

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben
Valerie Means
Matthew Schuerger
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Chair
Commissioner
Commissioner
Commissioner

In the Matter of the Application of Northern States Power Company for a Site Permit for the 84 MW Freeborn Wind Farm in Freeborn County, Minnesota

ISSUE DATE: March 31, 2020

DOCKET NO. E-002/WS-17-410

ORDER DENYING AFCL's PETITIONS AND AMENDING SITE PERMIT

PROCEDURAL HISTORY

On December 19, 2018, the Commission issued an order granting Freeborn Wind Energy LLC a site permit to erect a collection of wind turbines and related facilities, known as a Large Wind Energy Conversion System (LWECS or wind farm), in Freeborn County (the Freeborn Wind Project).¹

On May 10, 2019, the Commission issued an order amending the site permit.²

On July 2, 2019, the Commission issued an order denying the petition of the Association of Freeborn County Landowners (AFCL) to reconsider the May 10, 2019 order.³

On October 22, 2019, the Commission issued an order transferring the site permit to the project's new owner, Northern States Power Company d/b/a Xcel Energy (Xcel).⁴

On October 23, 2019, the Commission solicited comments on a) Xcel's petition to amend the site permit to change the number, type, and layout of the turbines to be used, and to incorporate additional land, and b) Xcel's supplemental environmental impact analysis offered in support of its proposed amendments.⁵

By November 15, 2019, the Commission had received comments from the Minnesota Department of Commerce (the Department), and various members of the public.

¹ Order Issuing Site Permit and Taking Other Action (December 19, 2018).

² Order Amending Site Permit (May 10, 2019).

³ Order Denying Reconsideration (July 2, 2019).

⁴ Order Granting Request to Transfer Site and Route Permits (October 22, 2019).

⁵ Citing Xcel petition for site permit amendments (August 20, 2019).

On November 19, 2019, the Commission received reply comments from AFCL and Xcel, and another comment from a member of the public.

On December 12, 2019, the Department filed additional comments. Also, AFCL filed a petition for preparation of an Environmental Impact Statement under Minn. Stat. § 116D.03, subd. 3, and Minn. Stat. § 116D.04, subd. 2a; and to transfer the proceedings to the Office of Administrative Hearings for a contested case proceeding.

On December 19, 2019, the Commission met to consider AFCL's and Xcel's petitions. The Commission voted to deny AFCL's petitions, and approve Xcel's petition to amend the Site Permit.

On January 3, 2020, the Minnesota Environmental Quality Board (EQB) informed the Commission that AFCL had petitioned for the preparation of an Environmental Assessment Worksheet for the project, and that the EQB identified the Commission as the appropriate agency to determine if a worksheet is required. This action barred the Commission from issuing its order effectuating its December 19, 2019 decision pending further action on the petition for the worksheet.⁶

On January 15, 2020, the AFCL petition to the EQB was filed with the Commission.

On February 3, 2020, Minnesota Center for Environmental Advocacy (MCEA) and Fresh Energy filed a letter opposing AFCL's petition for an Environmental Assessment Worksheet, and AFCL filed a letter opposing the letter of MCEA and Fresh Energy.

On February 6, 2020, the Commission met to consider the matter.

FINDINGS AND CONCLUSIONS

I. Summary

Having reviewed the record of the proceedings, the Commission will decline to order the preparation of an Environmental Impact Statement or an Environmental Assessment Worksheet, or to refer the matter to the Office of Administrative Hearings for a contested case proceeding.

Finding Xcel's petition to amend the site permit to be reasonable, the Commission will approve it.

II. Xcel's Petition

A. Overview

Xcel seeks to amend the Freeborn Wind Project's site permit to allow the use of a different combination of wind turbines and a different layout. The initial permit provides for installing 42 turbines, including 32 Vestas V116s and 10 Vestas 110s. Xcel now proposes to install only 41 turbines, replacing the 32 Vestas V116s with 31 Vestas V120s. Xcel does not expect the new

⁶ Minn. R. 4410.3100, subp. 1.

turbine model to generate more power than the old model, but the V120's longer turbine blade would enable the new model to harvest wind power from a broader area, resulting in more electricity generation over time.

This change in turbine models, combined with advanced engineering, geotechnical data, landowner input, and environmental field information, prompted Xcel to propose a change to the turbine layout. Xcel proposed to remove one turbine and reposition 21 others.

B. Revised Permit Language

1. Site Permit Section 2.0 – Project Description

Site Permit Section 2.0 currently reads as follows:

The Freeborn Wind Farm, when fully constructed and operational will have a nameplate capacity of up to 200 MW, of which, 84 MW will be located in Freeborn County, Minnesota and the remaining 116 MW will be located in Worth County, Iowa. The Project will consist of 42 2-MW wind turbines, consisting solely of one turbine model or a combination of turbine models, which may include Vestas V110 and Vestas V116 as identified in the Permittee's Site Permit Application.

Xcel proposed amending this section to read as follows:

The Freeborn Wind Farm will be a 200 MW nameplate capacity LWECS, 82 MW of which will be located in Freeborn County, Minnesota. The LWECS portion in Minnesota will consist of 10 Vestas V110 and 31 Vestas V120 turbines. Both turbine models are 2 MW in size.

2. Site Permit Section 3.0 – Designated Site

The last sentence of Site Permit Section 3.0 states that the Permittee had obtained wind rights or easements for approximately 17,435 acres under easement and with participation agreements. Xcel proposed amending this language to read as follows:

Wind rights or easements have been obtained by the Permittee and include approximately 21,313 acres of land under easement and with participation agreements.

3. Site Permit Section 3.1 – Turbine Layout

Xcel did not propose changing any of the language of this section of the Site Permit, but asked to replace the existing site layout maps with revised maps reflecting the selection of Vestas V110 and V120 turbines.

C. Environmental Impact Analysis

In support of its petition, Xcel reported on how its analysis of the project's environmental consequences has changed over time—partially due to Xcel's proposed changes, but mostly due to changes arising from other sources. Xcel's discussion is summarized below:

Demographics: Xcel stated that it does not anticipate that its proposed changes would produce any significant change to the project's consequences for demographics.

Land use: Xcel stated that it does not anticipate that its proposed changes would produce any significant change to land use. Xcel still proposes to erect the turbines generally in Freeborn County's Agricultural District, consistent with local zoning policies.

Noise: Xcel noted that it was removing one of the turbines from the current project layout to comply with noise restrictions, and proposed to install Serrated Trailing Edge technology on certain turbines to reduce their noise. Xcel's acoustical consultants updated the noise assessment to reflect the new turbines and layout, and predicted that the changes would not generate much change in noise output. The model estimated that the noise from the turbines reaching a residence would not exceed 45 A-weighted decibels—that is, decibels weighted to reflect the sensitivity of the human ear—for 50 percent of the time during a one-hour testing period (denoted 45 dBA (L₅₀)). The model also estimated that noise from all sources at any of the project's noise receptor locations would not exceed 47 dBA. These values conform to the requirements of Site Permit Section 6.1.

Visual impact: Xcel concluded that the new turbines and layout would not appreciably change the project's visual impact from public lands, private lands, or homes. The new turbine blades would be two meters longer than the old ones, but their towers would remain the same height. Xcel acknowledged its duty to limit shadow flicker as required by Site Permit Section 7.4. Consistent with the duty, Xcel's consultant updated the shadow flicker model to reflect the new turbines and layout, and identified houses that could potentially require additional mitigation efforts to reduce shadow flicker.

Public services and infrastructure: Xcel reported that the proposed changes would not change the resources, impacts, or mitigative measures for public services and infrastructure, telecommunications, communication systems, television, roads, or other infrastructure.

Cultural and archaeological resources: Xcel reported that the Phase I archaeological reconnaissance surveys were complete and filed with the Minnesota State Historic Preservation Office (SHPO), and a follow-up survey of an additional 123 acres was conducted. While the project would be visible from some archeological sites—including one site listed on the National Register of Historic Places—SHPO agreed that the project's visual impact would have no adverse effect and that the project would not affect any known or suspected significant archeological properties in the area. Xcel states that it has been coordinating its efforts with SHPO and the Office of State Archaeologist, and pledges to implement the mitigative measures set forth in its application, as appropriate.

Recreation: Xcel reported that the amended site permit's consequences for recreational land would be little different than the impact of the current site permit. Xcel noted a change in the

name of one land parcel, and a revised map of a snowmobile trail. And Xcel reported that all turbines would be more than 500 feet away from the nearest snowmobile trail.

Public health and safety: Xcel noted the addition of a new turf airport 1.6 miles outside the project's boundaries, and pledged to pursue the necessary coordination with the Federal Aviation Administration. While this is a new development, it is not clear that the revised project would have any larger impact than the currently permitted project.

Hazardous materials: Xcel reported conducting a Phase 1 Environmental Site Assessment at the site—but denied that the proposed change had any bearing on this category.

Land-based economies: Xcel reported that land use in the project area has changed little—mostly agricultural—and Xcel did not anticipate any change resulting from its proposed site permit amendments. However, Xcel anticipates that its new layout will slightly reduce the amount of agricultural land and prime farmland permanently affected by the project. Xcel projected that its proposed amendments would have little consequence for forestry or mining.

