COMMERCE DEPARTMENT

July 25, 2018

ELECTRONIC FILING

The Honorable Jessica Palmer-Denig
Minnesota Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
Saint Paul, MN 55164-0620

RE: Comments and Recommendations
260 MW Nobles 2 Wind Project
Commission Docket Nos. IP-6964/WS-17-597, CN-16-289
OAH Docket No. 71-2500-35110

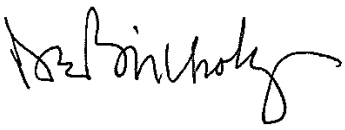
Dear Judge Palmer-Denig:

In the Matter of the Applications of Nobles 2 Power Partners, LLC for a Certificate of Need and a Site Permit for the up to 260 MW Nobles 2 Wind Project and Associated Facilities in Nobles County.

Energy Environmental Review and Analysis (EERA) staff provides the attached comments and recommendations in the above matter that address substantive public comments, edits or other responses to Applicant's proposed Findings of Fact, Conclusions of Law, and Recommendation, and suggestions as to permit conditions.

I am available to answer any questions you might have.

Sincerely,



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cc: John Wachtler, Energy Environmental Review and Analysis
Mike Kaluzniak, Minnesota Public Utilities Commission
Sheena Denny, Office of Administrative Hearings

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COMMERCE DEPARTMENT

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS COMMENTS AND RECOMMENDATIONS

PUC Docket Nos. IP-6964/WS-17-597, CN-16-289
OAH Docket No. 71-2500-35110

Date: July 25, 2018 **Staff**: David Birkholz | (651) 539-1838 | david.birkholz@state.mn.us

Issues Addressed: These comments and recommendations include responses to substantive public comments; edits to Nobles 2 Wind's proposed findings of fact, conclusions of law, and recommendations; and staff recommendations on permit conditions.

Attachments: EERA edited Findings of Fact, Conclusions of Law, and Recommendation

Additional documents and information, including the applications, can be found on eDockets by searching year "17" and number "597" for the site permit and year "16" and number "289" for the certificate of need at https://www.edockets.state.mn.us/EFiling/search.jsp; or on the EERA webpage at https://mn.gov/commerce/energyfacilities/Docket.html?Id=34736.

This document can be made available in alternative formats, that is, large print or audio, by calling (651) 539-1530 (voice).

On June 20, 2018, Administrative Law Judge Jessica Palmer-Denig presided over a public hearing on behalf of the Public Utilities Commission (Commission) for the Nobles 2 Wind Project (Project) proposed by Nobles 2 Power Partners, LLC (Nobles 2 or Applicant).[1] [2] Interested persons were afforded the opportunity to provide verbal comments at the public hearing and written comments through July 11.[3] Nobles 2 provided proposed findings of fact, conclusions of law, and recommendations for the Project July 11, 2018.[4]

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[1] Revised: *Application to the Minnesota Public Utilities Commission Site Permit for a Large Wind Energy Conversion System*, Nobles 2 Power Partners, LLC, December 1, 2018, eDocket nos. 201712-137883-02, 201710-136496-01, 201710-136496-02, 201710-136496-03, 201710-136496-04,

[2] *Certificate of Need Application to the Minnesota Public Utilities Commission*, Nobles 2 Power Partners, LLC, October 13, 2018, eDocket nos. 201710-136484-01, 201710-136484-02, 201710-136484-04, 201710-136484-05

[3] Notice of Joint Public Hearing, Public Utilities Commission, May 29, 2018, eDocket no. 20185-143368-01

[4] Proposed Findings of Fact, Conclusions of Law, and Recommendations (Proposed Findings), Nobles 2, July 11, 2018, eDocket no. 20187-144725-02

EERA Response to Substantive Comments

Public comments were received at the public hearing[5] and associated comment period. To the extent possible, questions and comments posed at the public hearing were answered at the hearing. Responses to comments and questions specific to the Site Permit are provided below.

Public Comments

At the hearing and in subsequent written submissions, most of the public comments were of support for the Project. These require no response from EERA. Also, no questions were received concerning the Environmental Report[6] (ER), so EERA lets stand its ER as entered into the record. The following issues were raised that require additional attention.

Minnesota Department of Natural Resources
The Department of Natural Resources (DNR) submitted comments[7] in response to their earlier comments on the Draft Site Permit. DNR noted the presence of native prairie within the site boundaries. EERA points out that existing Permit Condition 4.7 addresses this issue and requires the preparation of a prairie protection and management plan in consultation with DNR. DNR also noted that with turbines located near a WMA, it assigns the site a "moderate risk" designation. EERA recommends amending the Site Permit to reflect this designation and would add the following "Special Condition" to the permit, reflecting the language in the Stoneray Wind Project[8] Permit:

> **6.2 Avian and Bat Protection Plan Special Provision**
>
> In keeping with the DNR assessment of the Project area as "moderate risk" for bird and bat fatalities, the Permittee shall conduct one year of post-construction fatality monitoring for avian and bat species using survey protocols developed by the DNR specifically for moderate risk sites. The Permittee should consult with DNR for the availability of updated moderate risk protocols before commencing post-construction monitoring. The Commission may require additional monitoring based on results of the first year's data collection.

Mankato Building Trades, et al.
Mankato Building Trades (MBT) filed comments[9] in support of Tenaska's Direct Testimony[10] that it would agree to a permit condition to track the use of local labor during Project construction. Several other labor groups made similar requests and testimony at the public hearing (recorded in the Public Hearing Transcripts).

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[5] Transcripts (Public Hearing-1:00 and Public Hearing-6:00), Court Reporter, June 27, 2018, eDocket nos. 20186-144265-02, 20186-144265-04
[6] *Environmental Report Nobles Wind 2 Project*, EERA, March 31, 2018, eDocket nos. 20185-143452-01, 20185-143452-02, 20185-143452-03
[7] Comments and Recommendations, DNR, July 11, 2018, eDocket no. 20187-144723-01
[8] *Order Approving Site Permit Amendment and Requiring Report* (Stoneray Order), Commission, January 26, 2018, eDocket no. 20181-139392-01 at p. 21
[9] Comments, MBT, July 11, 2018, eDocket no. 20187-144729-01
[10] Testimony of Scott Seier, Tenaska, June 15, 2018, eDocket no. 20186-143909-03

EERA supports the use of local labor to the extent practicable. EERA is sensitive to the potential local benefits of the recommendations of North Star Policy Institute (NSPI):[11] to secure commitments from developers and contractors to set local hiring goals, to require regular reporting by developers on their use of local workers and to encourage collaboration with state-registered apprenticeship programs.

EERA believes tracking data regarding local labor may help the state better evaluate the socio-economic impact of wind development, in additional to enabling workforce development such as the apprenticeship programs mentioned above.

The Applicant recommended permit language for reporting in its proposed findings.[12] EERA recommends a statistical report at the conclusion of construction, rather than quarterly "status reports," as being less onerous and providing equivalent data. EERA also recommends including the requirement ordered by the Commission in its Stoneray Order[13] for an accounting of the developer's efforts to engage local workers. EERA would replace the Applicant's language with the following permit condition language that can also serve as a model to assure consistency of reporting and continuity with subsequent dockets:

> **10.4.1 Labor Statistics Report**
>
> The Permittee shall file a post-construction Labor Statistics Report within 60 days of commencement of operation. The Report shall (a) detail the Permittee's efforts and the site contractor's efforts to hire Minnesota workers, and (b) provide an account of 1) 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; 2) the gross number of hours worked by or full-time equivalent workers who are residents of other states, but live within 150 miles of the project; and 3) 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.

Applicant Comments

Aircraft Detection Lighting System

An Aircraft Detection Lighting System (ADLS) has been discussed on the record as an alternative to the standard FAA lighting requirements on wind turbines. ADLS is designed to mitigate the impact of nighttime lights by deploying a radar-based system around a wind farm, turning lights on only when low-flying aircraft are detected nearby. The Applicant proposed eliminating a requirement for an ADLS solution from the Draft Site Permit "due to the ineffectiveness of such a system in an already developed landscape and the regulatory uncertainty associated with FAA approval."[14]

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[11] *Catching the Wind: The impact of local vs. non-local hiring practices on construction of Minnesota wind farms,* (Ex. B), NSPI, June 2018, eDocket no. 20186-144256-03

[12] Proposed Findings at pp. 20, 46-7

[13] Stoneray Order at p. 4

[14] Proposed Findings at p. 45-46

The Applicant's argument for not installing ADLS because surrounding winds farms would still be emitting the standard flashing red lights[15] is not compelling. This argument does not take into consideration that the Commission has authority to amend any permit and bring it up to current standards. It is not uncommon for previous permits to be amended. For example, neighboring North Dakota recently passed legislation to update all wind farms to the ADLS standard retroactively, reflecting changes in current technology and public benefit.

EERA recognizes the concern that the FAA approves ADLS installations on a case-by-case basis, which is the regulatory uncertainty noted by the Applicant. There needs to be consideration in the Site Permit to allow for the possibility that the FAA does not provide approval, or even timely approval, for the installation of the system. Rather than excising Special Condition 6.1, as recommended by the Applicant, EERA recommends editing the existing Draft Site Permit language and offers the following as a model for future site permits as well:

> **6.1 Obstruction Marking and Lighting**
>
> The Permittee shall install an Aircraft Detection and Lighting System (ADLS) to mitigate the aesthetic and visual effects of the FAA's aviation lighting requirements. Permittee may install an FAA approved lighting system without ADLS if the Permittee demonstrates that, despite its reasonable efforts to secure FAA approval for an ADLS, one of the following conditions exists:
>
> 1) The FAA denies the Permittee's application for an ADLS system, or
> 2) Permittee is unable to secure FAA approval in a timely manner.
>
> If either of these two conditions occur, the permittee's reasonable efforts to secure FAA approval of the ADLS must be described and filed with the Commission 14 days before the pre-construction meeting.

Transferring Permit

The Applicant noted in its proposed findings[16] that the requirements in the second and third parts of Permit Condition 14.0 in the Draft Site Permit appear duplicative. AG counsel for EERA agreed the first two items in the third set are redundant of the first two items in the second set. However, EERA counsel believes the third item in the third set, concerning the ultimate parent entity, is not. EERA recommends rewriting the condition with the following edits to the Draft Site Permit:

> **14.0 Transfer of Permit**
>
> 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

[15] Public Hearing-1:00 at pp. 33-35
[16] Proposed Findings at p. 47

(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; or
(d) a sale which changes the Permittee's ultimate parent entity.

*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.~~

Right of Entry
The Applicant recommended altering Permit Condition 12.6 to limit the Commission's rights to enter the facilities easement of the site property by requiring compliance with "the terms and conditions of all leases and easements held by Permittee."[17] This clause would allow the Permittee to countermand the Commission with the nature of its lease language, thereby usurping the Commission's authority and rendering the permit condition moot. In order to preserve the Commission's historic right of entry, especially to enforce its permit, EERA recommends the language of Permit Condition 12.6 in the Draft Site Permit remain unchanged.

EERA Comments on Proposed Findings, Conclusions, and Recommendations

In the following comments on Nobles 2's Proposed Findings of Fact, EERA provides explanation for any substantive edits (typographical and minor technical errors have been corrected in line). References to specific findings are numbered according to the attached, edited version (underline and strikethrough) of the Applicant's proposed findings.

FOF 17. Deleted as redundant to FOF 35.

FOF 39. Edited to reflect EERA made all the required notices of Environmental Report availability as per Minn. Rule 7849.1400, subpart 10.

FOF 99B. Added to incorporate the Department's recommendations on labor reporting (see above).

[17] Id.

FOF 151. EERA considers portions of the Applicant's finding to be argument rather than factual. EERA has edited out what it considers opinion.

FOF 151B. Added to incorporate the Department's recommendations on ADLS lighting (see above).

FOF 160B. Added to model permit to reflect MDNR designation as a "moderate risk" site (see above).

FOF 218. EERA disputes the conclusion in four sections of the Applicant's proposed Permit Conditions. EERA would exclude 12.6 (leave stand as in the Draft Site Permit). EERA offers alternative language for Permit Conditions 6.1, 10.4.1, and 14. In addition, EERA adds 6.2. (See above.)

Concl. 7. Edited to delete Permit Condition 12.6 and add 6.2. EERA recommends the inclusion of its own revisions in lieu of Applicant recommended revisions.

EERA Staff Recommendation

EERA believes, with the implementation of the comments above and the attached revised findings, that Nobles 2 is consistent with "the policy of the state to site LWECS in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources."[18]

Staff recommends issuing a Site Permit for the Nobles 2 Wind Project with permit conditions as contained in the Draft Site Permit,[19] and with the additional permit conditions and edits listed above or in the "Site Permit Conditions" section of the attached proposed Findings of Fact.

[18] Minn. Statute 216F.03
[19] Order (Approving Draft Site Permit), Commission, May 25, 2018, eDocket no. 20185-143331-01

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Nobles 2 Power Partners, LLC for a Certificate of Need for the up to 260 MW Nobles 2 Wind Project and Associated Facilities in Nobles County, Minnesota

In the Matter of the Application of Nobles 2 Power Partners, LLC for a Site Permit for the up to 260 MW Nobles 2 Wind Project and Associated Facilities in Nobles County, Minnesota

OAH Docket No. 71-2500-35110
MPUC Docket No. IP-6964/CN-16-289
MPUC Docket No. IP-6964/WS-17-597

EERA EDITS OF
NOBLES 2 POWER PARTNERS, LLC'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

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STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

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OAH Docket No. 71-2500-35110
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MPUC Docket No. IP-6964/WS-17-597

EERA EDITS OF
NOBLES 2 POWER PARTNERS, LLC'S PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

This matter was assigned to Administrative Law Judge Jessica A. Palmer-Denig ("ALJ") to conduct a public hearing and provide a summary of public testimony on the Certificate of Need (MPUC Docket No. CN-16-289) and Site Permit (MPUC Docket No. WS-17-597) Applications of Nobles 2 Power Partners, LLC ("Nobles 2" or "Applicant") for an up to 260 megawatt ("MW") wind energy conversion system and associated facilities in Nobles County (the "Project"). The Minnesota Public Utilities Commission ("MPUC" or "Commission") also requested that the ALJ prepare Findings of Fact, Conclusions of Law, and Recommendations on the merits of the Site Permit Application and provide recommendations, if any, on conditions and provisions for the proposed site permit.

A joint public hearing on the Site Permit and Certificate of Need Applications for the Project was held on June 20, 2018 at 1:00 p.m. and 6:00 p.m., in Wilmont, Minnesota in Nobles County.

Jeremy P. Duehr, Fredrikson & Byron, P.A., 200 South Sixth Street, Suite 4000, Minneapolis, Minnesota 55402, and Scott Seier, Vice President of Strategic Development and Acquisitions, Justin Vala, Director of Engineering and the Technical Lead for Tenaska's Wind Program, and Joseph Finocchiaro, Director of Environmental Programs of Tenaska, Inc. appeared on behalf of Nobles 2 Power Partners, LLC.

David Birkholz and Jamie ~~MacAllister~~ MacAlister, Environmental Review Managers, 445 Minnesota Street, Suite 1500, St. Paul, MN 55101 appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis ("EERA").

Michael Kaluzniak, Minnesota Public Utilities Commission Staff ("Staff"), 121 Seventh Place East, Suite 350, St. Paul, MN 55101 appeared on behalf of the Commission.

STATEMENT OF ISSUE

Has Nobles 2 satisfied the criteria set forth in Chapter 216F of the Minnesota Statutes and Chapter 7854 of the Minnesota Rules for a Site Permit for the proposed Project?

SUMMARY OF RECOMMENDATIONS

The ALJ concludes that Nobles 2 has satisfied the criteria set forth in Minnesota law for a Site Permit and that the Commission should GRANT the Site Permit, subject to the conditions discussed below.

Based on the evidence in the hearing record, the ALJ makes the following:

FINDINGS OF FACT

I. APPLICANT

1. Nobles 2 Power Partners, LLC, is a wholly owned subsidiary of Tenaska Wind Holdings II, LLC. Tenaska Wind Holdings II, LLC is an affiliate of Tenaska, Inc. ("Tenaska").[1]

2. Tenaska, based in Omaha, Nebraska, is one of the largest private, independent energy companies in the United States. Tenaska and its affiliates have developed 10,000 megawatts MW of natural gas-fueled and renewable power generating facilities and currently manage operations for 7,000 MW of power generating facilities. Tenaska presently has wind development projects across the Midwest.[2]

3. Nobles 2 does not have ownership or financial interests in any other large wind energy conversion systems ("LWECS") in Minnesota.[3]

4. Nobles 2 anticipates overseeing and managing all aspects of Project execution, including, but not limited to, design, solicitation and award of construction contracts; construction; construction monitoring and oversight; third party quality assurance; final commissioning and acceptance; and operations and maintenance activities once the Project commences commercial operations. Nobles 2 has stated that it intends to be the long-term owner and operator of the Project, but reserves the right to sell or assign the Project to another qualified entity before, during, or after the Project's construction.[4]

[1] Ex. Nobles-7 at 1 (Revised Site Permit "SP" Application).
[2] Ex. Nobles-7 at 2 (Revised SP Application).
[3] Ex. Nobles-7 at 6 (Revised SP Application).
[4] Ex. Nobles-7 at 1 (Revised SP Application).

