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March 12, 2025

VIA E-FILING
Mr. William Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, MN 55101-2147

Re: In the Matter of Applications of Plum Creek Wind Farm, LLC for a Certificate of Need, Site Permit, and Route Permit for an up to 414 MW Large Wind Energy Conversion System and 345 kV Transmission Line in Cottonwood, Murray, and Redwood Counties

MPUC Docket Nos. IP-6997/CN-18-699, WS-18-700, TL-18-701

Dear Mr. Seuffert:

Plum Creek Wind Farm, LLC (Plum Creek) respectfully submits these reply comments in response to comments submitted during the initial comment period established in the Minnesota Public Utilities Commission's (Commission) Notice of Comment Period on Request to Amend Permits ending on March 5, 2025 for the Plum Creek Wind Farm Project (Project). Initial comments were submitted by the Minnesota Department of Commerce, Energy and Environmental Analysis unit (EERA),[1] Minnesota Department of Commerce, Division of Energy Resources (DER),[2] Jean Knakmuhs,[3] Robert and Jeanette Heggerson,[4] and Dennis Fultz[5].

1. EERA.

EERA submitted comments on whether the Commission should approve Plum Creek's site permit and route permit amendment requests and, if so, what additional conditions should be required. Plum Creek appreciates EERA's comprehensive analysis of the Plume Creek's permit amendment requests and agrees with EERA' s recommended permit changes and conditions. Plum Creek has incorporated those changes into the redlined draft site and route permits in **Appendix A** and **B**.

Plum Creek agrees with EERA's recommendations on the wind permit amendment request, including EERA's proposed new permit conditions. Furthermore, Plum Creek agrees with EERA's assessment that the anticipated environmental and human impacts associated with the change in

[1] EERA Comments and Recommendations (March 5, 2025) (eDocket No. 20253-216089-01) (EERA Comments).

[2] DER Comments (March 3, 2025) (eDocket No. 20253-216048-01).

[3] Jean Knakmuhs (Feb. 24, 2025) (eDocket No. 20252-215702-01, 20252-215702-02, 20252-215702-03).

[4] Robert and Jeanette Heggerson (March 4, 2025) (eDocket No. 20253-216039-01).

[5] Dennis Fultz (March 6, 2025) (eDocket No. 20253-216128-01).

turbine technology, modifications to the layout, move of the substation, are comparable, or less than, the potential impacts associated with the originally permitted wind turbine models and turbine and infrastructure layouts.[6]

Plum Creek agrees with EERA's recommendations on the route permit amendment request, including EERA's proposed new permit conditions. Furthermore, Plum Creek agrees with EERA's assessment that the anticipated environmental and human impacts associated with proposed route segment are comparable to and, in some cases less than, the potential impacts associated with the permitted route segment.[7]

Plum Creek offers the following responses to EERA's edits to the route permit:

- Plum Creek agrees that the proposed amendment to section 2.2 of the Draft Route Permit is not needed. The updated route maps will show the updated location of the collector substation.

- Concerning the native plant communities, EERA staff recommend the route permit be amended to include a special condition requiring Plum Creek survey the route width in Section 6 of Ann Township (T 108N, R 38W) and develop a mitigation plan in this area in cooperation with the DNR. Plum Creek has no objection to this special condition. Plum Creek plans to complete surveys of the area in 2025 and will work with DNR on a mitigation plan.

Plum Creek provides the following responses concerning the additional information EERA's requested to be provided in a supplemental filing:

A. Correspondence with SHPO: EERA staff recommends that Plum Creek provide its recent correspondence with the Minnesota State Historic Preservation Office (SHPO) regarding both the site and route.

   Response: Plum Creek will be corresponding with SHPO in the near future and will file its correspondence with SHPO regarding both the site and route upon receipt.

B. Manufacturer's Cut-In Speed: EERA staff recommends Plum Creek provide the manufacturer's standard cut-in speed for all turbine models proposed.

   Response: The cut in speed is 3 m/s for all four turbines under consideration.

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[6] EERA Comments at 16.

[7] EERA Comments at 17.

C. Turbine Access Roads: EERA recommends that Plum Creek clarify the intent of its amendments to section 5.3.15 of the permit regarding turbine access roads.

Response: When drafting the amendments to this special condition, Plum Creek was not aware of the language in recent permits requiring permittees to provide the access road plans to soil and water conservation districts and landowners for comment. Plum Creek is amenable to the revisions proposed by EERA.

D. Information on Right-of-Way Acquisition: EERA staff recommends that Plum Creek provide additional information on right-of-way acquisition to clarify the record. Specifically. EERA recommends that Plum Creek clarify:

a. The distinction between "full transmission easements" and "overhang transmission easements."

Response: The Route Permit Amendment request referred to 'full transmission easements' and 'overhang transmission easements'. A 'full transmission easement' refers to an easement that will allow construction of the HVTL infrastructure, e.g., poles, within the easement area. On the contrary, 'overhang transmission easements will not allow the placement of poles or other physical infrastructure on the surface of the easement area. Instead, it will allow the HVTL cables to 'overhang' or be suspended above the easement area, without touching the ground of the easement area.

b. The distinction between (a) landowner and landowner group and (b) the 14 landowner groups discussed in Section 3.8 and the 24 landowners identified in Appendix C as being within the proposed route segment.

