

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben  
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Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

In the Matter of Freeborn Wind Energy  
LLC's Application for a Large Wind Energy  
Conversion System Site Permit for the 84  
MW Freeborn Wind Farm in Freeborn  
County

ISSUE DATE: May 10, 2019

DOCKET NO. IP-6946/WS-17-410

ORDER AMENDING SITE PERMIT

**PROCEDURAL HISTORY**

On December 19, 2018, the Commission issued its Order Issuing Site Permit and Taking Other Action (Site Permit Order), granting Freeborn Wind Energy LLC (Freeborn Wind or the Company) a permit to erect a collection of wind turbines and related facilities (a wind farm) in Freeborn County (the Project). In support of its decision, the Commission adopted with modifications the findings, conclusions, and recommendation prepared by an Administrative Law Judge (ALJ).

By January 9, 2019, the Commission had received petitions for reconsideration or clarification from the Association of Freeborn County Landowners (AFCL), Freeborn Wind, Sean and Heidi Gaston, Dorene Hansen, Sue Madson, and Allie Olson. The Commission had also received letters from State Senator Dan Sparks and State Representative Peggy Bennett. Among other topics, commenters raised concerns about provisions in the site permit—and in particular, about Section 7.4 and its subsections, addressing compliance with state noise standards.

On January 18, 2019, the Minnesota Department of Commerce (Department) filed comments and recommendations. In addition, Freeborn Wind filed answers to the petitions for reconsideration, and a motion to strike portions of AFCL's petition as untimely and unsupported by the record.

On January 28, 2019, AFCL filed a response to Freeborn Wind's motion to strike.

By February 14, 2019, the Department had filed revised comments, and AFCL had filed a motion to remand the docket to the Minnesota Office of Administrative Hearings for further proceedings.

On February 26, 2019, the Commission granted rehearing, and granted parties 14 days to provide rationales in support of their proposed changes to the site permit and to propose further revisions to Section 7.4.

On February 27, 2019, Freeborn Wind filed its response to AFCL's motion to remand.

On March 4, 2019, Freeborn Wind filed comments, including an attachment delineating proposed changes to the site permit.

By March 22, 2019, the Commission had received additional filings from AFCL, the Department, and Freeborn Wind.

On March 25, 2019, the Commission's staff filed briefing papers in this docket.

On March 26, 2019, AFLC filed objections to the briefing papers.

On April 1, 2019, the Commission met to consider the matter.

## **FINDINGS AND CONCLUSIONS**

### **I. Summary**

In this order, the Commission declines to act on the parties' motions. Instead, on its own motion, the Commission reconsiders its Site Permit Order and makes corrections in the permit language as recommended by the Department and Freeborn Wind.

### **II. Positions of the Parties and Commenters**

#### **A. Commenters**

Commenters raised concerns about a variety of matters, including the permit's site layout and setbacks, turbine noise, shadow flicker, decommissioning, and enforcement.

#### **B. AFCL**

AFCL raised a number of objections to the Commission's Site Permit Order, including the following allegations:

- The Department met privately with Freeborn Wind and the Minnesota Pollution Control Agency (MPCA) in violation of Minn. R. 7845.0400.
- The Commission declined to require Freeborn Wind to build its turbines set back at least 1,500 feet from any landowner who has not consented to the Project, as recommended by the ALJ.
- The Commission authorized Freeborn Wind to model its compliance with noise standards based on a 0.5 ground factor rather than the 0.0 ground factor that the Company had used in its application (where a higher factor means a greater tendency to absorb sound).
- The permit provides for Freeborn Wind and the Department to collaborate in developing a methodology for measuring noise arising from the project, rather than directing Freeborn Wind to use a methodology developed in the context of other wind farms.

- Freeborn Wind and the Commission have relied on the MPCA’s 2015 “A Guide to Noise Control in Minnesota; Acoustical Properties, Measurement, Analysis and Regulation” (2015 MPCA Guide), when no party had filed that document into the record.
- The address that Freeborn Wind provided for receiving complaints led to an unoccupied office.
- The Commission granted the site permit notwithstanding the claim that “[t]he community does not consent to the project.”<sup>1</sup>

In relief, AFCL asked the Commission to strike various filings from the record, reconsider its Site Permit Order, suspend the site permit, and remand the matter to the Administrative Law Judge for additional record development.

### **C. Freeborn Wind**

Freeborn Wind asked the Commission to deny AFCL’s petitions for relief. The Company also proposed a variety of changes to the permit, summarized below.