Tourism: Xcel's proposed permit changes would have little consequence for tourism. While Xcel noted a recent change in the location of a snowmobile trail, it would still be more than 500 feet from the nearest turbine.

Local economies: Xcel stated that it does not anticipate that its proposed changes would produce any change to local economies.

Topography: Xcel stated that it does not anticipate that its proposed changes would produce any change to the topography.

Soils: Xcel stated that it does not anticipate that its proposed changes would produce any change to the soils.

Geologic and Groundwater Resources: Xcel stated that it does not anticipate that its proposed changes would produce any change to the surficial geology, bedrock geology and aquifers.

Surface Water and Floodplain Resources: Xcel reported on its progress in pursuing a License to Cross Public Waters and a Public Waters Work Permit with the Minnesota Department of Natural Resources and the Cedar Watershed District. But given that Xcel does not propose to move any turbines into public waters or impaired waters, Xcel stated that it does not anticipate that its proposed changes would produce any change to the surface water or floodplain.

Wetlands: Xcel reported that the 2019 National Wetland Inventory has identified a new freshwater pond/reverine within the project area, but concluded that the project would not affect it. Xcel noted that its ability to reduce consequences for wetlands will improve as project staff complete ever more field surveys, in coordination with the U.S. Army Corps of Engineers and local units of government. Indeed, under the new layout, the amount of wetlands affected would drop from 0.1 acres to 0.0 acres.

Vegetation: Xcel revised the list of land covers existing in and around the project, incorporated new data from the Department of Natural Resources, and distinguished lands that have been

previously plowed from lands that have not. Xcel estimated that the revised project would affect one site of moderate biodiversity and three sites of below-moderate biodiversity. Out of a project area of 24,700 acres, Xcel estimated the revised layout would permanently affect 38.3 acres, comparable to the 38.2 acres under the current layout. And 93 percent of these permanently affected acres would be cultivated farmland.

In sum, Xcel did not anticipate any significant environmental effect resulting from its proposed site permit amendments. In addition to retaining all the mitigation measures applicable to the current permit and layout, Xcel reported that its Native Prairie Protection and Management Plan—developed in coordination with the Department and the Department of Natural Resources—will help resolve issues related to avoidance, minimization, and mitigation measures for native prairie, native plant communities, and sites of biodiversity significance.

Wildlife: Xcel reported that newly-completed studies have resulted in a revised draft for the Avian and Bat Protection Plan. But in other respects, Xcel stated that it does not anticipate that its proposed changes would produce any change in the project’s consequences for wildlife.

Rare and unique resources: Xcel stated that it does not anticipate its proposed changes would produce any change related to rare or unique resources.

In sum, Xcel generally argued that the description of resources, impacts, and mitigating measures described as part of its proposed amendment to the site permit and project layout are consistent with the existing record supporting the existing permit and layout.

Finally, Xcel noted its progress in preparing pre-construction filings as required by the site permit. These included the following:

- Section 5.4 Electrical Collector and Feeder Lines
- Section 7.5.1 Avian and Bat Protection Plan (in coordination with the Department and the Minnesota Department of Natural Resources)
- Section 10.3 Site Plan
- Section 11.1 Decommissioning Plan

III. AFCL’s Petitions

A. Contested Case Proceedings

Noting that Xcel has made a variety of factual claims in support of its proposed permit amendments, AFCL asked the Commission to refer this matter to the Office of Administrative Hearings for a contested case proceeding.

Contested case proceedings have many qualities of a trial, where parties call and cross-examine witnesses. The Commission refers a docket for a contested case proceeding under Minn. Stat. §§ 14.57–.62 only if (a) the proceeding involves contested material facts and a party has a statutory or regulatory right to the hearing, or (b) the Commission finds that all significant issues have not been resolved to its satisfaction.⁷

⁷ Minn. R. 7829.1000.

B. Environmental Impact Statement

AFCL also petitioned that an Environmental Impact Statement be prepared for the project.

The Minnesota Environmental Protection Act provides for preparation of an Environmental Impact Statement when a state agency, private entity, or local government proposes a major governmental action (including granting a permit) that could significantly affect the quality of the environment.⁸

Where there is potential for significant environmental effects resulting from any major governmental action, the action must be preceded by a detailed environmental impact statement prepared by the responsible governmental unit. The environmental impact statement must be an analytical rather than an encyclopedic document that describes the proposed action in detail, analyzes its significant environmental impacts, discusses appropriate alternatives to the proposed action and their impacts, and explores methods by which adverse environmental impacts of an action could be mitigated. The environmental impact statement must also analyze those economic, employment, and sociological effects that cannot be avoided should the action be implemented.⁹

C. Environmental Assessment Worksheet

Alternatively, AFCL petitioned the EQB to provide for preparation of an Environmental Assessment Worksheet—“a brief document which is designed to set out the basic facts necessary to determine whether an Environmental Impact Statement (EIS) is required for a proposed project.”¹⁰

The Minnesota Environmental Policy Act authorizes EQB to exempt projects from environmental review, and to adopt rules identifying alternative forms of environmental review to be used in lieu of an Environmental Impact Statement.¹¹ The EQB adopted Minnesota Rules Chapter 4410. Under these rules, a private party may petition the EQB for preparation of an Environmental Assessment Worksheet, and the EQB designates the responsible governmental unit to rule on the petition. AFCL petitioned the EQB for preparation of a worksheet, and the EQB designated the Commission as the responsible governmental unit for evaluating petitions related to LWECSSs capable of generating 25 megawatts or more.¹²

⁸ Minn. Stat. Ch. 116D.

⁹ Minn. Stat. § 116D.04, subd. 2a(a).

¹⁰ Minn. R. 4410.0200, subp. 24.

¹¹ Minn. Stat. § 116D.04, subd. 4a.

¹² Minn. R. 4410.4300, subp. 3.D.

IV. Public Comments

Comments received from the public expressed concerns regarding potential impacts of the project similar to those received and considered prior to issuance of the site permit. These commenters raised concerns about the health effects of noise, shadow flicker, television reception, internet connectivity, setback adequacy, decommissioning, communication interference, nonparticipating landowners, bird strikes, data validity, property values, aesthetic impacts, and the selection of an appropriate ground factor for noise analysis. Commenters variously recommended the Commission provide additional process for reviewing the amendment petitions, adopt additional permit requirements, or deny the amendments.

V. Department Comments

The Department disagreed with AFCL's legal analysis alleging the need for additional environmental review. The Department argued that environmental review for the Freeborn Wind Farm, both as originally proposed and as amended, has been completed in accordance with Minn. R. Ch. 7854.

The Department provided a summary of Xcel's petition and evaluated the consequences of Xcel's proposed changes. For example, the Department evaluated the consequences of Xcel's proposed changes for noise—both from the operation of the turbines themselves, and when that noise would be combined with ambient noise—and found support for the proposition that the revised project would be able to comply with the site permit's requirements. Also, the Department concurred with Xcel's analysis that the project could be expected to cause six residences to experience more than 30 hours of shadow flicker per year, arguably triggering the need for remedial measures—although the study did not take into account the effects of trees, buildings, or specific building designs in blocking the shadow.

Based on its analysis, the Department recommended granting Xcel's petition. The Department concluded that the amendment's consequences for people and the environment appeared comparable to, or less than, the consequences anticipated from the existing site permit. But the Department recommended that Xcel file more detailed maps of its revised site layout, demonstrating appropriate distance between the new turbine locations and the location of neighboring houses—especially houses of people who have not consented to the project.

VI. MCEA and Fresh Energy Comments

MCEA and Fresh Energy opposed AFCL's petition for an Environmental Assessment Worksheet. These parties argued that Minn. Stat. § 116D.04, subd. 4a, authorizes the EQB to approve alternative means for conducting environmental review, that the EQB used this power in adopting Minn. R. 7854.0500, and that the Freeborn Wind project had fulfilled the requirements of that rule.

VII. Xcel Comments

In its comments, Xcel provided the revised maps as requested by the Department, noting that it had moved one turbine approximately 80 feet to maintain the necessary distance from

neighboring houses. In addition, Xcel provided additional documentation that it had secured the necessary wind rights and other land rights for the project.

Xcel opposed AFCL's petition to refer the matter for a contested case proceeding, or to generate an Environmental Impact Statement or Environmental Assessment Worksheet, arguing that these efforts would be redundant of the efforts already undertaken in the docket. Xcel opposed efforts to use its amendment petition as an occasion for making improper collateral attacks on the Commission's prior decisions.

Xcel reaffirmed its commitment to comply with the site permit conditions, including conditions governing noise, shadow flicker, reception of over-the-air television signals, and plans for eventually decommissioning the wind farm. Xcel argued that its proposed changes are not expected to generate any changes in the project's effects on communications signals or other infrastructure. Finally, Xcel argued that no party had alleged any deficit in its methods for generating decommissioning estimates. In any event, Xcel was committed to revisiting its decommissioning plan every five years, thereby providing the opportunity to revise cost estimates or adjust funding balances over time.

VIII. Commission Action

A. Referral for Contested Case Proceeding

The Commission notes that it approved the Freeborn Wind Project after analyzing and approving Xcel's resource plan, and then approving the resulting competitive bidding process for acquiring new resources.¹³ As such, the record supporting this project stretches back to 2015.