5. On May 10, 2017, Nobles 2 entered into a Power Purchase Agreement ("PPA") with Minnesota Power ("MP") for up to 250 MW of the energy to be generated by the Project.[5]

II. SITE PERMIT APPLICATION AND RELATED PROCEDURAL BACKGROUND

6. On October 13, 2017, Nobles 2 filed a Site Permit Application ("SP Application") with the Commission for the Project.[6]

7. On October 26, 2017, the Commission issued a Notice of Comment Period on SP Application Completeness, with the initial comment period closing on November 16, 2017, and the reply comment period closing November 27, 2017. The Notice requested comments on whether Nobles 2's SP Application was complete within the meaning of the Commission's rules; whether there are any contested issues of fact; whether the Application be referred to the Office of Administrative Hearings for a contested case proceeding; and whether there are other issues or concerns.[7]

8. On November 16, 2017, EERA filed comments recommending that the Commission accept the SP Application as complete. EERA recommended that the SP Application be processed jointly with Noble 2's Application for a Certificate of Need. EERA also recommended the Commission make a determination concerning the Applicant's use of Trade Secret data.[8]

9. On November 27, 2017, Nobles 2 filed reply comments agreeing with EERA's recommendation that Nobles 2's SP Application and Certificate of Need Application ("CN Application") be processed jointly. Nobles 2 also acknowledged EERA's comments on certain cost data marked as trade secret in the SP Application and agreed to file a revised SP Application that includes, as public, the cost data previously withheld as trade secret.[9]

10. On December 1, 2017, Nobles 2 filed a Revised SP Application that included, as public, the cost data previously withheld.[10]

11. On December 1, 2017, the Commission issued a Notice of Commission Meeting scheduling a meeting for December 14, 2017 to address whether to accept the SP Application as substantially complete and whether the Commission should direct the use of the informal review process.[11]

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[5] *See* Ex. Nobles-7 at 2 (Revised SP Application). Nobles 2 is also requesting the ability to construct up to 10 MW of additional nameplate capacity to, in part, account for the terms of the PPA with MP, which defines Installed Capacity as 247 to 253 MWs and, to, in part, provide a hedge against expected and unexpected disruptions in turbine availability. *Id.*

[6] Ex. Nobles-4 (Appendices, Maps and Affidavit of Service to Site Permit Application).

[7] Notice of Comment Period (October 26, 2017) (eDocket No. 201710-136852-01).

[8] EERA Comments (Nov. 16, 2017) (eDocket No. 201711-137456-01(SP)).

[9] Ex. Nobles-6 (Reply Comments).

[10] Ex. Nobles-7 (Revised SP Application).

[11] Notice of Commission Meeting (Dec. 1, 2017) (eDocket No. 201712-137848-05).

12. On December 14, 2017, the Commission met to consider the items identified in the Notice of Commission Meeting.[12] The Commission voted to: accept the SP Application as substantially complete; request that an administrative law judge from the Office of Administrative Hearings ("OAH") preside over the public hearing; vary Minn. R. 7854.0600, subp. 1, and Minn. R. 7854.0800, subp. 1, to extend the timelines contained in those rules; grant the Applicant's request for a variance to Minn. R. 7854.0600, subp. 3; and address various other administrative matters.[13]

13. On December 28, 2017, Nobles 2 filed updated maps 2A and 2B, which reflect the addition of landowners participating in the Project via wind rights easements.[14]

14. On January 4, 2018, the Commission incorporated its decision into its Order Finding Application Complete, Establishing Procedural Framework, and Varying Rules.

15. On January 25, 2018, the Commission issued a Notice of Public Information and Environmental Report Scoping Meeting scheduling a meeting on February 15, 2018 in Wilmont, Minnesota and announcing that written comments would be accepted through March 2, 2018. On February 12, 2018, the Commission issued a Notice Rescheduling the Public Information and Environmental Report Scoping Meeting for February 28, 2018 in Wilmont, Minnesota and announcing that written comments would be accepted through March 20, 2018.[15]

16. On February 28, 2018, the Commission and the EERA Staff held a public meeting in Wilmont, Minnesota to solicit comments on the scope of the Environmental Report and Draft Site Permit.[16]

~~17. On March 29, 2018, EERA filed the Environmental Report Scoping Decision Document.[17] On April 6, 2018, EERA filed a Notice of Environmental Report Scoping Decision.[18]~~

18. On April 4, 2018, Nobles 2 filed documentation confirming that it completed the notice requirements of Minn. R. parts 7854.0600 and 7829.0500 and provided direct mail notice and newspaper publications relating to the SP Application and CN Application, and that it placed copies of the applications in the Nobles County Public Library, Worthington Location.[19]

19. On April 16, 2018, EERA filed comments and recommendations on a Draft Site Permit and a Preliminary Draft Site Permit.[20]

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[12] Minutes – December 14, 2017 Agenda (May 30, 2018) (eDocket No. 20185-143440-03).
[13] Minutes – December 14, 2017 Agenda (May 30, 2018) (eDocket No. 20185-143440-03).
[14] Ex. Nobles-8 (Revised Map 2A and Map 2B).
[15] Ex. EERA-1 (Notice of Rescheduled Public Information and Scoping Meeting).
[16] Ex. EERA-3 (Public Record of Information and Scoping Meeting).
[17] Ex. EERA-4 (Scoping Decision Document).
[18] Notice of Environmental Report Scoping Decision (April 6, 2018) (eDocket No. 20184-141729-01).
[19] Ex. Nobles-10 (Cover Letter with Affidavit of Mailing, Letter to Landowners and Affidavits of Publication).
[20] Ex. EERA-5 (Comments and Recommendations on Draft Site Permit).

20. On April 20, 2018, the ALJ issued a Scheduling Order, setting forth the procedural schedule for the proceedings.[21]

21. On May 25, 2018, the Commission issued its Order Issuing Draft Site Permit, to which a copy of the Draft Site Permit was attached. The Order also requested that EERA file a supplemental filing containing an evaluation and description of the disposition of certain issues raised by state agencies, Nobles County, and in public comments.[22]

22. On May 29, 2018, the Commission issued a Notice of Joint Public Hearings and Draft Site Permit Availability.[23] The Notice provided: (a) the location and date of the public hearing; (b) a description of the proposed Project; (c) a deadline for public comments on the Application and Draft Site Permit; (d) a description of the Commission's Site Permit review process; and (e) identification of the public advisor. The Notice indicated that the hearing would address the SP Application and CN Application. Topics for public comment included: (1) should the Commission issue a Certificate of Need and Site Permit for the Project; (2) is the proposed Project needed and in the public interest; (3) what are the human and environmental impacts of the Project; and (4) any other project-related issues or concerns.[24] The Notice was published in the *Nobles County Review* and the *Daily Globe* newspapers on June 6, 2018.[25]

23. On June 8, 2018, EERA filed its Supplemental Response to Public Comments, as requested by the Commission.[26]

24. On June 15, 2018, Nobles 2 filed the direct testimony of Justin Vala, Scott Seier, and Joseph Finocchiaro.[27]

25. On June 20, 2018, the ALJ presided over joint public hearings on the SP Application and the CN Application for the Project in Wilmont, Minnesota. Approximately 31 members of the public attending the public hearings held at 1:00 p.m. and 6:00 p.m. on June 20, 2018.[28] Commission Staff, EERA Staff, and representatives from Nobles 2 were present. Approximately 10 members of the public spoke at the hearings.[29] In addition, several additional written comments were received before the close of the initial comment period on July 11, 2018.[30]

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[21] Scheduling Order (April 20, 2018) (eDocket No. 20184-142156-01).
[22] Order (May 25, 2018) (eDocket No. 20185-143331-01).
[23] Notice of Joint Public Hearings and Draft Site Permit Availability (May 29, 2018) (eDocket No. 20185-143368-01).
[24] Notice of Joint Public Hearings and Draft Site Permit Availability (May 29, 2018) (eDocket No. 20185-143368-01).
[25] Ex. Nobles-15 (Affidavit of Publication).
[26] Ex. EERA-11 (Supplemental Comments).
[27] Ex. Nobles-12 (Seier Direct); Ex. Nobles-13 (Vala Direct); Ex. Nobles-14 (Finocchiaro Direct).
[28] Public Hearing Sign-In Sheets – 1 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-01); Public Hearing Sign-In Sheets – 6 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-03).
[29] Public Hearing Sign-In Sheets – 1 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-01); Public Hearing Sign-In Sheets – 6 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-03).
[30] *See, e.g.,* Public Comments Batch 1 (June 12, 2018) (eDocket No. 20186-143743-01); Public Comments Batch 2 (June 21, 2018) (eDocket No. 20186-144033-01); Public Comments Batch 3 (June 20, 2018) (eDocket No. 20186-

III. CERTIFICATE OF NEED APPLICATION AND RELATED PROCEDURAL BACKGROUND

26. On April 5, 2016, Nobles 2 filed a Request for Exemption from Certain Certificate of Need Application Content Requirements with the Commission requesting exemptions from certain Certificate of Need data requirements.[31]

27. On May 25, 2016, the Commission issued an order granting exemptions from some of the information requirements under Minn. Rules Chapter 7849.[32]

28. On October 13, 2017, Nobles 2 filed an Application for a Certificate of Need for the Project along with a summary of filing.[33]

29. On October 23, 2017, the Department of Commerce, Division of Energy Resources ("DOC-DER") filed comments and recommendations on the Certificate of Need Application, recommending that the Commission find the application complete.[34]

30. On October 26, 2017, the Commission issued a Notice for Comment on the completeness of the Certificate of Need Application. Initial comments were accepted through November 16, 2017 and reply comments through November 27, 2017.[35]

31. On November 27, 2017, Nobles 2 provided reply comments expressing agreement with the Department's recommendations that the Commission find the application complete and review the application using the Commission's informal comment and reply process.[36]

32. On December 1, 2017, the Commission issued a Notice of Commission Meeting scheduling a meeting on December 14, 2017 to consider whether to accept the Application as complete, and whether to direct that it be evaluated using the informal review process.[37] On December 14, 2017, the Commission voted to accept the CN Application as complete; direct that the Application be reviewed using the informal review process; declare that the public hearing for the Certificate of Need proceeding shall be held jointly with the public hearing for the SP Application in docket IP-6964/WS17-597; and to vary Minn. R. 7849.0200, subp. 5, and Minn. R. 7849.1400, subp. 3, to extend the timelines contained in those rules.[38]

33. On January 4, 2018, the Commission issued an Order Accepting Application as Complete, Directing Use of ~~Information~~ Informal Review Process, and Varying Timeframes.

144014-02); Comment by Minnesota State Energy Center of Excellence (July 2, 2018) (eDocket No. 20187-144443-02); Comment by State Senator Julie Rosen (July 2, 2018) (eDocket No. 20187-144440-02).

[31] Ex. Nobles-1 (Request for Exemption).

[32] Order (May 25, 2016) (eDocket No. 20165-121609-01).

[33] Ex. Nobles-2 (Certificate of Need "CN" Application, Appendices, Figures, Affidavit of Service, and Summary of Filing); Ex. Nobles-3 (Trade Secret Appendices A and C to CN Application).

[34] DOC-DER Comments (Oct. 23, 2017) (eDocket No. 201710-136692-01).

[35] Notice of Comment Period (Oct. 26, 2017) (eDocket No. 201710-136851-01).

[36] Ex. Nobles-6 (Reply Comments).

[37] Notice of Commission Meeting (Dec. 1, 2017) (eDocket No. 201712-137848-03).

[38] Minutes – December 14, 2017 Agenda (May 30, 2018) (eDocket No. 20185-143440-06).

The Order also directed the ALJ to summarize comments from the public hearing related to the question of the need for the Project.[39]

34. On January 25, 2018, the Commission issued a Notice of Public Information and Environmental Report Scoping Meeting scheduling a meeting on February 15, 2018 in Wilmont, Minnesota and announcing that written comments would be accepted through March 2, 2018. On February 12, 2018, the Commission issued a Notice Rescheduling the Public Information and Environmental Report Scoping Meeting for February 28, 2018 in Wilmont, Minnesota and announcing that written comments would be accepted through March 20, 2018.[40]

35. On March 29, 2018, EERA filed the Environmental Report Scoping Decision Document.[41] On April 6, 2018, EERA filed a Notice of Environmental Report Scoping Decision.[42]

36. On April 4, 2018, Nobles 2 filed documentation that it has completed the notice requirements of Minn. R. parts 7854.0900 and 7849.1400 and provided direct mail notice and newspaper publication relating to the Notice Rescheduling Public Information and Environmental Report Scoping Meeting for its applications. Nobles 2 also filed the Affidavit of Mailing a copy of the Notice sent to landowners and government officials and the service list. Nobles 2 also filed documentation that it published the Notice in the *Nobles County Review* and the *Daily Globe*.[43]

37. On May 10, 2018, the Commission issued a Notice of Comment Period on the Merits of the Application for a Certificate of Need opening an initial written comment period until July 2, 2018, and a reply comment period until July 11, 2018. The Commission directed that comments should address whether there were any contested issues of fact with respect to the representations made in the Application; whether the Commission should grant a certificate of need for the Project; and whether there are other issues or concerns related to this matter.[44]

38. On May 29, 2018, the Commission issued a Notice of Joint Public Hearings and Draft Site Permit Availability.[45] The Notice provided: (a) the location and date of the public hearing; (b) a description of the proposed Project; (c) a deadline for public comments on the Application and Draft Site Permit; (d) a description of the Commission's Site Permit review process; and (e) identification of the public advisor. The Notice indicated that the hearing would address the Site Permit and Certificate of Need Applications. Topics for public comment included: (1) should the Commission issue a Certificate of Need and Site Permit for the Project; (2) is the proposed Project needed and in the public interest; (3) what are the human and environmental impacts of the Project; and (4) any other project-related issues or

[39] Order Accepting Application as Complete, Directing Use of ~~Information~~ Informal Review Process, and Varying Timeframes (Jan. 4, 2018) (eDocket No. 20181-138636-01).
[40] Ex. EERA-1 (Notice of Rescheduled Public Information and Scoping Meeting).
[41] Ex. EERA-4 (Scoping Decision Document).
[42] Notice of Environmental Report Scoping Decision (April 6, 2018) (eDocket No. 20184-141729-01).
[43] Ex. Nobles-10 (Cover Letter with Affidavit of Mailing, Letter to Landowners and Affidavits of Publication).
[44] Notice of Comment Period (May 10, 2018) (eDocket No. 20185-142927-01).
[45] Notice of Joint Public Hearings and Draft Site Permit Availability (May 29, 2018) (eDocket No. 20185-143368-01).

concerns.[46] The Notice was published in the *Nobles County Review* and the *Daily Globe* newspapers on June 6, 2018.[47]

39. On May 31, 2018, EERA issued the Environmental Report ("ER") for the Project.[48] Notice of the availability of the ER was mailed to persons who requested notice and to public agencies with authority to permit or approve the project, and was also published in the *EQB Monitor*.[49]

40. On June 27, 2018, the DOC-DER submitted comments recommending that the Commission determine that Nobles 2 has shown that: the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states; a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record; and the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments. DOC-DER recommended that, should the Commission find, after consideration of the Environmental Report, that the proposed facility "will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health," the Commission issue a Certificate of Need to Nobles 2 for the Project.[50]

41. As noted above, on June 20, 2018, the ALJ presided over joint public hearings on the SP Application and the Certificate of Need Application for the Project held in Wilmont, Minnesota.

IV. DESCRIPTION OF THE PROJECT

42. The proposed Project consists of between 65 and 82 wind turbines yielding a total nameplate capacity of up to 260 MW in Nobles County. The Project would also include associated facilities.[51]

43. Turbine models with nameplate capacities ranging from 2.0 MW to 4.2 MW are currently being considered. Nobles 2 has selected the Vestas V136-3.6 MW as the primary wind turbine model for the Project. If the technology is economical and commercially proven, Nobles 2 may elect to utilize Vestas V136-3.45 MW, V136-4.0 MW or V136-4.2 MW turbines instead. The Project will also include 10 to 21 Vestas V110-2.0 MW wind turbines for the purpose of qualifying for the PTC.[52] The final number of Vestas V110-2.0 MW turbines will

[46] Notice of Joint Public Hearings and Draft Site Permit Availability (May 29, 2018) (eDocket No. 20185-143368-01).
[47] Ex. Nobles-15 (Affidavit of Publication).
[48] Ex. EERA-6 (ER).
[49] Ex. EERA-7-10 (Notice of ER Availability in EQB Monitor, et al.).
[50] DOC-DER Comments at 17 (June 27, 2018) (eDocket No. 20186-144230-01).
[51] Ex. Nobles-7 at 5-6 (Revised SP Application).
[52] Nobles 2 has purchased Vestas V110-2.0 MW turbines as a "safe harbor" to qualify for the PTC and, accordingly, will need to incorporate at least ten (10) Vestas V110-2.0 MW turbines into the Project to satisfy PTC rules. The

be determined by Nobles 2 based upon PTC requirements, turbine availability and other economic considerations. As result, the number of turbines installed could range from 65 to 82, depending on the configuration selected. For the primary configuration (64 V136-3.6 and 10 V110-2.0 turbines), a total of 12 alternate turbines are currently proposed, for a total of 86 turbine sites.[53]

44. Vestas, the wind turbine manufacturer, has indicated that the V136-3.6 MW turbine is also offered with a larger generator and other changes that increase the nameplate capacity to 4.0 or 4.2 MW without increasing the size of the turbine. Nobles 2 is in the process of evaluating the potential use of these turbines and may use them if commercially available prior to construction and if the cost of such turbines does not exceed the benefits realized by increasing the nameplate capacity of turbines (e.g., fewer turbine sites would be required to construct the Project).[54]

45. Turbines under consideration are three bladed, active yaw, and active aerodynamic control regulated wind turbine generators with power/torque control capabilities.[55] The wind turbines consist of a nacelle, hub, blades, tower, and foundation. The rotor consists of three blades mounted to a rotor hub. The hub is attached to the nacelle, which houses the gearbox, generator, brake, cooling system, and other electrical and mechanical systems.[56] Generator step-up transformers are located within the nacelle. Each turbine is equipped with a wind speed and direction sensor that communicates to the turbine's control system to signal when sufficient winds are present for operation. Turbines feature variable-speed control and independent blade pitch to enhance aerodynamic efficiency.[57]

46. The turbine models under consideration have hub heights ranging from 80 meters to 82 meters, and the rotor diameters ("RD") range from 110 meters to 136 meters.[58]

47. All proposed turbine models have Supervisory Control and Data Acquisition ("SCADA") communication technology to control and monitor the Project. The SCADA communications systems permits automatic, independent operation and remote supervision, allowing the simultaneous control of the wind turbines.[59]

48. In addition to the turbines, the Project would require the following associated facilities:

- Gravel access roads and improvements to existing roads;
- Underground and/or aboveground electrical collector lines and feeder lines;

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use of the V110-2.0 MW turbine will be in combination with V136-3.6 MW turbine. Ex. Nobles-7 at 5-6 (Revised SP Application).