- Section 2.0 (Project Description)—Freeborn Wind proposed modifying this section to clarify the wind farm’s generating capacity in Iowa.
- Section 4.9 (Wind Turbine Towers)—Freeborn Wind proposed subdividing the discussion of restrictions related to setbacks and site layout to establish a heading for the discussion of wind turbine towers, and to re-number to subsequent headings accordingly.
- Section 6.2 (Post-Construction Noise Monitoring)—Freeborn Wind proposed correcting an error to substitute the word “monitoring” for “modeling.”
- Section 6.3. (Over-the-Air Television Interference Notice Requirements)—To better conform the language of the permit to the Commission’s order, Freeborn Wind proposed adding a subdivision summarizing the Commission’s requirement that the developer provide certain types of notice related to the risk that wind turbines may interfere with over-the-air television transmissions.
- Section 7.4. (Noise Studies)—Noting that Sections 6.1 and 6.2 already address pre- and post-construction noise regulation, Freeborn Wind proposed omitting much of the language at 7.4.1 and 7.4.2 which address the same topic, and instead restoring Section 7.4 from the Commission’s Draft Site Permit (January 30, 2018).

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<sup>1</sup> AFCL Motion for Reconsideration, at 18 (January 8, 2019).

- Section 7.5.1 (Avian and Bat Protection Plan)—While the site permit directs Freeborn Wind to comply with an Avian and Bat Protection Plan filed in 2017, Freeborn Wind proposes to substitute a later version approved by the Minnesota Department of Natural Resources (MDNR).
- Complaint Handling Procedures—Freeborn Wind proposed changing the people designated to receive complaints—and, in particular, to identify Northern States Power Company d/b/a Xcel Energy (Xcel) as the party that will be responsible for the project once construction begins.
- Table of Contents—Freeborn Wind proposed revising the table of contents to reflect the changes listed above.

#### **D. Department**

The Department expressed no objection to Freeborn Wind’s proposed changes to the permit—with one proviso. The Department recommended adding language to Section 7.4 to clarify the relationship between the Department, Freeborn Wind, and the independent consultant that would be hired to develop and conduct the study of the Project’s noise during operations, as follows:

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.

With this addition, the Department concluded that revised Section 7.4 would provide clear and enforceable language that would help ensure that the necessary noise monitoring is performed and filed.

### **III. Commission Action**

#### **A. Motions**

AFCL and Freeborn Wind each filed motions to exclude portions of the other party’s filings from the record, and AFCL moved to remand this matter to the ALJ for further record development. The Commission finds that the record is well developed already, and that the Commission can take each party’s concerns into account when evaluating the appropriate weight to give to the filings. Accordingly the Commission will decline to grant the motions to strike or to refer for further proceeding.

#### **B. *Ex Parte* Meetings**

AFCL objects to the fact that the Department met with Freeborn Wind and the MPCA outside the presence of AFCL. AFCL cited Minn. R. 7845.0400 for the proposition that such meetings violated the Commission’s rule requiring Commission employees to avoid actions that might

result in the appearance of impropriety, and the rule limiting *ex parte* communications during contested cases.<sup>2</sup>

By its terms, the rules applying to the propriety of Commission employees and *ex parte* communications apply to Commissioners and employees of the Commission.<sup>3</sup> The rules do not constrain any party or participant—not the Department, not AFCL—from convening meetings, including meetings with other parties, participants, or government agencies, *except* where those meetings would include a Commissioner or employee of the Commission. The record provides no basis for applying Minn. R. 7845.0400 or 7845.7400 to any meeting or meetings between the Department, Freeborn Wind, and/or the MPCA.<sup>4</sup>

## **C. Noise**

### **1. Introduction**

The Commission initially issued a draft Site Permit on January 30, 2018. On September 19, 2018, Freeborn Wind offered its Late Filed Proposed Special Conditions Related to Noise, reflecting permit language agreed to by the Company, the Department, and MPCA. At its September 20, 2018 meeting, the Commission combined the language from the draft Site Permit with language from other sources and incorporated them into Permit Sections 4.3, 6.1, 6.2, 7.4.1, and 7.4.2.<sup>5</sup> This language prompted requests for reconsideration or clarification from AFCL, Freeborn Wind, and other commenters. At the Commission’s February 15, 2019 meeting, the Commission invited comments specifically about how to reconcile the permit’s terms regulating noise,<sup>6</sup> and subsequently received comments from AFCL, Freeborn Wind, and the Department.

