BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

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

ISSUE DATE: September 23, 2021

DOCKET NO. IP-6997/CN-18-699

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

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

ORDER GRANTING CERTIFICATE OF NEED AND ISSUING SITE PERMIT AND ROUTE PERMIT

PROCEDURAL HISTORY

On November 12, 2019, Plum Creek Wind Farm, LLC (Plum Creek, the Company) filed separate applications for a certificate of need (CN), a site permit, and a route permit to construct the 414 megawatt (MW) Plum Creek Wind Farm Project in Cottonwood, Murray, and Redwood Counties (the Project). The proposed Project would include a large wind energy conversion system (LWECS) and an associated 345-kilovolt (kV) high-voltage transmission line (HVTL).

By December 11, 2019, the Commission had received comments from the Department of Commerce, Division of Energy Resources (DOC DER); Department of Commerce Energy Environmental Review and Analysis unit (DOC EERA); Southwest Regional Development Commission; Laborers' International Union of North America, Minnesota and North Dakota (LIUNA); Plum Creek; the Cottonwood County Board of Commissioners; and several landowners.

On January 30, 2020, the Commission found the applications complete and referred the matter to the Office of Administrative Hearings (OAH) for contested case proceedings.

On June 16, 2020, staff from the Commission and DOC EERA conducted a remote-access public meeting to provide information and receive comments on the appropriate scope for the planned environmental impact statement (EIS). Following the meeting, a public comment period was open through July 7, 2020, to receive comments on the scope of the EIS and the sample site and route permits.

By July 7, 2020, comments were received from Plum Creek, DOC EERA, and several landowners.

On July 21, 2020, DOC EERA filed a proposed preliminary draft site permit and Plum Creek filed a response to the scoping comments.

On July 24, 2020, Plum Creek filed updated modeling data for newly proposed turbine layouts using an additional, larger turbine.

On August 4, 2020, Plum Creek filed an updated proposed preliminary draft site permit reflecting the inclusion of the larger turbines.

On October 30, 2020, the Commission issued an order including a draft site permit. Among other things, the order directed Plum Creek to refile its site permit application with additional data on the potential impact of the newly proposed turbine models and required Alternative Route Segment Blue E to be included in the scope of the EIS.

On August 28, 2020, Plum Creek filed its updated site permit application.

On November 4, 2020, DOC EERA issued the draft EIS.

On February 1, 2021, staff from the Commission and DOC EERA conducted a remote-access public meeting for the draft EIS and draft site permit. Following the meeting, a public comment period was open through February 12, 2021.

On February 11, 2021, Plum Creek filed comments on the draft EIS. Among other issues, Plum Creek indicated that the Project may have an adverse impact to the Common Air Route Surveillance Radar and noted that the Company had entered into negotiations with the North American Aerospace Defense Command (NORAD). Consequently, Plum Creek indicated that commercial operation of the Project would not begin until 2023.

On February 16 and 17, 2021, Administrative Law Judge (ALJ) Jessica A. Palmer-Denig presided over a remote-access public hearing and a remote-access evidentiary hearing. Following the hearings, a public comment period was open through March 10, 2021, to receive comments on the merits of the applications for a certificate of need, site permit, and route permit.

By March 10, 2021, comments were received from DOC EERA; the Department of Natural Resources (DNR); the International Union of Operating Engineers, Local 49 (Local 49); the Clean Energy Organizations (CEOs);[1] LIUNA; the Redwood County Environmental Office, and several landowners.

On March 10, 2021, Plum Creek filed a letter updating the Commission on its request to interconnect its system to the transmission lines operated by the Midcontinent Independent System Operator, Inc. (MISO).

On March 16, 2021, Plum Creek and DOC DER filed initial post-hearing briefs.

[1] The Clean Energy Organizations are a group comprised of Minnesota Center for Environmental Advocacy, Fresh Energy, and Clean Grid Alliance.

On April 6, 2021, Plum Creek and DOC DER filed reply briefs and DOC EERA filed comments.

On April 12, 2021, DOC EERA filed the final EIS.

On May 18, 2021, the ALJ filed the Findings of Fact, Conclusions of Law, and Recommendation (ALJ Report).

On June 2, 2021, Plum Creek, DOC DER, and DOC EERA filed exceptions to the ALJ Report.

On August 12, 2021, the Commission met to consider the matter.

FINDINGS AND CONCLUSIONS

I. Summary of Commission Action

In this order, the Commission will (1) determine that the EIS and the record developed in this matter adequately address the issues identified in the scoping decision, (2) adopt the ALJ Report, (3) grant a certificate of need for the Project, (4) issue a site permit for the Project, (5) issue a route permit for the Project, and (6) require Plum Creek to make annual reports on its charitable activities.

II. The Project

Plum Creek, an independent power producer, requests a certificate of need, site permit, and route permit to build an approximately 414-MW LWECS and an associated 31-mile 345-kilovolt transmission line. The Project would be located in portions of Cottonwood, Murray, and Redwood counties.

The proposed wind facility would consist of 67 to 74 wind turbines ranging from 5.6 to 6.2 MW in size. The Project would include above- or below-ground electric collection and communications lines; an above-ground electric feeder line; two collector substations; four permanent meteorological towers; a sonic or light detection and ranging unit; two aircraft detection lighting system radars; an operations and maintenance building, and new gravel access roads.

The associated 345 kilovolt transmission line would be constructed on single-circuit monopole structures within a 150-foot right-of-way and would connect the wind facility to the existing Brookings-to-Hampton 345-kilovolt transmission line via a new switching station.

For the proposed transmission line, Plum Creek identified four route segments comprising two distinct routes for the proposed transmission line. The Green and Yellow segments are alternative routes to connect Collector Substation 1 with Collector Substation 2. The Blue and Red segments are alternative routes to connect Collector Substation 1 with the Switching Station. In addition, the Blue and Red segments each included an alternative route segment to be evaluated in the EIS: the Alternative Route Segment Blue E and the Cottonwood River Alternative Alignment, respectively.

III. The ALJ Report

A. The ALJ's Recommendation

The ALJ issued a report detailing the proceedings, the evidence in the record, the arguments of parties and commenters, and the various issues raised and discussed in the process of evaluating the need for the Project and developing the site and route permits.

As discussed further in each section below, the ALJ recommended that the Commission issue a certificate of need, site permit, and route permit to Plum Creek to construct and operate the up to 414 MW large wind energy conversion system and 345 kV HVTL in Cottonwood, Murray, and Redwood Counties, Minnesota, with certain additional conditions related to the site permit.

B. Commission Action

The Commission has examined and considered the record, the ALJ Report, and the exceptions to the ALJ Report. The Commission finds that the report was well-reasoned and thorough. Based on the record, the Commission concurs with the ALJ's findings of fact, conclusions of law, and recommendation, and will adopt them except to the extent they are inconsistent with the Commission's decisions on the site permit and route permit as discussed below.

IV. Environmental Impact Statement

A. Legal Standard

The Department of Commerce must prepare an EIS for a proposed HVTL.[2] This duty is carried out by DOC EERA. As part of this process, DOC EERA must hold public meetings and solicit public comments on the scope of the EIS.[3] Through the scoping process, DOC EERA and parties identify potentially significant issues and alternatives that may require analysis.[4] The scoping decision must cover the issues to be addressed in the EIS, any alternative sites or routes to be analyzed in the EIS, and the schedule for completion of the EIS.[5]

Once the final EIS is issued, the Commission must determine whether it is adequate. The final EIS is adequate if it:

- addresses the issues and alternatives raised in scoping to a reasonable extent considering the availability of information and the time limitations for considering the permit application;
- provides responses to the timely substantive comments received during the draft environmental impact statement review process; and

[2] Minn. R. 7850.2500, subp. 1.

[3] *Id.*, at subp. 2.

[4] *Id.*, at subp. 4.

[5] *Id.*

- was prepared in compliance with the procedures in Minn. R. 7850.1000 to 7850.5600.[6]

Under Minn. R. 7849.1900, subp. 2, the Commission has authority to conduct joint proceedings on a certificate of need and a route/site permit application, following the procedures of Minn. R. 7850.1000 to 7850.5600. This may include combining environmental review by preparing an Environmental Impact Statement addressing both applications (in lieu of a separate environmental report on the certificate of need application under Minn. R. 7849.1200). In the present docket, the Commission authorized combined environmental review of the certificate of need, site permit, and route permit through an EIS.[7]

B. Content of the Scoping Decision and Environmental Impact Statement

DOC EERA's scoping decision lists the issues to be addressed in the EIS, including impacts on human settlements, solid and hazardous waste, air quality, agriculture, and the natural environment.

The scoping decision also identifies several alternatives to the LWECS project, the HVTL, and the HVTL route. As an alternative to the LWECS, the decision considers a generic 414 MW wind farm, a generic 414 MW solar farm, and a no-build alternative. As an alternative to the HVTL, the decision considers a transmission line of a different size or type, alternative endpoints, and a no-build alternative. The decision also analyzes alternative HVTL routes, including the blue route, red route, yellow route, green route, the Cottonwood River Alternative Alignment, and the Blue E Alternative Route Segment.

The final EIS contains thorough analyses of the potential Project impacts identified in the scoping decision and possible mitigation measures. Additionally, it analyzes the impacts, feasibility, and availability of the alternatives identified, including comparisons between each alternative and the Project as proposed.

Comparing the LWECS to a generic 414 MW wind farm sited elsewhere in Minnesota, the EIS concluded that a generic wind farm would likely have similar impacts, but access to transmission interconnection could be a constraint for the generic alternative. The EIS concluded that a solar farm would have the potential to result in greater loss of wetlands, wildlife habitat, vegetation, and croplands due to the larger footprint and fenced area associated with a solar farm. However, a solar farm would produce less noise during operation. With respect to the no-build alternative, the EIS concluded that opting to build neither this Project nor any alternative could result in adverse environmental and public-health impacts if non-renewable sources replace the proposed wind energy, could reduce the state's ability to meet its renewable energy objectives, and could result in the loss of economic benefits in the Project area.

Comparing the proposed HVTL to a transmission line of a different size or type, the EIS concluded that, based on the required amperage for the Project, a transmission line of at least 230 kV would be required. Plum Creek could build a 230 kV transmission line instead of the 345 kV transmission line proposed, but since there are no existing 230 kV facilities in the area, a

[6] Minn. R. 7850.2500, subp. 10.

[7] Order Accepting Applications, Establishing Procedural Framework, Varying Rules, and Notice of and Order for Hearing, at 8 (January 30, 2020).

