

# **Staff Briefing Papers**

Meeting Date	October 27, 2022		Agenda Item ** 3	
Company	Northern States Power Company d/b/a Xcel Energy			
Docket No.	IP-6828/WS-09-1197			
lssues	In the Matter of the Application for an Amendment to the Site Permit to Repower the 200 MW Pleasant Valley Wind Project in Dodge and Mower Counties, Minnesota			
	1. Should the Commission approve the requested amendments to the Pleasant Valley Wind Farm site permit?			
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Relevant Documents	Date
<u>Xcel Initial Filing – Repower Filing Letter</u>	4/29/2022
Wind Site Permit Amendment Application (15 parts)	4/29/2022
DOC EERA - Comments on Completeness and Draft Site Permit	6/22/2022
Notice of Public Information Meetings	8/02/2022
Public Comment – M Preul	8/30/2022
Xcel – Comments – Proposed Revisions to EERA Draft Site Permit	8/31/2022

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Relevant Documents	Date
DNR – Comments	8/31/2022
MNDOT – Comments	8/31/2022
Mower County – Comments – Repower Permit Amendment	9/01/2022
Public Comment – Roger Nelson	9/12/2022
DOC-EERA Minutes – Virtual Meeting	9/13/2022
DOC-EERA Minutes – In Person Meeting	9/13/2022
Xcel Energy – Reply Comments	9/19/2022
DOC – EERA Comments	9/21/2022

### I. Statement of the Issues

Should the Commission approve the requested amendments to the Pleasant Valley Wind Farm site permit?

#### II. Statutes and Rules

Under Minn. Stat. § 216F.03, the siting of a large wind energy conversion system will be done in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.

Under Minn. Stat. § 216F.04 (d), the Commission may place conditions in a permit and may deny, modify, suspend, or revoke a permit.

Minn. R. 7854.1300, subp. 2, provides that the Commission may amend a site permit for a large wind energy conversion system at any time if the Commission has good cause to do so.

Section 11.2 of the 2014 Site Permit Order states, "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."

### III. Project Description and Amendment Request

The Pleasant Valley Wind Farm (Pleasant Valley) is an existing 200-megawatt (MW) Large Wind Energy Conversion System (LWECS) located in Dodge and Mower Counties. Pleasant Valley's first site permit was issued on October 27, 2010. The site permit was amended on two occasions. First, on February 20, 2013, the Commission extended the deadline for Pleasant Valley to obtain a power purchase agreement (PPA) with Xcel Energy (the Applicant or Xcel) and begin construction. As a result of the PPA, Pleasant Valley received a second site permit amendment (February 10, 2014) to make several changes to the project scope, including reducing the approved energy production from 301 MW to 200 MW for the project.<sup>1</sup>

In accordance with the 2014 site permit, 100 Vestas V100 2.0 MW were installed on the approved site. After the project was constructed (November 2015), ownership of Pleasant Valley transferred to Xcel . The proposed repower is driven by improved project economics rather than issues with the reliability.<sup>2</sup>

Xcel is currently petitioning the Public Utilities Commission (PUC or the Commission) to amend the 2014 Site Permit to make improvements to all 100 turbines. The repower (the Project) will consist of installing rotors with longer blades, replacing components of existing nacelles for 86 turbines, and replacing the entire nacelle for 14 turbines. By making these changes, Xcel states

<sup>&</sup>lt;sup>1</sup> <u>Pleasant Valley Wind Farm Repower Project Amendment Application</u>, p. 1-2

<sup>&</sup>lt;sup>2</sup> Ibid. p. 17

that energy production will increase, reliability will improve, and the service life of the turbines will be extended.<sup>3</sup>

Design Feature	Vestas v100 (existing)	Vestas v110 (Repowering)
Capacity	2.0 MW	2.2 MW
Number of Turbines	100	100
Total Height	145 m (475.7 ft)	150 m (492.1 ft)
Hub Height	311.7 ft	311.7 ft
Rotor Diameter	100 m (328.1 ft)	110 m (360.9 ft)

Based on Table 5.2-1 from the Application

Xcel reports that the repowered turbines will increase capacity from 200 MW to roughly 220 MW using the current tower configuration. While the capacity will increase to 220 MW, the Applicant's current generator interconnection agreement with the Midcontinent Independent System Operator (MISO) only allows for the transmission of 200 MW. Control equipment will be installed to ensure 200 MW is not exceeded.<sup>4</sup>

The Applicant intends to remove unused acreage to reduce the Project boundary from approximately 70,000 acres to 45,449 acres. The unmoved towers will be contained within this smaller boundary.