The Commission finds that Freeborn Wind’s proposed changes to the Permit’s provisions governing noise are reasonable. This proposal would retain the Draft Site Permit’s Section 4.3, correct a typographical error in Section 6.2, and restore the draft Site Permit’s Section 7.4 (replacing Sections 7.4.1 and 7.4.2). In addition, the Commission finds that the Department’s proposed language—clarifying that the consultant that will develop and conduct the noise monitoring must meet with the Department’s approval—is also reasonable. Accordingly the Commission will adopt all these changes.

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<sup>2</sup> AFCL Response to Freeborn Wind Energy LLC’s Request for Clarification/Motion for Reconsideration, at 2 (January 18, 2019).

<sup>3</sup> Minn. R. 7845.0400, subp. 2; *see also* Minn. R. 7845.7000 and .7400.

<sup>4</sup> *See also* Minn. Stat. § 216A.037, subd. 3 (“[T]he commission shall adopt rules prescribing a code of conduct for commissioners and employees of the commission.”).

<sup>5</sup> Site Permit Order, Attachment 2 (Site Permit).

<sup>6</sup> Order Continuing Proceedings, Tolling Deadline and Soliciting Comments (February 26, 2019).

## 2. Distinguishing background noise

AFCL objected that the Commission lacked record support to adopt Sections 6.1 (Pre-Construction Noises Modeling) and 6.2 (Post-Construction Noise Monitoring). These sections limit turbine noise to no more than 47 A-weighted decibels (that is, decibels measured in a manner that reflects the sensitivities of the human ear) for 50 percent of the time during a one-hour testing period (denoted 47 dB(A) L<sub>50</sub>-one hour).<sup>7</sup>

The Commission's decision is well grounded in the record. According to Freeborn Wind's application, the Company's noise models demonstrated that the Project would meet the state noise standards:

[T]hrough the careful placement of turbines and the selective use of the quieter V110 turbines, *noise levels are approximately 47 dB(A) or less at all non-participating residences*. It should be noted that the noise levels shown in Figure 8 and listed in Table 8.3-4 are the maximum that are ever expected to occur. Noise levels will be less than those shown when the turbines are not operating near full capacity, are off, or when atmospheric conditions are less conducive to sound propagation.<sup>8</sup>

In support of its application, Freeborn Wind's Dr. Mark Roberts filed testimony including a document identifying other jurisdictions that had adopted a noise standard of 47 dB(A).<sup>9</sup>

But more generally, limiting the Project's noise to no more than 47 dB has the desired effect of ensuring that the Project would never contribute more than a barely perceptible amount of noise in an environment with background noise of 47 dB or more. This conclusion results from two facts. First, outside of laboratory conditions, most people cannot perceive a noise increase of less

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<sup>7</sup> AFCL also objected that Freeborn Wind's proposed language for Sections 6.1 and 6.2 would use a 47 dB(A) limit rather than the 45 dB(A) limit set forth in the Site Permit issued by the Commission. While this claim is accurate, the 45 dB(A) limit reflected a typographical error; the Commission approved a noise limit of 47 dB(A). See Minutes—September 20, 2018 Agenda Meeting, at 3 (April 12, 2019).

<sup>8</sup> Ex. FR-1 (Freeborn Wind Site Permit application) at 34 (emphasis added).

<sup>9</sup> Ex. FR-6 (Roberts Direct), Sch 22 (Report on Health Impacts of Wind Turbines), at 44 (citing, for example, the Netherlands) (December 22, 2017).

than 3 dB(A).<sup>10</sup> Second, noise combines logarithmically, such that a doubling of noise results in an increase of only 3 dB.<sup>11</sup>

Thus, adding a 47 dB wind farm to an environment with 47 dB of background noise would increase aggregate noise levels to no more than 50 dB. If background noise levels increase from that point, a 47 dB windfarm's contribution to the total would be less than 3 dB; if background noise levels decrease from that point, then the windfarm's contribution would be more than 3 dB—but not enough to cause aggregate noise levels to exceed 50 dB. In support of this analysis, Freeborn Wind cited the testimony of Mike Hankard and the MPCA's 2015 "A Guide to Noise Control in Minnesota; Acoustical Properties, Measurement, Analysis and Regulation" (2015 MPCA Guide), among other things.<sup>12</sup>