Response: Appendix C summarizes 24 parcels that are included within the proposed Route for proposed alignment revision. The application referred to these parcel owners as landowner groups. After further review, an additional property is within the proposed Route, and therefore, 25 parcels are located in the proposed Route revision (an updated map of participating and non-participating parcels within the route is included in **Appendix C**). Some parcels of land needed for the proposed alignment are owned by multiple landowners. In a case where multiple landowners are owners of a parcel of land, those landowners are referred to as a landowner group. Accordingly, 25 distinct parcels are included in the proposed Route. However, only 14 landowner groups are necessary to provide the full transmission easements or overhang transmission easements necessary for Plum Creek to construct the proposed alignment.

c. The status of right-of-way acquisition in text along with a map showing the anticipated alignment overlaid on parcel boundaries and indicating the type of

easement agreement (full or overhang) and the status of easements (executed or in negotiation).

Response: Plum Creek has secured all easements necessary for the proposed alignment, except for two overhang transmission easements and one full transmission easement (**See Appendix C**), which are currently in negotiation with the two remaining affected landowner groups. The landowner group owning one parcel of land for which Plum Creek is seeking a full transmission easement (east-west) and an overhang easement (north-south) has previously executed a lease agreement with Plum Creek for the wind farm project. Accordingly, Plum Creek anticipates securing the desired full and overhang easement agreements with this landowner group in the near future. The remaining overhang easement being sought from another landowner group is not critical to provide for the construction of the HVTL project, but is being sought to allow the HVTL project to be constructed closer to the property boundary to minimize the impacts to the property on which the HVTL project will be constructed.

d. Whether Plum Creek will consider using eminent domain if it is unable to reach agreement with landowners.

Response: Plum Creek intends to secure voluntary agreements for the remaining full and overhang transmission easements. Easement negotiations with landowners is progressing and Plum Creek anticipates securing voluntary participation without having to use eminent domain.

2. DER.

DER submitted comments on Plum Creek's proposal to extend the in-service date for the Project from December 31, 2026, to December 31, 2028. DER recommended that the Commission approve Plum Creek's request to extend the date by which construction must commence until December 31, 2028.[8] Plum Creek appreciates DER's comprehensive analysis of Plum Creek's extension request and agrees with its conclusion.

3. Supportive Landowners.

Robert and Jeanette Heggerson submitted comments in favor of Plum Creek's request and stated that this is an important project for the area and for the long-term improvement for Minnesota's renewable energy.[9] Dennis Fultz submitted comments stating that the wind rights and tower payments that landowners receive are very helpful and recommending that the Commission allow

[8] DER Comments at 4.

[9] Robert and Jeanette Heggerson (March 4, 2025) (eDocket No. 20253-216039-01).

Plum Creek to amend the site permit application.[10] Plum Creek appreciates the supportive comments of Robert and Jeanette Heggerson, and Dennis Fultz.

4. Human Impacts and EMF.

Jean Knakmuhs submitted comments concerning the proposed route permit change of the collection line in Ann Township, Section 5, Cottonwood County, Minnesota. Jean recommends that the Commission not approve the requested change to the route permit in this area because the proposed changes would put transmission lines "within a few feet of a residence" where her son's family lives. Jean asks that the current permitted route be maintained, and the proposed change be rejected due to the impact on residents of the area.[11]

Plum Creek appreciates the comments from Jean Knakmuhs and provides the following summary of information relevant to Jean Knakmuhs' concerns regarding the proximity of the proposed route to residences First, there are fewer residences within the 1,000-foot requested route width of the proposed segment (two) compared to five for the permitted route segment. Additionally, the distance between the proposed alignment and the nearest residence is greater in the proposed route segment than in the permitted route segment.[12] The minimum distance to residences has increased from 184 feet to 250 feet. Moreover, in the case of the Knakmuhs residence there is also significant existing vegetation between this residence the and the proposed alignment. Plum Creek provides an overview figure of the route near Jean Knakmuhs residence in Section 5 in **Appendix D**. This figure includes an inset map showing significant existing vegetation between the residence and the alignment from the Google Earth street view looking south/southeast from just north of the trees, on the east side of the road.

The distance between the proposed alignment and residences will ensure there are no health impacts to adjacent residents. Electric and magnetic fields from electrical transmission lines and transformers dissipate rapidly with distance from the source (National Institute of Environmental Health Sciences [NIEHS], 2002). The World Health Organization performed a review of the current scientific literature and concluded that there is no evidence of low-level electric and magnetic fields causing negative health effects (World Health Organization, 2016). Guidelines are set to ensure members of the public are not exposed to potentially harmful levels of electric and magnetic fields. The internationally accepted guideline for the general public exposed to electric fields is 4.2 kV per meter (kV/m) and 833 milligauss (mG) for magnetic fields (NIEHS, 2002).