230 kV transmission line would require transformation to 345 kV for interconnection. Furthermore, the EIS concluded that a 345 kV transmission line would be more reliable and would require less land than a 230 kV alternative. The EIS also concluded that using a direct current transmission line instead of the proposed alternating current transmission line would not be feasible. The EIS concluded that alternative transmission line endpoints would be further away from the Project and would be less efficient. Finally, the EIS concluded that the no-build alternative would not meet the need for the Project; if no transmission line were built, the generation would have no outlet and the wind farm would not be financially viable.

Plum Creek proposed either the blue or red route to connect the wind farm collector substation 1 to the grid, and either the yellow or green route to connect the wind farm collector substation 2 to collector substation 1 within the wind farm. The Cottonwood River Alternative Alignment is an alternative to a portion of the red route. The Blue E Alternative Route Segment is an alternative to a portion of the blue route.

The EIS determined that, between the blue and red routes, the blue route would cross fewer acres of wetlands and fewer sites of biological significance; the red route would make relatively better use of existing road infrastructure. Between the yellow and green routes, the yellow route would include fewer acres of cultivated crop land within the right of way and would better use existing road infrastructure; the green route would have fewer impacts on wetlands.

The Cottonwood River Alternative Alignment was anticipated to create a number of incremental increases in impacts compared to the corresponding portion of the proposed red route, including impacts on farmland, residences, river crossings, and sites of biological significance. The Blue E Alternative Route Segment was anticipated to create fewer impacts relative to the corresponding portion of the proposed blue route, including installation of fewer poles and proximity to fewer residences.

C. Comments

Plum Creek commented on the draft EIS and provided a number of minor corrections. Plum Creek also stated that it had entered into discussions with NORAD regarding mitigation that may be needed to avoid adverse impacts to air radar systems; consequently, Plum Creek noted that the anticipated commercial operation date for the Project would be in 2023 rather than 2022 as originally planned.

Additionally, Plum Creek recommended that the final EIS contain a statement that the Company "reserves the right to evaluate whether the use of eminent domain is appropriate under Minn. Stat. Ch. 117, based on certain circumstances."[8]

Regarding the adequacy of the EIS, the ALJ concluded that DOC EERA conducted an appropriate environmental analysis of the Project for purposes of the certificate of need, site permit, and route permit proceedings pursuant to Minn. R. 7849.1200 and 7850.2500; the final EIS adequately addresses the issues and alternatives identified in the EIS Scoping Decision and responds to all substantive comments received on the draft EIS; and (iii) the Commission and DOC EERA followed the process requirements under Minn. R. 7850.1000 to 7850.5600.

[8] Plum Creek Wind Farm, Commenter Letter on the DEIS (February 11, 2021).

D. Commission Action

The Commission has reviewed the EIS and finds that it adequately addresses the issues and alternatives raised in scoping, provides responses to substantive comments received on the draft EIS, and was prepared in compliance with Minn. R. 7850.1000 to 7850.5600.

V. Certificate of Need

A. Legal Standard

No large energy facility may be sited or constructed in Minnesota without a certificate of need.[9] An electric power generating plant with at least 50-megawatt capacity is a large energy facility.[10] The proposed Project falls within this definition and, therefore, requires a certificate of need.

In assessing the need for a large energy facility, the Commission evaluates the 12 factors listed in Minn. Stat. § 216B.243, subd. 3. Statutory factors include the accuracy of the demand forecasts supporting the need for the facility, the facility's relationship to overall state energy needs, and the facility's benefits to environmental quality and energy reliability.

Under Minn. R. 7849.0120, the Commission must issue a certificate of need if it determines:

A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states . . .;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record . . .;

C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health . . .; and

D. the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

The rule sets out several sub-factors to consider in evaluating factors A through C.[11]

B. DOC DER's Analysis and Recommendation

DOC DER filed comments including a thorough analysis of the need for the Project. DOC DER recommended that the Commission find that Plum Creek has failed to prove by the preponderance of the evidence that there is need for the energy produced by the Project at this time.

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[9] Minn. Stat. § 216B.243, subd. 2.

[10] Minn. Stat. § 216B.2421, subd. 2(1).

[11] Minn. R. 7849.0120.

1. Future Adequacy, Reliability, or Efficiency of Energy Supply

DOC DER argued that, to demonstrate demand for the Project, Plum Creek had relied heavily on generalized statements of existing renewable energy demand such as general state policy goals, proposed future legislation, and corporate decarbonization goals. DOC DER stated that these did not provide sufficient detail to determine whether actual demand for the Project exists. DOC DER noted that there was no power purchase agreement (PPA), IRP, or biennial transmission project report to demonstrate demand for the Project.

For the remaining factors in part A of the CN criteria, DOC DER concluded that Plum Creek had shown that these factors either favor or do not weigh against granting a CN. In particular, DOC DER noted that the large size of the proposed wind farm would make efficient use of resources by taking advantage of economies of scale; furthermore, using a higher-voltage 345 kV generation tie-line would reduce line losses and avoid the need to modify interconnection facilities.

2. Reasonable and Prudent Alternatives

DOC DER agreed with Plum Creek's analysis of the appropriateness of the size, type, and timing of the proposed facility compared to alternatives. Specifically, DOC DER again noted that the large size of the wind farm would take advantage of economies of scale, and the timing of construction would likely take advantage of federal tax incentives. Additionally, DOC DER found that the voltage of the HVTL was appropriate, noting that a higher-voltage alternative would be more costly, and a lower-voltage alternative would be insufficient for the Project or would require costly facility modifications.

DOC DER noted that the proposed Project costs compared favorably to the alternatives under consideration, since wind energy is one of the lowest-cost forms of power. Additionally, DOC DER stated that the anticipated reliability of the Project would be consistent with other reasonable renewable alternatives.

3. Environmental and Societal Benefits

DOC DER took no position on part C of the CN criteria, but stated that the Project would generally provide societal benefits to the state, including both short- and long-term jobs and local tax base increases. DOC DER pointed to the EIS for additional information about the Project's environmental impact.

4. Compliance with Existing Policies, Rules, and Regulations

DOC DER also took no position on part D of the CN criteria, but noted that nothing in the record at the time its comments were filed showed that Plum Creek would be unable to comply with applicable policies, rules, and regulations.

C. Additional Comments

The CEOs commented in support of a CN for the Project, disagreeing with DOC DER's objection to the demand forecast data. The CEOs argued that the law requires the Commission to "evaluate" —among other factors— "the accuracy of the long-range energy demand forecasts on

which the necessity for the facility is based."[12] Therefore, the CEOs contended, there is no specific requirement to base this evaluation on PPAs, IRPs, renewable energy standards (RES), or any other particular data. Rather, the Commission is only required to broadly evaluate long-range *forecasts*—which the CEOs define as "an estimate or prediction, based on an analysis of available data."[13] Furthermore, the CEOs pointed out that the statute requires the Commission to evaluate *long-range* energy demand forecasts, meaning that the Commission can and should look beyond immediate demand.

The CEOs likewise noted that no applicable Minnesota rules require the Commission to consider a PPA, IRP, or RES, and argued that it would in fact be unreasonable to expect Plum Creek to have a signed PPA at this point in the process. Rather, the CEOs stated that the most applicable rule merely requires the Commission to consider the applicant's forecast "for the type of energy that would be supplied by the proposed facility."[14] Therefore, the CEOs contended, the Commission is only required to consider the forecast of demand for wind energy in the region. The CEOs argued that the materials presented by Plum Creek did show a strong forecast for wind energy demand in the state and region, including specific, detailed data on increasing customer demand and strong state policy goals.

LIUNA also commented in favor of granting a CN for the Project, noting that one of DOC DER's witnesses had testified that the applicable statutes do not specify the type of evidence that may be considered by the Commission. Furthermore, LIUNA pointed out that DOC DER's witness acknowledged that although there was no PPA yet finalized, the facility would not be built without a PPA in place and ratepayers would not bear any financial risk associated with the facility. LIUNA emphasized the Project's benefits, including local jobs and environmental impacts.

D. The ALJ's Recommendation

The ALJ noted that analysis of the CN factors was the greatest area of dispute in this matter. DOC DER asserted that Plum Creek did not meet its burden under Minn. R. 7849.0120(A) to show that demand for the Project exists. However, the ALJ disagreed and ultimately concluded that Plum Creek had satisfied all the criteria set forth in Minn. Stat. § 216B.243 and Minn. R. 7849.0120.

Concerning Minn. R. 7849.0120(A)(1), DOC DER argued that Plum Creek did not use reliable information from sources such as approved IRPs, PPAs, and transmission reports to establish demand. Additionally, DOC DER argued that Plum Creek had relied heavily on Minnesota's RES goals to demonstrate need for the Project; however, DOC DER contended that the RES is of diminished relevance in a demand analysis because utilities are already meeting or exceeding those goals. Finally, DOC DER argued that utilities' stated goals to purchase additional renewable energy do not establish demand for a project. For these reasons, DOC DER argued against granting a certificate of need.

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[12] Minn. Stat. § 216B.243, subd. 3(1).

[13] CEO comments, at 3 (March 10, 2021).

[14] Minn. R. 7849.0120, item A(1).

The ALJ disagreed with DOC DER and concluded that Plum Creek had satisfied Minn. R. 7849.0120(A)(1). The ALJ found that the sources relied on by Plum Creek to meet its burden under Minn. R. 7849.0120(A)(1), such as Commission filings and data from MISO, are credible alternative sources of information. In support of this conclusion, the ALJ noted that Minnesota and other states have evaluated and enacted policies to increase renewable energy goals and reduce greenhouse gas emissions, the Commission and utilities have continuously made efforts to set renewable energy goals above the requirements of the RES, and utilities have found that there is market demand for renewable energy. Furthermore, the ALJ stated that current IRPs may not adequately reflect this rapidly changing environment and developing picture of demand for renewable energy generation. Additionally, the ALJ noted that a showing of immediate need is not required, and an absence of a PPA at this stage is not indicative of a lack of demand. Finally, the ALJ stated that a site permit would prevent excess projects from being built because a mechanism for sale of the power must be in place before construction can begin.

DOC DER also asserted that the burden of providing evidence to establish the existence and characteristics of more prudent alternatives should fall on Plum Creek. DOC DER pointed out that the Commission's certificate of need rules for oil and gas pipelines specify that alternatives must be demonstrated by "parties or persons other than the applicant," but the certificate of need rules for transmission lines do not make any such reference to other parties or persons. Therefore, DOC DER contended, in transmission line dockets, the burden of providing evidence to demonstrate the prudence of alternatives rests with the applicant.

The ALJ disagreed with DOC DER, finding that the proponent of any alternatives—not the applicant—should bear the burden to establish that a more reasonable and prudent alternative exists.