AFCL objected to Freeborn Wind relying on the 2015 MPCA Guide, arguing that the document was not in the record. Freeborn Wind incorporated the 2015 MPCA Guide into its initial application by reference.<sup>13</sup> The Commission may consider documentary evidence that is incorporated by reference to be part of the record.<sup>14</sup> Because the 2015 MPCA Guide is a public document published by a state agency for the purpose of implementing state noise standards, and was incorporated by reference into a document in the record, the Commission considers the Guide to be part of the record, too.<sup>15</sup>

### 3. Ground factor

In addition, AFCL objected that the Commission authorized Freeborn Wind to model noise from the Project based on a 0.5 ground factor, rather than the 0.0 factor discussed in much of the record. The Commission finds no merit to this objection.

Freeborn Wind boasted that its project would meet noise standards even under the "very

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<sup>10</sup> *Id.*, Sch. 22 at 28 ("Human subjects under normal conditions, and for sounds of a similar temporal and spectral nature, are generally only capable of noticing changes in noise levels of no less than 3 dB(A)."); Sch. 25 (Analysis of the Research on the Health Effects from Wind Turbines, including Effects from Noise) at 6 ("[A] 3 dB increase correlates to a doubling in objective sound energy levels, but is considered the threshold of perceivable difference in sound levels."); Sch. 26 (Strategic Health Impact Assessment on Wind Energy Development in Oregon) at 12, 32, 57; Tr. Vol. 1B at 115 (Hankard); Site Permit Order, Attachment 1 (Modifications to the ALJ Report), Finding 197.

<sup>11</sup> Tr. Vol. 1B at 65 (Hankard).

<sup>12</sup> MPCA 2015 Noise Guide at 11 (Nov. 2015) available at <https://www.pca.state.mn.us/sites/default/files/p-gen6-01.pdf>. Ex. FR-1 (Freeborn Wind Site Permit application), Appendix B (Pre-Construction Noise Analysis); Ex. FR-5 (Hankard Direct); Ex. FR-18 (Aff. of Mike Hankard and Noise Tables); Evid. Hr'g Trans. Vol 1B (February 21, 2018) at 114-115 (Hankard); Freeborn Wind's Late-Filed Proposed Special Conditions Related to Noise (September 19, 2018); Freeborn Wind handout "Special Condition—Example" (October 3, 2018).

<sup>13</sup> Ex. FR-1 (Freeborn Wind Site Permit application), Appendix B (Pre-Construction Noise Analysis) at 2.

<sup>14</sup> Minn. Stat. § 14.60, subp. 2.

<sup>15</sup> *See* Site Permit Order, Attachment 1 (Modifications to the ALJ Report), Finding 207A.

conservative” assumptions of a 0.0 ground factor and that all homes being modeled would be downwind of the turbines. When the ALJ found that the record did not support Freeborn Wind’s claim, the Company abandoned its needlessly stringent argument and switched to arguing that the Project would meet the noise standards under the more realistic assumption of a 0.5 ground factor. As Freeborn Wind explained in its application:

A ground factor of 0.0 represents a completely reflective surface such as pavement, which would result in a higher level of sound reaching a receiver. A ground factor of 1.0 represents absorptive ground such as thick grass or fresh snow, resulting in a lower level of sound reaching the receiver. For this Project, a ground factor of 0.0 (completely reflective) was used to be conservative. *Actual ground conditions* could, at rare times, be 0.0 when the ground is completely frozen and bare, but *would generally be closer to 0.5 when the ground is covered with vegetation or is bare and unfrozen.*<sup>16</sup>

The Commission never understood Freeborn Wind to argue that the ground factor *would* be 0.0. Rather, the Commission understood the Company to offer its analysis with a 0.0 ground factor to demonstrate that its Project would cross any regulatory hurdle with room to spare. Freeborn Wind now argues that the Project will merely comply with the noise standard. Because the noise standard requires compliance, not “room to spare,” the Commission finds no fault with Freeborn Wind’s position. The Commission finds that the Company has fulfilled its regulatory obligations.