Levels of electric and magnetic fields from the Plum Creek high voltage transmission line (HVTL) will be considerably below acceptable guidelines for public exposure. As stated in Section 4.2.2 of the Route Permit Amendment Request (RPAR), incorporating the Proposed Route Segment[13]

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[10] Dennis Fultz (March 6, 2025) (eDocket No. 20253-216128-01).

[11] Jean Knakmuhs (Feb. 24, 2025) (eDocket No. 20252-215702-01, 20252-215702-02, 20252-215702-03).

[12] *See* EERA Comments at 11; Plum Creek Route Permit Amendment Request, Section 1, p. 2; Section 3.6, Table 3.6.1, pp. 7-8

[13] Plum Creek identified a "Preferred Route Segment" to minimize costs and the overall impacts of the proposed route. In its comments, EERA staff refers to this segment as the "proposed route segment" to avoid indicating a preference between segments. The proposed route segment identified in Plum Creek's amendment request shortens

into the HVTL Project would not change the calculated electric or magnetic fields that were described in the November 2019 Application or in the Electric and Magnetic Fields Report provided in Appendix G of the November 2019 Application, which were considered by the Commission in its 2021 Route Permit Order.

5. Conclusion.

Plum Creek appreciates the public participation in this docket and the opportunity to respond to address issues raised during the comment period. Plum Creek respectfully requests that the Commission approve its requests to amend the certificate of need, site permit, and route permit. Given the comments from EERA and DER indicating the Commission can approve the requests pending submission of the supplemental information information requested by EERA, this matter appears to be ready for consideration by the Commission and could be considered by consent agenda.

These reply comments have been e-filed through www.edocket.state.mn.us. A copy of this filing is also being served upon the persons on the Official Service List of record. Please let me know if you have any questions regarding this filing.

Sincerely,

FREDRIKSON & BYRON, P.A.

/s/ Jeremy P. Duehr

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the overall length of the transmission line by 3.4 miles and reduces the number of turns, which reduces procurement and construction costs. *See* RPAR at Section 1.0, p. 2.

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~~ 77 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~~ [updated date of expiration. 2055], thirty (30) years from ~~September 23, 2021~~ [date of issuance, 2025], the date this site permit was first approved.

Approved and adopted this ~~5th day of July, 2023~~ [updated date of approval]

BY ORDER OF THE COMMISSION

Will Seuffert,
Executive Secretary

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Service or email consumer.puc@state.mn.us for assistance.

CONTENTS

ATTACHMENTS

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 LWECS will consist of either 77 GE 3.8-154 turbines, 68 GE 6.1-158 turbines, 76 Vestas V150-4.5 turbines, or 77 Vestas V163-4.5 turbines. The project also includes up to 1 alternate turbine location for the GE 3.8-154 model, 10 alternate turbine locations for the GE 6.1-158 model, two alternate turbine locations for the Vestas V150-4.5 model, and 1 alternate turbine location for the Vestas V163-4.5 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.~~ The site includes approximately 73,000 acres of land. The Permittee currently holds easements and participation agreements on up to 52,869 acres of land within the site. Upon completion of project construction and restoration, the project site will include no more than 84 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.~~

- 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
- one laydown area 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~~ site encompasses approximately 73,000 acres. Upon completion, the project will occupy no more than ~~113.1~~ 84 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*~~ February 2025 *Site Permit Amendment Request 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~~

Design Feature	**Turbine**			
	GE 3.8-154	GE 6.1-158	Vestas V150-4.5	Vestas V163-4.5
Total Height (m)	176	196	173 – 195	176
Hub Height (m)	98	117	98, 105, 120	98, 113

Rotor Diameter (m)	154	158	150	163
Cut-in Wind Speed (m/s)	3	3	3	3
Rated Capacity Wind Speed (m/s)	12.0	14.5	12.0	11.5
Cut-out Wind Speed (m/s)	25	25	24.5	24
Maximum Sustained Wind Speed (m/s)	37.5	42.5	37.5	37.5
Wind Swept Area (m^2)	18,723	19,607	17,671	20,867
Rotor Speed (rpm)	10.6	10.1	12.0	11.0
Primary Turbine Positions	77	68	75	76
Alternate Turbine Positions	1	10	3	2

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, February 2025

Site Permit Amendment Request 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 Independent Third-Party Monitoring

Prior to any construction, the Permittee shall propose a scope of work and identify an independent third-party monitor to conduct Project construction monitoring on behalf of the

Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. Department of Commerce staff shall keep records of compliance with this section and will ensure that status reports detailing the construction monitoring are filed with the Commission in accordance with scope of work approved by the Department of Commerce.

5.3.5 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.

5.3.6 Topsoil Protection

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

5.3.7 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.

5.3.8 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.

5.3.9 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.

5.3.10 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.

5.3.11 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.

5.3.12 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.

5.3.13 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.

5.3.14 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.

5.3.15 Turbine Access Roads

The Permittee shall construct the ~~least~~ fewest 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.

The Permittee shall provide the local soil and water conservation district and participating landowners an opportunity to review and comment on access road plans in order to minimize the potential to pond and divert water creating gully erosion or the potential to cause damage or failure to existing conservation practices, such as terraces, sediment control basins or diversions prior to finalization and installation. The Permittee shall file documentation of turbine access road coordination at least 14 days prior to the pre-construction meeting.