Consequently, the ALJ recommended that the Commission issue a certificate of need with no conditions.

E. Commission Action

The Commission has evaluated the considerations and criteria set forth in Minn. Stat. § 216B.243, subd. 3 and Minn. R. 7849.0120, considering the entire record, including the EIS, comments, and the ALJ Report. As discussed below, the Commission concludes that the Project meets the applicable criteria and that Plum Creek has justified the need for the Project. Therefore, the Commission will grant a certificate of need for the 414 MW Plum Creek LWECS and associated 345-kilovolt HVTL.

1. Future Adequacy, Reliability, or Efficiency of Energy Supply

The Commission finds that the probable result of denial of a certificate of need for the Project would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the people of Minnesota and neighboring states, satisfying Minn. R. 7849.0120(A).

The Commission agrees with the ALJ's analysis that Plum Creek's proposed Project will provide a cost-effective source of energy to meet the reasonably anticipated energy needs of consumers in the state and region, while contributing to increases in renewable energy use consistent with public policy goals. It has not been demonstrated that the anticipated demand could be met in a

more reasonable or cost-effective manner by any combination of existing facilities or planned facilities not requiring certificates of need.

Plum Creek did not use data from a PPA, IRP, or biennial transmission project report to demonstrate demand for the Project. However, under Minnesota statute and rules, there is no requirement that Plum Creek present a PPA, IRP, biennial transmission project report, or any other specific data to demonstrate demand. The Legislature contemplated that independent power producers would construct such projects and did not require them to enter into power purchase agreements before obtaining a certificate of need. Rather, the Commission may evaluate demand using any data it finds persuasive, on a case-by-case basis. Furthermore, because Plum Creek is an independent power producer and not a utility, the Commission granted it certain variances to provide alternative data when more appropriate,[15] and the data provided is sufficient to demonstrate demand.

In this case, Plum Creek showed that utilities and commercial and industrial customers have reported strong clean energy goals above and beyond RES requirements, and additional renewable energy sources will be needed to meet that demand. Furthermore, utilities plan to retire coal-based generating units across the region in the coming years, and renewable energy sources are expected to fill some of the resulting capacity needs. These established goals and plans are strong evidence of a utility's intention for future energy development and can be used to demonstrate demand, especially when consistent with stated public policy goals.

If the Commission were to deny a CN for the Project, adverse effects include the risk that customers would not be able to access clean, efficient, and cost-efficient energy that also meets current and future renewable energy goals and obligations; the loss of local jobs and tax benefits; and the potential for power to instead be obtained through non-renewable sources if the Project is not built.

2. Reasonable and Prudent Alternatives

The Commission finds that a more reasonable and prudent alternative to the Project has not been demonstrated by a preponderance of the evidence in the record under Minn. R. 7849.0120(B).

The Commission agrees with DOC DER's and the ALJ's analyses concluding that the type, size, and timing of the Project are reasonable. Additionally, none of the alternatives evaluated in the EIS, application, or other record materials have been demonstrated to be more reasonable and prudent than the Project as proposed by Plum Creek.

The Commission's rules on certificates of need for transmission lines simply state that a certificate of need must be granted to an applicant if, among other things, "a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record," considering various factors.[16] The statute does not specify who must provide the necessary evidence; in this case, DOC DER noted that Plum Creek provided sufficient information.

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[15] Order (January 17, 2019).

[16] Minn. R. 7849.0120(B).

The ALJ's recommendation was based on a thorough evaluation of the entire record, including each of the alternatives. The Commission is satisfied that the record contains sufficient information with which to evaluate each alternative and come to a well-reasoned decision on the reasonableness and prudence of those alternatives compared to Plum Creek's proposal.

3. Environmental and Societal Benefits

By a preponderance of the evidence in the record, the Commission finds that the Project will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, satisfying Minn. R. 7849.0120(C).

The EIS and ALJ Report demonstrate that the Project will provide low-cost wind energy that will help utilities and customers meet renewable-energy goals and emissions-reduction objectives. The ALJ found that the Project would be a cost-effective and efficient way to meet increasing demand for renewable energy. The Project is also likely to benefit the local economy with jobs, taxes, lease payments, and local spending. Conditions in the site permit discussed below will further ensure the Project's compatibility with protecting the natural and human environments.

4. Compliance with Existing Policies, Rules, and Regulations

The Commission finds that the record does not demonstrate that the design, construction, or operation of the proposed Project will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments, satisfying Minn. R. 7849.0120(D).

A number of commenters, including state agencies and local governments, participated in these dockets and their comments did not identify any concerns regarding the applicant's efforts to obtain additional permits or meet other applicable requirements. Further, the consultation necessary for Plum Creek to obtain all requisite permits and approvals from various authorities will help ensure compliance with applicable policies, rules, and regulations.

VI. Site Permit

A. Legal Standard

Anyone seeking to construct a large wind energy conversion system must obtain a site permit from the Commission.[17] The proposed Project is a LWECS as defined by the statute because it is a wind energy conversion system having 5-MW capacity or more.[18] Therefore, a site permit is needed.

The Commission will not issue a site permit for a LWECS unless it determines that the proposed Project is compatible with environmental preservation, sustainable development, and the efficient use of resources, and the applicant has complied with chapter 7854 of the Commission's rules.[19] When deciding whether to issue a site permit, the Commission is guided by the state policy goals and the 12 considerations set forth in Minn. Stat. § 216E.03, subd. 7.

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[17] Minn. Stat. § 216F.04(a); Minn. R. 7854.0300, subp. 1.

[18] Minn. Stat. § 216F.01, subd. 2.

[19] Minn. R. 7854.1000; *see* Minn. Stat. § 216F.03.

B. Comments

The Commission received a number of comments relating to the site permit.

LIUNA and Local 49 expressed support for the Project based on its economic and environmental benefits. These organizations emphasized that the Project would benefit local construction workers by creating jobs with family-supporting wages and spurring economic recovery from the recession caused by the COVID-19 pandemic.

A number of comments on the site permit were received from landowners and members of the public. Citizens raised concerns including impacts on bald eagles, decommissioning procedures, public health and safety, noise, and compliance with environmental requirements. A number of citizens also expressed general support for the Project.

The Redwood County Environmental Office raised concerns about potential damage to roads or public drainage tiles that could result from construction.

The DNR noted that the Henslow's sparrow, a state-listed endangered species, was recorded within one mile of the Project boundary, and recommended a site permit condition that would reduce potential impacts on this species.

The ALJ Report concluded that Plum Creek had satisfied all the criteria set forth in Minn. Stat. Ch. 216F and Minn. R. Ch. 7854 and recommended that the Commission issue a site permit with certain additional conditions related to post-construction bird and bat fatality monitoring, Henslow's sparrow requirements, archaeological surveys, other permit requirements, road use agreements, and a community fund.

Plum Creek proposed adding language to the site permit at section 5.6.2 to clarify that proof of other permits is only required for the portion of the Project undergoing construction. DOC EERA disagreed, stating that this modification was unnecessary because phased construction regularly occurs under the standard permit language. The ALJ agreed with DOC EERA.

C. Commission Action

Based on a careful consideration of the record and the site-permit criteria of Minn. R. 7854.1000 and Minn. Stat. § 216E.03, the Commission concludes that all procedural requirements have been met and that the Project, subject to the permit conditions discussed below, is compatible with environmental preservation, sustainable development, and the efficient use of resources. Accordingly, the Commission will issue the site permit attached to this order.

As detailed in the ALJ Report, the proposed site permit contains reasonable conditions that will mitigate potential impacts and address concerns raised by parties, agencies, and members of the public in the course of these proceedings. Among these are conditions requiring coordination with landowners and various state and local authorities.

The Commission will include several items in the site permit, in addition to the draft site permit language. First, Plum Creek will be required to obtain necessary aviation permits as applicable at

least 14 days before the pre-operation meeting.[20] This timing will ensure that the Project does not interfere with aviation routes or compromise flight safety.

Plum Creek will also be required to develop a project-wide Shadow Flicker Management Plan, to be filed at least 14 days prior to the pre-operation meeting. Generally, Plum Creek should endeavor to reduce shadow flicker exposure to fewer than 30 hours per year for all occupied residences. To the extent this is not practicable, Plum Creek must discuss alternative mitigations with landowners and file either agreed-upon mitigations or waivers for impacted individual residences. The Commission believes that it is preferable to work collaboratively with landowners to address potential shadow flicker issues up front and ensure that landowners fully understand the agreements they are making. This requirement is intended to help improve landowner satisfaction and reduce the number of times Plum Creek must return to the Commission with disputes.

Finally, permit section 5.6.2 will be modified as stated on page 12 of the staff briefing papers, to clarify that proof of all necessary permits is required only for the portion of the Project undergoing construction. Even if phased construction has occurred in other projects under the standard permit language, it is reasonable to clarify this point and ensure that the permit language accurately reflects the anticipated construction timeline. The Commission is sympathetic to Plum Creek's point that construction of a large project necessarily requires many different permits that are specific to smaller geographic areas. In order to reduce potential construction delays, the Commission will allow Plum Creek to obtain permits relevant to each portion of the Project as that portion arises, rather than requiring every permit to be finalized at the outset of Project construction. However, all necessary permits must be obtained before relevant construction can begin.

VII. Route Permit

A. Legal Standard

No one may site or construct a high-voltage transmission line in Minnesota without obtaining a route permit from the Commission.[21] The transmission line associated with the proposed Project is defined as a high-voltage transmission line under Minn. Stat. § 216E.01, subd. 4, because it is a conductor of electric energy designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length. Therefore, a route permit is needed.

The Commission's route-permit determinations are guided by Minnesota's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land-use conflicts, and ensure the state's electric-energy security through efficient, cost-effective power supply and transmission infrastructure.[22]

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[20] The site permit, Section 10.2, directs the permittee to meet with Commission staff and the Department of Commerce before commercial operations begin to coordinate field monitoring of the Project's operations.

[21] Minn. Stat. § 216E.03, subd. 2.

[22] Minn. Stat. § 216E.03, subd. 7(a).

Minn. Stat. § 216E.03 contains a non-exclusive list of factors for the Commission to consider in evaluating a route permit:

1. research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;
2. environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
3. the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
4. the potential for beneficial uses of waste energy from proposed large electric power generating plants;
5. the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
6. adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
7. alternatives to the applicant's proposed site or route proposed pursuant to [Minn. Stat. § 216E.03] subdivisions 1 and 2;
8. potential routes that would use or parallel existing railroad and highway rights-of-way;
9. governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
10. the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;
11. irreversible and irretrievable commitments of resources should the proposed site or route be approved; and
12. when appropriate, consideration of problems raised by other state and federal agencies and local entities.[23]

When deciding whether to issue a permit for a high-voltage transmission line, the Commission must also consider the factors set forth in Minn. R. 7850.4100:

A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;

B. effects on public health and safety;

C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;

[23] *Id.*, at subd. 7(b).