Staff summarizes the key points associated with the proposed upgrades, as identified by Xcel Energy in its application:

- Construction will last 8 10 months. The Project is anticipated to begin operation in December 2025.<sup>5</sup>
- 35 of 100 turbines would need serrated trailing edges (STE) to meet noise standards.
   Xcel is proposing using STEs on all repowered turbines.<sup>6</sup>
- The highest modeled turbine-only sound level at participating and nonparticipating residences is 47 dBA. The maximum predicted sound level for the Repower Project is 49 dBA.<sup>7</sup>
- The maximum flicker for non-participants is 48.3 hours per year and 50.8 hours per year for participants.<sup>8</sup>

<sup>&</sup>lt;sup>3</sup> Ibid. p. 2

<sup>&</sup>lt;sup>4</sup> Ibid. p. 3

<sup>&</sup>lt;sup>5</sup> Ibid. p. 40; p. 97

<sup>&</sup>lt;sup>6</sup> Ibid. p. 32

<sup>&</sup>lt;sup>7</sup> Ibid. p. 32

<sup>&</sup>lt;sup>8</sup> Ibid. p. 38

- Within the Project Area (45,449 acres), Xcel has existing lease agreements on 32,467 acres and is negotiating longer terms with landowners because of the proposed Repower.<sup>9</sup>
- Given the larger rotors, approximately 1,931 acres of new wind rights-only lease are being pursued.<sup>10</sup>
- The applicant will ask the Commission to waive the wind access buffer setback for up to 25 turbines, dependent upon how wind rights negotiations proceed.<sup>11</sup>
- This Project is working on a mutual consent agreement with the neighboring Prairie Star Wind project because of two parcels impacted by both projects.<sup>12</sup>

#### IV. Procedural Background

On April 29<sup>th</sup>, 2022, Xcel filed a LWECS Site Permit Amendment for the Pleasant Valley Wind Farm in Dodge and Mower counties.

On June 22, 2022, (document dated June 21<sup>st,</sup> 2021) the Department of Commerce Energy Environmental Review and Analysis (DOC EERA) submitted comments regarding the completeness of the application and submitted an Amended Draft Site Permit.<sup>13</sup> DOC EERA recommended the application be accepted as substantially complete. Additionally, DOC EERA staff supported the Commission reviewing the project under the LWECS permit amendment process.

On August 2, 2022, the Commission issued a Notice of Public Information Meetings and held meetings on August 16 (in-person) and August 17 (virtual). The Austin Herald ran the advertising for the meetings on August 6, 2022. At the in-person meeting approximately 19 people attended and five people spoke. The virtual meeting had approximately 10 people attend with three people speaking.

A written comment period was open until August 31, 2022, for initial comments and September 21, 2022, for reply comments. Comments were received from Mark C. Preul, Xcel, the Minnesota Department of Natural Resources (DNR), Minnesota Department of Transportation (MnDOT), Mower County, Roger Nelson, and DOC EERA. The Commission received reply comments from Xcel.

#### V. Summary of Comments Received

1. Members of the Public

Many people noted their displeasure with the original developer's construction practices when

<sup>&</sup>lt;sup>9</sup> Ibid. p. 22

<sup>&</sup>lt;sup>10</sup> Ibid. p. 22

<sup>&</sup>lt;sup>11</sup> Ibid. p. 23

<sup>&</sup>lt;sup>12</sup> Ibid. p. 23

<sup>&</sup>lt;sup>13</sup> Document ID: <u>20226-186821-01</u>

the facility was constructed in 2014 and 2015. However, some individuals that spoke at the public meeting indicated that since Xcel had taken over the project communication with landowners greatly improved.

The main questions/concerns during the in-person meeting included:

- Vehicle damage to drain tile and their timely repair
- Repairs to damaged gravel roads
- Development of road agreements that include input from not only the county but also townships
- A request was made to have pre- and post-construction videorecording of township roads to determine the need for repair, if any.

Xcel indicated that it has committed to using rubber-tire cranes to help minimize damage and will run cranes only along roads rather than across agricultural fields. Xcel also indicated that it would consider videorecording/photographing the roads that will be used during construction.