[53] Ex. Nobles-7 at 5-6 (Revised SP Application).
[54] Ex. Nobles-7 at 6 (Revised SP Application).
[55] Ex. Nobles-7 at 8 (Revised SP Application).
[56] Ex. EERA-6 at 5 (ER).
[57] Ex. Nobles-7 at 9 (Revised SP Application).
[58] Ex. Nobles-7 at 9 (Revised SP Application).
[59] Ex. Nobles-7 at 9, 95 (Revised SP Application).

- Operations and maintenance ("O&M") facility;
- Project substation facility and interconnection facility;
- Up to six permanent meteorological ("MET") towers;
- Temporary batch plant and staging/laydown area for construction of the Project.[60]

49. The Project will include a wind access buffer of five rotor RDs in the prevailing wind direction and three RDs in the non-prevailing wind direction from other turbines and from non-participating parcels and State and Federal conservation lands; a noise setback meeting the noise standards in Minnesota Rules Chapter 7030; and a minimum setback of 1,600 feet from residences, and 1x turbine height from road rights-of-way.[61]

50. The total Project installed capital cost is currently estimated to be between $350 million and $400 million, including wind turbines, associated electrical and communications systems, and site facilities. The final installed capital cost of the Project is dependent on site conditions, including ease of access, geologic and hydrologic conditions, and turbine layout. Annual ongoing operating and maintenance costs are expected to average $10 million per year (real 2019 dollars) over 20 years.[62]

V. SITE LOCATION AND CHARACTERISTICS

51. The Project is located in Leota, Wilmont, Bloom, Lismore, Larkin, and Summit Lake Townships, in Nobles County in southwestern Minnesota.[63]

52. The "Project Area" is composed of 42,547 acres (66 square miles) of mostly agricultural land, of which approximately 33,991 acres is currently under lease or wind easement for the Project.[64] The Project's aboveground facilities will occupy less than one percent of the Project Area.[65]

53. The Project is located in a rural, agricultural area.[66] Wilmont Township, where the Project is centered, has a population of 187 and a population density of 5.27 people per square mile.[67]

VI. WIND RESOURCE CONSIDERATIONS

54. Based on the National Renewable Energy Laboratory's Wind Integration National Dataset, predicted long-term mean annual wind speeds near the Project Area at 80 meters above ground-level range from 7.5 to 8.5 meters per second ("m/s").[68]

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[60] Ex. Nobles-7 at 10-12 (Revised SP Application).
[61] Ex. Nobles-7 at 7 (Revised SP Application).
[62] Ex. Nobles-7 at 96 (Revised SP Application).
[63] Ex. Nobles-7 at 4 (Revised SP Application).
[64] Ex. Nobles-7 at 5 (Revised SP Application) and Ex. Nobles-12 at 6 (Seier Direct).
[65] Ex. Nobles-7 at 5 (Revised SP Application).
[66] Ex. EERA-6 at 50 (ER).
[67] Ex. EERA-6 at 51 (ER).

55. Nobles 2 initiated its wind resource assessment in 2014. The first temporary MET tower monitoring weather data in the Project Area was installed in October 2014, and it operated for 18 months, until April 2016. Nobles 2 installed additional MET towers at the site in 2016. The average annual wind speed is estimated to be 8.52 m/s at an 80-meter hub height. Wind speeds are highest in April at 9.6 m/s and lowest in August at 6.9 m/s.[69]

56. The prevailing wind directions in the Project Area are generally from the northwest in the winter and the south in the summer.[70]

57. Nobles 2 estimates that the Project will have an annual average production of between approximately 930,000 and 1,100,000 MW hours, depending on turbine model and type used. The estimate net capacity factor is between approximately 42.5 percent and 47 percent. Energy projections will be further analyzed after the final design and layout of the Project has been completed.[71]

VII. WIND RIGHTS AND EASEMENT/LEASE AGREEMENTS

58. Nobles 2 worked with landowners to secure sufficient land lease and wind easements/setback easement agreements to build the Project. The secured easement agreements ensure access for construction and operation of the Project and identify landowner and Nobles 2 obligations and responsibilities during the implementation and operation of the Project. Project facilities will be sited on leased land, and the current leasehold is sufficient to accommodate the proposed up to 260 MW project. Nobles 2 currently leases approximately 33,991 acres of the approximately 42,550 acres within the Project Area (80 percent of the Project Area). All Project facilities will be sited on leased land and the current leasehold is sufficient to accommodate the proposed facilities, required buffers, and turbine placement flexibility needed to avoid natural resources, homes, and other sensitive features.[72] The Project lease agreements provide for lease terms up to 380 months.[73]

59. The Project layout closely adheres to the wind energy conversion facility siting criteria outlined in the Commission's Order Establishing General Wind Permit Standards, Docket No. E,G999/M-07-1102, applicable local government ordinances, discussions with the Minnesota Department of Natural Resources ("MDNR"), U.S. Fish and Wildlife Service ("USFWS"), and industry standard siting practices. Turbine siting and spacing is further dictated by the selected turbine model, setback requirements, proximity to existing residences, interconnection with available transmission, and proximity to natural resources.[74]

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[68] Ex. Nobles-7 at 80 (Revised SP Application).
[69] Ex. Nobles-7 at 80-82 (Revised SP Application).
[70] Ex. Nobles-7 at 87 (Revised SP Application).
[71] Ex. Nobles-7 at 96 (Revised SP Application).
[72] Ex. Nobles-7 at 12-13 (Revised SP Application) and Ex. Nobles-12 at 6 (Seier Direct).
[73] Ex. Nobles-12 at 6 (Seier Direct).
[74] Ex. Nobles-7 at 7(Revised SP Application).

VIII. PROJECT SCHEDULE

60. Construction of the Project is anticipated to begin as early as third quarter 2018.[75] Nobles 2 anticipates constructing the Project on a schedule that facilitates an in-service date of third or fourth quarter 2019.[76]

IX. SUMMARY OF PUBLIC COMMENTS

61. Approximately 75 people attended the Public Information and Environmental Scoping Meeting held on February 28, 2018. Five members of the public provided verbal comments during the meeting and 16 written comments were submitted during the public comment period, which closed on March 20, 2018.[77] The verbal comments and questions included topics such as: economic benefits of the Project, including payments to landowners and the creation of good-paying jobs; what measures Nobles 2 would take to ensure that jobs created by the Project go to local workers; and ensuring cellular, internet, and broadband service is not interrupted.[78] Written public comments included a broad range of topics, including: drain tiles; impacts to native plant communities; potential changes to storm water runoff; impacts to farming operations; and potential interference with cellular, internet, and broadband service.[79]

62. In addition, comment letters were received from the Minnesota Department of Transportation ("MnDOT"), MDNR, Minnesota Pollution Control Agency ("MPCA"), and the Nobles County Board of Commissioners. MnDOT provided comments on corridor sharing with utility projects in highway rights-of-way and other possible roadway restrictions and concerns during construction, and microwave paths used for communications. MDNR provided a range of comments on the Project, including: potential avian and bat fatalities, possible setback distances from MDNR-managed wildlife areas, use of guy wires on MET towers, and potential impacts to natural communities. MPCA commented on the Project's sound studies and surface water and floodplain resources. Nobles County Board of Commissioners submitted a letter in support of the economic benefits of wind projects in Nobles County, specifically the production taxes that are used for infrastructure projects.[80]

63. Comments were also received from Lismore Cooperative Telephone, Mankato Building and Construction Trades Council, North Central States Regional Council of Carpenters, and the North Star Policy Institute. Lismore Cooperative Telephone provided information on plans to install a fiber/wireless hybrid internet system in Nobles County, which will include a repeater tower in Summit Lake Township, section 5. The comments from labor and industry organizations are in support of using Minnesota labor for the construction and maintenance of the Project.[81]

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[75] Ex. Nobles-7 at 1 (Revised SP Application).
[76] Ex. Nobles-7 at 5 (Revised SP Application).
[77] Ex. EERA-4 at 1 (Scoping Decision Document).
[78] *See, e.g.*, Ex. EERA-3 at 29, 31, 32, 34, 36 (Public Record of Information and Scoping Meeting).
[79] *See* Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).
[80] *See* Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).
[81] *See* Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).

64. Approximately 31 members of the public attend~~ing~~ged the public hearings held at 1:00 p.m. and 6:00 p.m. on June 20, 2018.[82] Approximately 10 members of the public spoke at the hearings.[83] People expressed support for the Project as a source of reliable, cost-effective renewable energy, good-paying jobs, and tax benefits and other economic benefits to the local communities.[84] For example, Gene Metz, speaking as a Nobles County Commissioner and a farmer that operates in two of the current wind farms in Nobles County, spoke of wind development like the Project as a way to diversify the county's predominantly agricultural-based economy by bringing a business to the area that does not require concessions many other types of business require, and which doesn't pollute, or require a large amount~~s~~ of water or electricity or gas to operate. He also spoke of the production taxes Nobles County has gained from wind projects and how it is used to improve local loads and make other capital improvements without increasing local taxpayers' levy amounts.[85] In addition to expressing support for the Project as a source of good-paying jobs, people spoke about utilizing local workers for those jobs and complimented the Project's commitment to trying to maximize local workers and job opportunities.[86]

65. Several written comments were received before the close of the initial comment period on July 2, 2018. Numerous members of the public submitted comments in support of the Project because it would generate good-paying jobs; provide a reliable, clean source of renewable energy; provide an additional, diverse source income for landowners; generate tax revenue for local communities, and provide a boost to the local economy.[87]

X. SITE PERMIT CRITERIA

66. Wind energy projects are governed by Minn. Stat. Ch. 216F and Minn. R. Ch. 7854. Minn. Stat. § 216F.01, subd. 2, defines a "large wind energy conversion system" ("LWECS") as a combination of wind energy conversion systems with a combined nameplate capacity of five MW or more. Minn. Stat. § 216F.03 requires that a LWECS be sited in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources.

67. In addition, when deciding whether to issue a Site Permit for a LWECS, the Commission considers the factors set forth in Minn. Stat. § 216E.03, subd. 7, which specifies, in relevant part, that the Commission "shall be guided by, but not limited to, the following considerations:

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[82] Public Hearing Sign-In Sheets – 1 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-01); Public Hearing Sign-In Sheets – 6 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-03).
[83] Public Hearing Sign-In Sheets – 1 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-01); Public Hearing Sign-In Sheets – 6 PM Hearing on June 20, 2018 (eDocket No. 20186-144257-03).
[84] Pub. Hrg. Tr. 1 PM (June 20, 2018) at 41 (Moeller), at 42 (Peterson), at 43 (Metz), at 46-47 (Kluis), at 50 (Pranis), at 54 (O'Reilly), at 57 (Moerke); Pub. Hrg. Tr. 6 PM (June 20, 2018) at 31-32 (Algadi).
[85] Pub. Hrg. Tr. 1 PM (June 20, 2018) at 43-44 (Metz).
[86] Pub. Hrg. Tr. 1 PM (June 20, 2018) at 50 (Pranis), at 54 (O'Reilly), at 57 (Moerke); Pub. Hrg. Tr. 6 PM (June 20, 2018) at 29-30 (Franco).
[87] *See* Public Comments Batch 1 (June 12, 2018) (eDocket No. 20186-143743-01); Public Comments Batch 2 (June 21, 2018) (eDocket No. 20186-144033-01); Public Comments Batch 3 (June 20, 2018) (eDocket No. 20186-144014-02); Comment by Minnesota State Energy Center of Excellence (July 2, 2018) (eDocket No. 20187-144443-02); Comment by State Senator Julie Rosen (July 2, 2018) (eDocket No. 20187-144440-02).

(1) evaluation and research and investigations relating to the effects on land, water, and air resources or large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic field resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

(2) environmental evaluation of sites . . . proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;

(3) evaluation of the effects of new electric power generation . . . systems related to power plants designed to minimize adverse environmental effects;

(4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;

(5) analysis of the direct and indirect economic impact of proposed sites . . . including, but not limited to, productive agricultural land lost or impaired;

(6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site . . . be accepted;

(7) evaluation of alternatives to the applicant's proposed site . . . ;

(8) ***

(9) evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;

(10) ***

(11) evaluation of irreversible and irretrievable commitments of resources should the proposed site . . . be approved; and

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities."[88]

68. The Commission must also consider whether the applicant has complied with all applicable procedural requirements.[89]

69. The Commission's rules require the Applicant to provide information regarding any potential impacts of the proposed project, potential mitigation measures, and any adverse effects that cannot be avoided as part of the application process.[90] No separate environmental review document is required for a LWECS project.[91]

70. There is sufficient evidence on the record for the ALJ to assess the proposed site using the criteria and factors set forth above.

XI. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT

A. Human Settlement

71. The Project is located in rural southwestern Minnesota.[92] Wilmont Township, where the Project is centered, has a population density of 5.27 people per square mile.[93] There are already a number of installed wind turbines in Nobles County.[94] Existing wind farms are located immediately to the northwest and south of the proposed Project.[95]

72. The construction of the Project is not anticipated to have a significant impact on the demographics of the Project Area.[96]

B. Zoning and Land Use

73. Under Minn. Stat. § 216F.081, "A county may adopt by ordinance standards for LWECS that are more stringent than standards in commission rules or in the commission's permit standards. The commission, in considering a permit application for LWECS in a county that has adopted more stringent standards, shall consider and apply those more stringent standards, unless the commission finds good cause not to apply the standards."[97]

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[88] Minn. Stat. § 216E.03, subd. 7(b). Considerations (8) and (10) are omitted because they pertain only to proposed routes of high voltage transmission lines.
[89] Minn. R. 7854.1000, subp.1.
[90] Minn. R. 7854.0500, subp. 7.
[91] Minn. R. 7854.0500, subp. 7 ("The analysis of the environmental impacts required by this subpart satisfies the environmental review requirements of chapter 4410, parts 7849.1000 to 7849.2100, and Minnesota Statutes, chapter 116D. No environmental assessment worksheet or environmental impact statement shall be required on a proposed LWECS project").
[92] Ex. Nobles-7 at 13 (Revised SP Application).
[93] Ex. EERA-6 at 51 (ER).
[94] Ex. Nobles-7 at 23 (Revised SP Application); Ex. EERA-6 at 53 (ER).
[95] Ex. Nobles-7 at 24 (Revised SP Application).
[96] *See, e.g.*, Ex. Nobles-7 at 15 (Revised SP Application).
[97] Minn. Stat. § 216F.081.

74. Nobles County has adopted a comprehensive plan. The Nobles County Zoning Ordinance Section 729 discusses WECS Regulations. According to Nobles County Environmental Services Office, the Project Area is situated entirely within the Agricultural Preservation District of Bloom, Larkin, Leota, Lismore, Summit Lake, and Wilmont Townships as defined by the Nobles County Zoning Ordinance. While Nobles County has specific WECS ordinances, the ordinance exists "to regulate the installation and operation of WECS not otherwise subject to siting and oversight by the State of Minnesota". The Project is exempt from the County's WECS ordinances because the Project is over 25 MW in size; however, the Project will be designed to generally meet or exceed the minimum setback requirements identified by Nobles County's WECS ordinances.[98]

75. The Project is consistent with Nobles County's comprehensive plan.[99] Agricultural use of the Project Area will continue.[100]

76. There are no Reinvest in Minnesota ("RIM") easements or USFWS lands within the Project Area.[101]

77. The Project avoids impacts to all 536 acres of Conservation Reserve Program ("CRP") land within the Project Area with the exception of one proposed collector line that is routed through land that may still be under CRP. CRP areas will be verified by evaluating current land lease agreements for participating landowners prior to construction. Nobles 2 has stated that it plans to avoid CRP lands as it continues to develop the Project, and that if these lands are unavoidable, Nobles 2 will work collaboratively with the U.S. Department of Agriculture ("USDA") and the landowner to remove the impacted portion of the parcel from the applicable program prior to conducting disturbance activities.[102]

78. The Project compliments current agricultural and other land uses within and nearby the Project Area, and does not conflict with the applicable zoning and/or comprehensive plan requirements. The Project is not expected to have negative impacts on local zoning and comprehensive plans.[103] The record demonstrates that Nobles 2 has taken steps to avoid and minimize impacts to land use and local zoning.