Moreover, the Commission already referred this docket to the Office of Administrative Hearings for a contested case proceeding. With one exception, the Administrative Law Judge found that the project, with appropriate conditions, did "not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and/or the Minnesota Environmental Policy Act."¹⁴ The one exception pertained to compliance with noise standards, and the Commission addressed that concern when it approved the initial site permit.¹⁵

Finally, the Commission has solicited and received public comments on Xcel's petition. No party has demonstrated a statutory or regulatory right for a contested case proceeding on Xcel's permit amendments; additionally, the Commission finds no significant issues of material fact that require resolution before acting on Xcel's petition.

As discussed further below, the site permit imposes stringent requirements on Xcel regarding the construction and operation of the project, and none of Xcel's proposed amendments would alter this fact. Xcel's duty to comply with these requirements is not in dispute—and whether Xcel will

¹³ See *In the Matter of Xcel Energy's 2016–2030 Integrated Resource Plan*, Docket No. E-002/RP-15-21; *In the Matter of the Petition of Xcel Energy for Approval of the Acquisition of Wind Generation from the Company's 2016-2030 Integrated Resource Plan*, Docket No. E-002/M-16-777.

¹⁴ Findings of Fact, Conclusions of Law, and Order, at Recommendations 10 (May 14, 2018).

¹⁵ Order Issuing Site Permit and Taking Other Action, at 10–16 (December 19, 2018).

actually comply with these requirements in the future is not a matter that can be established via a contested case proceeding. Accordingly, AFCL's petition for an additional contested case proceeding will be denied.

B. Environmental Review—Scope

In evaluating the need for environmental review for the Freeborn Wind Project, the Commission notes that the EQB's list of projects that are exempt from further environmental review includes projects for which all governmental decisions have been made.¹⁶ Long before the AFCL's petition to the EQB, all Commission decisions had been made regarding Freeborn's December 19, 2018 site permit, its May 10, 2019 site permit amendments, and the October 22, 2019 permit transfer to Xcel. The only matter that remains before the Commission is action on Xcel's petition to amend the site permit to authorize installation of a different turbine model and updating the project layout. While the Commission voted to approve the permit amendments on December 19, 2019, AFCL's petition to the EQB put the issuance of the order memorializing that decision in abeyance.

Accordingly, the Commission will evaluate the need for environmental review for Xcel's proposed site permit amendments.

C. Environmental Review—Legal Analysis

The Commission concurs with the Department, Fresh Energy, and the MCEA that no additional environmental review is required for the Freeborn Wind Project as a matter of law.

When the EQB designated the Commission the responsible governmental unit for evaluating proposals to build wind farms capable of generating 25 megawatts or more, the EQB specified that environmental review would be governed by Minn. R. Ch. 7854.¹⁷ Minn. R. 7854.0500, subp. 7, states in part that "[n]o environmental assessment worksheet or environmental impact statement shall be required on a proposed LWECS project."¹⁸ In adopting this rule, the EQB stated as follows:

Because the environmental and human consequences of wind turbines are relatively minor and can be minimized by appropriate permit conditions, the EQB is not requiring in these rules that an Environmental Assessment Worksheet or an Environmental Impact Statement be prepared on a proposed LWECS. It is sufficient that the environmental impacts and mitigative measures be discussed in the application itself. If an issue of concern were to be raised specific

¹⁶ Minn. R. 4410.4600, subp 1 and 2.B.

¹⁷ Minn. R. 4410.4300, subp. 3(D).

¹⁸ Minn. R. 7854.0500, subp. 7. The EQB drafted and adopted the rules set forth in Minn. R. Ch. 7854 in 2002; *see* Environmental Quality Board's Adopted Permanent Rules Relating to Wind Siting, 26 SR 1394 (April 22, 2002). The rules became subject to the Commission's jurisdiction after a subsequent change in statutory authority. Laws of Minnesota 2005, ch. 97, art 3.

to a particular wind project, the EQB could ask for additional examination of those impacts and could address the concern through permit conditions or by moving some of the turbines.¹⁹

As the EQB anticipated, review of the environmental concerns related to the proposed LWECS has already resulted in the appropriate permit conditions and the relocation of turbines. No further review is required by law.

D. Environmental Review—Factual Analysis

The Commission also finds that no additional environmental review is required for the Freeborn Wind Project as a matter of fact because the record fails to demonstrate that the proposed permit amendments and site layout revision have the potential to produce significant environmental effects.²⁰ In its entirety, Minn. R. 7854.0500, subp. 7, states as follows:

An applicant for a site permit shall include with the application an analysis of the potential impacts of the project, proposed mitigative measures, and any adverse environmental effects that cannot be avoided, in the following areas:

- A. demographics, including people, homes, and businesses;
- B. noise;
- C. visual impacts;
- D. public services and infrastructure;
- E. cultural and archaeological impacts;
- F. recreational resources;
- G. public health and safety, including air traffic, electromagnetic fields, and security and traffic;
- H. hazardous materials;
- I. land-based economics, including agriculture, forestry, and mining;
- J. tourism and community benefits;
- K. topography;
- L. soils;
- M. geologic and groundwater resources;
- N. surface water and floodplain resources;
- O. wetlands;
- P. vegetation;
- Q. wildlife; and
- R. rare and unique natural resources.

¹⁹ EQB's Statement of Need and Reasonableness, at 20 (2001), included in AFCL's petition for preparation of an Environmental Assessment Worksheet, Exhibit V (filed in the Commission's docketing system on January 15, 2020).

²⁰ Minn. R. 4410.1100, subp. 6.

The analysis of the environmental impacts required by this subpart satisfies the environmental review requirements of [Minnesota Rules] chapter 4410 [EQB rules], parts 7849.1000 to 7849.2100 [rules for obtaining a Certificate of Need for power plants], and Minnesota Statutes, chapter 116D [the Minnesota Environmental Policy Act]. No environmental assessment worksheet or environmental impact statement shall be required on a proposed LWECS project.

Xcel provided the listed information when it petitioned for amending the project's site permit, and all parties have had the opportunity to analyze it. This information identifies the type, extent, and reversibility of environmental effects.²¹

Based on this record, the Commission concludes that the potential effects of Xcel's proposed permit amendments and turbine layout revisions (including cumulative potential effects) are not significant, even when viewed in connection with other factors. The Commission finds that Xcel has demonstrated a concerted effort to minimize the project's environmental effects.²² For example, Xcel has developed models in order anticipate the project's environmental effects such as noise and shadow flicker, and has modified its plans to moderate these effects.

But most significantly, the Commission emphasizes that government agencies will retain jurisdiction over this project well after the point that the Commission issues the site permit.²³ As the Commission explained in a previous order, parties do not have to rely on prospective second-guessing of Xcel's performance; the site permit establishes the standards Xcel must meet, and establishes mechanisms for enforcing those standards:

[Site Permit] Section 5.2.1 provides for a Field Representative to oversee compliance with permit conditions during construction, and Section 5.2.2 provides for a Site Manager to oversee compliance during operation and decommissioning. Moreover, the Commission retains jurisdiction over the project throughout its life. At Attachment A, the permit provides a process for anyone to file a complaint about the project. Freeborn Wind must file reports monthly—or, in the case of substantial complaints filed under the complaint procedures, by the following business day—regarding the complaints it receives.

Regarding remedies, Section 3.1 states that the final turbine layout may change “to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process.” Section 12.4 provides for modifying or

²¹ Minn. R. 4410.1700, subp. 7.A. and B.

²² *Id.*, at B. and D.

²³ *Id.*, at C.

amending the permit to address any threats to human health or the environment, while Section 4.3 states that “[t]urbine operation shall be modified or turbines shall be removed from service if necessary to comply with ... noise standards.”

More generally, the Commission emphasizes that granting a permit does not give a developer a free hand in erecting and operating its windfarm. To the contrary:

- The permit requires Freeborn Wind to comply with the standards of the Minnesota Department of Agriculture; the MDNR; the MPCA; U.S. Army Corps of Engineers; the U.S. Environmental Protection Agency; the U.S. Fish and Wildlife Service; the Federal Aviation Administration; the Federal Communications Commission; the Institute of Electrical and Electronics Engineers, Inc.; the National Electric Safety Code; the North American Electric Reliability Corporation; local and state safety codes; federal, state, county, city, or municipal permits (except where pre-empted); and landowner agreements.
- The permit specifies various circumstances under which Freeborn Wind will not be able to proceed without first securing additional approval from the Commission, the MDNR, the MPCA, the Minnesota State Archeologist, Gopher State One Call, the U.S. Army Corps of Engineers, local units of government, local law enforcement, and affected landowners.
- Finally, the permit requires Freeborn Wind to give various types of notice—not only to the entities and groups listed above, but also to the U.S. Environmental Protection Agency; U.S. Fish and Wildlife Service; Freeborn County Environmental Services Office; emergency responders; Public Safety Answering Points; regional development commission; and county auditor or county environmental office.²⁴

This ability to remedy actual problems as they arise, rather than to seek to anticipate and guard against every possible problem that might arise, provides a reasonable and lawful safeguard for the public interest.