A Mower County representative had clarifying questions about laydown areas and construction schedules, specifically the sequencing of decommissioning and retrofitting.

General questions were also asked about wind turbine efficiency, why turbines are at times idle, and payments to individual landowner hosting turbines on their land.

Public testimony submitted:

- Roger Nelson, Mayor of the City of Sargeant, Minnesota submitted comments on August 23, 2022.<sup>14</sup> The Mayor's comments stated that three wind turbines were constructed within city limits and three additional wind turbines have been constructed within the 1250-foot perimeter around the city. The mayor believes the PUC and an independent investigative office should determine if these turbines are properly located in and around Sargeant, Minnesota. Mayor Nelson also stated that, depending on the weather conditions, people on their deck or patio cannot converse outside because of the noise created by the wind turbines. He also cited the shadow flicker from the turbine blades as a concern.
- Mark C. Preul, Owner of M&K Preul Farms LLC, filed comments on August 30, 2022.<sup>15</sup>
  The comments focused on wind turbines and energy infrastructure being placed on
  fertile soil to the detriment of agricultural production and the need for this production
  given world events. Mr. Preul requested a contested case review of the project as well
  as an advisory task force. Additionally, Mr. Preul suggested a temporary moratorium
  until a task force of subject area experts reviews the state's laws and rules regarding
  renewable energy and related infrastructure.

<sup>&</sup>lt;sup>14</sup> Document ID: <u>20229-188999-01</u>

<sup>&</sup>lt;sup>15</sup> Document ID: <u>20228-188674-01</u>

## 2. Xcel Energy

Xcel responded to the Amended Draft Site Permit submitted by DOC EERA with some edits and revisions.<sup>16</sup> Since the Applicant's initial filing, an additional three people have reached agreement with them bringing the total of requested wind access buffer setback waivers from 25 to 22. The Applicant requested that the 'highest last offer' permit language, which has been included in recent repowering amended permits, be included in the amended permit for Pleasant Valley for consistency.

## 3. International Brotherhood of Electrical Workers

A representative from the International Brotherhood of Electrical Workers was supportive of the project, citing economic benefits to the community and the local workforce. The representative praised Xcel for its use of the local workforce on projects and emphasized that the practice should continue for this proposed project.

4. DNR

On August 31, 2022, the DNR offered comments regarding the Project.<sup>17</sup> The agency recommended a special permit condition that would require the project to only include "bio-netting" or "natural netting" and types of mulch products without synthetic (plastic) fiber additives. The DNR cited a similar condition that was required in the permit for the Louise Solar project (<u>WS-20-647</u>).

The DNR proposed an additional special permit condition that would require the Applicant to consult with snowmobile groups regarding potential impacts the project may have on the Mower County Management Snowmobile Trail. A similar condition was included in Sherco Solar's proposed site permit (GS-21-191).

The Amended Draft Site Permit requires the Applicant to prepare a Prairie Protection and Management Plan. The DNR is anticipating reviewing the plan when it becomes available. The DNR also stated in their letter that DNR's permits, or licenses required for the project would not be granted until the PUC issued an amended permit for the project.

5. MnDOT

On August 31, 2022, the Minnesota Department of Transportation (MnDOT) submitted comments<sup>18</sup> regarding the Pleasant Valley Wind repower project.

MnDOT requires that the applicants work with the local agency staff should any of the existing permanent points of access or collection line locations need to be changed from the original project. MnDOT indicated that consultation is also needed regarding any modifications or

<sup>&</sup>lt;sup>16</sup> Document ID: <u>20228-188739-01</u>

<sup>&</sup>lt;sup>17</sup> Document ID: 20228-188731-01

<sup>&</sup>lt;sup>18</sup> Document ID: <u>20228-188711-01</u>

upgrades required to state highways. Additionally, any temporary roadway signs used during construction should be made and placed in areas that will withstand the weather. Like the DNR, MnDOT will not issue any downstream permits for the project until the Commission approves an Amended Site Permit for the project.

6. Mower County

Mower County submitted comments on September 1, 2022 indicating that if the Commission approves an Amended Draft Site Permit, it would strongly encourage the Applicant to coordinate with Mower County's Public Works staff. It is the expectation of Mower County that the Applicant would enter into a Road Use Agreement with the local unit of government. Additionally, the Mower County stated that any new access points from local roads are subject to the approval of the appropriate road authority.