C. Property Values

79. Because property values are influenced by a complex interaction between factors specific to each individual piece of real estate as well as local and national market conditions, the effect of one particular project on the value of one particular property is difficult to determine.[104]

80. Southern and southwestern Minnesota have experienced the greatest development of wind energy facilities in the state, which could make the addition of another large wind

[98] Ex. Nobles-7 at 15-16 (Revised SP Application).
[99] Ex. Nobles-7 at 18, 19 (Revised SP Application).
[100] Ex. Nobles-7 at 19 (Revised SP Application).
[101] Ex. Nobles-7 at 19 (Revised SP Application).
[102] Ex. Nobles-7 at 19 (Revised SP Application).
[103] Ex. Nobles-7 at 18-19 (Revised SP Application).
[104] Ex. EERA-6 at 63 (ER).

facility in the area to be less influential on property values then it may be if the facility was placed in area where wind energy facilities are less common on the landscape. More specifically, there are other wind farms near the Project Area.[105]

81. Six counties in southern Minnesota (Dodge, Jackson, Lincoln, Martin, Mower, and Murray) responded to a Stearns County survey asking about impacts on property values as a result of wind farms. That survey showed that neither properties hosting turbines nor those adjacent to those properties have been negatively impacted by the presence of wind farms.[106]

82. Negative impacts to property value as a result of the Project are not anticipated. In unique situations, it is possible that specific, individual property values may be negatively impacted. Such impacts can be mitigated by siting turbines away from residences.[107]

D. Noise

83. The operation of wind turbines produces sound. The level of sound varies with the speed of the turbine and the distance of the listener from the turbine.[108] The MPCA has established standards for the regulation of sound levels, the most stringent of which is a 50 A-weighted decibel ("dBA") limit for nighttime sound levels.[109] Sound levels are not to be exceeded for 10 percent and 50 percent of the time in a one-hour survey (L10 and L50, respectively) for each noise area classification.[110]

84. Nobles 2 has conducted a preliminary sound assessment of the Project and also submitted a supplemental pre-construction sound monitoring report in response to MPCA requests.[111] Per MPCA guidance, the Supplemental Report re-presents the result data with traffic noise and all other short-term sound events included in the final results. Complying with MPCA directives, the sound level measurements were filtered to remove sound level data for hours with meter-height wind speeds 11 mph or greater. Average adjusted statistical sound levels were presented for each of the five days with stable weather conditions. Both daytime and nighttime levels were 40 dBA or lower for periods with moderate wind speeds.[112]

85. An ambient background sound level of 35 dBA was included in the model and a safety margin of +2 dBA was added to the turbine manufacturer's sound emission data. All potential turbine locations, including alternates, were also included in the model. All modeled sound levels at the provided occupied residences are anticipated to be below 50.0 dBA. The maximum calculated sound level at any noise-sensitive receptor was 49.0 dBA. Based on this data, it is anticipated there would be no exceedances of the MPCA rules at any of the

[105] Ex. EERA-6 at 63 (ER).
[106] Ex. EERA-6 at 63-64 (ER).
[107] Ex. EERA-6 at 64 (ER).
[108] Ex. EERA-6 at 59, 61 (ER).
[109] Minn. R. 7030.0040
[110] Ex. EERA-6 at 59 (ER).
[111] Ex. Nobles-4 at Appendix C (Pre-Construction Sound Monitoring Study) and Ex. Nobles-13, Sched. 6 (Vala Direct); Ex. EERA-6 at 61-62 (ER).
[112] Ex. Nobles-13, Sched. 6 at 26 (Vala Direct).

residential receivers for any of the wind turbine options at any of the proposed wind turbine locations.[113]

86. The record demonstrates that Nobles 2 has taken considerable effort to site turbines carefully and responsibly to satisfy the MPCA sound standards. For example, Nobles 2 is maintaining a minimum setback distance of 1,600 feet to occupied dwellings.[114]

87. The Draft Site Permit contains adequate conditions to monitor and mitigate the sound from the Project. Draft Site Permit Condition 4.3 requires turbines to be placed in appropriate locations to ensure compliance with the Noise Standards. In addition, Section 7.4 of the Site Permit will require the Permittee to conduct post-construction sound monitoring. The study will determine the sound levels at different frequencies and at various distances from the turbines at various wind directions and speeds.[115]

E. Shadow Flicker

88. Shadow flicker caused by wind turbines is defined as alternating changes in light intensity at a given stationary location, or receptor, such as the window of a home. For shadow flicker to occur, three conditions must be met: (1) the sun must be shining with no clouds to obscure it; (2) the rotor blades must be spinning and must be located between the receptor and the sun; and (3) the receptor must be sufficiently close to the turbine to be able to distinguish a shadow created by it.[116]

89. Shadow flicker intensity and frequency at a given receptor are determined by a number of interacting factors, including: sun angle and path, cloud cover, distance from turbine(s), wind direction and speed, topography, presence of visual obstacles (i.e., trees or buildings), and the light intensity within the home.[117] Shadow flicker from the proposed turbines is not harmful to the health of photosensitive individuals, including those with epilepsy.[118]

90. Nobles 2 modeled shadow flicker frequency calculations for the Project at 590 residences. Nobles 2 used both a worst case scenario model and a realistic model. The shadow flicker modelling used the Vestas V136, which has the largest rotor diameter of the turbines proposed by Nobles 2, at each of the 86 wind turbine pad sites. The conservative results of the study indicate that, of the 590 receptors modeled, 80 percent received no shadow flicker, with none measuring over 30 hours or more per year of realistic shadow flicker at a participating or a non-participating landowner's occupied residence.[119] Specifically, no occupied residences experienced more than 29 hours and 7 minutes of shadow flickering per year based on realistic assumptions regarding operational time and sunshine probability.[120]

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[113] Ex. Nobles-13, Sched. 7 at 4 (Vala Direct).
[114] Ex. Nobles-7 at 23 (Revised SP Application).
[115] Draft Site Permit at § 7.4.
[116] Ex. EERA-6 at 54-55 (ER).
[117] Ex. EERA-6 at 56 (ER); Ex. Nobles-7 at 26-27 (Revised SP Application).
[118] Ex. EERA-6 at 57 (ER).
[119] Ex. EERA-6 at 56 (ER).
[120] Ex. Nobles-13, Sched. 7 at 4 (Vala Direct).

91. The record demonstrates that Nobles 2 has taken considerable effort to site turbines carefully and responsibly to minimize the impact of shadow flicker to residences. Nobles 2 is maintaining a minimum 1,600 foot setback from all residences, which should be effective in minimizing shadow flicker.[121] Further, Nobles 2 will continue to consider shadow flicker when siting wind turbines to minimize impacts to area residents.[122] Although unlikely to occur, specific cases of documented excessive shadow flicker will be addressed.[123] Mitigation measures will be considered and implemented based on individual circumstances of residences experiencing shadow flicker, and as a reasonable function of the amount of flicker experienced.[124] Mitigation measures may include providing indoor or exterior screening, or operational software adjustments (brief, temporary shutdown of specific turbines) will be considered and utilized where appropriate and reasonable.[125]

92. The Draft Site Permit appropriately addresses shadow flicker. Section 7.2 of the Site Permit will require the Permittee to provide the Commission with data on shadow flicker, at least 14 days prior to the pre-construction meeting, for each residence of non-participating landowners and participating landowners within and outside of the Project boundary potentially subject to turbine shadow flicker exposure. The data will include the modeling results, assumptions made, and the anticipated level of exposure from turbine shadow flicker for each residence. Nobles 2 will also be required to provide documentation on its efforts to avoid, minimize, and mitigate shadow flicker exposure.

F. Aesthetics

93. The typical visual landscape within the Project Area consists of agricultural fields, farmsteads with trees planted as windbreaks, and active or fallow fields.[126]

94. Construction of the Project would alter the existing landscape with the placement of up to 82 wind turbines. However, the Project is consistent with existing wind energy production land use in the area.[127] Because numerous commercial wind farms are located in the immediate area and surrounding area, the Project should have a lesser impact than in areas with no previous wind development.[128] The Project Area will retain its overall rural character; the wind turbines are compatible with the rural and agricultural heritage of the area.[129]

95. Nobles 2 will also implement mitigation measures to minimize potential aesthetic impacts. In the Application, Nobles identified nine mitigation measures, including, but not limited to, using existing roads to the greatest extent possible to limit the number of new roads

[121] *See* Ex. EERA-6 at 57 (ER); Ex. Nobles-7 at 28 (Revised SP Application).
[122] Ex. Nobles-7 at 28 (Revised SP Application).
[123] Ex. Nobles-7 at 28 (Revised SP Application).
[124] Ex. Nobles-7 at 28 (Revised SP Application).
[125] Ex. EERA-6 at 57 (ER); Ex. Nobles-7 at 28 (Revised SP Application).
[126] Ex. Nobles-7 at 23 (Revised SP Application).
[127] Ex. Nobles-12 at 3 (Seier Direct)
[128] Ex. Nobles-12 at 3 (Seier Direct)
[129] Ex. Nobles-7 at 24 (Revised SP Application); Ex. EERA-6 at 53 (ER).

that need to be constructed, limiting above ground collector lines, and using a uniform turbine color.[130]

96. The record demonstrates that Nobles 2 has taken steps to avoid and minimize aesthetic impacts. With the mitigation measures discussed above, the Project is not anticipated to result in significant aesthetic impacts.

G. Local Economy

97. The Project will result in both short- and long-term benefits to the local economy. To the extent possible, Nobles 2 plans to use local contractors and suppliers for portions of the construction. Up to 230 temporary construction jobs and approximately 15 full-time operations jobs, plus additional seasonal and support staff, are expected to be added as a result of the Project. Wages and salaries paid to contractors and workers in Nobles County will contribute to the overall personal income of the region.[131] Several commenters at the public hearing noted that the Project is expected to result in well-paying construction jobs in the area.[132]

98. Nobles 2 will hire an engineering, procurement, and construction ("EPC") contractor who will be responsible for hiring the construction work force. It is the EPC contractor's responsibility to survey project labor availability and make arrangements to staff and manage the project workforce. Nobles 2 has not yet selected an EPC contractor for the Project, nor has Nobles 2 assessed the availability of qualified labor in the local area. Nobles 2 has stated that it will encourage its EPC contractor to utilize qualified local labor where practical, and that it will also encourage the EPC contractor to use a variety of recruiting methods, including a local job fair prior to the start of construction, to identify qualified and available local labor.[133]

99. Nobles 2 has stated that it is open to using local labor resources for the Project.[134] Recognizing the desire to hire local labor, but also recognizing that qualified local labor may not be available, Nobles 2 has reached a compromise with the Laborers' International Union of North America and Mankato Building and Construction Trades Council and has voluntarily committed to providing the Commission with quarterly reports documenting the number of hours or full-time equivalents worked by local laborers for the construction of the Project.[135] Nobles 2, in coordination with The Laborers' International Union of North America and Mankato Building and Construction Trades Council, drafted and agreed upon the following proposed permit condition:

> **10.4.1. Construction Labor Status Reports.** The Permittee shall file quarterly reports with the Commission within 45 days of the

[130] Ex. Nobles-7 at 25 (Revised SP Application).
[131] Ex. Nobles-7 at 50-51 (Revised SP Application).
[132] *See, e.g.*, Pub. Hrg. Tr. 1 PM (June 20, 2018) at 50 (Pranis), at 54 (O'Reilly), at 57 (Moerke); Pub. Hrg. Tr. 6 PM (June 20, 2018) at 29-30 (Franco).
[133] Ex. Nobles-12 at 7 (Seier Direct).
[134] Ex. Nobles-12 at 7 (Seier Direct).
[135] Ex. Nobles-12 at 8 (Seier Direct).

end of the quarter regarding construction workers that participated in construction of the project. Reports shall include: (a) 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, during the quarter in which they participated in construction of the project; (b) the gross number of hours worked by or full-time equivalent workers of people who live in other states but are within 150 miles of the project; and (c) total gross hours or full-time equivalent workers. Permittee shall work with its contractor to determine suitable reporting metrics. Reports shall begin with the commencement of site construction and continue until completion of site restoration.[136]

99B. EERA recommends the following alternative language (see EERA Comments and Recommendations, July 25, 2018) that incorporates one report detailing the efforts to hire local workers alluded to in Finding 98 and the labor participation statistics detailed in Finding 99. It also removes the quarterly "status" reporting that would require additional Commission oversight and compliance monitoring.

10.4.1. Labor Statistics Report. The Permittee shall file a post-construction Labor Statistics Report within 60 days of commencement of operation. The Report shall (a) detail the Permittee's efforts and the site contractor's efforts to hire Minnesota workers, and (b) provide an account of 1) 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; 2) the gross number of hours worked by or full-time equivalent workers who are residents of other states, but live within 150 miles of the project; and 3) 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.

100. In addition, the Project provides landowners and farmers with opportunities for higher agricultural profitability and a more diverse revenue stream. Landowners that executed leases or wind easements with Nobles 2 will receive payments annually for the life of the Project, which should also strengthen the local economy.[137]

101. In addition to creating jobs and personal income, the Project will pay a Wind Energy Production Tax to the local units of government of $0.0012 per kilowatt hour ("kWh") of electricity produced, resulting in an estimated $1.1 to $1.3 million annually to the county and to townships within the Project.[138]

[136] Ex. Nobles-12 at 11 (Seier Direct).
[137] Ex. Nobles-7 at 51 (Revised SP Application).
[138] Ex. Nobles-7 at 51 (Revised SP Application); Ex. EERA-6 at 65 (ER).

102. The record demonstrates that the Project will result in both short- and long-term benefits to the local economy.

H. Public Health

103. The term EMF refers to electric and magnetic fields that are present around any electrical device. The term EMF refers to electric and magnetic fields that are present around electrical devices. Electric fields arise from the voltage or electrical charges and magnetic fields arise from the flow of electricity or current that travels along transmission lines, power collection (feeder) lines, substation transformers, house wiring, and electrical appliances.[139]

104. Although EMF is often raised as a concern with electrical transmission projects, the Commission has consistently found that there is insufficient evidence to demonstrate a causal relationship between EMF exposure and human health effects.[140]

105. Based upon current research regarding EMFs and the separation distances being maintained between transformers, turbines and collector lines from public access and occupied homes, EMFs associated with the Project are not expected to have an impact on public health and safety.[141]

106. Stray voltage is a natural phenomenon that is the result of low levels of electrical current flowing between two points that are not directly connected. Stray voltage does not cause electrocution and is not related to ground current, EMF, or earth currents. Where distribution lines have been shown to contribute to the propagation of stray voltage on farm facilities, the distribution system was either directly under or parallel to an existing transmission line. These factors are considered in design and installation of transmission lines and can be readily mitigated.[142] Because of the type of transformers used at each turbine and the design of the collection system, there are no ground currents in the collection system. Therefore, under normal operating conditions, the grounding for the wind farm collection system has no current with which to create stray voltage.[143] No impacts from stray voltage are anticipated.[144]

107. No impacts to public health are anticipated to result from construction and operation of the Project.[145]

I. Public Safety

108. The Draft Site Permit contains conditions to address public safety.[146] In accordance with those conditions, Nobles 2 will provide educational materials to landowners adjacent to the site and, upon request, to interested persons about the Project and any

[139] Ex. Nobles-7 at 41 (Revised SP Application); *see also* Ex. EERA-6 at 66 (ER).
[140] Ex. EERA-6 at 66 (ER).
[141] Ex. Nobles-7 at 42 (Revised SP Application); *see also* Ex. EERA-6 at 67-68 (ER).
[142] Ex. EERA-6 at 68 (ER).
[143] Ex. EERA-6 at 83 (ER).
[144] Ex. Nobles-7 at 42 (Revised SP Application); Ex. EERA-6 at 83 (ER).
[145] *See* Ex. Nobles-7 at 42 (Revised SP Application).
[146] *See* Draft Site Permit at § 5.2.25.

restrictions or dangers associated with the Project. Nobles 2 will also provide any necessary safety measures such as warning signs and gates for traffic control or to restrict public access. In addition, Nobles 2 will submit the location of all underground facilities to Gopher State One Call after construction is completed.

109. In addition, Nobles 2 will coordinate with first responders to develop a safety plan during construction and operation of the Project. Nobles 2 will also be in contact with local first responders to offer information about the Project.[147]

110. No significant impacts to public safety are expected to result from construction and operation of the Project. Further, the Draft Site Permit contains adequate conditions to monitor and mitigate the Project's potential impacts on public safety.

J. Public Service and Infrastructure

111. The Project is located in a lightly populated, rural/farming area in southwest Minnesota. Public services to farmsteads and rural residences within the Project Area include transportation/roadways, electric and telephone.[148]

112. Existing roadway infrastructure in and around the Project Area consists of county and township roads that generally follow section lines, with private unpaved farmstead driveways and farming access roads.[149] Access from surrounding roadways will reduce the need for extensive access roads and allow existing primarily agricultural uses to continue relatively unaltered.[150]

113. During construction, temporary impacts are anticipated on some public roads within the Project Area. Construction traffic would use the existing county and state roadway system to access the Project Area and deliver construction materials and personnel. Construction activities will increase the amount of traffic using local roadways, but such impacts will be short-term and intermittent. Some roads may also be expanded along specific routes as necessary to facilitate the movement of equipment. Any temporary modifications to the existing road system would be restored following construction.[151]

114. Constructing the Project will require the construction of approximately 24 miles of gravel access roads; the final mileage will depend on the wind turbine model selected and final design. Access roads would be used by operation and maintenance crews while inspecting and servicing the wind turbines throughout the life of the Project. The access roads would be between towers and one road would be required for each turbine string. The roads will be primarily gravel with varying thickness and will initially be wide enough for construction traffic, but the permanent access road will be 16 - 18 feet wide with a low profile to allow cross travel by farm equipment.[152]

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[147] Ex. Nobles-7 at 44 (Revised SP Application).
[148] Ex. Nobles-7 at 28 (Revised SP Application).
[149] Ex. Nobles-7 at 29 (Revised SP Application).
[150] Ex. EERA-6 at 70 (ER); Ex. Nobles-7 at 29 (Revised SP Application).
[151] Ex. EERA-6 at 72 (ER).
[152] Ex. EERA-6 at 72 (ER).

115. Nobles 2 will review designated haul roads with the local authority having jurisdiction over the haul roads and will execute road use agreements where required. Road use agreements will be used to identify suitable travel routes, traffic control measures, methods for evaluating, monitoring and restoring roads, and mitigation measures to ensure roads used for oversize/overweight loads are properly identified, monitored and stabilized.[153]

116. In addition, the Draft Site Permit contains provisions related to the use of public roads, the construction of turbine access roads, and private roads.[154] For example, the Draft Site Permit requires Nobles 2 to make satisfactory arrangements with the appropriate road authorities. In addition, Nobles 2 will construct the least number of turbine access roads necessary to safely and efficiently operate the Project and satisfy landowner requests; access roads will be constructed in accordance with all necessary township, county, or state road requirements and permits. Further, Nobles 2 will promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.