D. effects on archaeological and historic resources;

E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;

F. effects on rare and unique natural resources;

G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;

H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;

I. use of existing large electric power generating plant sites;

J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;

K. electrical system reliability;

L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;

M. adverse human and natural environmental effects which cannot be avoided; and

N. irreversible and irretrievable commitments of resources.

B. Comments

In its Order Issuing Draft Site Permit,[24] the Commission directed DOC EERA to include the Blue E Alternative Route Segment in the scope of the EIS. At that time, the Commission recognized that Plum Creek had not reached agreement with an affected landowner on the use of land included in that segment, but determined that consideration of the Blue E segment would ensure a thorough consideration of impacts and alternatives.

Plum Creek opposed the Blue E segment, arguing that it was unworkable because the Company had not been able to reach agreement with the affected landowner. Plum Creek stated that it preferred to complete the Project with landowner support and its goal was to find a route that everyone supports. However, Plum Creek noted that it had difficulty in contacting and negotiating with one landowner despite making several attempts; therefore, the Company preferred to use the Blue route without the Blue E alternative segment to avoid this landowner's property, although this would be a longer route.

At the Commission meeting, DOC EERA supported the Blue E segment, stating that the Blue E segment was the least impactful route.

C. ALJ Report

Regarding the route permit, the ALJ concluded that Plum Creek had satisfied all the criteria set forth in Minn. Stat. Ch. 216E and Minn. R. Ch. 7850. Based on consideration of all routing factors set forth in Minn. Stat. § 216E.03, subd. 7, and Minn. R. 7850.4100, the ALJ concluded

[24] Order Issuing Draft Site Permit, at 2-3 (October 30, 2020).

that the Green-Blue Route was the best route for the Project and recommended that the Commission issue a permit for that route with no additional conditions. Regarding the Blue E Alternative Route Segment, the ALJ noted that although this route segment is shorter than the corresponding portion of the blue route, it impacts one residence and lacks landowner support.

D. Commission Action

The Commission will issue a route permit for the 345-kilovolt high-voltage transmission line along Plum Creek's Green-Blue Route as recommended in the ALJ Report, except that the Blue E Alternative Route Segment will be the designated route. The Commission will also widen the route width at the Blue E segment to give Plum Creek additional flexibility on pole placement.

The Commission respectfully disagrees with the ALJ's recommendation to authorize use of the Blue Route as proposed, instead of the Blue E Alternative Route Segment.

The Commission recognizes that Plum Creek has not yet been successful in making meaningful contact and negotiating with one landowner along this route. However, the factors in Minn. Stat. § 216E.03 and Minn. R. 7850.4100 overall weigh in favor of the Blue E segment. The Blue Route as proposed is longer than the Blue E segment; requires more poles, including some inaccessible from public rights of way (making this route less reliable and more costly); has more impacts on agriculture and the natural environment; and makes less efficient use of the existing right of way. One landowner's seeming disinterest in the Project does not outweigh the public interest in these numerous other factors.

Plum Creek stated at the Commission meeting that it has attempted to contact the landowner via email and phone, but he has not responded. However, based on the record, it is unclear how many attempts the Company has made, and how strenuous these attempts have been. It is also unclear whether Plum Creek has attempted to contact the parent company of the farm in question. It seems to the Commission that there are a number of additional steps that should be taken before Plum Creek concludes that it is impossible to obtain an easement for the Blue E segment.

In its comments on the draft EIS, Plum Creek stated that it "reserves the right to evaluate whether the use of eminent domain is appropriate under Minn. Stat. Ch. 117."[25] Plum Creek has not yet conducted this evaluation, to the Commission's knowledge. Although the question of whether an independent power producer like Plum Creek has the power of eminent domain is not settled under Minnesota law, the Commission believes that—as suggested by Plum Creek—it is an avenue that the Company should explore before concluding that it is impossible to obtain the necessary easements for the route that is otherwise in the public interest.

If, after making these additional efforts, Plum Creek is not able to construct along the designated route, the Company must file a minor alteration with the Commission, including analysis of the factors identified in Minn. R. 7850.4100 and an explanation of its efforts to construct along the designated route.

[25] Plum Creek Wind Farm—Comment Letter on the DEIS, at 1-2 (February 11, 2021).

VIII. Plum Creek Community Fund

In its proposal, Plum Creek stated that it planned to establish the Plum Creek Community Fund for the purpose of engaging in and contributing money to support charitable activities within the communities near the Project. The Company explained that this would ensure that the entire surrounding community, not just participating landowners, would see benefits from the Project's construction and operation.

Commenters recommended that the Commission include language in its order or the site permit requiring compliance filings describing the activities of the community fund. However, Plum Creek expressed concern that if the community fund were required by the Commission, this would jeopardize its charitable status.

Although the Commission will not specifically require Plum Creek to establish its planned community fund, the Commission appreciates the Company's strong and explicit commitment to the communities surrounding the Project. The Commission will direct the Company to report annually on contributions and distributions of the Plum Creek Community Fund.

ORDER

1. The Commission approves and adopts the attached ALJ Report.
2. The Commission determines that the final EIS is adequate, in that it: (i) addresses the issues and alternatives raised in scoping; (ii) provides responses to substantive comments received on the draft EIS, and (iii) was prepared in compliance with Minn. R. 7850.1000 to 7850.5600.
3. The Commission grants a certificate of need for the 414-megawatt Plum Creek large wind energy conversion system and associated 345-kilovolt high-voltage transmission line.
4. The Commission issues a site permit for the 414-megawatt Plum Creek large wind energy conversion system with the additional conditions recommended in the ALJ Report with the following modifications and additions:
    a. The permittee is required to obtain necessary aviation permits for structures that are considered to be an obstruction to safety of flight from MnDOT Aeronautics and the FAA as applicable at least 14 days prior to the pre-operation meeting.
    b. The Permittee is required to 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 plan must be filed at least 14 days prior to the pre-operation meeting. As an alternative to this 30-hour requirement, the permittee may file proof of specific alternative agreed on mitigations or waiver for impacted individual residences.
    c. Permit Section 5.6.2 is modified as proposed by staff on page 12 of the briefing papers.
5. The Commission issues a route permit for the 345-kilovolt high-voltage transmission line along Plum Creek's Green-Blue Route as recommended in the ALJ Report with the exception that Blue Segment E continuing along County Road 10 north of 160th Street

shall be the designated route. The route width at this segment is expanded to the West to encompass the proposed blue route segment that went west along 160th Street for half-mile, then north along a private drive one quarter of a mile and then finally headed back east on the field line to County Road 10. If the applicant is not able to construct along the designated route, it shall file a minor alteration pursuant to Minn. R. 7850.4800 with supporting analysis taking into account the factors identified in Minn. R. 7850.4100, and an explanation of its efforts to construct along the designated route.

6. Plum Creek is required to report annually to the Commission regarding the activities (i.e., contributions and distributions) of the Plum Creek Community Fund.

7. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Will Seuffert
Executive Secretary

This document can be made available in alternative formats (e.g., large print or audio) by calling 651.296.0406 (voice). Persons with hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

SITE PERMIT FOR A
LARGE WIND ENERGY CONVERSION SYSTEM

IN
COTTONWOOD, MURRAY, AND REDWOOD COUNTIES

ISSUED TO
PLUM CREEK WIND FARM, LLC

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

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

Plum Creek Wind Farm, LLC

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

This site permit shall expire thirty (30) years from the date of this approval.

Approved and adopted this 23rd day of September, 2021

BY ORDER OF THE COMMISSION

Will Seuffert,
Executive Secretary

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

2.1 Associated Facilities

Associated facilities for the project will include the following:

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

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

2.2 Project Location

The project is located in the following:

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

3 DESIGNATED SITE

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

3.1 Turbine Layout

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

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

4 SETBACKS AND SITE LAYOUT RESTRICTIONS

4.1 Wind Access Buffer

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

4.2 Residences

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

4.3 Noise

The wind turbine towers shall be placed such that the Permittee shall, at all times, comply with noise standards established by the MPCA as of the date of this permit and at all appropriate locations. The noise standards are found in Minnesota Rules Chapter 7030. Turbine operation shall be modified, or turbines shall be removed from service if necessary to comply with these noise standards. The Permittee or its contractor may install and operate turbines as close as the minimum setback required in this permit, but in all cases shall comply with MPCA noise standards. The Permittee shall be required to comply with this condition with respect to all homes or other receptors in place as of the time of construction, but not with respect to such receptors built after construction of the towers.

4.4 Roads

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

4.5 Public Lands

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

4.6 Wetlands

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

4.7 Native Prairie

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

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

4.8 Sand and Gravel Operations

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

4.9 Wind Turbine Towers

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

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

4.10 Turbine Spacing

The turbine towers shall be constructed within the site boundary as shown on the site maps. The turbine towers shall be spaced no closer than three rotor diameters in the non-prevailing wind directions and five rotor diameters on the prevailing wind directions. If required, up to 20 percent of the towers may be sited closer than the above spacing, but the Permittee shall minimize the need to site the turbine towers closer.

4.11 Meteorological Towers

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

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

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

4.12 Aviation

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

4.13 Footprint Minimization

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

5 GENERAL CONDITIONS

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

5.1 Permit Distribution

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

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

5.2 Access to Property

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

5.3 Construction and Operation Practices

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

5.3.1 Field Representative

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

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

5.3.2 Site Manager

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

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

5.3.3 Employee Training and Education of Permit Terms and Conditions

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

5.3.4 Public Services and Public Utilities

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

5.3.5 Topsoil Protection

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

5.3.6 Soil Compaction

The Permittee shall implement measures to minimize soil compaction of all lands during all phases of the project's life and shall confine compaction to as small an area as practicable. Soil decompaction measures shall be utilized on all lands utilized for project construction and

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

5.3.7 Soil Erosion and Sediment Control

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

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

5.3.8 Wetlands and Water Resources

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

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

5.3.9 Vegetation Removal

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

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

5.3.10 Application of Pesticides

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

5.3.11 Invasive Species

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

5.3.12 Noxious Weeds

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

5.3.13 Public Roads

At least 14 days prior to the pre-construction meeting, the Permittee shall identify all state, county, or township roads that will be used for the project and shall notify the Commission and the state, county, or township governing body having jurisdiction over the roads to determine if the governmental body needs to inspect the roads prior to use of these roads. Where practical, existing roadways shall be used for all activities associated with the project. Where practical,

all-weather roads shall be used to deliver cement, turbines, towers, assembled nacelles, and all other heavy components to and from the turbine sites.

