stream
- Lake, Pond or Reservoir

*Turbines not to scale

Figure 2
Site Map
Siemens Gamesa SG170
Configuration

Plum Creek Wind Project

Docket No. IP-6997/WS-18-700

CERTIFICATE OF SERVICE

I, Robin Benson, hereby certify that I have this day, served a true and correct copy of the following document to all persons at the addresses indicated below or on the attached list by electronic filing, electronic mail, courier, interoffice mail or by depositing the same enveloped with postage paid in the United States mail at St. Paul, Minnesota.

Minnesota Public Utilities Commission ORDER

Docket Numbers: **IP-6997/WS-18-700**

Dated this **14th** day of **January, 2022**

/s/ Robin Benson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Lisa	Agrimonti	lagrimonti@fredlaw.com	Fredrikson & Byron, P.A.	200 South Sixth Street Suite 4000 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron	200 S 6th St Ste 4000 Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_18-700_Official CC Service List
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Lucas	Franco	lfranco@liunagroc.com	LIUNA	81 Little Canada Rd E Little Canada, MN 55117	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Carol A.	Overland	overland@legalelectric.org	Legalelectric - Overland Law Office	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Jessica	Palmer Denig	jessica.palmer-Denig@state.mn.us	Office of Administrative Hearings	600 Robert St N PO Box 64620 St. Paul, MN 55164	Electronic Service	Yes	OFF_SL_18-700_Official CC Service List
Kevin	Pranis	kpranis@liunagroc.com	Laborers' District Council of MN and ND	81 E Little Canada Road St. Paul, Minnesota 55117	Electronic Service	No	OFF_SL_18-700_Official CC Service List
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_18-700_Official CC Service List
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_18-700_Official CC Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	7400 Lyndale Ave S Ste 190 Richfield, MN 55423	Electronic Service	Yes	OFF_SL_18-700_Official CC Service List