Mower County stated that all decommissioned parts should be disposed of within 12 months of initiating the work. The County also stated that laydown yards and staging areas may require a Conditional Use Permit from Mower County. Lastly, the County's comments indicated that there are microwave beam path corridors in the project area and that turbine towers must not interfere with those beam path routes or reserve beam path routes.

7. Xcel Energy – Reply Comments

Xcel Energy submitted reply comments on September 19, 2022.<sup>19</sup> Xcel responded to the comments made by Mark Preul, Mower County, DNR, MnDOT, and Roger Nelson.

Xcel stated that Mark Preul's request for an advisory task force and/or a contested case should be denied by the Commission. The Applicant stated, "While Mr. Preul has requested an advisory taskforce and/or contested case, he has not identified any disputed facts, alternative sites, or additional mitigation to be developed through these additional processes."

Xcel replied to Mower County by stating that they are looking forward to working with the County on a Road Use Agreement, and any other required local permits. Xcel further stated that the project will not interfere with either registered microwave beam path routes or reserved beam path routes. Finally, Xcel indicated that it believes that any decommissioned components from the re-powered wind farm can be removed from the turbine sites within 12 months of the date of the first turbine replacement.

8. DOC EERA

On September 21, 2022, DOC EERA submitted their comments on the proposed project and provided responses to the concerns expressed regarding the project. DOC EERA staff outlined how the draft permit addresses the concerns articulated during the comment period.

## Drainage Tile Damage Comments

<sup>&</sup>lt;sup>19</sup> Document ID: <u>20229-189151-01</u>, p 2

DOC EERA stated that it is understood that this project is likely to impact drainage tile. Public comments were concerned about the repair of damaged tile. DOC EERA cited Amended Draft Site Permit section 7.6 (Drainage Tiles) that addresses those concerns by ensuring drainage tile is repaired or replaced promptly, unless negotiated with the affected landowner(s).<sup>20</sup>

### Mark Pruel Comments

DOC EERA stated the repower will have temporary impacts on agricultural land. Additionally, the Amended Draft Site Permit includes provisions to protect topsoil, minimize soil compaction, and requires complete site restoration.

DOC EERA did not believe a Contested Case Hearing is applicable to the site permit amendment process. DOC EERA believes Minnesota Rule 7854.0900, Subp. 5 is specific to the application of a new Large Wind Energy Conversion System, not a repower. Also, DOC EERA could not identify special or rare resources that would be impacted by the proposed Pleasant Valley Repower Project that would warrant the formation of an Advisory Task Force. Lastly, DOC EERA believes a moratorium on any wind, solar or related energy projects is an issue that would be best deliberated by the Legislature.

### Damage to Public Roads Comments

During testimony taken from the public there were concerns expressed that the Project would damage local roads. Mr. Ron Masching asked if it would be feasible to take video recordings and/or photographs of the roads before and after project construction to ensure the roads are properly restored.<sup>21</sup>

DOC EERA referred to section 7.8.1 (Public Roads) of the Amended Draft Site Permit as a possible remedy to the concerns outlined in public testimony.<sup>22</sup>

### Soil Health and Restoration Comments

Written comments received from Mark Preul raised concerns regarding damage to agricultural land and agricultural productivity. DOC EERA cited sections 7.2 (Topsoil Protection), 7.3 (Soil Compaction), and 7.12 (Restoration) in the Amended Draft Site Permit as addressing the concerns of the Project's impact on soil health and restoration. Additionally, DOC EERA staff noted that this project is not "new" but is a repowering of existing turbine locations.<sup>23</sup>

### Labor Comments

The importance of using local labor was brought forward during the comment period by a member of the International Union of Operating Engineers Local 49. To understand the impact of the project on local labor, DOC EERA indicated there is a provision 13.2 (Labor Statistic Reporting) in the Amended Draft Site Permit where the Commission requires reporting on the

<sup>&</sup>lt;sup>20</sup> Document ID: <u>20229-189221-01</u>, p 4

<sup>&</sup>lt;sup>21</sup> Document ID: <u>20229-189045-01</u>, p 30-40

<sup>&</sup>lt;sup>22</sup> Document ID: <u>20229-189221-01</u>, p 4

<sup>&</sup>lt;sup>23</sup> Ibid. p 5

labor used during construction. 24

## <u>13.2 LABOR STATISTIC REPORTING</u>

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

### DNR Comments

Based on the comments submitted by the DNR, DOC EERA recommended the following language be included in the Amended Draft Site Permit,<sup>25</sup>

13.3 WILDLIFE-FRIENDLY EROSION CONTROL

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

## <u>13.4 SNOWMOBILE TRAIL</u>

The Permittee shall coordinate with local snowmobile groups regarding potential project related impacts to the Mower County Management Snowmobile Trail. Coordination with local snowmobile groups shall include discussions of potential construction timing and activities that could impact the trail and potential trail rerouting needs.