5.3.16 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.

5.3.17 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. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce staff or Commission staff.

5.3.18 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.

5.3.19 Livestock Protection

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

5.3.20 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.

5.3.21 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.

5.3.22 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.

5.3.23 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.

5.3.24 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.

5.3.25 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.

5.3.26 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.

5.3.27 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.

5.3.28 Tower Identification

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

5.3.29 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.

5.3.30 Bio-netting, Natural Netting, and Mulch Products

The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.

5.3.31 Project Substation Lighting

The Permittee must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation. Downward facing lighting must be clearly visible on the plan and profile submitted for the project.

5.3.32 Dust Control

The Permittee shall minimize, and avoid, if possible, the use of chloride-based dust control chemicals (i.e., calcium chloride and magnesium chloride).

5.3.1 State Historic Preservation Office Recommendations

The Permittee shall file correspondence from the State Historic Preservation Office (SHPO) containing recommendations for surveys or other mitigation measures related to the Project promptly upon receipt by the Permittees.

5.3.1 Unanticipated Discoveries Plan

The Permittee shall develop an Unanticipated Discoveries Plan (UDP) to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during construction. This is in addition to and not in lieu of any other obligations that may exist under law or regulation relating to these matters. The UDP shall describe how previously unrecorded, non-human burial, archaeological sites found during construction shall be marked and all construction work must stop at the discovery location. The Permittee shall file the UDP with the Commission at least 14 days prior to the preconstruction meeting.

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 ~~four~~ two years of the issuance of the ~~September 23, 2021~~ [Date of issuance of new site permit] site 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 ~~four~~ two years of the issuance of the ~~September 23, 2021~~ [Date of issuance of new site permit] site 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.

If the Permittee does not commence construction of the Project within six months of permit issuance, the Permittee shall file status reports on the anticipated timing of construction every

six months beginning with the issuance of this permit until the pre-construction meeting. The status updates shall include information on the Project's Midcontinent Independent System Operator (MISO) interconnection process.

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 Prevailing Wage

The Permittee, its contractors, and subcontractors shall pay no less than the prevailing wage rate as defined in Minn. Stat. § 177.42 and shall be subject to the requirements and enforcement provisions under Minn. Stat. §§ 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45. The Permittee shall keep records of contractor and subcontractor pay and provide them at the request of Department of Commerce staff or Commission staff.

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-Builts

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 latest version of the decommissioning plan was submitted for this project as part of the February 2025 Site Permit Amendment Request. 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.

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT FOR A
HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN
COTTONWOOD, MURRAY, AND REDWOOD COUNTIES

ISSUED TO
PLUM CREEK WIND FARM, LLC

PUC DOCKET NO. IP-6997/TL-18-701

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this route permit is hereby issued to:

Plum Creek Wind Farm, LLC

Plum Creek Wind Farm, LLC is authorized by this route permit to construct and operate a new 28~~31~~-mile single-circuit 345 kilovolt (kV) transmission line between a new collector substation in Ann Township, Cottonwood County and a new switching station in Vesta Township, Redwood County.

The high-voltage transmission line and associated facilities shall be built within the route identified in this permit and as portrayed on the route maps and in compliance with the conditions specified in this permit.

Approved and adopted this ~~23rd day of September, 2021~~[Update to date of issuance]

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.

CONTENTS

ATTACHMENTS

1 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to Plum Creek Wind Farm, LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes the Permittee to construct and operate a new approximately 28~~31~~-mile 345 kV single-circuit high-voltage transmission line in Cottonwood and Redwood counties, and as identified in the attached Route Maps, hereby incorporated into this document as Attachment 3.

1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this permit shall be the sole route approval required to be obtained by the Permittee for construction of the transmission facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose governments.

2 PROJECT DESCRIPTION

The 345 kV transmission line authorized by this permit is directly associated with the Plum Creek Wind Facility (PUC Docket No. IP-6997/WS-18-700). The transmission line connects the wind facilities' two collector substations to the existing Brookings-to-Hampton 345 kV transmission line via a new switching station.

2.1 Project Location

County	Township Name	Township	Range	Section
Murray	Holly	108N	38W	13, 24
Cottonwood	Ann	108N	38W	~~3-5, 8-10, 15-20~~ 5-7, 18-19
Redwood	North Hero	109N	38W	3-4, 9-10, 15-16, 20-22, 27-29, 32-33
	Johnsonville	110N	38W	3-4, 9-10, 15-16, 21-22, 27-28, 33-34
	Granite Rock	111N	38W	4-5, 8-9, 16-17, 20-22, 27-29, 33-34
	Vesta	112N	38W	32-33

2.2 Substations and Associated Facilities

The project includes two collector substations (Collector Substation 1 and Collector Substation 2) that will require approximately 10 acres of land each within the project area. The project also includes an operation and maintenance building that will be located adjacent to Collector Substation 2.

2.3 Structures and Conductors

The table below details specifics on the various structure and conductor types as presented in the route permit application.