#### **4. World Health Organization study**

AFCL argued that the Commission should reconsider its decision based on the Environmental Noise Guidelines issued by the World Health Organization.<sup>17</sup>

However, the text of the portion of the study filed by AFCL states that the WHO’s recommendations are “conditional” and based on low-quality studies with no association, or

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<sup>16</sup> Ex. FR-1 (Freeborn Wind Site Permit application), Appendix B (Pre-Construction Noise Analysis) at 12 (emphasis added). *See also* EERA-9 (Department’s 2012 Guidance for Large Wind Energy Conversion System Noise Study Protocol and Report), including Appendix B which references, among other documents, the National Association of Regulatory Utility Commissioners’ *Assessing Sound Emissions from Proposed Wind Farms and Measuring the Performance of Completed Projects*, October 2011 (“Assume a ground absorption coefficient (Ag from ISO 9613-2) appropriate to the site area (a moderate value of 0.5 generally works well as an annual average for rural farmland, although higher values specifically for farm fields during summer conditions may be appropriate. A value of 0 (100% reflective ground) is likely to produce highly conservative results.”).

<sup>17</sup> AFCL Petition for Reconsideration, Ex. G.

statistically insignificant association, with public health outcomes.<sup>18</sup> Accordingly the Commission will decline to reconsider its decision on this basis.

## 5. Low-Frequency Noise and Infrasound

Commentors objected to the Commission's failure to establish conditions on low frequency noise and/or infrasound.

The Commission considered this matter in its Site Permit Order and concluded that there was insufficient basis to include any specific conditions in the Site Permit related to low-frequency noise/infrasound. The MPCA has established no standard explicitly limiting infrasound. Because wind turbine noise has a relatively consistent spectral shape, once any part of the spectrum of sound is limited, this effectively limits the rest of the spectrum.<sup>19</sup>

## 6. Noise Studies

Finally, AFCL objected that Section 7.4 (with language proposed by the Department) requires Freeborn Wind to work with the Department in developing a study to measure noise coming from the Project after it is in operation. AFCL argued that this process is unnecessary as the Department has already developed such studies for purposes of evaluating other wind farms. In support of this argument, AFCL cites prior wind farm projects.<sup>20</sup>

The Commission acknowledges that the Department has developed some experience in post-construction noise monitoring. Nevertheless, circumstances and the state of technology change with each project. Accordingly the Commission will continue its practice of offering wind farm developers the opportunity of working with the Department in developing a noise-monitoring methodology—just as the Commission did in the prior wind farm dockets that AFCL cites with approval.<sup>21</sup>

## D. Setbacks

AFCL and others objected that the Site Permit authorizes Freeborn Wind to erect wind turbines within 1,000 feet of residences, rather than set back 1,500 feet as recommended by the ALJ. AFCL argued that 1,000 feet is arbitrary and may lead to residents experiencing excessive noise from the turbine's operation.

First, the Commission clarifies that the setback standard is not a substitute for the noise standards; Freeborn Wind must comply with both standards. Permit Section 4.2 states that the turbine towers “shall not be located closer than 1,000 feet from all residences *or the distance*

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<sup>18</sup> *Id.*, Ex. G at 77–78 and 84–85.

<sup>19</sup> Site Permit Order at 16.

<sup>20</sup> *See. e.g., In the Matter of the Site Permit Issued to the Wisconsin Power and Light Company for the Bent Tree Wind Project in Freeborn County, Minnesota*, Docket No. ET-6657/WS-08-573, Order (October 20, 2009).

<sup>21</sup> *See. e.g., id.*, Site Permit Section III.F.2.

*required to comply with the noise standards ... , whichever is greater.*” (Emphasis added). Likewise, Section 4.3 states, “The wind turbine towers shall be placed such that the Permittee shall, at all times, comply with noise standards....”

Second, as the Commission explained in its Site Permit Order,<sup>22</sup> the ALJ’s finding was based on an erroneous interpretation of the Commission’s Order Establishing General Wind Permit Standards (Wind Standards Order),<sup>23</sup> and ran contrary to the setback requirements the Commission had adopted in other wind farm siting dockets.<sup>24</sup> Instead, Freeborn Wind agreed—with one exception, related to a wetland<sup>25</sup>—to set back its turbines in the manner prescribed by the county’s ordinances.<sup>26</sup> Ultimately the Commission found that Freeborn Wind and the Department provided the most reasonable assessment of the appropriate trade-offs in establishing a setback requirement.<sup>27</sup> Implementing this trade-off provides good cause to deviate from strict adherence to the standard articulated in the County ordinance.<sup>28</sup>

Likewise, the Commission finds no new arguments for reconsidering its setbacks from public road rights-of-way or designated public trails.<sup>29</sup>

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<sup>22</sup> Site Permit Order at 9–10, 18.