117. In response to concerns raised in public comments, Nobles 2 engaged Comsearch to conduct an analysis of existing cellular mobile phone coverage in and near the Project Area and to assess the potential for the Project to disrupt cellular mobile phone service within and adjacent to the Project Area after the Project is constructed.[155] Comsearch completed a Mobile Phone Carrier Report for the Project on June 5, 2018 in which it noted that cellular phone communications "are typically unaffected by the presence of wind turbines" and Comsearch does "not anticipate any significant harmful effect to mobile phone services" in and near the Project.[156] In addition, Comsearch indicates that "cellular mobile signal propagation is typically not affected by physical structures because the beam widths of the radiated signal… are very wide and the wavelength of the signal is long enough to wrap around objects such as wind towers and blades."[157] Therefore, the Project is not anticipated to have any significant impact on cell phone reception in the Project Area.

118. Construction and operation of the proposed project is not expected to impact telephone service in the Project Area.[158] To the extent Project facilities cross or otherwise impact existing telephone lines or equipment, Nobles 2 will enter into agreements with service providers to avoid interference with their facilities.[159] In addition, Section 5.2.16 of the Draft Site Permit already requires that the Project not interfere with telecommunications.

119. Because of their height, wind turbines have the potential to interfere with existing communications systems licensed to operate in the United States. Nobles 2 will not operate the

[153] Ex. Nobles-7 at 31 (Revised SP Application).
[154] *See* Draft Site Permit at §§ 5.2.12, 5.2.13, 5.2.1.
[155] Ex. Nobles-13, Sched. 2 at 10 (Vala Direct).
[156] Ex. Nobles-13, Sched. 2 at 10 (Vala Direct).
[157] Ex. Nobles-13, Sched. 2 at 9 (Vala Direct).
[158] Ex. EERA-6 at 75 (ER).
[159] Ex. Nobles-7 at 32 (Revised SP Application); Ex. EERA-6 at 75-76 (ER).

Project so as to cause microwave, radio, or navigation interference contrary to Federal Communications Commission ("FCC") regulations or other law.[160]

120. Comsearch completed an evaluation of licensed non-federal government microwave beam paths in the vicinity of the Project Area and determined that 40 microwave beam paths intersect the Project Area. Comsearch calculated the Fresnel Zones, which is an area of signal swath which proposed turbines should avoid. To prevent disruption of the microwave beam path, the Project's turbines will not be sited in the centerline of a beam path.[161]

121. Comsearch evaluated degradation to the operational coverage of AM and FM radio broadcast stations located in the Project vicinity.[162] The potential for interference with radio signals is low.[163] FM stations are usually not at risk to interference from wind turbines, and all of the identified FM stations are outside of the Project Area and at least 3.2 miles from the Project Area. Consequently, no impact to FM broadcasts is expected.[164] Because the nearest AM station transmitter is 4.5 miles from the Project Area, no interference with AM broadcast stations is expected.[165]

122. The United States Department of Commerce National Telecommunications and Information Administration ("NTIA") coordinates government communication systems for all departments and agencies. Nobles 2 requested a review by NTIA to determine if there would be any concerns with radio frequency transmission blockage, and the NTIA responded with a review finding that No Harmful Interference Anticipated.[166]

123. Construction of wind turbines has the potential to impact television reception as a result of an obstruction in the line of sight between residences relying on digital antennas for TV reception and the TV station antennas. TV cable service, (where available) and direct satellite broadcast are believed to be the dominant delivery mode of TV service to the Project area, and these services will be unaffected by the presence of the Project.[167] Should issues arise following construction of the Project, Nobles 2 will work with the affected residents in a timely manner to determine the cause of the interference and establish acceptable reception.[168]

124. The Draft Site Permit also contains provisions to prevent the Project's interference with microwave, television, radio, telecommunications, or navigation signals, and requires Nobles 2 to be responsible for alleviating any disruption or interference of these services caused by the turbines or any associated facilities.[169]

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[160] Draft Site Permit at § 5.2.16.
[161] Ex. Nobles-7 at 32 (Revised SP Application); Ex. EERA-6 at 77 (ER).
[162] Ex. Nobles-7 at 32 (Revised SP Application).
[163] Ex. EERA-6 at 77 (ER).
[164] Ex. Nobles-7 at 33 (Revised SP Application).
[165] Ex. EERA-6 at 77 (ER).
[166] Ex. EERA-6 at 75 (ER).
[167] Ex. EERA-6 at 76 (ER).
[168] Ex. Nobles-7 at 34 (Revised SP Application).
[169] Draft Site Permit at § 5.2.16.

125. Nobles 2 engaged Comsearch to prepare a study of the local wireless broadband internet service to determine whether wireless broadband internet service could be impacted.[170] To the extent any customer impacts are identified prior to or after construction, Nobles 2 will work with the local provider, Lismore Cooperative Telephone Company ("LCTC"), on a case-by-case basis, to adjust the line of sight to a customer to eliminate the impacts.[171] Comments provided by LCTC indicate that the western half of the Project Area is served by cable broadband service. LCTC plans to install a repeater tower east of Lismore in the near term to facilitate better wireless broadband coverage in the eastern half of the Project Area. LCTC also noted that it has not received any complaints about wind farms disrupting wireless broadband service.[172] Nobles 2 stated that it will continue to engage with LCTC prior to and during construction to ensure that the LCTC cable infrastructure is properly located and avoided during construction. Avoidance of LCTC cable infrastructure will ensure that there is no disruption to cable broadband internet customers in the western half of the Project Area.[173]

126. Nobles 2 engaged Comsearch to conduct an analysis of the potential for the Project to disrupt wireless broadband internet service within and adjacent to the Project Area after the Project is constructed. Comsearch completed a Wireless Internet Services Report for the Project and determined that three residences would lose line-of-sight ("LOS") service due to construction of the Project, but all three of the residences that would lose LOS service because of the Project are located in an area serviced by cable broadband service. Therefore, Comsearch does not anticipate any harmful effect to the wireless broadband internet services in and near the Project.[174] Even though impacts to broadband internet services by the Project are not expected, in the event the Project or its operations cause wireless broadband interference, Nobles 2 has stated it will take timely measures necessary to correct the problem in close coordination with LCTC. Such measures will depend upon LCTC's recommendations, the location of the interference and the problems being experienced by the broadband customer.[175]

127. No oil and natural gas pipelines are mapped within or near the Project Area. Consequently, impacts to identified pipelines are not expected.[176]

128. Limited and short-term impacts to the electrical service may be experienced where coordinated, short-term outages occur when high clearance construction equipment needs to cross areas with overhead distribution and/or transmission lines. Outages associated with the Project's transmission interconnection construction may also be required. Nobles 2 will work closely with local service providers to ensure outages are planned and coordinated with local residents and other impacted users.[177]

129. The Project Area has limited public infrastructure services. Homes and farmsteads typically utilize on-site water wells or water service from Lincoln-Pipestone Rural

[170] Ex. Nobles-13 at 5 (Vala Direct).
[171] Ex. EERA-6 at 78 (ER).
[172] *See* Ex. EERA-6 at 78 (ER); Ex. Nobles-13 at 5 (Vala Direct).
[173] Ex. Nobles-13 at 5 (Vala Direct).
[174] Ex. Nobles-13 at 5 (Vala Direct) and Ex. Nobles-13, Sched. 3 at 8 (Vala Direct).
[175] Ex. Nobles-13 at 6 (Vala Direct).
[176] Ex. Nobles-7 at 34 (Revised SP Application).
[177] Ex. Nobles-7 at 34 (Revised SP Application).

Water. Septic systems typically provide individual household sanitary needs.[178] Construction and operation of the proposed Project will not affect the water supply or sanitary service. Nobles 2 will share information with Lincoln-Pipestone Rural Water to avoid impacts to their water distribution system, utilizing crossing agreements where needed. No installation or abandonment of water supply wells is anticipated for the Project.[179]

K. Recreational Resources

130. Recreational opportunities in Nobles County include hiking, biking, boating, fishing, hunting, camping, snowmobiling, cross country skiing, horseback riding, state parks and nature viewing.[180]

131. There are Wildlife Management Areas ("WMA"), Scientific and Natural Areas ("SNA"), and Waterfowl Protection Areas ("WPA") within ten miles of the Project Area.[181] There are four WMAs within the Project Area. There are no Federal, county, or city parks in or near the Project Area boundary.[182] No National Wildlife Refuges ("NWR") are within the Project Area.[183] Recreational resources within the Project Area include approximately 8 miles of the Frosty Riders Snowmobile Trail, which will be afforded a minimum 300-foot setback from the trail right-of-way.[184]

132. The Project's turbines will not be located in biologically sensitive areas such as public parks, WMAs, SNAs, and WPAs.[185] Further, Nobles 2 has designed the layout to provide at least a three RD by five RD setback from all non-participating lands, including all WMA boundaries and all other state or federal conservation lands.[186]

133. Because all of the public lands identified within the Project Area are provided a minimum setback of 1,339 feet (e.g., 3 RD x 5 RD from non-participating land) from Project infrastructure, and a minimum setback of 300 feet from snowmobile trail right-of-ways, no direct impacts to recreational resources are anticipated.[187]

134. Based on the record, no adverse impacts to recreational resources are anticipated from the Project.

[178] Ex. Nobles-7 at 34 (Revised SP Application).
[179] Ex. Nobles-7 at 34 (Revised SP Application).
[180] Ex. Nobles-7 at 38 (Revised SP Application).
[181] Ex. Nobles-7 at 38-40 (Revised SP Application).
[182] Ex. Nobles-7 at 38 (Revised SP Application).
[183] Ex. Nobles-7 at 40 (Revised SP Application).
[184] Ex. Nobles-7 at 41 (Revised SP Application).
[185] Ex. EERA-6 at 54 (ER).
[186] Ex. Nobles-14 at 4 (Finocchiaro Direct); Ex. Nobles-7 at 41 (Revised SP Application).
[187] Ex. Nobles-7 at 41 (Revised SP Application).

L. Land-Based Economies

135. The majority of the Project Area is in agricultural use. Approximately 37,697 acres (88.6 percent) of the Project Area is classified as cultivated land. Approximately 26 acres (less than 1 percent) of the Project Area is classified as hay/pasture.[188]

136. Land will be taken out of agricultural production where turbines and access roads are located (approximately 0.5 to one acre per turbine).[189] Less than one half of one percent of the Project Area will be converted to non-agricultural use.[190] Landowners may continue to plant crops near and graze livestock up to the turbine pads.[191] Areas temporarily removed from agricultural crops production during construction will be restored back to farmable conditions after construction is complete.[192] Additionally, landowners will be reimbursed, by the project developer, for any crop damages and losses that occur during construction or maintenance activities during operation.[193]

137. Prior to beginning site work, Nobles 2 will coordinate with landowners to identify and locate drain tiles and other drainage structures present in the work area. While significant impacts to drain tiles and other existing facilities due to Project construction and operation are not anticipated, Nobles 2 will promptly repair or replace drain tile that may be impacted by the Project in accordance with the agreement with the landowner.[194]

138. The Project avoids impacts to RIM lands and Nobles 2 will minimize impacts to CRP land. If CRP land is impacted, Nobles 2 will work with the landowner and the USDA to remove the impacted portion of the enrolled parcel from the CRP program.[195]

139. The Draft Site Permit includes multiple provisions related to agriculture. First, Section 5.2.4 requires Nobles 2 to implement measures to protect and segregate topsoil from subsoil on all lands unless otherwise negotiated with landowners. Second, Section 5.2.17 requires Nobles 2 to take precautions to protect livestock during all phases of the Project's life. Third, Section 5.2.19 requires Nobles 2 to take into account, avoid, and promptly repair or replace all drainage tiles broken or damaged during all phases of the Project's life unless otherwise negotiated with affected landowners.

140. The presence of the Project will not significantly impact the agricultural land use or general character of the area. As demonstrated by other wind energy projects in the Midwest, agricultural practices continue during construction and operations.[196] No significant impacts to forestry, mining, or tourism are anticipated.[197]

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[188] Ex. Nobles-7 at 59 (Revised SP Application); Ex. EERA-6 at 80 (ER).
[189] Ex. Nobles-7 at 15 (Revised SP Application); Ex. EERA-6 at 81 (ER).
[190] Ex. EERA-6 at 81 (ER).
[191] Ex. Nobles-7 at 14-15 (Revised SP Application); Ex. EERA-6 at 81 (ER).
[192] Ex. Nobles-7 at 48 (Revised SP Application).
[193] Ex. Nobles-7 at 53 (Revised SP Application).
[194] Ex. Nobles-7 at 48 (Revised SP Application); Ex. EERA-6 at 81-82 (ER).
[195] Ex. Nobles-7 at 19 (Revised SP Application).
[196] Ex. Nobles-7 at 48 (Revised SP Application); Ex. EERA-6 at 80-82 (ER).
[197] Ex. Nobles-7 at 48-50 (Revised SP Application).

M. Archaeological and Historic Resources

141. Nobles 2 initiated coordination with the Minnesota State Historic Preservation Office ("SHPO") in early 2016. SHPO recommended a Phase Ia archaeological assessment followed by a Phase I archaeological survey if recommended by the Phase Ia assessment.[198]

142. In February 2016, Westwood, on behalf of Nobles 2, conducted a Phase Ia cultural resources literature review of records at SHPO and the Office of the State Archaeologist ("OSA") for the Project Area and a one-mile buffer surrounding the Project Area.[199] The background literature search identified 10 previously inventoried archaeological sites located within one mile of the proposed Project Area. Three of the previously recorded archaeological sites are located within the defined Project Area. None of these sites have been listed or determined as eligible for listing on the National Register of Historic Places ("NRHP"), although it is possible that not all of the sites have yet been evaluated.[200] The Phase Ia review identified 22 previously inventoried historic architectural resources located within one mile of the proposed Project Area. Eight of the historic architectural resources are located within the defined Project Area.[201] The one NRHP listed architectural property located within the Project Area, the Church of St. Kilian, will be avoided by direct physical Project impacts.[202] The remaining resources have not been determined eligible for listing in the NRHP, although it is possible that not all of the resources have yet been evaluated.[203]

143. Nobles 2 has stated that an updated Phase Ia report will be compiled and submitted to SHPO and that it intends to have a Phase I archeological survey completed prior to Project construction.[204]

144. While Nobles 2 will attempt to avoid archeological sites, the proposed construction activities for the Project may have the potential to impact such sites or to add to the visual impacts on cultural resources in the region of the Project Area. In the event that an impact would occur, Nobles 2 will determine the nature of the impact and consult with the SHPO on whether or not the resource is eligible for listing in the NRHP.[205] If such resources are found to be eligible for the NRHP, adverse effects to the resource will be avoided by adjustment of the Project layout when possible. If avoidance is not possible, appropriate mitigative measures will need to be developed in consultation with SHPO, OSA, and consulting applicable American Indian communities, if any. While avoidance would be a preferred action, mitigation for Project-related impacts on NRHP-eligible archaeological and historic resources may include additional documentation through data recovery.[206]

145. The Draft Site Permit adequately addresses archeological and historical resources. Section 5.2.15 of the Draft Site Permit requires Nobles 2 to make every effort to avoid impacts

[198] Ex. Nobles-7 at 37 (Revised SP Application).
[199] Ex. Nobles-7 at 35, 37 (Revised SP Application).
[200] Ex. Nobles-7 at 35 (Revised SP Application).
[201] Ex. Nobles-7 at 36 (Revised SP Application).
[202] Ex. Nobles-7 at 37 (Revised SP Application).
[203] Ex. Nobles-7 at 36 (Revised SP Application).
[204] Ex. Nobles-7 at 37 (Revised SP Application).
[205] Ex. Nobles-7 at 37-38 (Revised SP Application).
[206] Ex. Nobles-7 at 38 (Revised SP Application).

to identified archaeological and historic resources. If a resource is encountered, Nobles 2 shall contact and consult with SHPO and OSA. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize Project impacts consistent with SHPO and OSA requirements. In addition, before 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 are found. If human remains are found during construction, Nobles 2 shall immediately halt construction at such location and promptly notify local law enforcement and OSA. Construction at such location shall not proceed until authorized by local law enforcement or OSA.

N. Aviation

146. There are no registered airports or heliports located within the Project Area. Airports within ten miles of the Project area include Slayton Municipal (9.4 miles to the north), Ramerth (8.3 miles to the east), and Worthington Municipal (9.2 miles to the southeast).[207]

147. The Project has been sited to meet setbacks to airport facilities required by MnDOT, Department of Aviation and Federal Aviation Administration ("FAA") requirements, as required by Draft Site Permit condition 4.12.

148. No adverse impacts to aviation are anticipated as a result of construction or operation of the Project. Nobles 2 will coordinate with the FAA to submit the proposed turbines for an aeronautical study to make a determination of whether there is a hazard to air navigation associated with the Project.[208]

149. The Applicant will follow FAA guidelines for marking towers and implement the necessary safety lighting. Notification of construction and operation of the Project will be sent to the FAA and steps will be taken to ensure compliance with FAA requirements. Permanent meteorological towers will have FAA mandated lighting consistent with the turbines. Temporary meteorological towers will have supporting guy wires which will be marked with colored sleeves for increased visibility.[209]

150. The FAA requires obstruction lighting of structures exceeding an elevation of 200 feet above average ground level because they are considered obstructions to air navigation. To mitigate the visual impact of such lighting, Nobles 2 will use FAA guidance and standards when applying to the FAA for approval of a lighting plan that will light the Project, and will follow the approved plan to meet the minimum requirements of FAA regulations for obstruction lighting.[210] It is anticipated that the FAA review of the Project will result in a "No Hazard" issuance determination.[211]

151. ~~The record does not support a permit condition requiring the use of an Aircraft Detection Lighting System ("ADLS").~~ An Aircraft Detection Lighting System ("ADLS")

[207] Ex. EERA-6 at 73 (ER).
[208] Ex. Nobles-7 at 43 (Revised SP Application); Ex. EERA-6 at 74 (ER).
[209] Ex. Nobles-7 at 43 (Revised SP Application); Ex. EERA-6 at 74 (ER).
[210] Ex. Nobles-7 at 24 (Revised SP Application).
[211] Ex. EERA-6 at 74 (ER).