Structure Type	Material	Height (feet)	Base (inches)	Foundation (feet)	Span (feet)
Tangent	Steel	125	80	N/A	650
Small Angle	Steel	120	80	8	650
Heavy Angle	Steel	115	80	9	650
Dead End	Steel	110	80	9	650

The conductors for the transmission line will consist of either 2-bundled "Cardinal" (954 kcmil) or 2-bundled "Bittern" (1,272 kcmil) Aluminum Conductor Steel Reinforced cables, or cables with comparable capacity. The 345-kV conductors will have a capacity equal or greater to 1,992 amperes.

3 DESIGNATED ROUTE

The route designated by the Commission in this permit is the route described below and shown on the Route Maps in Attachment 3 of this permit. The route width approved by this permit is 1,000 feet (500 feet on each side of the centerline) with the exception of an area in the northeast corner of Section 18 and the east half of Section 7 in Ann Township where the route is expanded an additional 2,000 feet to the east and in the southeast quarter of Section 33 in Johnsonville Township where the route is expanded an additional 2,500 feet to the west. The route is generally described as follows:

> *From Collector Substation 2 (northeast corner of 240th Street and 300th Avenue) the route proceeds north along 300th Avenue for one mile before turning east along 230th Street for 0.5 ~~one~~ mile. ~~The route then turns north along County Highway 7 for about 0.75 mile before turning east for 0.5 mile, then south again for 0.25 mile along the field edge. The route then turns east again and follows parcel boundaries for 1.5 miles. At this point, the route crosses 340th Avenue, turns north and parallels the east side of the road for 0.5 mile before reaching Collector Substation 1 (northeast corner of 220th Street and 340th Avenue). From Collector Substation 1, the route follows 340th Avenue north for one mile before turning west on 210th Street for one mile. The route turns north again at 330th Avenue for one mile before turning west for half mile to Eagle Avenue.~~ The route then turns*

north and continues for about 2.5 miles, crossing 220th Street and 210th Street. About 0.5 mile north of 210th Street, the route turns to the east, crosses over CSAH 7, parallels the county road for another 0.5 mile, the turns east again and travels along the southern side of CSAH 45 before connecting to the new Revised Collector Substation 1, in Township 108N, Range 38W, Section 5, Ann Township, Cottonwood County, just south of the Cottonwood County border.– The route follows Eagle Avenue north for two miles to U.S. Highway 14 and then turns east for one mile to

County Highway 10. The route turns north on County Highway 10 for six miles to 160th Street where the route turns west for half mile to a private driveway on the north side of the road. The route then follows the private driveway for one quarter of a mile before turning back east along the field edge for half mile to County Highway 10. The route follows County Highway 1 north for 1.75 miles to 180th Street. At 180th Street, the route turns west for one quarter of a mile, then north along a parcel line for half mile, before turning back east for one quarter of a mile to County Highway 10. At County Highway 10, the route turns north again for 1.5 miles to 200th Street where the route turns west for half mile before following a parcel line/field edge north for two miles to 220th Street. The route turns east for half mile on 220th Street back to County Highway 10 and continues north for two more miles to Minnesota Highway 68 where the route turns west for one mile. The route then turns north along Eagle Avenue for the final four miles before reaching the Switching Station.

The final alignment must be located within this designated route. The route widths identified on the attached route maps provide the Permittee with flexibility for minor adjustments of the alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (*i.e.*, permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized by this permit or the Commission.

4 RIGHT-OF-WAY

This Permit authorizes the Permittee to obtain a new permanent right-of-way for the transmission line up to 150 feet in width. The permanent right-of-way is typically 75 feet on both sides of the transmission line measured from its centerline.

The Project's anticipated alignment is intended to minimize potential impacts relative to criteria identified in Minn. R. 7850.4100. The actual right-of-way will generally conform to the anticipated alignment identified on the Route Maps unless changes are requested by individual landowners and agreed to by the Permittee or for unforeseen conditions that are encountered or as otherwise provided for by this permit.

Any right-of-way modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the right-of-way identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. R. 7850.4100 and the other requirements

of this permit; and for highways under the jurisdiction of the Minnesota Department of Transportation (MnDOT), the procedures for accommodating utilities in trunk highway rights-of-way.

4.1 Route Width Variations

Route width variations may be allowed to accommodate the potential site-specific constraints listed below. These constraints may arise from any of the following:

1. Unforeseen circumstances encountered during the detailed engineering and design process.
2. Federal or state agency requirements.
3. Existing infrastructure within the route, including but not limited to railroads, natural gas and liquid pipelines, high voltage electric transmission lines, or sewer and water lines.

Any alignment modifications arising from these site-specific constraints that would result in right-of-way placement outside of the designated route shall be specifically reviewed by the Commission under Minn. R. 7850.4900.

5 GENERAL CONDITIONS

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

5.1 Permit Distribution

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 route 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 route.

At the time of first contact, the Permittee shall also provide all affected landowners with a copy of the Minnesota Department of Commerce's Rights-of-Way and Easements for Energy Facility Construction and Operation fact sheet.[1]

[1] https://apps.commerce.state.mn.us/eera/web/project-file?legacyPath=/opt/documents/Easements%20Fact%20Sheet_08.05.14.pdf

5.2 Access to Property

The Permittee shall notify landowners or their designee at least 14 days in advance but not greater than 60 days in advance of entering the property.