<sup>23</sup> *See In the Matter of Establishment of General Permit Standards for the Siting of Wind Generation Projects Less than 25 Megawatts*, Docket No. E,G-999/M-07-1102, Order Establishing General Wind Permit Standards (January 11, 2008).

<sup>24</sup> *See In the Matter of the Application of Red Pine Wind Farm, LLC for a Site Permit for the 200.1 Megawatt Red Pine Wind Project in Lincoln County, Minnesota*, Docket No. WS-16-618, Order Issuing Site Permit for Large Wind Energy Conversion System, at Site Permit Section 4.2 (June 27, 2017) (“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 ... , whichever is greater.”); *In the Matter of the Application of Blazing Star Wind Farm, LLC for a Site Permit for the up to 200 Megawatt Blazing Star Wind Project in Lincoln County*, Docket No. WS-16-686, Order Issuing Site Permit for Large Wind Energy Conversion System, at Site Permit Section 4.2 (August 3, 2017); *In the Matter of the Application of Odell Wind Farm, LLC for a Site Permit for a 200 MW Large Wind Energy Conversion System for the Odell Wind Farm in Cottonwood, Jackson, Martin, and Watonwan Counties*, Docket No. WS-13-843, Order Issuing Site Permit. at Site Permit Section 4.2 (July 17, 2014); *In the Matter of the Application of Prairie Rose Wind, LLC for a Site Permit for a 200 Megawatt Large Wind Energy Conversion System in Rock and Pipestone Counties*, Docket No. WS-10-425, Order Approving Findings of Fact and Issuing Permit, at Site Permit Section 4.2 (September 16, 2011).

<sup>25</sup> Ex. FR-1 (Freeborn Wind Site Permit application) at 6.

<sup>26</sup> Freeborn County Ordinance § 26-51.

<sup>27</sup> *See, e.g.*, Department Comments at 13–15 (December 5, 2017).

<sup>28</sup> Minn. Stat. § 216F.081.

<sup>29</sup> Site Permit Order at 8–10.

### **E. Shadow Flicker**

The ALJ recommended that Freeborn Wind design its wind farm in a manner that would limit shadow flicker at nearby residences to no more than 27 hours per year, emphasizing the need to err on the side of caution. But Permit Section 7.2 does not require the Company to monitor shadow flicker at any residence unless that location is expected to receive at least 30 hours per year. AFCL argued that this change was arbitrary.

To the contrary, the 30 hour per year standard arose from Freeborn County's own ordinance.<sup>30</sup> Given that Freeborn Wind has committed to using software designed to shut down any turbine that would cause a home to experience more than 30 hours of shadow flicker per year,<sup>31</sup> the Commission found no support for adopting a 27 hour standard.<sup>32</sup> That said, if the Project generates an abnormal level of complaints, Section 7.2 also provides that the Commission may require shadow flicker monitoring at any time throughout the life of the permit.

### **F. Decommissioning**

AFCL and others objected that the Commission found Freeborn Wind's siting application complete even though the application lacked a decommissioning plan, and argued that the Site Permit's remedial decommissioning terms were insufficient.

The Commission finds no new information or argument in these objections. The Commission acknowledged its error in finding the application substantially complete without a decommissioning plan, but noted that parties had the authority to request the relevant information via discovery. Moreover, the Commission quadrupled the period for reviewing the plan before the pre-operation meeting, and required Freeborn Wind to send copies to the local zoning authorities. Finally, the Commission required that Freeborn Wind identify all surety and financial securities established for decommissioning and site restoration, and demonstrate that it will have the necessary resources to decommission the project.<sup>33</sup>

With these remedial measures, the Commission finds no need to reconsider its findings regarding decommissioning.

### **G. Property Values**

A commenter argued that the record contained insufficient evidence regarding the consequences of wind farms on the value of adjacent properties.

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<sup>30</sup> Freeborn County Ordinance § 26-56.

<sup>31</sup> See Tr. Vol. 1A at 33 (Litchfield); Ex. FR-1 at 40 (Application) and Ex. AFCL-19 at 2 (Freeborn Wind Response to AFCL IR No. 7).

<sup>32</sup> Site Permit Order at 21–22.

<sup>33</sup> *Id.* at 28; Site Permit Section 11.1.

The Commission considered this matter and concurred with the ALJ that the preponderance of the evidence did not demonstrate that wind farms reduced property values.<sup>34</sup> The Commission finds no basis to reconsider that decision.