In short, the Commission finds that the environmental effects arising from Xcel’s proposed changes are subject to monitoring by public regulatory authorities, and subject to specific remedial measures that can be reasonably expected to effectively mitigate the identified environmental impacts.²⁵ This order and its supporting materials comprise the record of decision under Minn. R. 4410.1100, subp. 6.

²⁴ Order Amending Site Permit, at 12–13 (May 10, 2019).

²⁵ Minn. R. 4410.1700, subp. 7.C.

E. Conclusion

Minn. R 7854.1300, subp. 2, provides for the Commission to amend a LWECS site permit at any time for good cause. And Site Permit Condition 13.0 provides that the Commission will afford Xcel and interested persons an opportunity to comment on a proposed amendment.

Having received comments and reviewed the record of the case, the Commission finds the filings of the Department and Xcel—especially Xcel’s August 20, 2019 supplemental environmental analysis—to persuasively demonstrate good cause to grant the proposed amendments. The record demonstrates that Xcel’s proposed changes in turbine model and site layout would likely generate effects on people and the environment that are comparable to, or less consequential than, the effects of the existing site permit. Xcel’s revised maps demonstrate that the turbines will be located the appropriate distance from neighboring houses. Moreover, the pre- and post-construction compliance process will provide the Commission with additional opportunities to oversee the project’s progress. Accordingly, the Commission will adopt the supplementary environmental analysis and approve the permit amendments to sections 2.0, 3.0 and 3.1.

The Commission will so order.

ORDER

1. The Commission denies the petitions of the Association of Freeborn County Landowners for—
 - A. the preparation of an Environmental Assessment Worksheet;
 - B. the preparation of an Environmental Impact Statement; and
 - C. a referral to the Office of Administrative Hearings for a contested case proceeding.
2. The Commission grants the petition of Northern States Power Company d/b/a Xcel Energy to amend the Freeborn Wind Farm Site Permit by amending Section 2.0 and 3.0, and replace the maps identified in Section 3.1, as set forth in Appendix A, the revised site permit.
3. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Will Seuffert
Executive Secretary



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In the Matter of the Application of Northern
States Power Company for a Site Permit for
the 84 MW Freeborn Wind Farm in Freeborn
County, Minnesota

DOCKET NO. E-002/WS-17-410

APPENDIX A:
REVISED SITE PERMIT

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

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

**IN
FREEBORN COUNTY**

**ISSUED TO
NORTHERN STATES POWER COMPANY d/b/a XCEL ENERGY
(XCEL ENERGY)**

PUC DOCKET NO. E-002\WS-17-410

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

XCEL ENERGY

The Permittee is authorized by this site permit to construct and operate an up to 84 megawatt nameplate capacity Large Wind Energy Conversion System in Freeborn County, Minnesota. The Large Wind Energy Conversion System and associated facilities shall be built within the site identified in this permit and as portrayed on the official 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 31st day of March, 2020

BY ORDER OF THE COMMISSION

Will Seuffert,
Executive Secretary

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ATTACHMENTS

Official Site Permit Maps

Attachment A - Complaint Procedures for Permitted Energy Facilities

Attachment B - Compliance Filing Procedures for Permitted Energy Facilities

1.0 SITE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to Northern States Power Company d/b/a Xcel Energy (Permittee) pursuant to Minnesota Statutes Chapter 216F and Minnesota Rules Chapter 7854. This permit authorizes the Permittee to construct and operate the Freeborn Wind Farm (Project), an 82 megawatt (MW) nameplate capacity Large Wind Energy Conversion System (LWECS) and associated facilities in Freeborn County. The LWECS and associated facilities shall be built within the site identified in this permit and as identified in the attached official site permit map(s), 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.

2.0 PROJECT DESCRIPTION

The Freeborn Wind Farm will be a 200 MW nameplate capacity LWECS, 82 MW of which will be located in Freeborn County, Minnesota. The LWECS portion in Minnesota will consist of 10 Vestas V110 and 31 Vestas V120 turbines. Both turbine models are 2 MW in size.

The project area includes approximately 26,273 acres of land, of which the Project currently holds easement and participation agreements on 21,313 acres. Upon completion, the project site will include no more than 100 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 access roads, an operations and maintenance (O&M) facility, project substation, permanent meteorological tower and associated weather collection data systems, electrical collection lines, and fiber optic communication lines.

The Project substation will interconnect to the Glenworth Substation with an approximately seven mile long 161 kilovolt (kV) high voltage transmission line (HVTL). The Freeborn Wind Transmission Line Project 161 kV HVTL is under PUC Docket No. E-002/TL-17-322 and issuance of the HVTL Route Permit is independent of this site permit process.

2.2 Project Location

The project is located in the following:

County	Township Name	Township	Range	Section
Freeborn	Hayward	102	20	12-15, 22-26, 35, 36
Freeborn	London	101	19	13, 14, 19-24, 27-33
Freeborn	Oakland	102	19	7-9, 16-21
Freeborn	Shell Rock	101	20	1, 2, 8, 11-17, 21-28, 35, 36

3.0 DESIGNATED SITE

The site designated by the Commission for the Freeborn Wind Farm is the site depicted on the official site permit maps attached to this permit. Within the site permit boundary, the Project and associated facilities shall be located on lands for which the permittee has obtained wind rights. Wind rights or easements have been obtained by the Permittee and include approximately 21,313 acres of land under easement and with participation agreements.

3.1 Turbine Layout

The preliminary wind turbine and associated facility layouts are shown on the official 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.

4.0 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, 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 Minnesota Pollution Control Agency 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 Minnesota Pollution Control Agency 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 and the nearest designated public trail.

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 turbine 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 and the United States Army Corps of Engineers, 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 Minnesota Department of Natural Resources 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 Minnesota Department of Natural Resources, 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 80 meters (262.5 feet) above grade measured at hub height.

4.10 Turbine Spacing

The turbine towers shall be constructed within the site boundary as shown in the official 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 during final micro-siting of the turbine towers to account for topographic conditions, up to 20 percent of the towers may be sited closer than the above spacing but the Permittee shall minimize the need to site the turbine towers closer.

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

All meteorological towers shall be fitted with the necessary equipment to deploy/attach acoustic recording devices to monitor wildlife activity.

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 public and private 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, Department of Aviation, and the Federal Aviation Administration. The Permittee shall notify owners of all known airports within six miles of the project prior to construction.

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.

5.0 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 Notification

Within 14 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. The Permittee shall contact landowners prior to entering the property or conducting maintenance within the site, unless otherwise negotiated with the affected landowner.

5.2 Construction and Operation Practices

The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the Freeborn Wind Farm Site Permit Application for a LWECS filed with the Commission on June 15, 2107, and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

5.2.1 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.

5.2.2 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, residents, local government units and other interested persons.

5.2.3 Employee Training and Education of Permit Terms and Conditions

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

5.2.4 Topsoil Protection

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

5.2.5 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.

5.2.6 Soil Erosion and Sediment Control

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

If construction of the facility disturbs more than one acre of land, or is sited in an area designated by the Minnesota Pollution Control Agency as having potential for impacts to water resources, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater Permit from the Minnesota Pollution Control Agency 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.

5.2.7 Wetlands

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 all applicable wetland permits. 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.

5.2.8 Vegetation Management

The Permittee shall disturb or clear the project site only to the extent necessary to assure suitable access for construction, safe operation and maintenance of the project. The Permittee shall minimize the number of trees to be removed in selecting the site layout specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation, to the extent that such actions do not violate sound engineering principles.

5.2.9 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture, Minnesota Department of Natural Resources, and the U.S. Environmental Protection Agency. 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.

5.2.10 Invasive Species

The Permittee shall employ best management practices to avoid the potential 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.

5.2.11 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.

5.2.12 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 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.

5.2.13 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.

5.2.14 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.

5.2.15 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the LWECs. 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 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.

5.2.16 Interference

The Permittee must provide notice which includes a description of the Project's potential to interfere with OTA TV service, Freeborn Wind's mitigation program and Complaint Procedure to local over-the-air television stations, townships, cities and county in the project area, and all households in "at risk" areas identified for all six local television stations, as identified in Appendix D of the Site Permit Application.

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 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.

5.2.17 Livestock Protection

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

5.2.18 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.

5.2.19 Drainage Tiles

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

5.2.20 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.

5.2.21 Restoration

The Permittee shall, as soon as practical following construction of each turbine, restore the areas temporarily 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 completion of the 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.

5.2.22 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.

5.2.23 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 and restoration of the site.

5.2.24 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.

5.2.25 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.

5.2.26 Tower Identification

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

5.2.27 Federal Aviation Administration Lighting

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

5.3 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.

5.4 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.

5.5 Other Requirements

5.5.1 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. standards, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. The Permittee shall report to the Commission on compliance with these standards upon request.

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. At least 14 days prior to the preconstruction meeting, the Permittee shall submit a filing demonstrating that it has obtained such permits. The Permittee shall provide a copy of any such permit 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.

6.0 SPECIAL CONDITIONS

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

6.1 Pre-Construction Noise Modeling

Xcel Energy shall file a plan, including modeling and/or proposed mitigation, at least 60 days prior to the pre-construction meeting that demonstrates it will not cause, or significantly contribute to an exceedance of the MPCA Noise Standards.