The Permittee shall, prior to the use of such roads, make satisfactory arrangements (i.e., approved permits, written authorizations, road use agreements, or development agreements) with the appropriate state, county, or township governmental body having jurisdiction over roads to be used for construction of the project, for maintenance and repair of roads that may be subject to increased impacts due to transportation of equipment and project components. The Permittee shall notify the Commission of such arrangements upon request.

5.3.14 Turbine Access Roads

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

5.3.15 Private Roads

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

5.3.16 Archaeological and Historic Resources

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

Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction at such location and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement and the State Archaeologist.

5.3.17 Interference

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

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

5.3.18 Livestock Protection

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

5.3.19 Fences

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

5.3.20 Drainage Tiles

The Permittee shall take into account, avoid, promptly repair or replace all drainage tiles broken or damaged during all phases of the project’s life unless otherwise negotiated with the affected landowner.

5.3.21 Equipment Storage

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

5.3.22 Restoration

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

5.3.23 Cleanup

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

5.3.24 Pollution and Hazardous Waste

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

5.3.25 Damages

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

5.3.26 Public Safety

The Permittee shall provide educational materials to landowners adjacent to the site and, upon request, to interested persons about the project and any restrictions or dangers associated with the project. The Permittee shall also provide any necessary safety measures such as warning

signs and gates for traffic control or to restrict public access. The Permittee shall submit the location of all underground facilities, as defined in Minn. Stat. § 216D.01, subd. 11, to Gopher State One Call following the completion of construction at the site.

5.3.27 Tower Identification

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

5.3.28 Federal Aviation Administration Lighting

Towers shall be marked as required by the FAA. There shall be no lights on the towers other than what is required by the FAA. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment. The Permittee shall install and employ an FAA-approved lighting mitigation system, such as an aircraft detection lighting system (ADLS), light intensity dimming solution (LIDS), or other FAA-approved mitigation method. The Permittee shall describe the lighting mitigation system used for the project in its site plan.

5.4 Communication Cables

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

5.5 Electrical Collector and Feeder Lines

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

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

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

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

5.6 Other Requirements

5.6.1 Safety Codes and Design Requirements

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

5.6.2 Other Permits and Regulations

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

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

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

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

6 SPECIAL CONDITIONS

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

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

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

6.2 Henslow's Sparrow

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

6.3 Archaeological Assessment

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

7 SURVEYS AND REPORTING

7.1 Biological and Natural Resource Inventories

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

7.2 Shadow Flicker

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

Should modeling identify any residence that will experience 30 hours or more of shadow flicker per year, the residence must be specifically identified in the Shadow Flicker Management Plan. If through minimization and mitigation efforts identified in the plan the Permittee is not able to reduce a residence's anticipated shadow flicker exposure to less than 30 hours per year, a shadow flicker detection system will be utilized during project operations to monitor shadow flicker exposure at the residence. The plan must detail the placement and use of any shadow flicker detection systems, describe how the monitoring data will be used to inform turbine operations, and include a detailed plan of when and how turbine operations will be adjusted to mitigate shadow flicker exposure exceeding 30 hours per year at any one residence.

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

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

7.3 Wake Loss Studies

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

7.4 Noise Studies

The Permittee shall file a proposed methodology for the conduct of a post-construction noise study at least 14 days prior to the pre-construction meeting. The Permittee shall develop the post-construction noise study methodology in consultation with the Department of Commerce (Department). The study must incorporate the Department's Noise Study Protocol to determine the operating LWECS noise levels at different frequencies and at various distances from the turbines at various wind directions and speeds. The Permittee must conduct the post-construction noise study and file with the Commission the completed post-construction noise study within 18 months of commencing commercial operation.

7.5 Avian and Bat Protection

7.5.1 Operational Phase Fatality Monitoring

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

7.5.2 Avian and Bat Protection Plan

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

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

The Permittee shall, by the 15th of March following each complete or partial calendar year of operation, file with the Commission an annual report detailing findings of its annual audit of ABPP practices. The annual report shall include summarized and raw data of bird and bat

fatalities and injuries and shall include bird and bat fatality estimates for the project using agreed upon estimators from the prior calendar year. The annual report shall also identify any deficiencies or recommended changes in the operation of the project or in the ABPP to reduce avian and bat fatalities and shall provide a schedule for implementing the corrective or modified actions. The Permittee shall provide a copy of the report to the Department, the DNR, and the USFWS at the time of filing with the Commission.

7.5.3 Quarterly Incident Reports

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

7.5.4 Immediate Incident Reports

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

(a) five or more dead or injured birds or bats, at an individual turbine location, within a five day reporting period;

(b) twenty or more dead or injured birds or bats, across the entire facility, within a five day reporting period;

(c) one or more dead or injured state threatened, endangered, or species of special concern;

(d) one or more dead or injured federally listed species, including species proposed for listing; or

(e) one or more dead or injured bald or golden eagle(s).

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

7.5.5 Turbine Operational Curtailment

The Permittee shall operate all facility turbines so that all turbines are locked or feathered up to the manufacturer's standard cut-in speed from one-half hour before sunset to one-half hour after sunrise of the following day from April 1 to October 31 of each year of operation. All operating turbines at the facility must be equipped with operational software that is capable of allowing for adjustment of turbine cut-in speeds.

8 AUTHORITY TO CONSTRUCT LWECS

8.1 Wind Rights

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

8.2 Power Purchase Agreement

In the event the Permittee does not have a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the project at the time this permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for purchase of the power. This permit does not authorize construction of the project until the Permittee has obtained a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the project. In the event the Permittee does not obtain a power purchase agreement or some other enforceable mechanism for sale of the electricity to be generated by the project within two years of the issuance of this permit, the Permittee must advise the Commission of the reason for not having such commitment. In such event, the Commission may determine whether this permit should be amended or revoked. No amendment or revocation of this permit may be undertaken except in accordance with Minn. R. 7854.1300.

8.3 Failure to Commence Construction

If the Permittee has not completed the pre-construction surveys required under this permit and commenced construction of the project within two years of the issuance of this permit, the Permittee must advise the Commission of the reason construction has not commenced. In such event, the Commission shall make a determination as to whether this permit should be

amended or revoked. No revocation of this permit may be undertaken except in accordance with applicable statutes and rules, including Minn. R. 7854.1300.

9 COMPLAINT PROCEDURES

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

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

10 COMPLIANCE REQUIREMENTS

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

10.1 Pre-Construction Meeting

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

10.2 Pre-Operation Meeting

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

10.3 Site Plan

At least 14 days prior to the pre-construction meeting, the Permittee shall provide the Commission, the Department, and the environmental services and public works departments of

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

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

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

10.4 Status Reports

The Permittee shall file status reports with the Commission on progress regarding site construction. The Permittee need not report more frequently than monthly. Reports shall begin with the commencement of site construction and continue until completion of restoration.

Reports shall describe construction activities and progress and activities undertaken in compliance with this permit. Reports shall include text and photographs.

10.5 Labor Statistic Reporting

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

10.6 In-Service Date

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

10.7 As-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 Permittee shall file an updated decommissioning plan, incorporating comments and information from the permitting process and any updates associated with the final construction plans, with the Commission 14 days before the pre-construction meeting. The decommissioning plan shall be updated every five years following the commercial operation date.

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

The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the area in which the project is located. The Permittee shall ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the project at the appropriate time. The Commission may at any time request the Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.

11.2 Site Restoration

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

restore and reclaim the site to pre-project conditions, including topography and topsoil conditions. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. All such agreements between the Permittee and the affected landowner shall be submitted to the Commission prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within 18 months of termination.

11.3 Abandoned Turbines

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

12 COMMISSION AUTHORITY AFTER PERMIT ISSUANCE

12.1 Final Boundaries

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

12.2 Expansion of Site Boundaries

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

12.3 Periodic Review

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

12.4 Modification of Conditions

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

(a) violation of any condition in this permit;

(b) endangerment of human health or the environment by operation of the project; or

(c) existence of other grounds established by rule.

12.5 More Stringent Rules

The issuance of this permit does not prevent the future adoption by the Commission of rules or orders more stringent than those now in existence and does not prevent the enforcement of these more stringent rules and orders against the Permittee.

12.6 Right of Entry

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

(a) To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations.

(b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.

(c) To sample and monitor upon the facilities easement of the property.

(d) To examine and copy any documents pertaining to compliance with the conditions of this permit.

12.7 Proprietary Information

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

13 PERMIT AMENDMENT

This permit may be amended at any time by the Commission in accordance with Minn. R. 7854.1300, subp. 2. Any person may request an amendment of the conditions of this permit by

submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

14 TRANSFER OF PERMIT

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

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

(a) the owner(s) of the financial and governance interests of the Permittee;

(b) the owner(s) of the majority financial and governance interests of the Permittee's owners; and

(c) the Permittee's ultimate parent entity (meaning the entity which is not controlled by any other entity).

The Permittee shall immediately notify the Commission of:

(a) a change in owner(s) of the majority* financial or governance interests in the Permittee;

(b) a change in owner(s) of the majority* financial or governance interests of the Permittee's owners; or

(c) a sale which changes the parent entity of the Permittee.

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

The Permittee shall notify the Commission of:

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

(b) the sale of a majority interest of the Permittee's owners or majority interest of the owners; or

(c) a sale which changes the entity with ultimate control over the Permittee.

15 REVOCATION OR SUSPENSION OF PERMIT

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

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

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

(c) there has been a material violation of a provision of an applicable statute, rule, or an order of the Commission; or

(d) the Permittee has filed a petition with the Commission requesting that the permit be revoked or terminated.

In the event the Commission determines that it is appropriate to consider revocation or suspension of this permit, the Commission shall proceed in accordance with the requirements of Minn. R. 7854.1300 to determine the appropriate action. Upon a finding of any of the above, the Commission may require the Permittee to undertake corrective measures in lieu of having this permit suspended or revoked.

16 EXPIRATION DATE

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

ATTACHMENT 1

Complaint Handling Procedures for Permitted Energy Facilities

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES

A. Purpose

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

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

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

D. Definitions

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

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

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

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

E. Complaint Documentation and Processing

1. The permittee shall designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.

2. A person presenting the complaint should, to the extent possible, include the following information in their communications:

    a. name, address, phone number, and email address;
    b. initial date of the complaint;
    c. tract, parcel number, or address of the complaint;
    d. a summary of the complaint; and
    e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.