~~expensive ADLS system may not provide effective~~ is an alternative mitigation, although the ~~to an~~ area ~~that~~ is already developed by wind farms and there is no guarantee that the FAA will approve an ADLS technology for the Project.[212] "Given the number of turbines near the project area, it is unclear how ADLS for Nobles 2 would be effective if only a portion of the turbines (such as the Nobles 2 Project) utilize this technology and the surrounding wind projects do not. However, a Commission ~~ADLS may be a more effective mitigation measure for new projects in areas with few to no LWECS or when all turbines in a given area, such as Nobles County, use the same technology."[213]~~ permit may be amended at any time by the Commission in accordance with Minn. R. 7854.1300, subp. 2; so other surrounding wind projects could be required to install ADLS systems retroactively. ~~Further,~~ Nobles 2 secured a quote from Vestas for the use of Vestas' ADLS system "InteliLight®" on the Project. Vestas indicated the InteliLight® system would add approximately $1,000,000.00 to the cost of the Project and would require the addition of at least two additional 30 meter lattice towers that would hold the radar systems required for the InteliLight® ADLS system and would need to be incorporated into the Project design for approval under the Site Permit. ~~This increased cost is not justified given the limited impact such a system would have on the already highly developed wind farm landscape.[214] Additionally,~~ ADLS and other light-mitigating technologies are new and are in the early stages of securing FAA and Federal Communications Commission ("FCC") approvals for use in the United States.[215] FAA Advisory Circular ("AC") 70/7460-1L states that "acceptance of ADLS applications will be on a case-by-case basis and may be modified, adjusted or denied based on proximity of the obstruction or group of obstructions to airports, low-altitude flight routes, military training areas, or other areas of frequent flight activity."[216] Approval for use on the Project is not guaranteed, especially in a manner that would allow construction of the Project to proceed on schedule.[217] Accordingly, Nobles 2 requested that Section 6.1 of the Draft Site Permit be removed, or in the alternative deleted and replaced with the following:

> The Permittee will use commercially reasonable efforts to receive FAA approval for an Aircraft Detection and Lighting System or other suitable light mitigating technology, in consultation with the Commission, as soon as practicable, and in any event by no later than March 1, 2019. Permittee may install an FAA approved lighting system without ADLS or other light mitigating components if:
>
> > 1) The FAA denies the Permittee's application for an ADLS or other light mitigating technology
> > 2) Permittee is unable to secure FAA approval by March 1, 2019 or
> > 3) The conditions attached to any FAA approval of a light mitigation system are commercially unreasonable.

[212] Ex. Nobles-13 at 12-13 (Vala Direct).
~~[213] Ex. EERA-6 at 58 (ER); Ex. Nobles-13 at 10 (Vala Direct).~~
~~[214] Ex. Nobles-13 at 10 (Vala Direct).~~
[215] Ex. Nobles-13 at 11 (Vala Direct).
[216] Ex. Nobles-13 at 12 (Vala Direct).
[217] Ex. Nobles-13 at 11 (Vala Direct).

151B. EERA recommends the following alternative language (see EERA Comments and Recommendations, July 25, 2018) that requires the Permittee to verify its reasonable efforts to secure FFA approval before approving a lighting system without ADLS:

> **6.1 Obstruction Marking and Lighting.** The Permittee shall install an Aircraft Detection and Lighting System (ADLS) to mitigate the aesthetic and visual effects of the FAA's aviation lighting requirements. Permittee may install an FAA approved lighting system without ADLS if the Permittee demonstrates that, despite its reasonable efforts to secure FAA approval for an ADLS, one of the following conditions exists:
>
> 1) The FAA denies the Permittee's application for an ADLS system, or
> 2) Permittee is unable to secure FAA approval in a timely manner.
>
> If either of these two conditions occur, the permittee's reasonable efforts to secure FAA approval of the ADLS must be described and filed with the Commission 14 days before the pre-construction meeting.

152. In any event where a permit condition requiring ADLS or other light mitigating technology is required, Nobles 2 requested the ability to adjust its Project design accordingly to include the additional infrastructure necessary to accommodate the ADLS or other light mitigating technology.[218]

153. No adverse impacts to aviation are anticipated as a result of construction or operation of the Project.[219] Nobles 2 will also work with local landowners on coordinating crop dusting activities to reduce risk to local pilots.[220]

154. The record demonstrates that Nobles 2 has taken steps to minimize and mitigate impacts to aviation.

O. Wildlife

155. Wildlife in the Project Area consists of mammals, birds, reptiles, amphibians, fish, and insects, both resident and migratory, which utilize the habitat in the Project Area for forage, breeding, and shelter.[221] Most of the wildlife species inhabiting the Project Area include those typically found in heavily disturbed habitats. Small isolated areas of grassland, woodland areas found along shelter belts and stream and river margins, the weedy edges of fields, as well as poorly maintained fields within agricultural areas comprise the majority of

[218] Ex. Nobles-13 at 13 (Vala Direct).
[219] Ex. Nobles-7 at 43 (Revised SP Application); *see also* Ex. EERA-6 at 74 (ER).
[220] Ex. Nobles-7 at 43 (Revised SP Application).
[221] Ex. EERA-6 at 32 (ER); Ex. Nobles-7 at 66-67 (Revised SP Application).

wildlife habitats.[222] The majority of migratory wildlife species are birds, including waterfowl, raptors and songbirds and migratory bat species.[223]

156. Local species use the grasslands, farm woodlots, wetlands and other areas for food and cover. Mammals common to this landscape include opossum, skunk, squirrels, rodents, rabbits, deer, fox, coyotes, and raccoons. Reptiles and amphibians are associated with wetlands, waterways and forested stretches throughout the project area. Reptiles and amphibians include snakes, turtles and frogs. Several species of birds and bats are also known to occur in this landscape, including grassland birds, migratory birds, raptors and waterfowl.[224]

157. Nobles 2 followed the suggested tiered approach as outlined in the USFWS Wind Energy Guidelines ("WEG") by documenting preliminary site evaluation (Tier 1) and characterization (Tier 2), pre-construction field studies and impact prediction (Tier 3), and post-construction monitoring studies and impact assessment (Tiers 4 and 5). Tier 1 and 2 analyses were conducted for the Project Area to screen for potential broad-based environmental and site development issues and to guide site design. A Site Characterization Study ("SCS") and a Work Plan for 2016 Pre-Construction Avian and Bat Surveys was prepared and shared with the USFWS, MDNR, and EERA as part of early agency coordination efforts. The SCS was incorporated into the Bird and Bat Conservation Strategy ("BBCS"). Tier 3 field studies served to inform the Project proponents and regulatory agencies regarding avian and bat species present within and adjacent to the Project Area boundary.[225] Pre-construction avian surveys were initiated in mid-January 2016, and were completed in late-March 2017, for one full year of avian use data collection.[226]

158. Nobles 2 initiated correspondence with state and federal agencies, including the MDNR, USFWS, and EERA in January 2016 for information specific to the Project regarding sensitive resources and potential impacts. On March 18, 2016, Nobles 2 submitted a letter to the MDNR requesting its comments on the Project, which at that time was an up to 300 MW Project consisting of approximately 150 turbines. On April 14, 2016 the MDNR provided comments on the Project and indicated it assigned the Project with a medium risk designation due to the proposed 300 MW capacity of the facility. MDNR did not provide any comment on the location of WMAs or WPAs within or adjacent to the Project Area, but did reserve the right to make further comment after the SP Application was submitted.[227]

159. After receipt of the April 14, 2016 MDNR letter, Nobles 2 reduced the overall size of the Project to an up to 260 MW project consisting of between 65 to 82 turbines. The overall size of the Project Area has been reduced by more than 30,000 acres, and turbine siting has taken into consideration the avoidance of potential bat habitat.[228] Nobles 2 made this reduction in part to be responsive to MDNR's concerns about the size of the Project and the

[222] Ex. Nobles-7 at 66 (Revised SP Application).
[223] Ex. EERA-6 at 32 (ER).
[224] Ex. EERA-6 at 32-33 (ER).
[225] Ex. Nobles-7 at 64 (Revised SP Application).
[226] Ex. Nobles-7 at 65 (Revised SP Application).
[227] Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit); Ex. Nobles-14 at 5-6 (Finocchiaro Direct); Ex. Nobles-7 at 64-65 (Revised SP Application).
[228] Ex. Nobles-7 at 65 (Revised SP Application).

number of operating turbines. The changes were primarily focused around using larger nameplate capacity turbines than originally proposed. These changes resulted in a reduction of 65-85 turbines and a reduction of the amount of rotor wind swept area by approximately 20% from the original design reviewed by MDNR.[229] Moreover, the use of turbines with a larger nameplate capacity than that which was originally proposed when the Project was first presented to the agencies will serve to reduce the overall impacts of the Project on avian and bat species. As such, the overall risk of the Project to avian and bat species is demonstrably low.[230]

160. MDNR provided additional comments on the revised Project and again noted that MDNR considers the Project risk as moderate due to the number of operational turbines planned for the site and the location of turbines surrounding large blocks of habitat associated with the Swessinger, Einck, Fenmont and County Line WMAs.[231] MDNR further indicated that it would consider a low risk designation if "numerous turbines are relocated farther from the habitat associated with the WMAs", but did not specify which of the turbines near the WMAs should be moved, the number of turbines that would need to be moved, or the distance they would need to be moved for a low-risk designation.[232] All turbines meet or exceed Commission wind access setback standards of three RD by five RD.[233] MDNR indicated Nobles 2 would need to include three turbines near the WMAs in its post-construction fatality monitoring.[234] Nobles 2 stated it is willing to revise its post-construction monitoring protocol, in consultation with MDNR, to monitor three turbines near WMAs.[235]

160B.EERA recommends amending the Site Permit to reflect the DNR "moderate" designation and would add the following "Special Condition" (See EERA Comments and recommendations, July 25, 2018) to the permit:

> **6.2 Avian and Bat Protection Plan Special Provision.** In keeping with the DNR assessment of the Project area as "moderate risk" for bird and bat fatalities, the Permittee shall conduct one year of post-construction fatality monitoring for avian and bat species using survey protocols developed by the DNR specifically for moderate risk sites. The Permittee should consult with DNR for the availability of updated moderate risk protocols before commencing post-construction monitoring. The Commission may require additional monitoring based on results of the first year's data collection.

161. Studies of bird fatalities near wind farms indicate that fatalities will occur and that they will vary with bird type (e.g., raptor, waterfowl, passerine), habitat availability, and other

[229] Ex. Nobles-14 at 6 (Finocchiaro Direct).
[230] Ex. Nobles-7 at 65 (Revised SP Application).
[231] Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).
[232] Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).
[233] Ex. Nobles-14 at 6 (Finocchiaro Direct).
[234] Ex. EERA-2 (Comments on Scope of Environmental Report and Draft Site Permit).
[235] Ex. Nobles-14 at 6-7 (Finocchiaro Direct).

resources available within the Project Area.[236] Based on the results of post-construction monitoring at similar facilities located on agricultural landscapes in southern Minnesota, estimated bird carcass rates at the Project would be expected to be within the range reported from studies at other wind facilities in the region.[237]

162. Bat fatality studies indicate a broad range of fatalities across the United States as a result of wind development. Fatality rates are highest for migrating-tree roosting bat species, with the majority of fatalities occurring during the late summer and early fall migration (roughly July-October). Documented bat fatalities are highest in the eastern United States, while those in the Midwest represent a wide range of fatality rates. Post-construction fatality studies completed in Iowa, Minnesota and Wisconsin show bat fatality estimates ranging from 1 to 24 bats per MW per year.[238]

163. Nobles 2 conducted bat acoustic surveys from May through October 2016. Six species and six species groups were documented, including the hoary bat, the silver-haired, big brown, and the big brown bat. Special-status bat species detected included the little brown bat, big brown bat, and tricolored bat. While each of these species has been reported among fatalities at operating wind energy developments across the United States, the Project is designed to be a low-risk site for bats. The Project Area does not contain distinct topography, unique habitats or resources, or other features that could concentrate bats or bat activity, and no indicators of high bat risk in the Project Area (e.g., impacts to roost trees or hibernaculum, high volume use as a migration corridor, etc.) were discovered during either the desktop evaluations or the annual passive acoustic bat monitoring.[239] Based on available data from operational wind projects in Minnesota and elsewhere in the Midwest, bat fatalities at the Project are expected to occur at a low frequency and be comparable with that of other Midwest wind energy facilities.[240] Impacts are not expected to adversely affect populations.[241]

164. The Project has the potential to cause displacement of some bird species from the Project Area due to increased human activity or the presence of tall structures, though clearing of habitat will be minimal. Many of the most-observed bird species within the Project Area are common, disturbance-tolerant species, similar to the results of surveys at other wind energy facilities in the region.[242]

165. Permanent and temporary loss of habitat as a result of construction activities could affect some small mammal, reptile, and/or amphibian species with very limited home ranges and mobility. However, the impact is likely to be moderate in the short term and be reduced over time as reclaimed areas produce suitable habitats. Most of these wildlife species would be common and widely distributed throughout the Project Area and the loss of some

[236] Ex. EERA-6 at 34 (ER).
[237] Ex. EERA-6 at 33-34 (ER).
[238] Ex. EERA-6 at 35 (ER).
[239] Ex. Nobles-7 at 77-78, 79 (Revised SP Application); Ex. EERA-6 at 35 (ER).
[240] Ex. Nobles-7 at 79 (Revised SP Application); Ex. EERA-6 at 35-36 (ER).
[241] Ex. EERA-6 at 35 (ER); Ex. Nobles-7 at 79 (Revised SP Application).
[242] Ex. EERA-6 at 33 (ER).

individuals as a result of habitat removal would have a negligible impact on populations of these species throughout the region.[243]

166. Nobles 2 is committed to minimizing wildlife impacts within the Project Area. The Project is designed to minimize avian and bat impacts. For example, Nobles 2 proposes to minimize impacts to wildlife by implementing numerous mitigation measures, including but not limited to, performing one year of post-construction avian and bat mortality monitoring, installation of bird flight diverters on all new overhead transmission lines, if any, to be built near sensitive habitat areas to minimize risks to waterfowl and other birds, implementation of a Wildlife Incident Reporting System ("WIRS") at the start of operations that will remain active for the life of the Project, and following the guidelines developed by the Avian Power Line Interaction Committee ("APLIC") working group as they are written at the time of installation for all conductor wire spacing and other features.[244] Additionally, Nobles 2 will implement feathering of turbine blades when operating below the cut-in-speed, as specified by the wind turbine generator manufacturer, during the period beginning April 1 and ending October 31 of each year, from ½ hour before sunset to ½ hour after sunrise, through the life of the Project.[245]

167. Nobles 2 prepared a BBCS which includes detailed discussions of the above and other provisions for avoiding, reducing, and, if warranted, mitigating for potential impacts to birds and bats. The BBCS is a living document throughout the life of the Project, during which Nobles 2 will work with USFWS and MDNR to evaluate the findings of post-construction studies, formulate recommendations and definitions, and incorporate them into the BBCS on an iterative basis.[246] Nobles 2 has agreed, in response to MDNR request, to modify the BBCS where appropriate to require a minimum of two search days per week for fatality monitoring.[247] MDNR requested that the BBCS be changed to reflect the use of free-standing MET towers.[248] Condition 4.11 of the Draft Site Permit requires free-standing MET towers. Accordingly, Nobles 2 will utilize guyless permanent MET towers. Therefore, additional bird deterrent devices are not necessary.[249]

168. Further, the Draft Site Permit provides adequate protection of wildlife resources, specifically avian and bat protection.[250]

169. Development of the Project is expected to produce a minimal impact to wildlife. Based on studies of existing wind power projects in the United States and Europe, the impact to wildlife would primarily occur to avian and bat populations. Similar to other wind developments, there is a high likelihood that individual bird fatalities will occur at the Project, but it is unlikely to affect populations of most species, especially at a regional scale.[251]

[243] Ex. Nobles-7 at 68 (Revised SP Application).
[244] Ex. Nobles-7 at 70-71 (Revised SP Application).
[245] Ex. Nobles-14 at 2-3 (Finocchiaro Direct).
[246] Ex. Nobles-7 at 71-72 (Revised SP Application).
[247] Ex. Nobles-14 at 7 (Finocchiaro Direct).
[248] Comment by MDNR (March 20, 2018) (eDocket No. 20183-141209-01).
[249] Ex. Nobles-14 at 3 (Finocchiaro Direct).
[250] Draft Site Permit at §§ 7.5.1, 7.5.2, 7.5.3, 7.5.4.
[251] *See* Ex. EERA-6 at 33-35 (ER).