5.3 Construction and Operation Practices

The Permittee shall follow those specific construction practices and material specifications described in its *November 2019 Route Permit Application for a 345 kV Transmission Line* 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, residents, local government units and other interested persons.

5.3.2 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 transmission line of the terms and conditions of this permit.

5.3.3 Independent Third-Party Monitoring

Prior to any construction, the Permittee shall propose a scope of work and identify an independent third-party monitor to conduct Project construction monitoring on behalf of the Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. Department of Commerce staff shall keep records of compliance with this section and will ensure that status reports detailing the construction monitoring are filed with the Commission

in accordance with scope of work approved by the Department of Commerce.

5.3.4 Public Services, Public Utilities, and Existing Easements

During construction, the Permittee shall minimize any disruption to public services or 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 transmission structure placement.

The Permittee shall consult with landowners, townships, cities, and counties along the route and consider concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction.

5.3.5 Temporary Workspace

The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. Temporary easements outside of the authorized transmission line right-of-way will be obtained from affected landowners through rental agreements and are not provided for in this permit.

Temporary driveways may be constructed between the roadway and the structures to minimize impact using the shortest route possible. Construction mats should be used to minimize impacts on access paths and construction areas.

5.3.6 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable to ensure nighttime noise level standards will not be exceeded.

5.3.7 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. Care shall be used to preserve the natural landscape, minimize tree removal, and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project during construction and maintenance. The Permittee shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads. Structures shall be placed at a

distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highways, or trail crossings.

5.3.8 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program.

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.

In accordance with MPCA requirements, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit.

5.3.9 Wetlands and Water Resources

Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions where practicable and shall be according to permit requirements by the applicable permitting authority. 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 not placed back into the wetland or riparian area. Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to the site for installation.

Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by the Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

All requirements of the U.S. Army Corps of Engineers (USACE) (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (DNR) (Public Waters/Wetlands), and

County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

5.3.10 Vegetation Management

The Permittee shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission facility will be removed by the Permittee. The Permittee shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation that will not pose a threat to the transmission facility or impede construction.

5.3.11 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture (MDA), 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.

5.3.12 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 30 days prior to commencing construction.

5.3.13 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. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.

5.3.14 Roads

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city, or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the facility. Oversize or overweight loads associated with the facility shall not be hauled across public roads without required permits and approvals.

The Permittee shall construct the least number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner.

5.3.15 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the transmission facility. In the event that a resource is encountered, the Permittee shall contact and consult with the State Historic Preservation Office 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 State Historic Preservation Office 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 and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement or the State Archaeologist.

5.3.16 Avian Protection

The Permittee in cooperation with the DNR shall identify areas of the project where bird flight diverters will be incorporated into the transmission line design to prevent large avian collisions attributed to visibility issues. Standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

5.3.17 Restoration

The Permittee shall restore the right-of-way, temporary workspaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such activities.

5.3.18 Cleanup

All waste and scrap that is the product of construction shall be removed from the right-of-way 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.

5.3.19 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment must 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 and restoration of the right-of-way.

5.3.20 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.

5.3.21 Bio-netting, Natural Netting, and Mulch Products

The Permittee shall use only “bio-netting” or “natural netting” types and mulch products without synthetic (plastic) fiber additives.

5.3.22 Dust Control

The Permittee shall minimize, and avoid, if possible, the use of chloride-based dust control chemicals (i.e., calcium chloride and magnesium chloride).

5.3.23 State Historic Preservation Office Recommendations

The Permittee shall file correspondence from the State Historic Preservation Office (SHPO) containing recommendations for surveys or other mitigation measures related to the Project promptly upon receipt by the Permittees.

5.3.24 Unanticipated Discoveries Plan

The Permittee shall develop an Unanticipated Discoveries Plan (UDP) to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during construction. This is in addition to and not in lieu of any other obligations that may exist under law or regulation relating to these matters. The UDP shall describe how previously unrecorded, non-human burial, archaeological sites found during construction shall be marked and all construction work must stop at the discovery location. The Permittee shall file the UDP with the Commission at least 14 days prior to the preconstruction meeting.

5.4 Electrical Performance Standards

5.4.1 Grounding

The Permittee shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliampere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified in the National Electric Safety Code. The Permittee shall address and rectify any induced current problems that arise during transmission line operation.

5.4.2 Electric Field

The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

5.4.3 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture

navigation systems or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is necessary to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

5.5 Other Requirements

5.5.1 Safety Codes and Design Requirements

The transmission line and associated facilities shall be designed to meet or exceed all relevant local and state codes, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements.

5.5.2 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. The Permittee shall submit a copy of such permits to the Commission upon request.

6 SPECIAL CONDITIONS

~~No special conditions have been identified for the high-voltage transmission line.~~

6.1.1 Native Plant Communities

The permittee shall survey the anticipated right-of-way of the permitted route in Section 6 of Ann Township (T108N, R38W) and shall develop a mitigation plan in cooperation with the Minnesota Department of Natural Resources to avoid, minimize, and mitigate potential impacts to native plant communities and to sites of biodiversity significance during construction and operation of the transmission line.