3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:

    a. docket number and project name;
    b. name of complainant, address, phone number and email address;
    c. precise description of property or parcel number;
    d. name of permittee representative receiving complaint and date of receipt;
    e. nature of complaint and the applicable permit condition(s);
    f. summary of activities undertaken to resolve the complaint; and
    g. a statement on the final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Public Advisor at 1-800-657-3782 (voice messages are acceptable) or publicadvisor.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

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

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

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

G. Complaints Received by the Commission

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

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

H. Commission Process for Unresolved Complaints

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

I. Permittee Contacts for Complaints and Complaint Reporting

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

ATTACHMENT 2

Compliance Filing Procedures for Permitted Energy Facilities

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE FOR
PERMITTED ENERGY FACILITIES

A. Purpose

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

B. Scope and Applicability

This procedure encompasses all known compliance filings required by permit.

C. Definitions

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

D. Responsibilities

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

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

2. All filings must have a cover sheet that includes:

    a. Date
    b. Name of submitter/permittee
    c. Type of permit (site or route)
    d. Project location
    e. Project docket number
    f. Permit section under which the filing is made
    g. Short description of the filing

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

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

PERMIT COMPLIANCE FILINGS[1]

PERMITTEE: Plum Creek Wind Farm, LLC
PERMIT TYPE: LWECS Site Permit
PROJECT LOCATION: Cottonwood, Murray, and Redwood Counties
PUC DOCKET NUMBER: IP-6997/WS-18-700

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

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

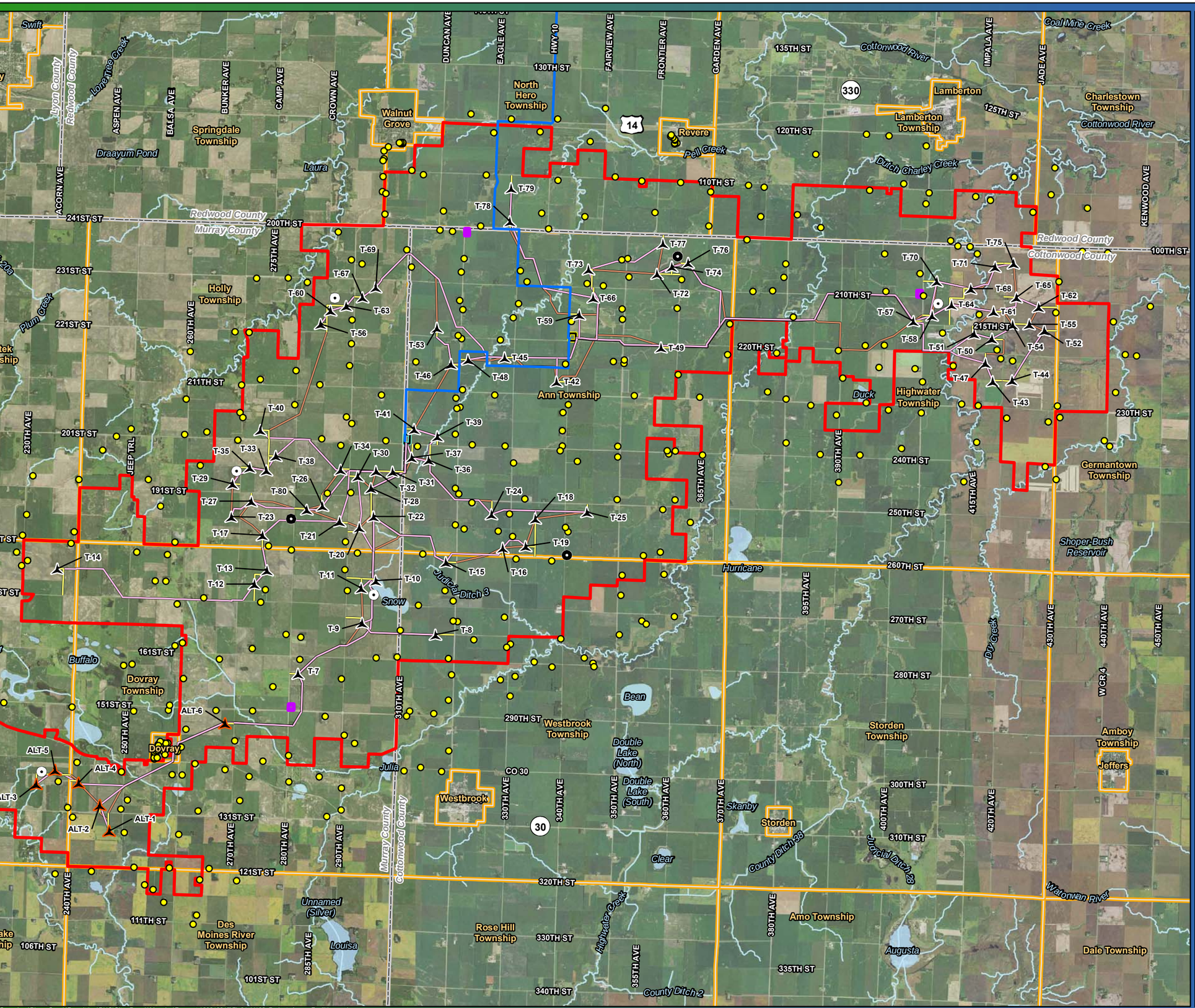
Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.3.22	Site Restoration Report	60 days after completion of all restoration activities
	5.3.26	Public Safety and Education Materials	Upon request
	5.3.28	FAA Lighting	Submit with site plan
	5.5	Engineered Drawings of Collector and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

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

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

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

ATTACHMENT 3
Site Maps



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Miles

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

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

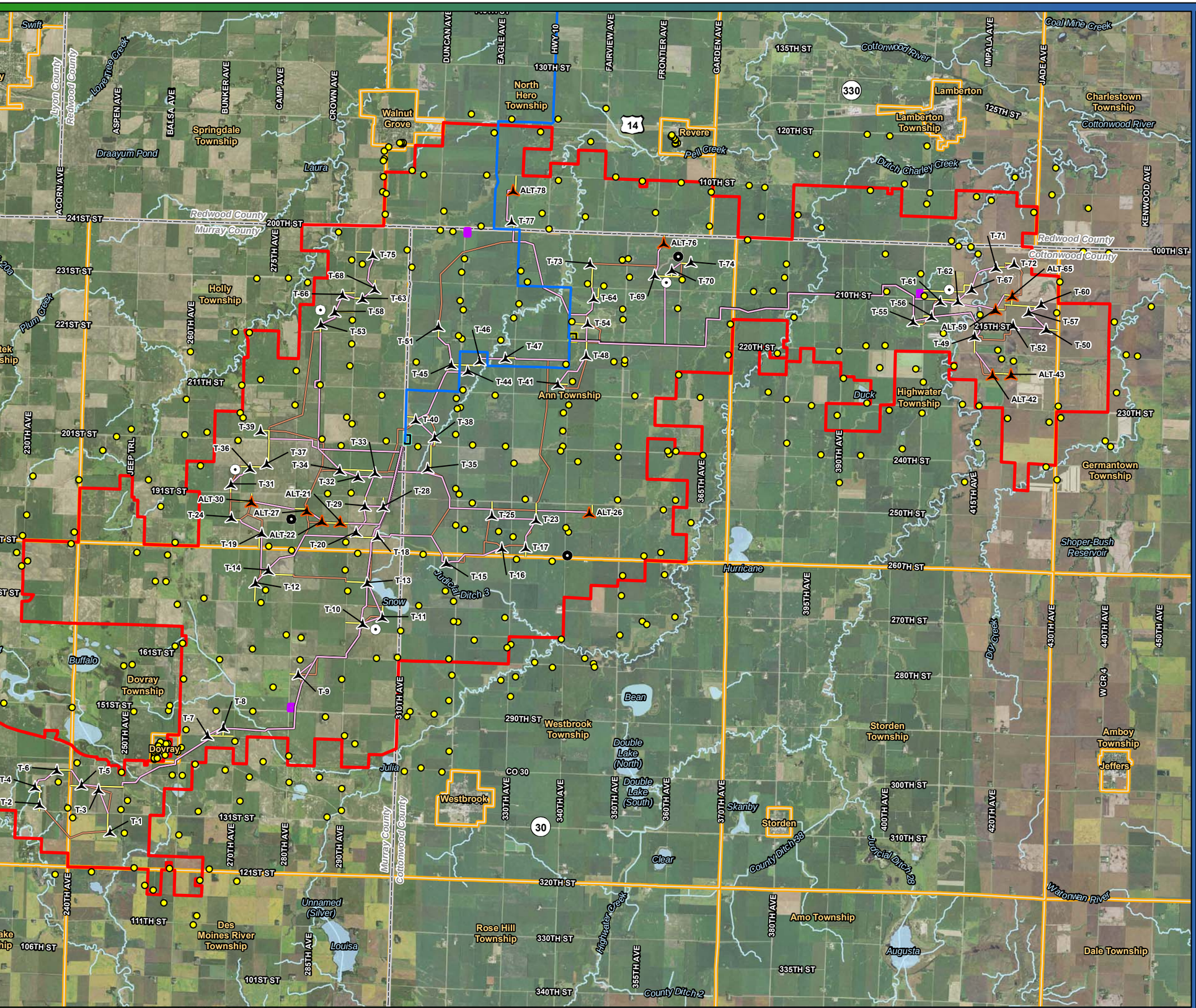
*Turbines not to scale

Figure 1
Site Map
Vestas V162
Configuration

Plum Creek Wind Project

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

Document Path: Z:\Clients\E_H\Geronimo\Plum_Creek\Permitting\PUC\Site_Permit\Mapping\Requests\20210817\Fig01_V162_Project_Areas_Facilities.mxd



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

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

*Turbines not to scale

Figure 2
Site Map
Siemens Gamesa SG170 Configuration

Plum Creek Wind Project

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

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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 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

BY ORDER OF THE COMMISSION

Will Seuffert,
Executive Secretary

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 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
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 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 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 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 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.

5.3.4 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.

5.3.5 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.

5.3.6 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.

5.3.7 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.

5.3.8 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.

5.3.9 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.

5.3.10 Application of Pesticides

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

5.3.11 Invasive Species

The Permittee shall employ best management practices to avoid the potential introduction and spread of invasive species on lands disturbed by project construction activities. The Permittee shall develop an Invasive Species Prevention Plan to prevent the introduction and spread of invasive species on lands disturbed by project construction activities and file with the Commission 30 days prior to commencing construction.

5.3.12 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. 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.

5.3.13 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.