## MnDOT Comments

MnDOT's comments focused on the project's need for additional permits from MnDOT or other agencies, depending on project variables. DOC EERA highlighted Amended Draft Site Permit sections 10.5 (Other Permits), 10.5.1 (Compliance with Federal and State Agency Permits) which require permit compliance with other State and federal units of government.

Additionally, DOC EERA recommended the following change (in red) to the to ensure signage can withstand inclement weather in Amended Draft Site Permit section 7.15.<sup>26</sup>

## 7.15 PUBLIC SAFETY

The Permittee shall provide educational materials to landowners within the site boundary and, upon request, to interested persons, about the Project and any restrictions or dangers associated with the Project.

<sup>&</sup>lt;sup>24</sup> Ibid. p. 4 - 5

<sup>&</sup>lt;sup>25</sup> Ibid. p. 7

<sup>&</sup>lt;sup>26</sup> Ibid. p. 8

The Permittee shall also provide any necessary safety measures, such as warning signs and gates for traffic control or to restrict public access. <u>Temporary roadway signage</u> <u>used during construction will be made be made of materials and placed in a manner that</u> <u>will withstand winter weather conditions.</u> The Permittee shall submit the location of all underground facilities, as defined in Minnesota Statutes section 216D.01, subdivision 11, to Gopher State One Call.

#### Mower County Comments

Mower County anticipates that Xcel will enter into a Road Use Agreement with Mower County for the use of County and/or Township roads. Additionally, the creation of new access points from local roads are subject to approval of the road authority. DOC EERA stated that permit provisions 7.8.1 (Public Roads) and 7.8.2 (Turbine Access Roads) address the County's concerns relative to use of local roads.<sup>27</sup>

In addition to the concerns Mower County raised in its comments, the County requested assurance that the components replaced during the repower will not be on location longer than 12 months. DOC EERA identified three conditions within the Amended Draft Site Permit that address decommissioning: 9.1 (Decommissioning Plan), 9.2 (Site Restoration), and 9.3 (Abandoned Turbines).<sup>28</sup>

The last concern outlined in Mower County's comments was the impact the Project may have on microwave beams. DOC EERA indicated that Mower County's concerns are addressed in the Amended Draft Site Permit in Section 6.4 (Interference).<sup>29</sup>

### Concerns about Shadow Flicker, Turbine Location, and Noise

DOC EERA contacted Mayor Roger Nelson regarding the concerns outlined in his comments dated December 12, 2022. DOC EERA completed research on the three turbines (T40, T41, and T45) located within city limits and found that when the turbines were permitted (February 10, 2014) no comments opposing or requesting modifications to the turbines were submitted during the comment period. DOC EERA also stated that it was not aware of any restrictions created by the City of Sargeant that would prohibit turbines within city limits.

DOC EERA indicated its belief that Amended Draft Site Permit Sections 4.3 (Setbacks and Layouts - Noise), 6.6 (Surveys and Reporting - Noise), and the revised Section 6.2 (Shadow Flicker) address the issues of shadow flicker and noise concerns.<sup>30</sup>

### 6.2 SHADOW FLICKER

At least fourteen (14) days prior to the pre-construction meeting, the Permittee shall provide data on shadow flicker for each residence of non-participating landowners and

<sup>&</sup>lt;sup>27</sup> Ibid. p. 8 - 9

<sup>&</sup>lt;sup>28</sup> Ibid. p. 9 - 11

<sup>&</sup>lt;sup>29</sup> Ibid. p. 11

<sup>&</sup>lt;sup>30</sup> Ibid. p. 13-14

participating landowners within and outside of the project boundary subject to exposure form from turbine shadow flicker. 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 minimize shadow flicker exposure. The results of any modeling shall be filed with the Commission at least fourteen (14) days prior to the pre- construction meeting to confirm compliance with conditions of this permit.

The Permittee shall develop a project wide Shadow Flicker Management Plan that reduces shadow flicker exposure to less than 30 hours per years for all occupied residences.