7 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

8 COMPLAINT PROCEDURES

Prior to the start of construction, 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.

9 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.

9.1 Plan and Profile

At least 30 days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the transmission line. The documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved per this permit.

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 in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission 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.

9.2 Status Reports

The Permittee shall report to the Commission on progress during finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than monthly. Reports shall begin with the submittal of the plan and profile for the project and continue until completion of restoration.

9.3 Notification to Commission

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

9.4 As-Builts

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

9.5 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 transmission line and each substation connected.

10 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. 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.

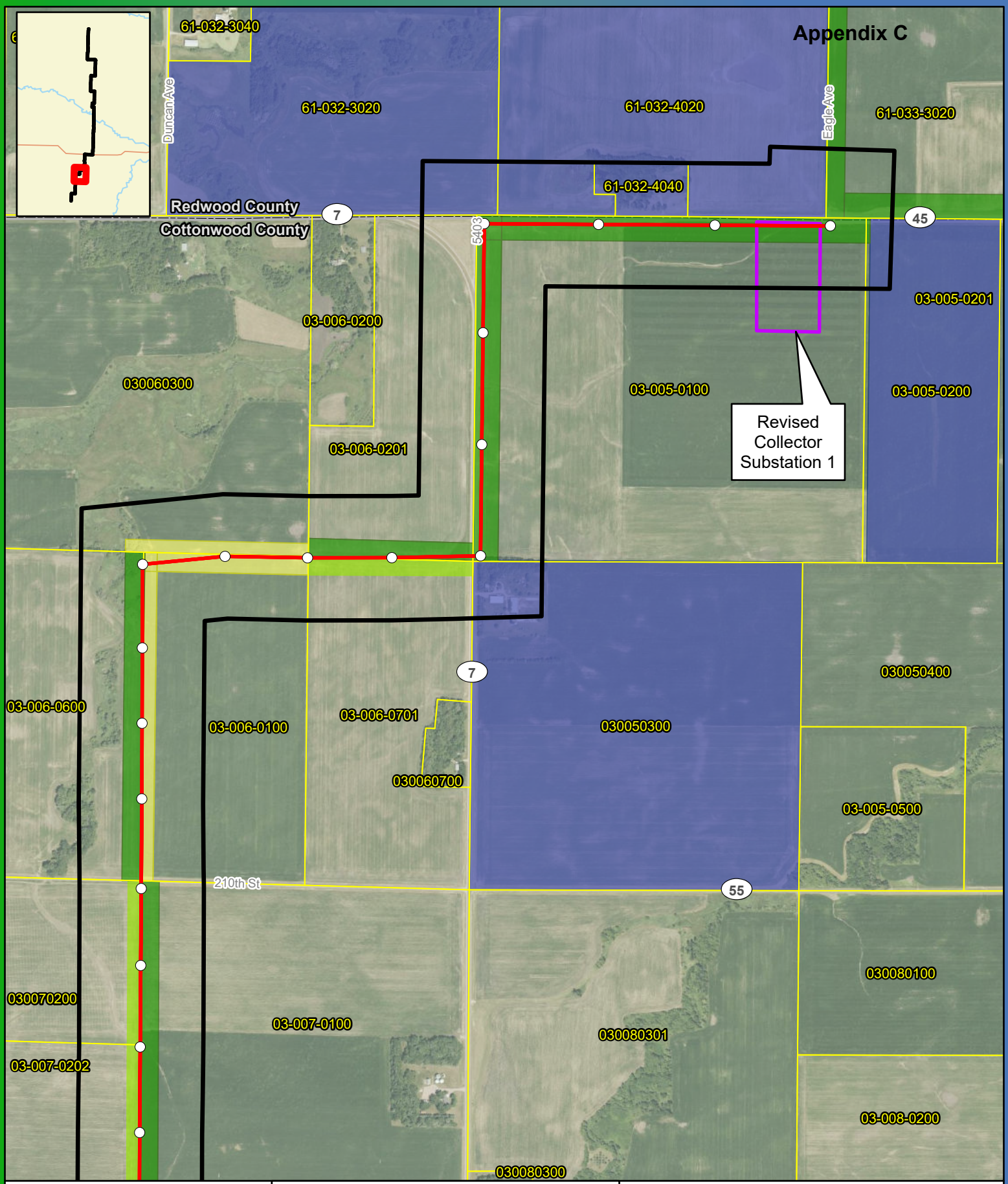
11 TRANSFER OF PERMIT

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.

12 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.