5.3.14 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.

5.3.15 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.

5.3.16 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.

5.3.17 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.

5.3.18 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.

5.3.19 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.

5.4 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.

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.

ATTACHMENT 1

Complaint Handling Procedures for Permitted Energy Facilities

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLAINT HANDLING PROCEDURES FOR
PERMITTED ENERGY FACILITIES

A. Purpose

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

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

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

D. Definitions

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

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

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

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

E. Complaint Documentation and Processing

1. The permittee shall designate a representative responsible for filing complaints to the Commission's eDocket system. This person's name, phone number and email address shall accompany all complaint submittals. The name and contact information for the representative shall be kept current in eDockets.

2. A person presenting the complaint should, to the extent possible, include the following information in their communications:

    a. name, address, phone number, and email address;
    b. initial date of the complaint;
    c. tract, parcel number, or address of the complaint;
    d. a summary of the complaint; and
    e. whether the complaint relates to a permit violation, a construction practice issue, or other type of complaint.

3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:

    a. docket number and project name;
    b. name of complainant, address, phone number and email address;
    c. precise description of property or parcel number;
    d. name of permittee representative receiving complaint and date of receipt;
    e. nature of complaint and the applicable permit condition(s);
    f. summary of activities undertaken to resolve the complaint; and
    g. a statement on the final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit, unless otherwise required below. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Public Advisor at 1-800-657-3782 (voice messages are acceptable) or publicadvisor.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

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

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

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

G. Complaints Received by the Commission

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

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

H. Commission Process for Unresolved Complaints

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

I. Permittee Contacts for Complaints and Complaint Reporting

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

ATTACHMENT 2

Compliance Filing Procedures for Permitted Energy Facilities

MINNESOTA PUBLIC UTILITIES COMMISSION
COMPLIANCE FILING PROCEDURE FOR
PERMITTED ENERGY FACILITIES

A. Purpose

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

B. Scope and Applicability

This procedure encompasses all known compliance filings required by permit.

C. Definitions

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

D. Responsibilities

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

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

2. All filings must have a cover sheet that includes:

    a. Date
    b. Name of submitter/permittee
    c. Type of permit (site or route)
    d. Project location
    e. Project docket number
    f. Permit section under which the filing is made
    g. Short description of the filing

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

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

PERMIT COMPLIANCE FILINGS[1]

PERMITTEE: Plum Creek Wind Farm, LLC
PERMIT TYPE: High-Voltage Transmission Line Route Permit
PROJECT LOCATION: Cottonwood and Redwood Counties
PUC DOCKET NUMBER: IP6997/WS-18-701

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.1	Permit Issuance	30 days after permit issuance
	5.3.1	Field Representative	14 days prior to commencing construction
	5.3.10	Application of Pesticides	Notice 14 days prior to application
	5.3.11	Invasive Species Prevention Plan	30 days prior to commencing construction
	5.3.16	Site Restoration Report	60 days after completion of all restoration activities
	5.5.2	List of Other Required Permits	Upon request
	7	Delay in Construction	Four years after permit issuance, as necessary
	8	Complaint Procedures	Prior to commencing construction
	9.1	Plan and Profile	30 days prior to commencing construction

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

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	9.2	Status Reports	Monthly through restoration
	9.3	Notice of Operation and Completion of Construction	Three days prior to commercial operation
	9.4	As-Builts	90 days after construction is complete
	9.5	GPS Data	90 days after construction is complete
	Complaint Reporting	Monthly Complaint Reports	See Route Permit Attachment 1
	Complaint Reporting	Immediate Complaint Reports	By the following day throughout the life of the permit

ATTACHMENT 3
Route Maps

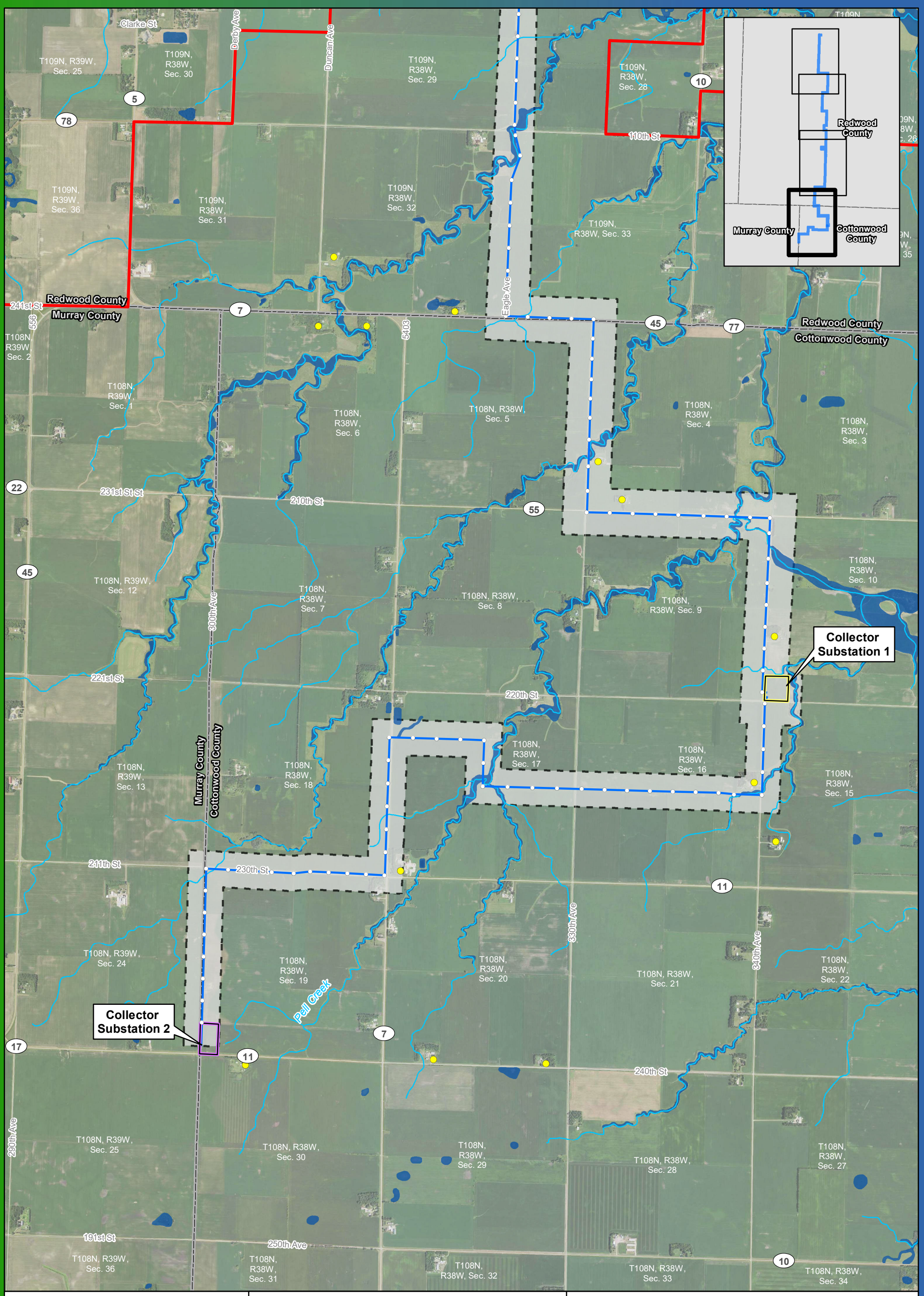

Figure 1

Route Map
Plum Creek Wind Project

Docket No. IP-6997/TL-18-701

- Residence within 500ft of Segments
- Transmission Structure
- 345 kV Transmission Line Route
- Collector Substation 1
- Collector Substation 2
- Wind Project Area Boundary
- Proposed Route Width
- NWI Wetlands
- MDNR Stream/River

Imagery: MNGeo 2017 Color FSA
Sources: Geronimo Energy, MN Geospatial Commons, MNDOT

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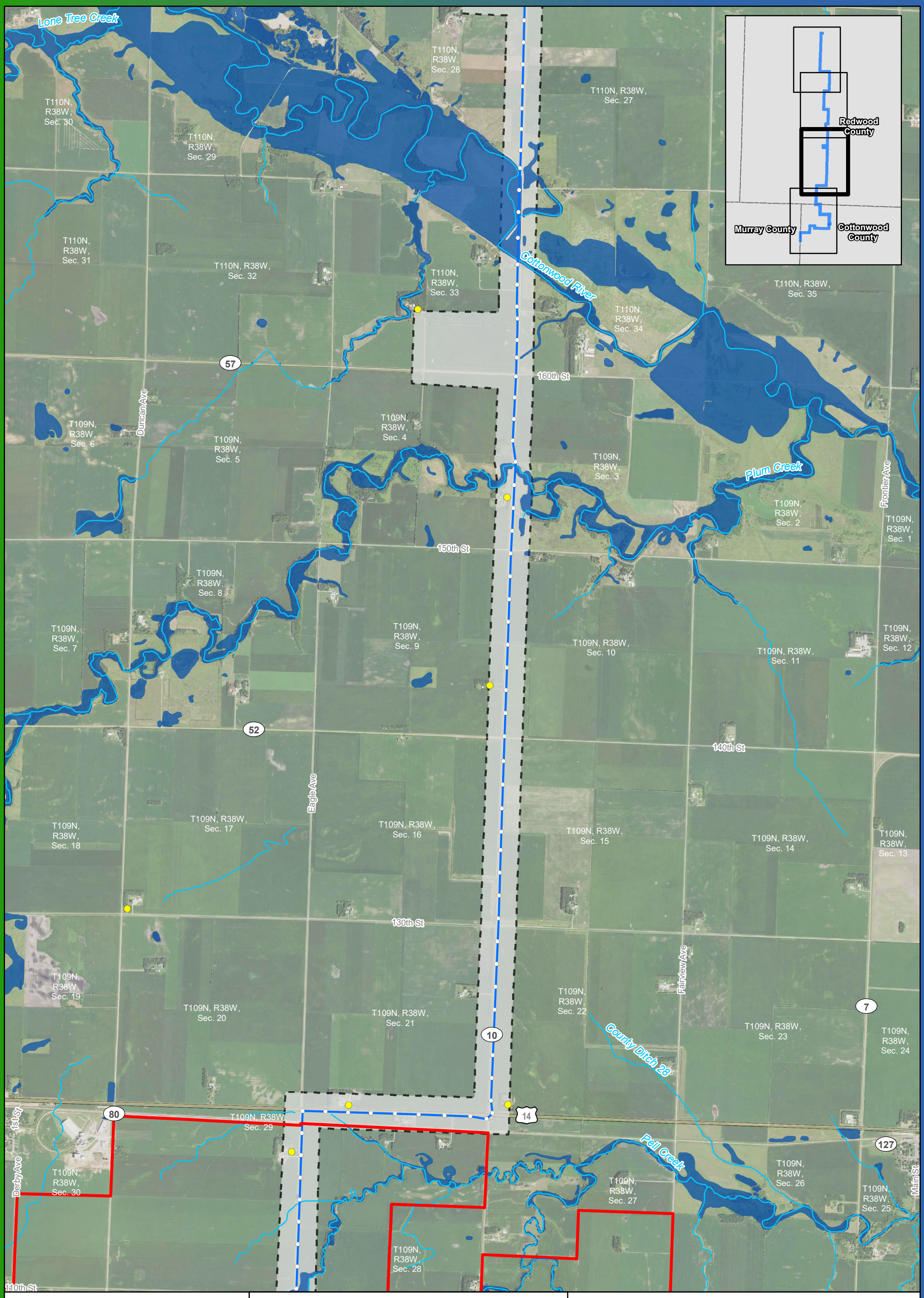
brian.schreurs Date: 8/18/2021