To ensure that the turbine-only noise does not cause or significantly contribute to an exceedance of the MPCA Noise Standards, modeled wind turbine-only sound levels (NARUC ISO 9613-2 with 0.5 ground) at receptors shall not exceed 47 dB(A) L50-one hour. Given this, at no time will turbine-only noise levels exceed the MPCA Noise Standards, and when total sound does exceed the limits it will be primarily the result of wind or other non-turbine noise sources. Under these

conditions, the contribution of the turbines will be less than 3 dB(A), which is the generally recognized minimum detectible change in environmental noise levels (non-laboratory setting). For example, when nighttime background sound levels are at 50 dB(A) L50-one hour, a maximum turbine-only contribution of 47 dB(A) L50-one hour would result in a non-significant increase in total sound of less than 3 dB(A).

6.2 Post-Construction Noise Monitoring

If the Noise Studies conducted under Section 7.4 document an exceedance of the MPCA Noise Standards where turbine-only noise levels produce more than 47 dB(A) L50-one hour at nearby receptors, then the Permittee shall work with the Department of Commerce to develop a plan to minimize and mitigate turbine-only noise impacts.

6.3 Over-the-Air Television Interference Notice Requirements

Freeborn Wind must provide notice which includes a description of the Project's potential to interfere with OTA TV service, Freeborn Wind's mitigation program, and availability of the Site Permit and Complaint Procedure to households in the following areas:

- All households in "at risk" areas identified for all six local television stations, as identified in Appendix D of the Site Permit Application;
- Each local government office in the communities of Albert Lea, Northwood, Silver Lake, Gordonsville, Glenville, Hayward, and Moscow; and
- Local over-the-air television broadcasters serving the Project area.

7.0 SURVEYS AND REPORTING

7.1 Biological and Natural Resource Inventories

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

7.2 Shadow Flicker

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

Should shadow flicker modeling identify any residence that will experience in 30 hours, or more, of shadow flicker per year, the Permittee must specifically identify these residences in the Shadow Flicker Management Plan. If through minimization and mitigation efforts identified in the Shadow Flicker Management Plan the Permittee is not able to reduce a residence's anticipated shadow flicker exposure to less than 30 hours per year a shadow flicker detection systems will be utilized during project operations to monitor shadow flicker exposure at the residence. The Shadow Flicker Management Plan will detail the placement and use of any shadow flicker detection systems, how the monitoring data will be used to inform turbine operations, and a detailed plan of when and how turbine operations will be adjusted to mitigate shadow flicker exposure exceeding 30 hours per year at any one receptor. The results of any shadow flicker monitoring and mitigation implementation will be reported by the Permittee in the Annual Project Energy Production Report identified in Section 10.8 of this Permit.

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

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. The study must incorporate the most current Department of Commerce 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 noise study methodology shall be developed by, and the noise monitoring shall be conducted by, an independent consultant approved by the Department of Commerce at Freeborn Wind's expense.

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 Avian and Bat Protection Plan

The Permittee shall comply with the provisions of the Avian and Bat Protection Plan (ABPP) submitted for this project as Appendix H of the June 15, 2017 site permit application and revisions resulting from the annual audit of ABPP implementation. The first annual audit and revision will be filed with the Commission 14 days before the preconstruction meeting and revisions should include any updates associated with final construction 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 project. 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 Minnesota Department of Natural Resources and to the U.S. Fish and Wildlife Service at the time of filing with the Commission.

7.5.2 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 Minnesota Department of Natural Resources and to the U.S. Fish and Wildlife Service at the time of filing with the Commission.

7.5.3 Immediate Incident Reports

The Permittee shall notify the Commission, U.S. Fish and Wildlife Service, and the Minnesota Department of Natural Resources within 24 hours of the discovery of any of the following:

- (a) five or more dead or injured birds or bats within a five day reporting period;
- (b) one or more dead or injured state threatened, endangered, or species of special concern;
- (c) one or more dead or injured federally listed species, including species proposed for listing; or
- (d) 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.

7.5.4 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.

7.5.5 Karst Geology Investigations

Should initial geotechnical and soils testing at proposed turbine locations identify areas with karst bedrock within 50 feet or less of the soil surface, which may lead to sinkhole

formation, additional geotechnical investigations will be performed to insure the area safe for the construction of a wind turbine.

Additional geotechnical investigations may include the following:

1. A geophysical investigation (electrical resistivity) to explore for voids in the bedrock.
2. Soil/bedrock borings to check and confirm the results of the electrical resistivity survey.
3. A series of electric cone penetrometer (CPT) soundings if the potential for loose zones in the soil overburden are suspected.

The Permittee must file with the Commission, a report for all geotechnical investigations completed. The reports must include methodology, results, and conclusions drawn from the geotechnical investigation.

8.0 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.

9.0 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 Freeborn Wind Farm Docket No. E-002\WS-17-410 complaint procedures attached to this permit (Attachment A).

10.0 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. Attachment B to this permit contains a summary of compliance filings, which is provided solely for the convenience of the Permittee. If this permit conflicts, or is not consistent with Attachment B, the conditions in this permit will control.

10.1 Pre-Construction Meeting

Prior to the start of any construction, the Permittee shall participate in a pre-construction meeting with the Department of Commerce 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 the Department of Commerce 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 Freeborn County Environmental Services Office 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 Freeborn County Environmental Services Office. 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 Freeborn County Environmental Services Office, 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 Minnesota Pollution Control Agency, the Minnesota Department of Natural Resources, the Freeborn County Environmental Services Office, 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 site restoration.

10.5 Notification to the Commission

At least three days before the project is to commence commercial operation, the Permittee shall file with the Commission the date on which the project will commence commercial operation and the date on which construction was completed.

10.6 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.

10.7 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 large wind energy conversion system.

10.8 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.

This information shall be considered public and must be filed electronically.

10.9 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.

10.10 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.

10.11 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.

11.0 DECOMMISSIONING, RESTORATION, AND ABANDONMENT

11.1 Decommissioning Plan

The Permittee shall submit a decommissioning plan to the Commission at least sixty (60) days prior to the pre-operation meeting, and provide updates to the plan every five years thereafter.

The 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 its pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. 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 developed and submitted to the Commission outlining the steps and schedule for returning the project, or any turbine within the project, to service.

12.0 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. If done, this permit may be modified, after notice and opportunity for public hearing, to represent the actual site required by the Permittee to operate the Project authorized by this permit.

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 Commission's 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

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

- (a) to enter upon the facilities easement of the site 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; and
- (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.

13.0 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.

14.0 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.

Within 20 days after the date of the notice provided in Section 10.5, the Permittee shall file a notice 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.

15.0 REVOCATION OR SUSPENSION OF PERMIT

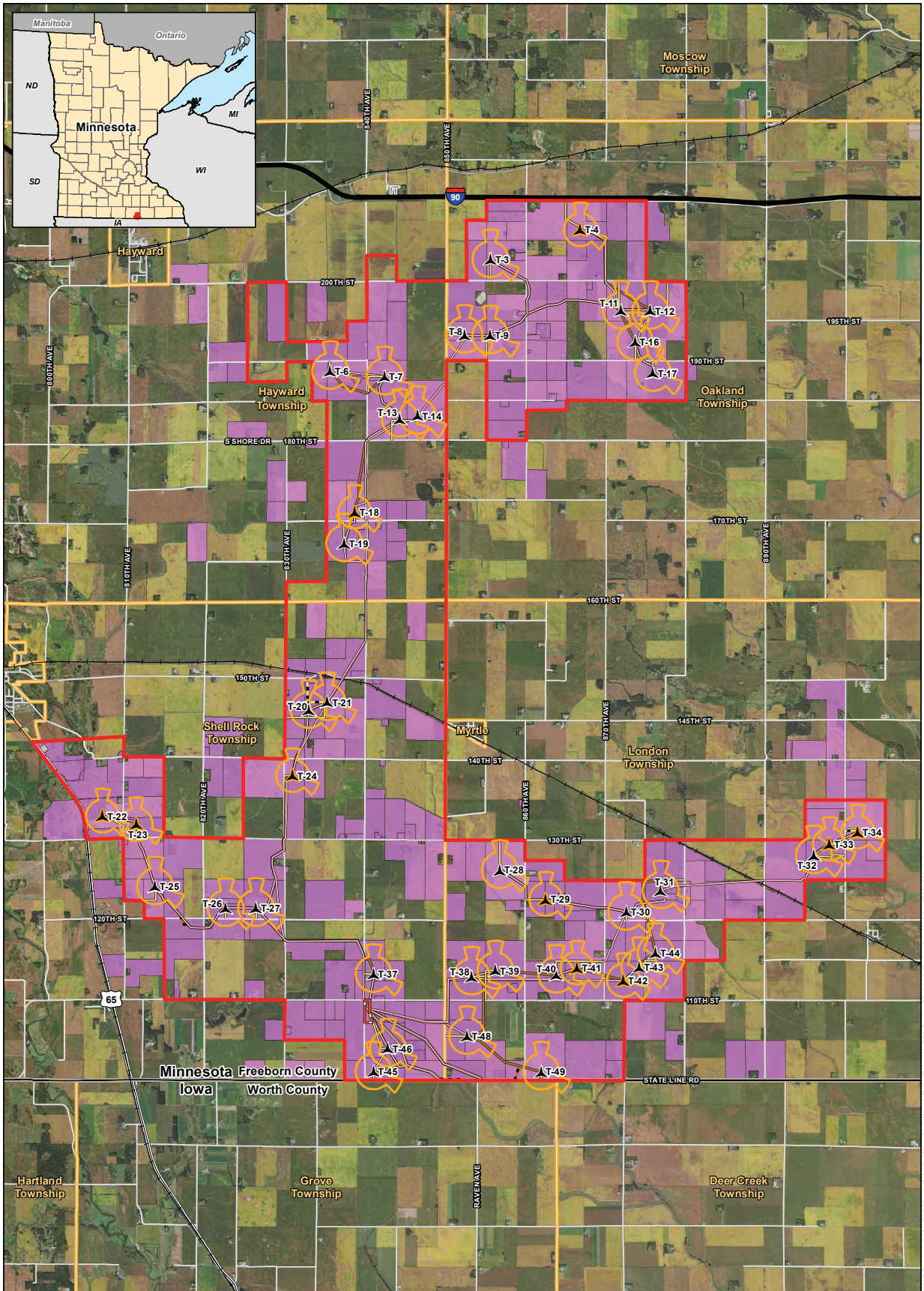
The Commission may take action to suspend or revoke this permit upon the grounds that:

- (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.

16.0 EXPIRATION DATE

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



FREEBORN WIND FARM

0 0.5 1 Miles
1 inch = 1 miles

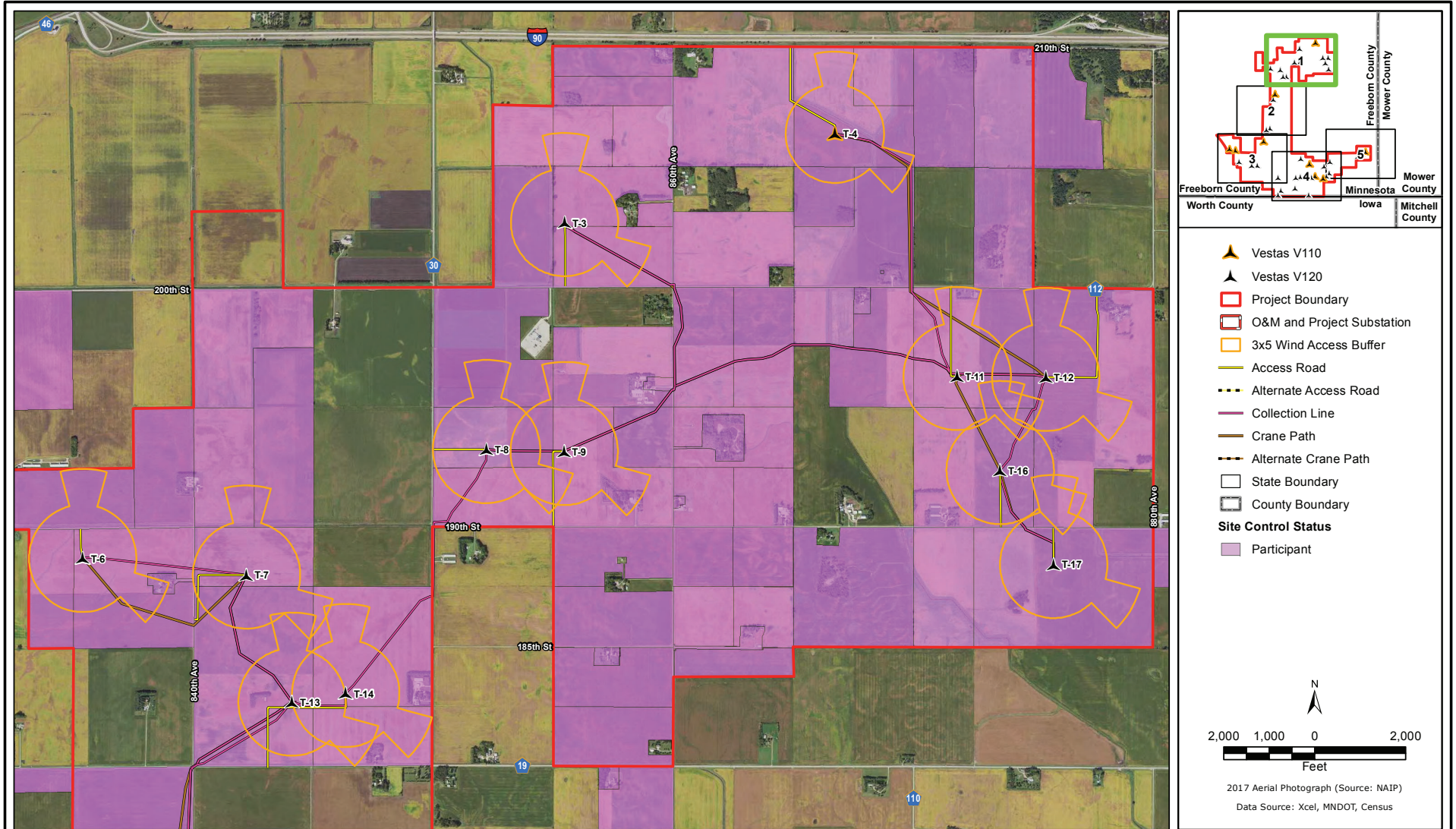
Imagery Source: 2017 Color FSA
Data Source: Xcel, MN DNR, USFWS, Census
For Environmental Review Purposes Only

Project Overview and Land Ownership

Freeborn Wind Farm

Freeborn County, MN

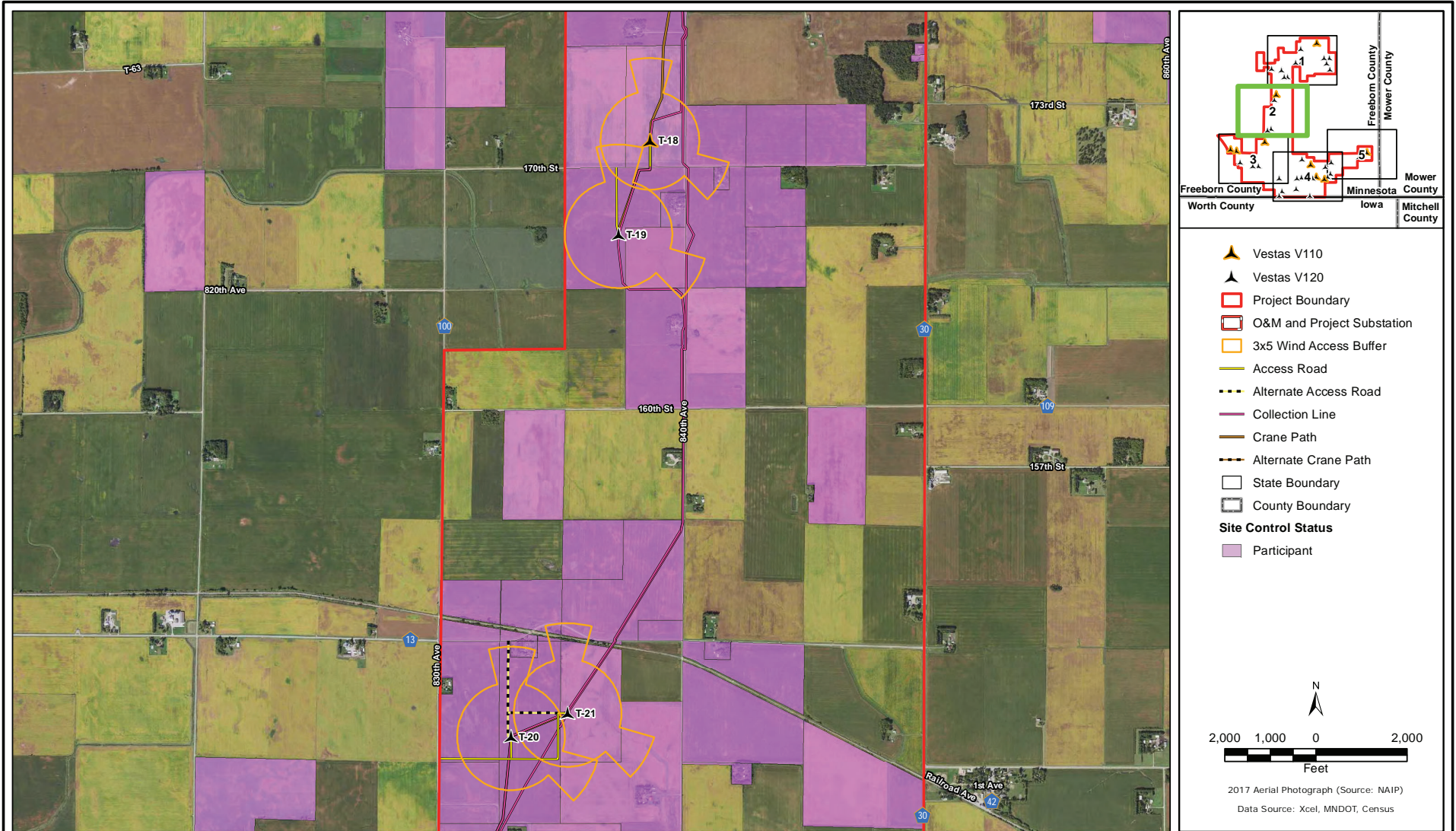
- Vestas V110
- Vestas V120
- Project Boundary
- O&M and Project Substation
- 3x5 Wind Access Buffer
- Access Road
- Alternate Access Road
- Collection Line
- Crane Path
- Alternate Crane Path
- Site Control Status**
- Participant