PLUM CREEK WIND FARM

0 500 1,000

Feet

Imagery: MNGeo 2021 Color FSA
Sources: National Grid Renewables, MN Geospatial Commons,

Site Control Map

Plum Creek HVTL Project
MPUC Docket No. IP-6997/TL-18-701

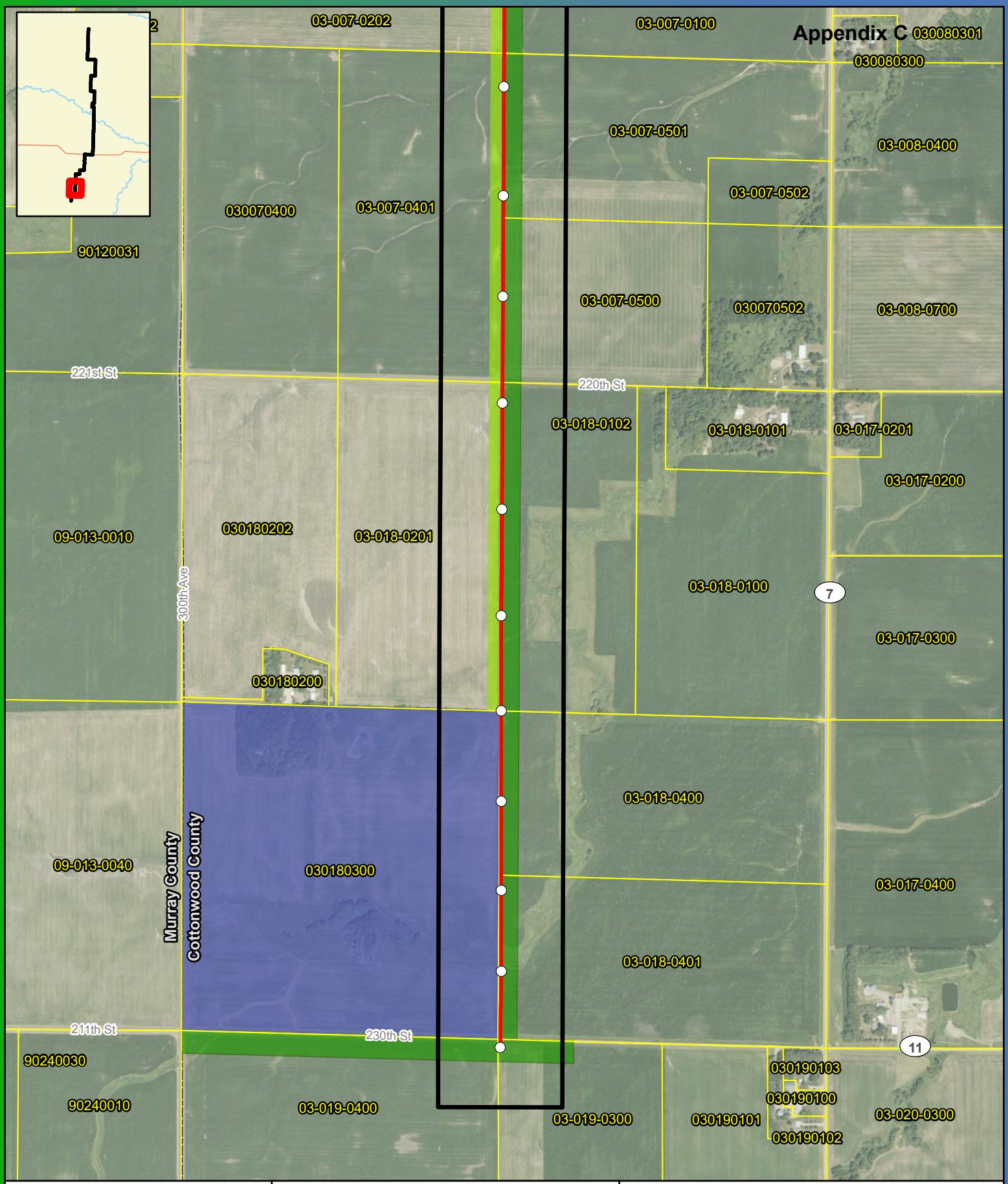
Redwood and Cottonwood Counties, MN

- Proposed Pole
- Proposed Route Segment
- Collector Substation
- Parcel Boundary
- County Boundary

Site Control

- Full Transmission Easement
- Overhang Easement
- Pending Easement
- No Site Control

taylor.roberts Date: 3/12/2025



PLUM CREEK WIND FARM

0 500 1,000

Feet

Imagery: MNGeo 2021 Color FSA
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Site Control Map

Plum Creek HVTL Project
MPUC Docket No. IP-6997/TL-18-701

Redwood and Cottonwood Counties, MN

Page 2 of 2

- Proposed Pole
- Proposed Route Segment
- Parcel Boundary
- County Boundary

Site Control

- Full Transmission Easement
- Overhang Easement
- No Site Control

taylor.roberts Date: 3/12/2025

Appendix D

PLUM CREEK WIND FARM

0 75 150

Feet

Imagery: MNGeo 2021 Color FSA
Sources: National Grid Renewables, MN Geospatial Commons,

Preferred Route Segment in
Township 108N, Range 38W, Section 5, Ann Township

Plum Creek HVTL Project
MPUC Docket No. IP-6997/TL-18-701

Redwood and
Cottonwood Counties, MN

- Proposed Pole
- Residence within 500ft of Segments
- Street View Location and Direction
- Proposed Route Segment
- Proposed Route Right-of-Way
- Parcel Boundary

taylor.roberts Date: 3/11/2025