#### **H. Interference with Over-the-Air Signals**

A commenter expressed concern that wind turbines would interfere with over-the-air television signals.

The Commission addressed this matter in its Site Permit Order, and adopted specific Site Permit conditions related to this matter.<sup>35</sup> The Commission finds no basis to reconsider that decision.

#### **I. Freeborn Wind Complaint Procedures**

AFCL objected that the address that Freeborn Wind provided for receiving complaints led to an unoccupied office.

The Commission finds merit in this objection. Accordingly the Commission will, on its own motion, accept Freeborn Wind's proposal to revise and maintain the contact information set forth in the Site Permit, providing a new location for sending complaints to the Company and, significantly, for sending complaints to Xcel once construction is complete. Xcel will then assume responsibility for maintaining this contact information.

#### **J. Enforcement**

Various commenters posed questions about how the Permit's terms would be enforced.

In brief, 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 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:

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<sup>34</sup> ALJ Report, Finding 174.

<sup>35</sup> Site Permit Order at 22–26.

- 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.

In sum, over time the Commission has gained experience in anticipating and addressing a variety of circumstances that may arise, and has incorporated into its draft site permit (and the resulting final permits) the necessary language to address those circumstances.

### **K. Community Consent**

Finally, AFCL objected to the Commission issuing the site permit on the grounds that “[t]he community does not consent to the project.”<sup>36</sup>

The Commission evaluates applications for a site permit using criteria set forth at Minn. Stat. Ch. 216F; Minn. Stat. § 216E.03, subd. 7; and Minn. R. Ch. 7854.<sup>37</sup> Applying these criteria, the Commission finds that the site permit should be granted subject to the conditions discussed herein and in prior orders.<sup>38</sup>

### **L. Conclusion**

The Commission has reviewed the entire record and the arguments presented in the comments and petitions for reconsideration.

Except as otherwise specified above, the Commission finds that the comments and petitions do not raise new issues, do not point to new and relevant evidence, do not expose errors or ambiguities in the Site Permit Order, and do not otherwise persuade the Commission that it

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<sup>36</sup> AFCL Motion for Reconsideration, at 18 (January 8, 2019).

<sup>37</sup> Site Permit Order at 3–5.

<sup>38</sup> *See generally* Site Permit Order.

should rethink the decision set forth in that order. The Commission concludes that its decision is consistent with the facts, the law, and the public interest, and will therefore deny the comments and petitions.

On its own motion, the Commission will modify the Site Permit to incorporate the changes recommended by Freeborn Wind and the Department, as set forth in the attached revised permit.

The Commission will so order.

### **ORDER**

1. The motions of the parties and participants are denied.
2. The Commission, on its own motion, reconsiders its Order Issuing Site Permit and Taking Other Action (December 19, 2018) to make corrections in the permit language.
3. The Commission hereby modifies the Site Permit for a Large Wind Energy Conversion System issued on December 19, 2018, to incorporate all the changes recommended by Freeborn Wind Energy LLC as modified by the Minnesota Department of Commerce, and set forth in the revised Site Permit, attached.
4. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf  
Executive Secretary



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**STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION**

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

**IN  
FREEBORN COUNTY**

**ISSUED TO  
FREEBORN WIND ENERGY LLC**

**PUC DOCKET NO. IP-6946\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:

**FREEBORN WIND ENERGY LLC**

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 30 years from the date of initial approval, December 19, 2018.

**BY ORDER OF THE COMMISSION**

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Daniel P. Wolf,  
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 Freeborn Wind Energy LLC (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 84 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, when fully constructed and operational will have a nameplate capacity up to 200 MW, of which, 84 MW will be located in Freeborn County, Minnesota and the remaining ~~106~~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.

The project area includes approximately 26,273 acres of land, of which the Project currently holds leases on 17,435 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. IP-6946/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 17,435 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 Wind Turbine Towers.

#### **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.

##### **4.9.4.10 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-

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.