FREEBORN WIND FARM
Turbine Layout Wind Access Buffers



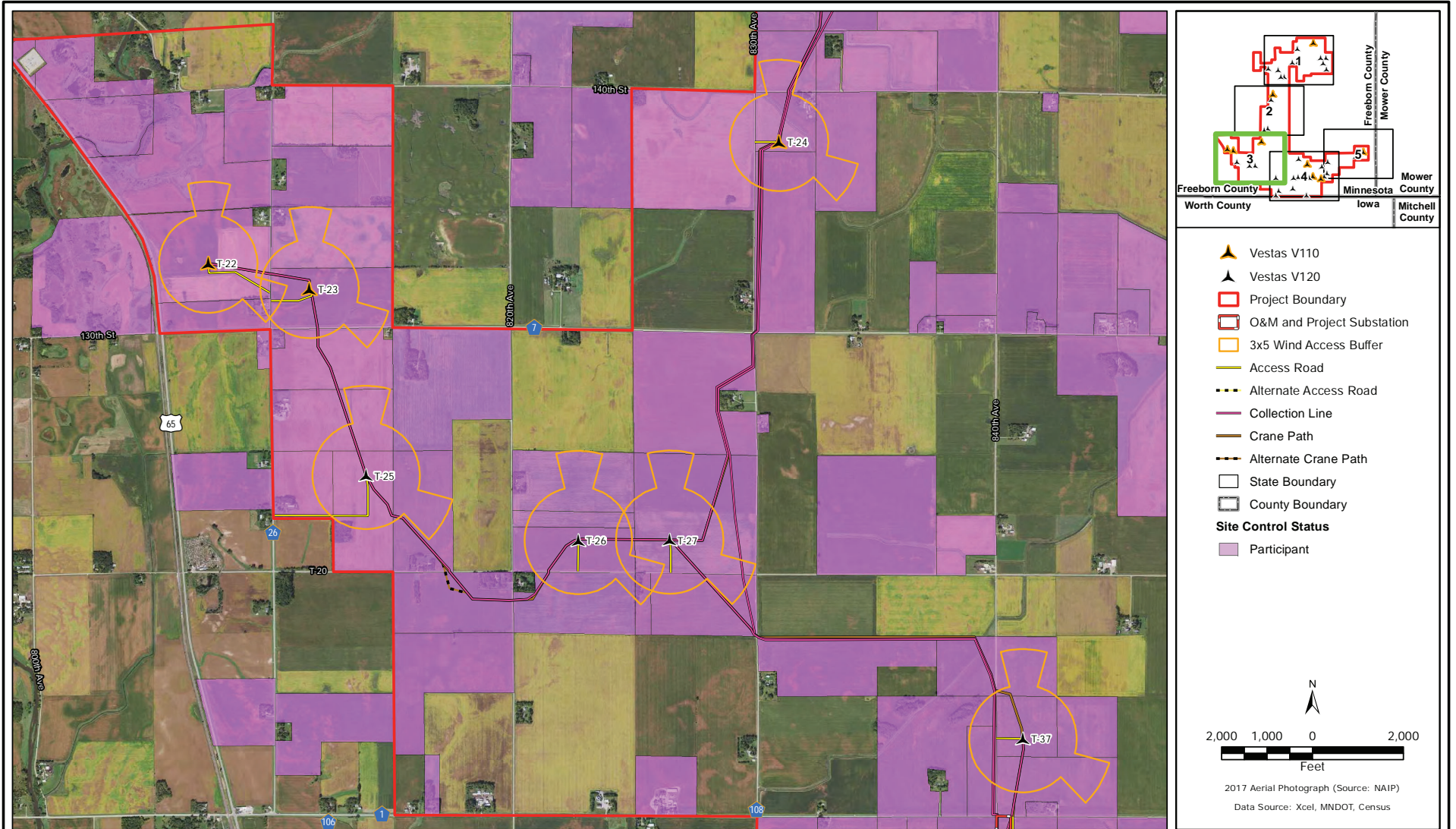
NOV 2019
Map 1 of 5



FREEBORN WIND FARM
Turbine Layout Wind Access Buffers



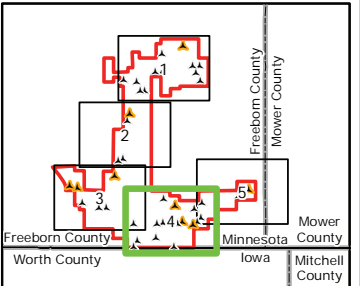
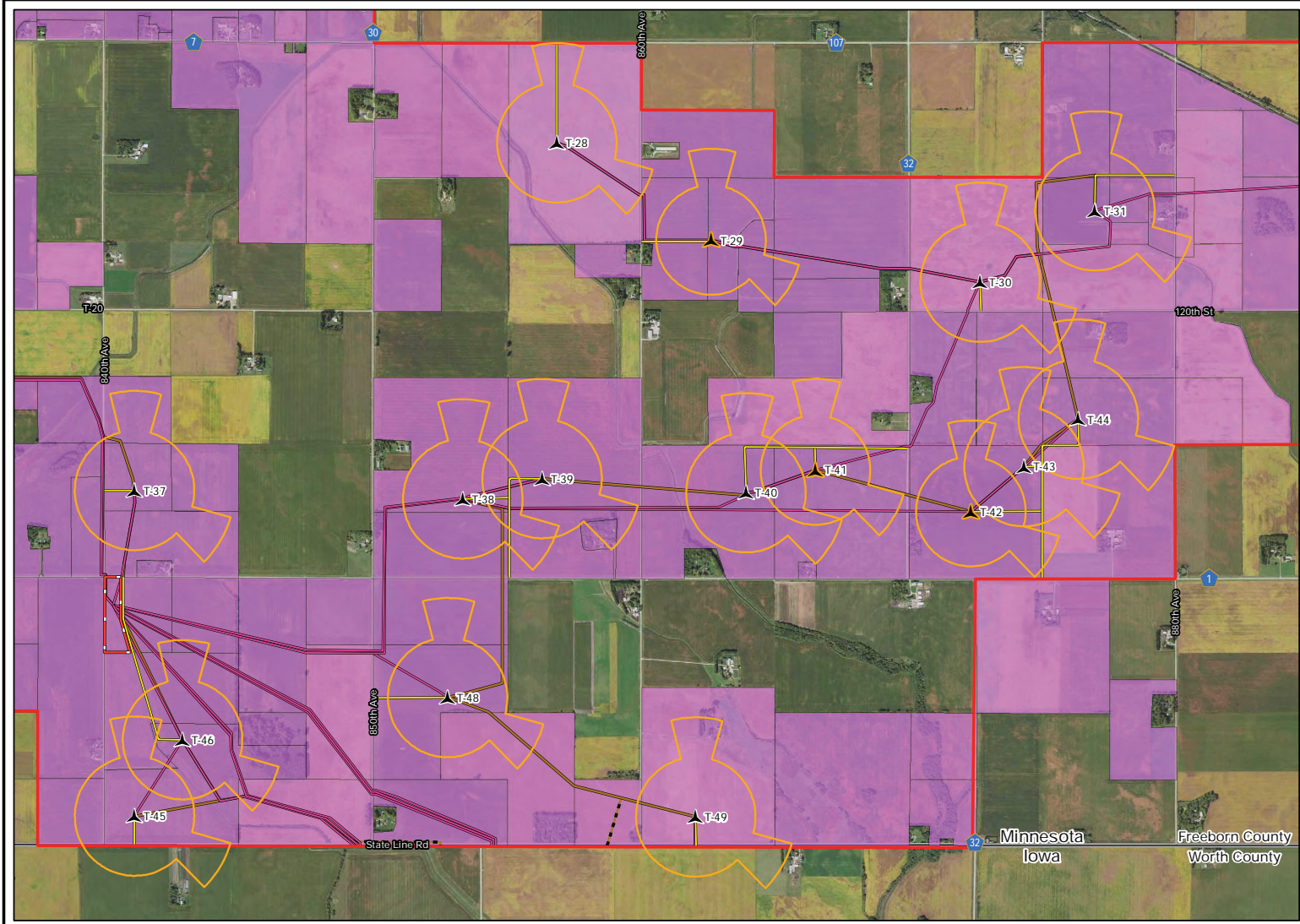
NOV 2019
Map 2 of 5



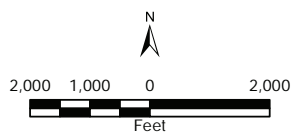
FREEBORN WIND FARM
Turbine Layout Wind Access Buffers