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Imagery: MNGeo 2017 Color FSA
Sources: Geronimo Energy, MN Geospatial Commons, MNDOT

Figure 2

Route Map
Plum Creek Wind Project

Docket No. IP-6997/TL-18-701

- Residence within 500ft of Segments
- Transmission Structure
- 345 kV Transmission Line Route
- Wind Project Area Boundary
- Proposed Route Width
- NWI Wetlands
- MDNR Stream/River

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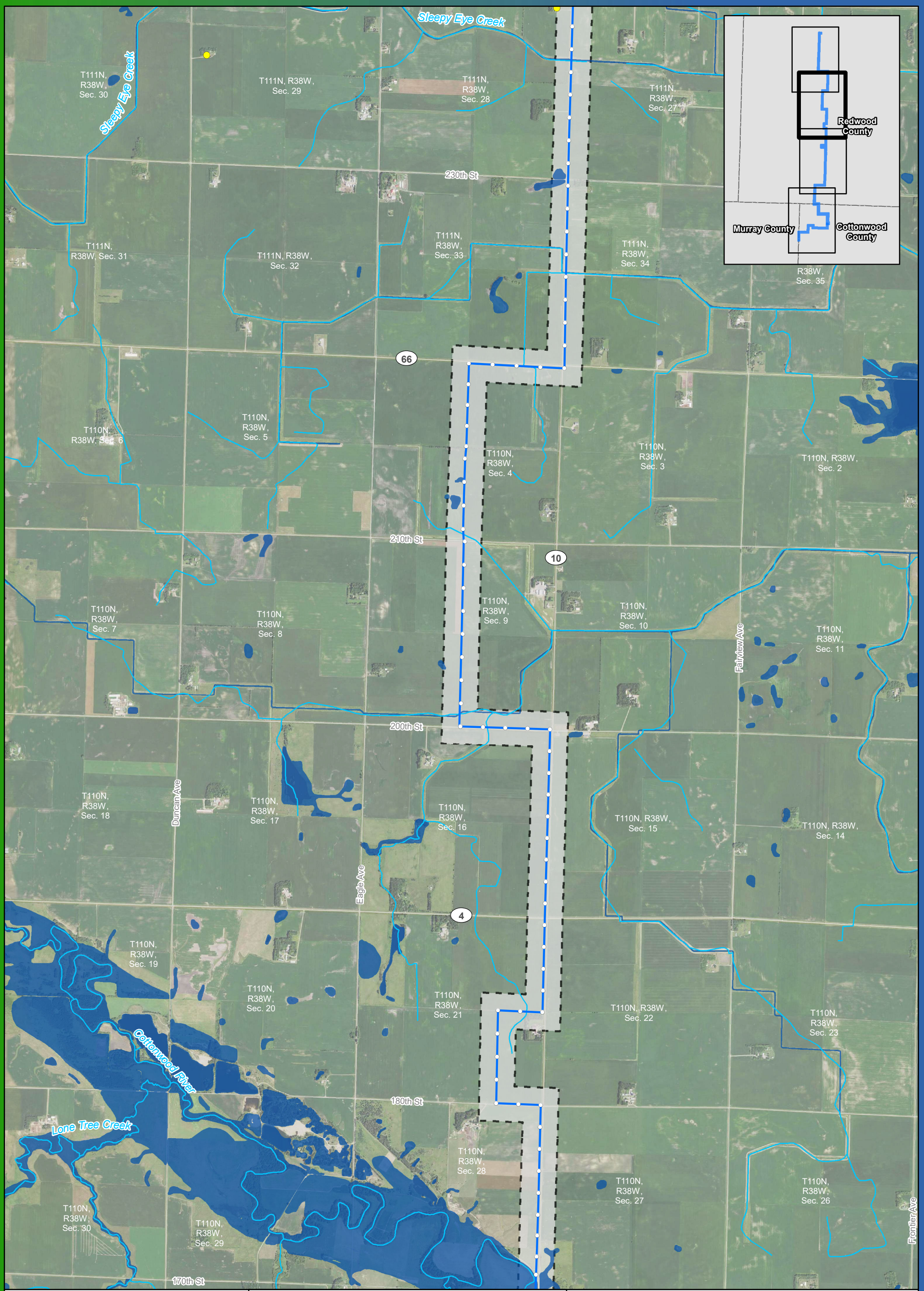
brian.schreurs Date: 8/18/2021



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Imagery: MNGeo 2017 Color FSA
Sources: Geronimo Energy, MN Geospatial Commons, MNDOT

Figure 3

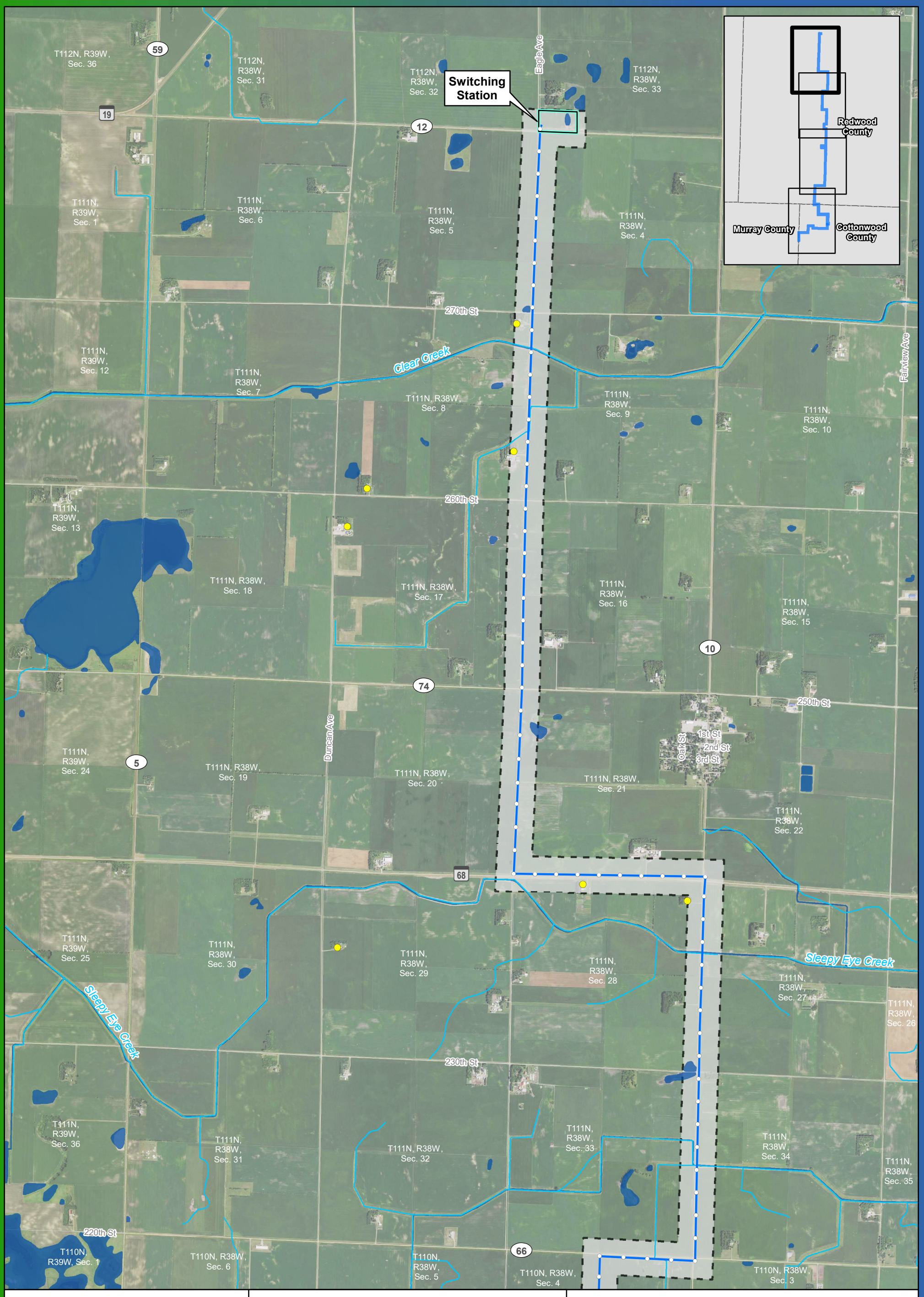
Route Map
Plum Creek Wind Project

Docket No. IP-6997/TL-18-701

- Residence within 500ft of Segments
- Transmission Structure
- 345 kV Transmission Line Route
- Proposed Route Width
- NWI Wetlands
- MDNR Stream/River

Document Path: Z:\Clients\E_H\Geronimo\Plum_Creek\Permitting\PUC\Site_Permit\Mapping\Requests\20210817\Plum_Creek_PUC_Detailed_Route_Maps.mxd

brian.schreurs Date: 8/18/2021



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Imagery: MNGeo 2017 Color FSA
Sources: Geronimo Energy, MN Geospatial Commons, MNDOT

Figure 4

Route Map
Plum Creek Wind Project

Docket No. IP-6997/TL-18-701

- Residence within 500ft of Segments
- Transmission Structure
- 345 kV Transmission Line Route
- Switching Station
- Proposed Route Width
- NWI Wetlands
- MDNR Stream/River

Document Path: Z:\Clients\E_H\Geronimo\Plum_Creek\Permitting\PUC\Site_Permit\Mapping\Requests\20210817\Plum_Creek_PUC_Detailed_Route_Maps.mxd

brian.schreurs Date: 8/18/2021