170. The potential for habitat fragmentation impacts as a result of the Project is low because the Nobles 2 Project Area is primarily agricultural and much of the remaining habitat is disturbed. The Project is designed to avoid placing turbines and access roads in MDNR-mapped native prairie, native plant communities, and sites of biodiversity significance.[252] At a minimum, wind turbines will be placed at least five rotor diameters or three rotor diameters, depending on wind direction and property location, from identified conservation lands within and adjacent to the proposed Project.[253]

P. Rare and Unique Natural Resources

171. A review of the Natural Heritage Information System ("NHIS") database and endangered and threatened species lists from the MDNR and USFWS was conducted to identify special-status species known or likely to occur in the Project Area. Results from the MDNR NHIS database review for the Project Area indicated four records of listed species in and within one mile of the Project Area.[254] Review of the USFWS Information Planning and Conservation System ("IPaC") identified four federally listed threatened or endangered species as potentially occurring within the Project Area and surrounding region. These include the prairie bush-clover, Dakota skipper, Topeka shiner, and the northern long-eared bat.[255]

172. Based on information from both Federal and State sources, six special-status plant species and 32 special-status animal species were identified as potentially occurring within the Project Area and surrounding region. Of these, five animal species have a "moderate" potential to occur in the Project vicinity. The remaining species listed as "low" are not expected to occur on or adjacent to the Project due to specific habitat requirements not identified in the Project Area.[256]

173. The Project Area is mostly cultivated cropland. In addition, land cover mapping indicates that grassland and pasture areas account for less than four percent of the Project Area and are highly fragmented across the Project.[257] The Project is designed to avoid placing turbines and access roads in MDNR-mapped native prairie, native plant communities, and sites of biodiversity significance.[258]

174. The Project Area does contain Minnesota Biological Survey sites ("MBS") and sites of biodiversity significance ("SBS"). Based on the ecological significance of moderately and highly ranked MBS sites, the MDNR recommends avoidance of these areas within the Project Area. In addition, the MDNR recommends avoidance of any "below" ranked MBS sites that contain native prairie.[259]

175. The record demonstrates that Nobles 2 has taken steps to avoid and minimize impacts to rare and unique natural features. Further, the Draft Site Permit contains adequate

[252] Ex. EERA-6 at 33 (ER).
[253] Ex. EERA-6 at 33 (ER).
[254] Ex. Nobles-7 at 72 (Revised SP Application).
[255] Ex. Nobles-7 at 72 (Revised SP Application).
[256] Ex. Nobles-7 at 72 (Revised SP Application); Ex. EERA-6 at 45 (ER).
[257] Ex. EERA-6 at 39 (ER); Ex. Nobles-7 at 60 (Revised SP Application).
[258] Ex. EERA-6 at 33, 39 (ER); Ex. Nobles-7 at 59 (Revised SP Application).
[259] Ex. Nobles-7 at 61 (Revised SP Application); Ex. EERA-6 at 41-42 (ER).

conditions to monitor and mitigate the Project's potential impacts on rare and unique natural resources. For example, Condition 4.7 requires the Permittee to prepare a prairie protection and management plan in consultation with MDNR, and Condition 7.5.1 includes requirements to maintain an updated Avian and Bat Protection Plan ("ABPP") in coordination with MDNR, USFWS, and the Commission, quarterly and immediate incident reporting, and utilizing operational software that can adjust turbine cut-in speeds.[260]

Q. Vegetation

176. The majority of the land within the Project Area is cultivated cropland (88.6 percent).[261] In addition, land cover mapping indicates that grassland and pasture areas account for less than four percent of the Project Area and are highly fragmented across the Project.[262] Based on MDNR data there are no railroad right-of-way prairies in the Project Area. In addition, land cover mapping indicates that grassland and pasture areas account for less than four percent of the Project Area and are highly fragmented across the Project. Native plant community data indicates the presence of native prairie remnants within the Project Area and there is the potential for additional native prairie remnants to be identified. Field surveys of identified potential native prairie areas will be conducted in the future as part of Project siting and planning.[263]

177. The Project Area does contain Minnesota Biological Survey sites ("MBS") and sites of biodiversity significance ("SBS"). There are approximately 956 acres of SBSs located within the Project Area, of which 818 acres (86 percent) are classified as "below the minimum biodiversity significance threshold" and 133 acres (14 percent) are classified as "moderate biodiversity significance". The SBS sites within the Project Area encompass mapped MDNR native plant communities, which are located primarily along stream corridors, and buffer lake and wetland complexes. The one MCBS site rated as "high" is located adjacent to the northwest boundary of the Project Area.[264] Based on the ecological significance of moderately and highly ranked MBS sites, the MDNR recommends avoidance of these areas within the Project Area. In addition, the MDNR recommends avoidance of any "below" ranked MBS sites that contain native prairie.[265]

178. Vegetation would be removed as a result of surface disturbing activities associated with blading, grading, vehicular traffic, and trenching. Construction would result in the disturbance of approximately 115 acres of vegetation. This includes approximately 111 acres of cultivated crops, 3 acres of disturbed/developed, 1ess than 1 acre of grassland, and 1 acre of wetland. Areas adjacent to the proposed wind turbine generator pad sites, access roads, and underground electrical collection system would experience temporary disturbance

[260] Ex. EERA-6 at 49 (ER).
[261] Ex. Nobles-7 at 59 (Revised SP Application); Ex. EERA-6 at 80 (ER).
[262] Ex. EERA-6 at 39 (ER); Ex. Nobles-7 at 60 (Revised SP Application).
[263] Ex. EERA-6 at 41 (ER).
[264] Ex. EERA-6 at 41 (ER).
[265] Ex. Nobles-7 at 61 (Revised SP Application); Ex. EERA-6 at 41-42 (ER).

associated with equipment access, materials, stockpile locations, and workspace requirements.[266]

179. The Project is designed to avoid placing turbines and access roads in MDNR-mapped native prairie, native plant communities, and sites of biodiversity significance.[267] Further, it is expected that over 96 percent of all direct and indirect impacts to vegetation would be minor in extent and limited to cultivated cropland. To the extent practicable, direct and indirect impacts to natural vegetation communities will be avoided and minimized. Proposed turbine locations will be sited primarily on agricultural lands and access roads and collection lines can be sited and connected to public roads while avoiding woodlands, shrub land, grasslands, and water resources to the extent practicable. Further, implementation of the recommended and required mitigation measures for vegetation would further act to avoid or minimize the potential for affecting sensitive natural communities and reduce the impact to a less than significant level.[268]

180. In order to minimize impacts to natural vegetation communities, Nobles 2 has incorporated the mitigation measures into the siting, construction, operations and decommissioning phases of the proposed Project, including but not limited to: siting turbines in agricultural fields to minimize impacts to grassland, forest, wetland and other native vegetation communities; for the proposed turbine layout, all native prairie will be avoided to the maximum extent practicable; creation of new roads will be minimized to the maximum extent practicable and to accommodate landowner preferences; temporary disturbed areas will be allowed to revegetate; and following construction, depending on seed availability and landowner preferences, non-agricultural areas will be re-seeded and stabilized using native seed to restore natural habitat.[269] Further, best management practices ("BMPs") will be used to avoid the introduction and spread of invasive species.[270] BMPs will also be used to protect topsoil and adjacent resources and to minimize soil erosion.[271]

181. The Draft Site Permit contains adequate conditions to monitor and mitigate the Project's potential impacts on vegetation. For example, section 4.7 of the Draft Site Permit provides that Project facilities will not be placed in native prairie unless addressed in a prairie protection and management plan and shall not be located in areas enrolled in the Native Prairie Bank Program. This section further requires Nobles 2 to prepare a prairie protection and management plan in consultation with MDNR if native prairie is identified within the site boundaries. The plan will 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 Nobles 2, MDNR, and the Commission.

[266] Ex. Nobles-7 at 61-62 (Revised SP Application); Ex. EERA-6 at 42 (ER).
[267] Ex. EERA-6 at 33, 42 (ER); Ex. Nobles-7 at 62-63 (Revised SP Application).
[268] Ex. Nobles-7 at 62 (Revised SP Application); Ex. EERA-6 at 42 (ER).
[269] Ex. Nobles-7 at 62-64 (Revised SP Application).
[270] Ex. Nobles-7 at 63-64 (Revised SP Application).
[271] Ex. Nobles-7 at 53 (Revised SP Application).

182. The record demonstrates that Nobles 2 has taken steps to avoid and minimize impacts to vegetation. Further, the Draft Site Permit contains adequate conditions to monitor and mitigate the Project's potential impacts on vegetation.

R. Soils, Geologic, and Groundwater Resources

183. Two soil associations are mapped across the majority of the Project Area. These include the Everly-Sac-Rushmore association and the Webster-Clarion-Nicollet association. Smaller sections of the Project Area are mapped within the Webster-Nicollet association. Approximately 41 percent of the soil within the Project is prime farmland.[272]

184. Approximately 79 acres of prime farmland could be impacted by construction and operation of the Project.[273] It is anticipated that the combined total areas of permanent disturbance to soils within the Project Area would not exceed 116 acres.[274]

185. Nobles 2 will acquire a National Pollutant Discharge Elimination System ("NPDES") permit to discharge stormwater from construction facilities from MPCA. In addition, Nobles 2 will develop a Stormwater Protection Plan ("SWPPP") prior to construction that will include BMPs to protect topsoil and adjacent resources and to minimize soil erosion and sedimentation.[275] The potential for construction-related soil erosion will be minimized by siting turbines and access roads so as to avoid highly erodible soils on steep slopes. Avoiding steep topography will also reduce the size of cut and fill areas. Erosion control measures would also be implemented during construction to avoid or minimize soil erosion and off-site deposition. Nobles 2 will work with landowners in the Project Area to site turbines and access roads so as to minimize impacts to high quality farmland to the extent practicable; however, overall impacts to agriculture as a result of the Project are anticipated to be short term, minimal and are not expected to significantly alter crop production. Additionally, the landowners will be compensated for lost production in accordance with the terms of their lease agreements with Nobles 2.[276]

186. Impacts to geologic and groundwater resources are not anticipated. Construction and operation of the proposed Project is not expected to impact groundwater quantity and quality within the region. Potential water-related needs will be minimal and can be accommodated locally. Geotechnical testing will occur at turbine locations prior to final design and construction.[277]

187. There are no mapped karst areas or caves within the Project Area.[278]

188. The record demonstrates that Nobles 2 has taken steps to avoid and minimize impacts to soils, geologic, and groundwater resources. Further, the Draft Site Permit contains

[272] Ex. EERA-6 at 31 (ER).
[273] Ex. Nobles-7 at 53 (Revised SP Application); Ex. EERA-6 at 31 (ER).
[274] Ex. Nobles-7 at 53 (Revised SP Application).
[275] Ex. Nobles-7 at 53, 79, 99 (Revised SP Application); Ex. EERA-6 at 26 (ER).
[276] Ex. Nobles-7 at 53 (Revised SP Application).
[277] Ex. Nobles-7 at 54 (Revised SP Application); Ex. EERA-6 at 20-21 (ER).
[278] Ex. Nobles-7 at 52 (Revised SP Application).

adequate conditions to monitor and mitigate the Project's potential impacts on soils, geologic, and groundwater resources.

S. Surface Water and Wetlands

189. The Project Area is located within the Des Moines River and Rock River watersheds, and is within the Missouri River water basin.[279]

190. Water resources and land cover mapping suggest that less than 6 percent of the total Project Area is wetland or other water resources.[280]

191. Wetlands are not a common feature in the Project Area. The National Wetlands Inventory ("NWI") identified approximately 922 wetlands within the Project Area, comprising 2,242 acres, or approximately 5.3 percent of the Project Area.[281] There are also 109 acres of MDNR Public Water Inventory ("PWI") Lakes and Wetlands within the Project Area, including portions of three unnamed public water wetlands; Penning Marsh, Willow Lake, and Groth Marsh.[282]

192. There are no calcareous fens located within the Project Area.[283] There are also no MDNR-designated Wildlife Lakes, Sensitive Lakeshores, Migratory Waterfowl Feeding and Resting Areas, or any State Wild, Scenic, or Recreation Rivers, within the Project Area or 1-mile buffer. There are also no outstanding resource value waters, sensitive lakeshore, or trout streams or lakes within the Project Area.[284] Champepadan Creek located northwest of the Project Area, is a state-wide area of importance for the state-listed threatened Blanding's turtle and plains topminnow. In addition, portions of Champepadan Creek and Kanaranzi Creek outside of the Project Area are federally designated critical habitat for the Topeka Shiner.[285]

193. Of the mapped streams and ditches within the Project Area, Jack Creek (North Branch) is listed as impaired for turbidity by the MPCA.[286] The portion of Jack Creek that is classified as perennial is located in the southeastern corner of the Project area where no infrastructure is proposed for the Project.[287] Elk Creek is also impaired for turbidity and is approximately 0.70 miles south-southwest of the Project boundary. Nobles 2 will be required to implement the necessary best management practices during construction as specified in the National Pollutant Discharge Elimination System/State Disposal System ("NPDES/SDS") General Construction Stormwater permit ("GSC"). Should the Project discharge to an impaired water with a construction-related parameter, the Stormwater Pollution Prevention Plan ("SWPPP") will need to be submitted to the MPCA for review and approval.[288]

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[279] Ex. EERA-6 at 21 (ER).
[280] Ex. Nobles-7 at 54 (Revised SP Application).
[281] Ex. Nobles-7 at 55 (Revised SP Application); Ex. EERA-6 at 24 (ER).
[282] Ex. Nobles-7 at 55 (Revised SP Application).
[283] Ex. Nobles-7 at 56 (Revised SP Application).
[284] Ex. Nobles-7 at 54 (Revised SP Application); Ex. EERA-6 at 22 (ER).
[285] Ex. Nobles-7 at 56 (Revised SP Application); Ex. EERA-6 at 22 (ER).
[286] Ex. Nobles-7 at 56 (Revised SP Application).
[287] Ex. EERA-6 at 21 (ER).
[288] Ex. Nobles-14 at 8 (Finocchairo Direct).

194. Based on publicly available desktop National Wetlands Inventory ("NWI"), National Hydrography Dataset ("NHD") and MN PWI data sources, there are no turbines located within close proximity to perennial streams.[289]

195. There are three general areas within the Project Area associated with Federal Emergency Management Agency (FEMA) mapped floodplains.[290] However, none of the proposed turbines, substation or access roads are located within a FEMA designated 100-year floodplain ("FEMA floodplain"). Underground electrical collection lines cross beneath three FEMA floodplain areas in proposed locations and one FEMA floodplain location associated with proposed collection alternate. Nobles 2 removed three proposed access roads that were partially located within the FEMA floodplain. Two portions of an alternate access road are located in margins of the FEMA floodplain, but are contemplated for creation only as contingency. If these alternate access roads become necessary, Nobles 2 will fulfill all the necessary federal, state and local approval and/or permitting requirements.[291]

196. Project facilities such as collection lines, access roads, crane paths, and the Project substation have the potential to impact surface water runoff. However, these impacts will be temporary during construction of the Project and will be minimized to the extent possible. Impacts to surface waters are expected to be negligible. If access roads cross waterbodies, they will be designed to maintain stream flow by using culverts.[292]

197. The Project will be constructed on relatively high elevation portions of the Project Area to avoid direct impacts to surface waters, floodplains, and wetlands, which tend to be in lower topographical positions. Access roads and substations will be designed to minimize impacts to wetlands. Temporary impacts associated with electric feeder and collector lines, and crane paths will also be minimized by siting to avoid wetland features. Installation of underground utilities will decrease impacts by boring under PWI as necessary.[293] Turbine layouts under consideration are expected to have minimal impacts to wetlands based on completed field surveys of proposed turbine sites, access roads, and the O&M site and desktop review of NWI data of collection lines and crane path areas associated with the Project.[294]

198. If some wetlands are determined to be unavoidable, wetland delineations will be completed, proposed temporary and permanent impacts will be quantified for the Project, and a wetland replacement plan will be submitted for review by the U.S. Army Corps of Engineers ("USACE"), the Nobles Soil and Water Conservation District ("SWCD"), and the Minnesota Board of Water and Soil Resources ("BWSR"). Wetland impacts will be minimized in accordance with sequencing and replacement requirements of the WCA and Section 404 of the CWA.[295]

[289] Ex. EERA-6 at 22 (ER).
[290] Ex. Nobles-7 at 56 (Revised SP Application); Ex. EERA-6 at 22 (ER).
[291] Ex. Nobles-14 at 9-10 (Finocchairo Direct); Ex. EERA-6 at 23 (ER).
[292] Ex. EERA-6 at 23 (ER).
[293] Ex. EERA-6 at 25 (ER).
[294] Ex. EERA-6 at 25 (ER).
[295] Ex. Nobles-7 at 57 (Revised SP Application).

199. As requested by MPCA, Nobles 2 will maintain a distance of 50-feet between construction activities and surface waters whenever practicable. If such separation is not practicable, Nobles 2 will install redundant down-gradient sediment controls to protect surface waters.[296]

200. The record demonstrates that Nobles 2 has taken steps to avoid and minimize impacts to surface water and wetlands. Further, the Draft Site Permit contains conditions that adequately address potential impacts. For example, Section 4.6 of the Draft Site Permit requires that wind turbines and associated facilities not be placed in public waters wetlands, except that electric collector or feeder lines may cross or be placed in public waters or wetlands subject to applicable permits and approvals. Section 5.2.7 of the Draft Site Permit includes additional provisions related to wetlands, including a requirement that construction in wetlands occur during frozen ground conditions to minimize impacts, to the extent feasible. When winter construction is not possible, wooden or composite mats shall be used to protect wetland vegetation. Further, wetland and water resources disturbed by construction will be restored to pre-construction conditions, in accordance with applicable permits and landowner agreements.