#### **4.104.11 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.

#### **4.114.12 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

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 LW ECS 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**

Freeborn Wind Energy LLC 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 detectable 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 pre-construction 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), as submitted in Giampoli Rebuttal Schedule 1, filed on January 22, 2018, 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. IP-6946\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 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 demonstrate that it will 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**

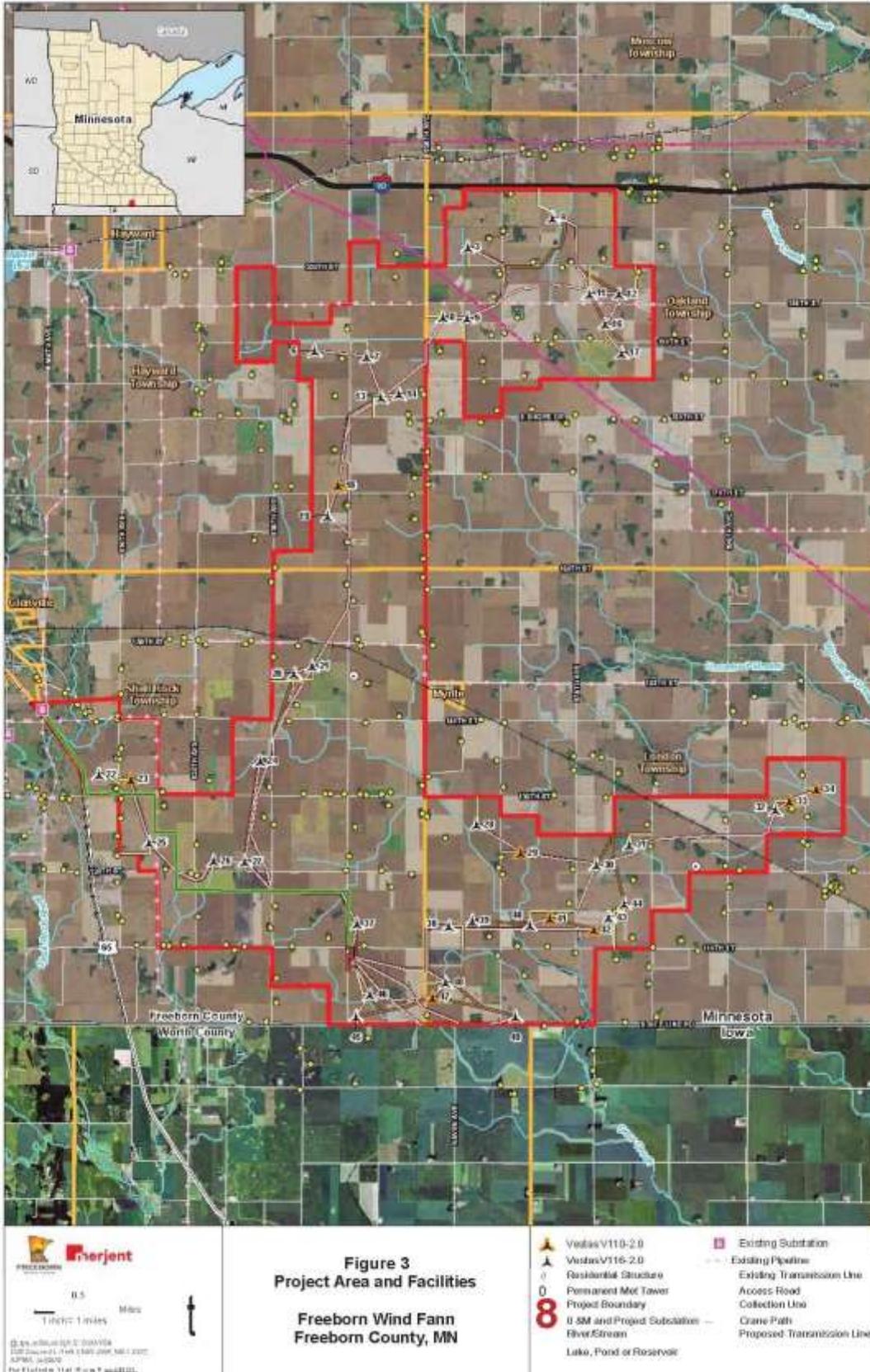
The Commission may take action to suspend or revoke this permit upon the grounds that:

- (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.



**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](mailto: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:

Prior to construction:

Dan Litchfield  
Freeborn Wind Energy LLC  
One South Wacker Drive, Suite 1800  
Chicago, IL 60606  
dlitchfield@invenergyllc.com

Upon commencement of construction, complaints should instead be directed here:

Sean Lawler  
Xcel Energy  
414 Nicollet Mall  
Minneapolis, MN 55401  
Sean.w.lawler@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 Daniel P. Wolf, 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) Daniel P. Wolf, 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.