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Map 3 of 5



- Vestas V110
- Vestas V120
- Project Boundary
- O&M and Project Substation
- 3x5 Wind Access Buffer
- Access Road
- Alternate Access Road
- Collection Line
- Crane Path
- Alternate Crane Path
- State Boundary
- County Boundary
- Site Control Status
- Participant



2017 Aerial Photograph (Source: NAIP)
 Data Source: Xcel, MNDOT, Census

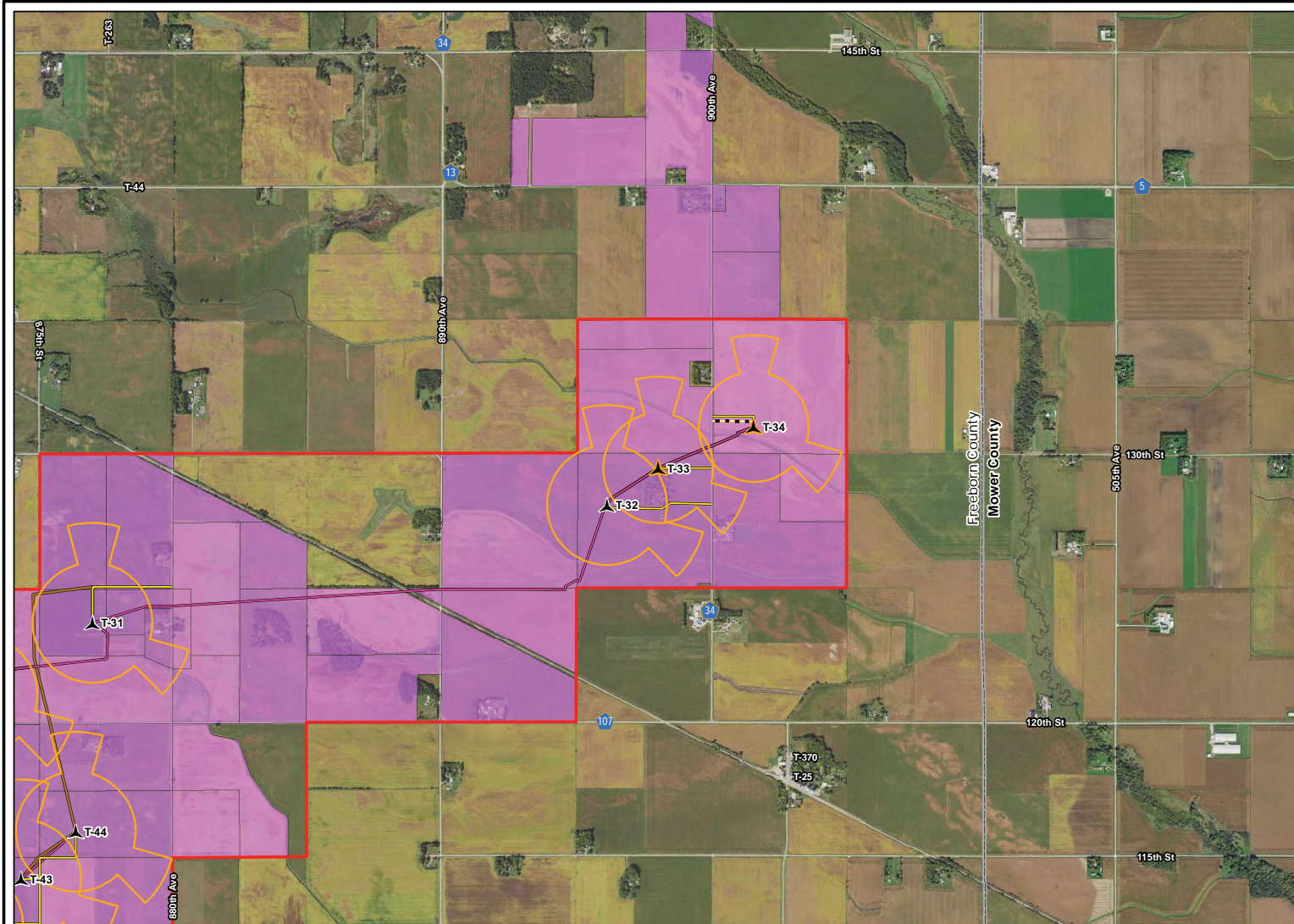
FREEBORN WIND FARM

Turbine Layout Wind Access Buffers



NOV 2019

Map 4 of 5



- Vestas V110
- Vestas V120
- Project Boundary
- O&M and Project Substation
- 3x5 Wind Access Buffer
- Access Road
- Alternate Access Road
- Collection Line
- Crane Path
- Alternate Crane Path
- State Boundary
- County Boundary

Site Control Status

- Participant

N

2,000 1,000 0 2,000

Feet

2017 Aerial Photograph (Source: NAIP)
Data Source: Xcel, MNDOT, Census

FREEBORN WIND FARM
Turbine Layout Wind Access Buffers



**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 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 preparation, cleanup or restoration or, television or communication signals, or other site and associated facilities 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 an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.
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. date of complaint;
 - c. tract or parcel number; and
 - d. whether the complaint relates to a permit matter or a compliance issue.
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. activities undertaken to resolve the complaint; and
 - g. 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. 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 Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.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 and restoration, 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 Daniel P. Wolf, 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.

G. Complaints Received by the Commission

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

H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may be filed by mail or email to:

Sean Lawler
Xcel Energy
414 Nicollet Mall
Minneapolis, MN 55401
FreebornWind@xcelenergy.com

This information shall be maintained current by informing the Commission of any changes as they become effective.

**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.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: Xcel Energy
 PERMIT TYPE: LWECS Site Permit
 PROJECT LOCATION: Freeborn County
 PUC DOCKET NUMBER: E002/WS-17-410

Filing Number	Permit Section	Description of Compliance Filing	Due Date
1	4.7	Prairie Protection and Management Plan	30 days prior to submitting Site Plan, as deemed necessary
2	4.12	Notification to Airports	Prior to project construction
3	5.1	Notification of Permit and Complaint Procedures	30 days of permit issuance
4	5.2.1	Field Representative	14 days prior to commencing construction
5	5.2.2	Site Manager	14 days prior to commercial operation
6	5.2.6	National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater Permit	In accordance with Minnesota Pollution Control Agency
7	5.2.9	Notification of Pesticide Application	14 days prior to application
8	5.2.10	Invasive Species Protection Plan	14 days prior to pre-construction meeting
9	5.2.12	Identification of Roads	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
10	5.2.16	Assessment of Television and Radio Signal Reception, Microwave Signal Patterns, and Telecommunications	60 days prior to pre-construction meeting
11	5.2.21	Site Restoration	60 days after completion of restoration
12	5.2.25	Public Safety/Education Materials	Upon request
13	5.4	Engineered Drawings of Collector and Feeder Lines	Submit with the Site Plan
14	5.5.2	Filing Regarding Other Required Permits	14 days prior to pre-construction meeting
15	7.1	Biological and Natural Resource Inventories	30 days prior to pre-construction meeting
16	7.2	Shadow Flicker Data	14 days prior to pre-construction meeting
17	7.3	Wake Loss Studies	14 days prior to pre-construction meeting and annual wake loss with annual report
18	7.4	Post-Construction Noise Methodology	14 days prior to pre-construction meeting
19	7.4	Post-Construction Noise Study	14 months of commercial operation
20	7.5.1	First Annual Audit and Revision of Avian and Bat Protection Plan	14 days prior to pre-construction meeting
21	7.5.1	Annual Report - Avian and Bat Protection Plan	15th of March each year or partial year

Filing Number	Permit Section	Description of Compliance Filing	Due Date
22	7.5.2	Quarterly Incident Reports	15th of January, April, July, and October the day following commercial operation
23	7.5.3	Immediate Incident Reports	24 hours of discovery and a report within 7 days
24	8.1	Demonstration of Wind Rights	14 days prior to pre-construction meeting
25	8.2	Power Purchase Agreement	If not obtained within two years issuance of permit
26	8.3	Failure to Construct	If within two years issuance of permit
27	10.0	Complaint Procedures	Prior to start of construction
28	10.1	Pre-Construction Meeting Summary	14 days following meeting
29	10.2	Pre-Operation Meeting Summary	14 days following meeting
30	10.3	Site Plan	14 days prior to pre-construction meeting
31	10.4	Construction Status Reports	Monthly
32	10.5	Commercial Operation	3 days prior to commercial operation
33	10.6	As-Builts	90 days after completion of construction

Filing Number	Permit Section	Description of Compliance Filing	Due Date
34	10.7	GPS Data	90 days after completion of construction
35	10.8	Project Energy Production	February 1st following each complete or partial year of project operation
36	10.9	Wind Resource Use	February 1st following each complete or partial year of project operation
37	10.10	Emergency Response Plan	14 days prior to pre-construction meeting and revisions 14 days prior to pre-operation meeting
38	10.11	Extraordinary Event	Within 24 hours of discovery
39	11.1	Decommissioning Plan	60 days prior to pre-operation meeting
40	14.0	Notice of Ownership	14 days after operation