T. Air and Water Emissions

201. The Project will not emit criteria pollutants (sulfur dioxide, nitrogen oxides, carbon dioxide, and particulate matter) or mercury during operation. Emission impacts from construction will be minimal and localized and would include dust and emissions from construction equipment.[297] The Project's wind turbines will not produce ozone or ozone precursors. Ozone production can occur adjacent to transmission lines under specific conditions. There are no new transmission lines associated with the proposed Project therefore there would be no additional ozone formation.[298] Under certain conditions, transmission lines produce small amounts of ozone and nitrogen oxide emissions; the existing Nobles-Fenton 115 kV transmission line associated with the Project will likely experience some ozone production.[299]

202. The Project would emit minimal hazardous air pollutants ("HAPs") or volatile organic compounds ("VOCs") during operation. Petroleum-based fluids used in the operation of wind turbines have a low vapor pressure, and any release of VOCs would be minimal.[300]

203. Operation of the proposed Project would not generate wastewater. However, wastewater would be created by the O&M building. Nobles 2 plans to build an on-site septic system to serve the O&M facility. The potential impacts of this wastewater and septic system

[296] Ex. Nobles-14 at 9 (Finocchairo Direct). Nobles 2 pointed out that aside from Nobles 2's placement of its infrastructure, the underlying landowners control the use of other land not occupied by Project infrastructure. This includes the land within 50-feet of surface waters. Accordingly, Nobles 2 does not have the authority or ability to require landowners to change existing land use within 50-feet of surface waters, including the planting of perennial vegetation to create 'natural buffers' if such vegetation does not currently exist. *Id.*
[297] Ex. EERA-6 at 14 (ER).
[298] Ex. EERA-6 at 16 (ER).
[299] Ex. EERA-6 at 16 (ER).
[300] Ex. EERA-6 at 15 (ER).

are anticipated to be minimal, and mitigation of the impacts, beyond a properly functioning septic system, is not anticipated.[301]

U. Solid and Hazardous Wastes

204. Potential hazardous materials within the Project Area would be associated with agricultural activities.[302] Petroleum products would also be present on site, such as oil and fuel. Operation of the proposed Project is not expected to generate solid and hazardous waste materials. Small quantities of hydraulic oil, lube oil, grease, and cleaning flush will be maintained and stored at the O&M building, and as these fluids are replaced the waste products will be handled and disposed of through an approved disposal firm as required by regulations.[303] Prior to construction, Nobles 2 will conduct an American Society for Testing and Materials ("ASTM") conforming Phase I Environmental Site Assessment ("ESA") within the Project Area to identify and avoid potential hazardous waste sites.[304]

205. Potential hazardous materials will be properly managed, stored and used in compliance with local, state and federal guidelines for their use by trained technicians. If any wastes, fluids, or pollutants are generated during any phase of the operation of the Project, they will be handled, processed, treated, stored, and disposed of in accordance with Minn. R. Ch. 7045.[305]

206. The record demonstrates that Nobles 2 has taken steps to avoid and minimize potential impacts. Further, the Draft Site Permit contains adequate conditions to monitor and mitigate the Project's potential impacts from solid and hazardous wastes. For example, Section 5.2.22 of the Draft Site Permit requires that 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. In addition, Section 5.2.23 of the Draft Site Permit requires Nobles 2 to take all appropriate precautions against pollution of the environment and makes Nobles 2 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.

V. Future Development and Expansion

207. The Project is located in southwest Minnesota, where there are already many other wind energy facilities.[306]

208. The Commission is responsible for siting LWECS "in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources."[307]

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[301] Ex. EERA-6 at 19 (ER).
[302] Ex. Nobles-7 at 44 (Revised SP Application).
[303] Ex. EERA-6 at 27 (ER); Ex. Nobles-7 at 45-46 (Revised SP Application).
[304] Ex. EERA-6 at 27-28 (ER); Ex. Nobles-7 at 45 (Revised SP Application).
[305] Ex. Nobles-7 at 45-46 (Revised SP Application).
[306] Ex. Nobles-7 at 24 (Revised SP Application); Ex. EERA-6 at 53 (ER).
[307] Minn. Stat. § 216F.03.

209. Section 4.1 of the Draft Site Permit imposes a wind access buffer and provides for setbacks from properties where Nobles 2 does not hold wind rights.

210. There is no evidence that the Project is inconsistent with any future development or expansion plans.

W. Decommissioning, Turbine Abandonment, and Restoration

211. The anticipated life of the Project is approximately 30 years beyond the date of first commercial operation with the potential for repowering the facility in the future.[308]

212. Pursuant to Section 11.1 of the Draft Site Permit, Nobles 2 will develop a Project decommissioning and restoration plan in accordance with the requirements of Minnesota Rule 7854.0500, subp. 13, prior to the Project's pre-operation meeting. At the end of commercial operation, the Project owners will be responsible for removing wind facilities, and removing the turbine foundations to a depth of four feet below grade.[309]

213. Nobles 2 has reserved the right to extend operations instead of decommissioning at the end of the site permit term. As necessary, Nobles 2 may apply for an extension of the LWECS Site Permit to continue Project operation. In this case, a decision may be made on whether to continue operation with existing equipment or to retrofit the turbines and power system with upgrades based on newer technologies.[310]

214. The Draft Site Permit contains appropriate conditions to ensure proper decommissioning and restoration of the Project site. As provided in Section 11.1 of the Draft Site Permit, the Permittee must submit a decommissioning plan to the Commission prior to the pre-operation meeting. The decommissioning plan will document the manner in which Nobles 2 will ensure it carries out its obligations to provide for the resources necessary to fulfill the requirements to properly decommission the Project at the appropriate time. Section 11.2 of the Draft Site Permit provides that Nobles 2 is required to dismantle and remove 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. Further, Nobles 2 is required to restore and reclaim the site to its pre-Project topography and topsoil quality within 18 months of the Project's termination.

215. The record demonstrates that decommissioning has been appropriately addressed by Nobles 2 and the Draft Site Permit.

XII. SITE PERMIT CONDITIONS

216. The Draft Site Permit issued on May 25, 2018, includes a number of proposed permit conditions, many of which have been discussed above. The conditions apply to site

[308] Ex. Nobles-7 at 97 (Revised SP Application).
[309] Draft Site Permit at § 11.2.
[310] Ex. Nobles-7 at 98 (Revised SP Application).

preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

217. Many of the conditions contained in the Draft Site Permit were established as part of the site permit proceedings of other wind turbine projects permitted by the Commission. Comments received by the Commission have been considered in development of the Draft Site Permit for this Project.

218. On June 15, 2018, Nobles 2 provided its suggested changes to the Draft Site Permit in the Direct Testimony of Justin Vala and the Direct Testimony of Scott Seier. Some of the suggested revisions are meant to clarify permit provisions. Others are more substantive and included proposed revisions to Sections 2.0, 2.2, 4.5, 5.2.9, 6.1, 6.2, 10.3, 10.4.1, ~~12.6,~~ and 14.0 of the Draft Site Permit. The revisions, with additional revisions by EERA are as follows:

Section No.	Proposed Revision	Explanation for Proposed Revision
2.0	The Nobles 2 Wind Project, when fully constructed and operational, will have a nameplate capacity up to 260 MW in Nobles County. The Project will consist of up to 82 wind turbines in a combination of models that will include at least 10 and up to 21 Vestas V110-2.0 MW (80 meter hub height) turbines. The remainder will be one of the following Vestas turbine models: V136-3.6 MW, V136-3.45 MW, V136-4.0 MW, or V136-4.2 MW (82 meter hub height) ~~turbines~~, as identified in the Permittee's Site Permit Application. The project area includes approximately 42, 547 acres of land of which the Project currently holds leases or easements on ~~30,356~~ 33,991 acres, an amount sufficient to support the Project. Upon completion, the Project will permanently convert approximately 115.5 acres of land to wind turbines and associated facilities approved by this site permit.	Nobles 2 anticipates the use of a combination of V110-2.0 MW and larger nameplate capacity turbines as outlined in the Site Permit Application. Nobles 2 has selected the V136-3.6 MW turbine as its primary choice of turbine to complement the V110-2.0 turbines within the Project layout. However, if larger variants of the V136-3.6 MW are economical and commercially proven, Nobles 2 may elect to utilize one of the enumerated variants to reduce the number of turbines in the overall Project array. All V136 turbine models have similar siting requirements and spatial dimensions. Nobles 2 also updated the current status of acres in the Project area upon which Nobles 2 holds a land lease or wind easement.
2.2	Revise the sections of land in Bloom Township that are located within the Project boundary, i.e., 2-11, 15, 16, ~~19~~18-22, 28-35	Revisions are necessary to reflect that Section 18 in Bloom Township is within the Project boundary.
4.5	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	Nobles 2 is proposing this modification to reflect that the type of legal enforceable agreement that may allow the placement of project infrastructure on public land could

Section No.	Proposed Revision	Explanation for Proposed Revision
	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, license or other enforceable agreement with ~~the Project~~ Nobles 2. Wind turbines towers shall also comply with the setbacks of Section 4.1.	take the form of a lease, easement, license or other type of agreement and in most cases would not involve more than one type of agreement. For example, an electrical collector could be placed on public land pursuant to an easement or license agreement; whereas, a wind turbine is likely to be allowed via a lease.
5.2.9	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~~ application area(s) at least 14 days prior to such application.	Nobles 2 is not opposed to providing notice of pesticide application to beekeepers with an active apiary near pesticide application areas. However, the Project area is comprised of 66 square miles of land. An additional 3-mile buffer of that 66 square miles area would result in notification of beekeepers located much more than 3 miles from the area where the pesticide will be applied. Nobles 2 believes the notification requirement is intended to protect apiaries that may be at risk of being inadvertently treated with pesticides and in order for that to happen the apiary would need to be relatively proximate to the pesticide application location. Therefore, compliance with the requirement, as proposed in the Draft Site Permit would be unreasonable and overly burdensome. As a compromise, Nobles 2 proposes to contact beekeepers known by Nobles 2 to have apiaries within three miles of the pesticide application area(s).
~~6.1~~	~~The Permittee shall install an Aircraft Detection Lighting System (ADLS) to mitigate the aesthetic and visual effects of the FAA's aviation lighting requirements.~~	~~The record does not support a requirement that the Project install an ADLS on the Project due to the ineffectiveness of such a system in an already developed landscape and the regulatory uncertainty associated~~

Section No.	Proposed Revision	Explanation for Proposed Revision
		~~with FAA approval of an ADLS system for the Project.~~
6.1	**Obstruction Marking and Lighting** The Permittee shall install an Aircraft Detection and Lighting System (ADLS) to mitigate the aesthetic and visual effects of the FAA's aviation lighting requirements. Permittee may install an FAA approved lighting system without ADLS if the Permittee demonstrates that, despite its reasonable efforts to secure FAA approval for an ADLS, one of the following conditions exists: 1) The FAA denies the Permittee's application for an ADLS system, or 2) Permittee is unable to secure FAA approval in a timely manner. If either of these two conditions occur, the permittee's reasonable efforts to secure FAA approval of the ADLS must be described and filed with the Commission 14 days before the pre-construction meeting.	See EERA Comments and Recommendations, July 25, 2018.
6.2	**Avian and Bat Protection Plan Special Provision** In keeping with the DNR assessment of the Project area as "moderate risk" for bird and bat fatalities, the Permittee shall conduct one year of post-construction fatality monitoring for avian and bat species using survey protocols developed by the DNR specifically for moderate risk sites. The Permittee should consult with DNR for the availability of updated moderate risk protocols before commencing post-construction monitoring. The Commission may require additional monitoring based on results of the first year's data collection.	See EERA Comments and Recommendations, July 25, 2018.
10.3	Revise the first sentence of the second	The language of the Draft Site

Section No.	Proposed Revision	Explanation for Proposed Revision
	paragraph of Section 10.3 to provide: The Permittee may not commence construction until the earlier of 30 days ~~has expired~~ after the pre-construction meeting or ~~until~~ when 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.	Permit did not clearly indicate the time when the 30-day waiting period begins or whether the Permittee can begin construction if 30 days have passed and the Commission still has not advised the Permittee in writing that the planned construction is consistent with the permit. Nobles 2 thinks its reasonable to tie the 30-day waiting period to the pre-construction meeting since the Permittee will be required to summarize the pre-construction meeting within 14 days of the pre-construction meeting, which would then provide the Commission with another 16 days to review the notes and any other filings to determine if all pre-construction filings are compliant with the Site Permit to allow construction to proceed. Moreover, in recognition of the schedule constraints present during construction, the Permittee should be able to proceed if the Commission has not acted within 30 days after the pre-construction meeting.
~~10.4.1~~	~~**Construction Labor Status Reports**~~ ~~The Permittee shall file quarterly reports with the Commission within 45 days of the end of the quarter regarding construction workers that participated in construction of the project. Reports shall include: (a) 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, during the quarter in which they participated in construction of the project; (b) the gross number of hours worked by or full-time equivalent workers of people who live in other states but are within 150 miles of the project; and (c) total gross hours or full-time~~	~~Nobles 2 has voluntarily committed to providing the Commission with quarterly reports documenting either gross hours worked or full-time equivalents represented by local workers for the construction of the Project. The Laborers' International Union of North America and Mankato Building and Construction Trades Council were involved in the drafting of this permit condition and are in agreement with the permit condition as drafted in this testimony.~~

Section No.	Proposed Revision	Explanation for Proposed Revision
	~~equivalent workers. Permittee shall work with its contractor to determine suitable reporting metrics. Reports shall begin with the commencement of site construction and continue until completion of site restoration.~~	
10.4.1	**Labor Statistics Report** The Permittee shall file a post-construction Labor Statistics Report within 60 days of commencement of operation. The Report shall (a) detail the Permittee's efforts and the site contractor's efforts to hire Minnesota workers, and (b) provide an account of 1) 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; 2) the gross number of hours worked by or full-time equivalent workers who are residents of other states, but live within 150 miles of the project; and 3) 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.	See EERA Comments and Recommendations, July 25, 2018.
~~12.6~~	~~Upon reasonable notice, presentation of credentials, and at all times in compliance with the Permittee's site safety standards and the terms and conditions of all leases and easements held by Permittee (including crop damage provisions), the Permittee shall allow representatives of the Commission to perform the following:~~	See EERA Comments and Recommendations, July 25, 2018. ~~Nobles 2 is amenable to providing Commission access to ensure Site Permit compliance. However, any person that accesses the land on which the Project is sited must abide by Nobles 2 safety standards as well as the terms and conditions of leases and easements with the underlying landowners. All must be respectful of the property rights of the underlying landowners pursuant to the leases and easements and any Commission access to the property should not cause damage to the property or should provide for the~~

Section No.	Proposed Revision	Explanation for Proposed Revision
		~~provision of damage payments under the leases or easements if the surveys, investigations, or sampling cause damage to the property or the crops grown thereon in accordance with the crop damage provisions contained in the lease or easement.~~
~~14.0~~	~~Nobles 2 revised Section 14.0 to remove the final three notification requirements:~~ ~~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.~~	~~The Transfer of Permit provision provided as Section 14.0 of the Draft Site Permit may lead to confusion due to the duplication of requirements using slightly different notice requirements. The removed notification requirements are redundant and require notice of the same information required to be provided by the second set of notification requirements provided in Section 14.0~~
14.0	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	See EERA Comments and Recommendations, July 25, 2018.

Section No.	Proposed Revision	Explanation for Proposed Revision
	interests of the Permittee's owners; or (c) a sale which changes the parent entity of the Permittee; or (d) a sale which changes the Permittee's ultimate parent entity. *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.~~	

219. Any of the foregoing Findings more properly designated Conclusions of Law are hereby adopted as such.

Based on the foregoing Findings of Fact and the record in this proceeding, the ALJ makes the following:

CONCLUSIONS

1. The Commission and the Administrative Law Judge have jurisdiction over the site permit applied for by Nobles 2 for the up to 260 MW proposed Project pursuant to Minn. Stat. § 216F.04.

2. Nobles 2 has substantially complied with the procedural requirements of Minn. Stat. Ch. 216F and Minn. R. Ch. 7854.

3. The Commission has complied with the procedural requirements of Minn. Stat. Ch. 216F and Minn. R. Ch. 7854.

4. A public hearing was conducted in a community near the proposed Project. Proper notice of the public hearing was provided, and the public was given an opportunity to speak at the hearing and to submit written comments.

5. The Commission has the authority under Minn. Stat. § 216F.04 to place conditions in a LWECS site permit.

6. The Draft Site Permit contains a number of important mitigation measures and other reasonable conditions that adequately address the potential impacts of the Project on the human and natural environments.

7. It is reasonable to amend the Draft Site Permit to include the changes to Sections 2.0, 2.2, 4.5, 5.2.9, 6.1, 6.2, 10.3, 10.4.1, ~~12.6,~~ and 14.0 of the Draft Site Permit as suggested by Nobles 2, and revised by EERA.

8. The Project complies with the criteria set forth in Chapter 216F and Section 216E.03, subd. 7 of the Minnesota Statutes and Chapter 7854 of the Minnesota Rules.

9. The Project, with the Draft Site Permit conditions revised as set forth above, satisfies the site permit criteria for an LWECS in Minn. Stat. § 216F.03 and meets all other applicable legal requirements.

10. The Project, with the permit conditions discussed above, does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and/or the Minnesota Environmental Policy Act.

11. Any of the foregoing Conclusions of Law which are more properly designated Findings of Fact are hereby adopted as such.

Based upon these Conclusions, the ALJ makes the following:

RECOMMENDATIONS

Based upon these Conclusions, the Administrative Law Judge recommends that the Commission issue a site permit to Nobles 2 Power Partners, LLC, to construct and operate the up to 260 MW Nobles 2 Wind Project and associated facilities in Nobles County, and that the permit include the draft permit conditions amended as set forth in paragraph seven of the Conclusions above.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated on _____

_____
Jessica A. Palmer-Denig
Administrative Law Judge

64322230.3

CERTIFICATE OF SERVICE

I, Linda Chavez, hereby certify that I have this day served copies of the following document on the attached list of persons by electronic filing, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

MINNESOTA DEPARTMENT OF COMMERCE - EERA– COMMENTS

Docket Nos. **IP6964/WS-17-597**
IP6964/CN-16-289

Dated this **25th** day of **July, 2018**.

/s/Linda Chavez
_____

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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_17-597_Official cc Service List
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