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

Per DOC EERA's conversation with Mayor Nelson, residents were displeased with the outreach that occurred during construction by the original permittee, RES American Development, Inc. Sargeant residents' concerns included not knowing whom to contact in the event there were project complaints. DOC EERA staff re-iterated the importance of proper communication between the Applicant and the residents of the city and identified Section 5.2 (Notice of Local Residents) within the Amended Draft Permit for reference.<sup>31</sup>

DOC EERA recommended the issuance of an Amended Site Permit for the Pleasant Valley Wind project including the provisions developed in previous permits and the additions outlined in its September 21, 2022 filing. Additionally, DOC EERA is supportive of the proposed revisions drafted by Xcel Energy, with the exception of combining the conditions of Amended Draft Site Permit Sections 11.1 and 11.2.<sup>32</sup> As a result, Commission staff maintain did not include this combination in the Attached Amended Draft Site Permit.

### VI. Staff Analysis

Staff believes there are two issues the Commission must consider. First, would the proposed turbine upgrades create new or additive impacts not considered during the initial permitting process and subsequent permit amendments?

Second, does the current permit need to be amended to include additional or modified conditions outlining appropriate mitigation measures that would avoid or minimize identified impacts and ensure environmental preservation, sustainable development, and the efficient use of resources?

<sup>&</sup>lt;sup>31</sup> Ibid. p 14

<sup>&</sup>lt;sup>32</sup> Ibid. p. 14

The major provisions in the draft permit amendment include the changes agreed to by Xcel Energy, DOC EERA, and Commission staff. Beyond the technical and conforming changes, the Amended Draft Site Permit Includes:

- A final offer for Wind Access Buffers (Section 4.1)
- Prairie Protection Plan (Section 4.7)
- Shadow Flicker Management Plan (Section 6.2)
- Updates to Avian and Bat Protection (Section 6.7)
- Road signage that will withstand inclement weather (Section 7.15)
- Installation of an FAA-approved lighting mitigation system (Section 7.18)
- Updated language for a Decommissioning Plan (Section 9.1)
- Labor Reporting Statistics (Section 13.2)
- Wildlife-Friendly Erosion Control (Section 13.3)
- Snowmobile trail coordination (Section 13.4)

Given that the complaints filed to date have been resolved by Xcel, staff agrees with DOC EERA and recommends granting the site permit as modified in these briefing papers. Staff believes the only condition that the Commission may want to consider is requiring a report regarding the disposal or reuse of the existing turbine blades and components.

1. Additional Amended Site Permit Language

In a previous repower filing (IP 6646/WS-09-584), the Commission included a permit provision requiring an applicant to report information on waste disposal and recycling activities related to a repowering project.<sup>33</sup> Staff recommends the Commission consider requiring a similar provision for this repowering project as well. Information on how wind turbine components are recycled or are disposed of may provide a more complete picture of the economic and ecological impacts of wind energy production and may be useful for other repowering dockets, as well as the Commission's open Decommissioning docket (E999/M-17-123).

The Permittee shall file a compliance filing at least 14 days before the pre-construction meeting outlining the methods for disposal or reuse of the existing turbine blades and other components, providing the estimated cost, options considered, evaluation conducted, option selected or rejected, and the timing for disposal or reuse. Additionally, the Permittee is required to submit an update to the disposal compliance filing after repowering has been completed describing actual costs, timing, and methods for disposal or reuse.

## VII. Decision Options

1. Grant the amendments to the LWECS Site Permit language as proposed by DOC

<sup>&</sup>lt;sup>33</sup> <u>Amended Site Permit in Nobles County</u>, p. 17 (2021)

EERA and modified by Xcel Energy, with the exception of the proposed combination of conditions 11.1 (Periodic Review) and 11.2 (Modification of Conditions) into a single condition which address different items, and two separate issues. (*Staff*)

- 2. Deny the amendments to accommodate the proposed project.
- 3. Authorize staff to make further administrative permit modifications as necessary to ensure consistency with record and recently issues permit.
- 4. Require a compliance filing at least 14 days before the pre-construction meeting outlining the method for disposal or reuse of the existing turbine blades and other components, providing the estimated cost, options considered, evaluation conducted, option selected or rejected, and the timing for disposal or reuse. Require an update to the disposal compliance filing after repowering has been completed describing actual costs, timing, and methods for disposal or reuse.

#### Staff Recommendation: 1, 3, and 4

