COMMERCE DEPARTMENT

January 10, 2024

VIA EDOCKETS

The Honorable James Mortenson Office of Administrative Hearings 600 North Robert Street P.O. Box 64620 Saint Paul, MN 55164-0620

RE: EERA Reply Comments Lake Wilson Solar Energy Center Project **PUC Docket No.** IP-7070/GS-21-792 and CN-21-791 **OAH Docket No**. 5-2500-39336

Dear Judge Mortenson,

Minnesota Department of Commerce, Energy Environmental Review and Analysis (EERA) staff submits these reply comments on the proposed Lake Wilson Solar Energy Center Project (Project). These comments address the proposed findings of fact, conclusions of law, and recommendations provided by Lake Wilson Solar Energy LLC (Lake Wilson).

Lake Wilson submitted its comments on December 21, 2023.¹ These comments summarized the hearing record and responded to several hearing comments (including EERA's December 11, 2023, comments²), proposed Findings of Fact, Conclusions of Law, and Recommendations (Findings),³ and provided markups of its proposed Draft Site Permit (DSP)⁴.

In these reply comments, EERA responds to Lake Wilson's comments. EERA's comments consist of four parts:

- I. Substantive modifications to Lake Wilson's Proposed Findings
- II. Minor technical edits to Lake Wilson's Proposed Findings
- III. Response to Lake Wilson's Draft Site Permit (DSP) edits
- IV. Edited versions incorporating EERA's proposed edits to:
 - a. Lake Wilson's proposed Findings (Attachment A)
 - b. Lake Wilson's proposed Draft Site Permit (Attachment B)

I. Substantive Modifications to Lake Wilson's Proposed Findings

For purposes of this discussion, proposed language in Lake Wilson's Findings is shown in plain black text and EERA's recommended revisions are shown with red strikeout for omissions and red underline for additions. For clarity and length, footnotes included in Lake Wilson's Findings are not included in EERA's comments. Footnotes, including those accompanying EERA's proposed revisions, are included in EERA's markup of Lake Wilson's

¹ Lake Wilson, *Reply Comments Part 1 of 2*, December 21, 2023, eDocket No. 202312-201482-02.

² EERA, *Hearing Comments*, November 29, 2022, eDocket Nos. <u>202312-201104-01</u> and <u>202312-201105-02</u>.

³ Lake Wilson, Proposed Findings of Fact, Conclusions of Law, and Recommendation, December 21, 2023, eDocket No. 202312-201479-01.

⁴ Lake Wilson, *Reply Comments Part 2 of 2*, December 21, 2023, eDocket No. <u>202312-201482-04</u>.

Findings (Attachment A). Reference to numbering of the revised Findings proposed by EERA relate to the original numbering proposed in Lake Wilson's comments, not what the new numbering would be if EERA's proposal were accepted.

Final Permitting Decision

Per Minnesota Rule 7850.3900, subp. 2, at the time that the Commission makes a site permit decision, it must determine whether the environmental assessment (EA) prepared for the Project and the record created at the public hearing address the issues identified in the EA scoping decision. EERA staff believes that the EA and the hearing record address the issues identified in the scoping decision. EERA staff recommends adding the following new Conclusion to the Conclusions of Law proposed in Lake Wilson's Findings:

9. The Environmental Assessment (EA) prepared for the Project and the record created at the public hearing address the issues identified in the EA scoping decision.

Procedural Background

EERA recommends adding information to Finding 46 about an appendix that EERA amended that wasn't included in the filing of the public hearing exhibit list.

46. On October 18, 2023, EERA issued the Environmental Assessment (EA) for the Project. On October 30, 2023, EERA filed a corrected Figure 7 to Appendix A of the EA. On October 25, 2023, EERA filed confirmation that the EA was provided to various agencies and Murray County. Notice of the availability of the EA was published in the October 31, 2023, EQB Monitor. On December 18, 2023, EERA filed a corrected Appendix H of the EA.

Summary of Public Comments

- A. In Section VII of the Findings (Summary of Public Comments), the comments are mostly summarized in full. However, one component in the broad range of topics was left out of Finding 92; thus, EERA recommends adding labor practices to the list as to include all parts of Timothy Tyson's public comment.⁵ Lake Wilson responded to this part of the comment about labor practices in their comments under Section III (Response to Written Public Comments).
 - 92. On September 28, November 21 and 30, and December 4, 20223, the Commission filed written comments that had been submitted by members of the public. The comments included a broad range of topics, including: concerns regarding potential damage to drain tile, removal of farm land, glare. <u>labor practices</u>; and the GIA with MISO.
- **B.** As discussed by Lake Wilson in its comments, Murray County submitted public comment requesting vegetative screening around the Battery Energy Storage System (BESS). As outlined in the DSP Section 4.3.8, Lake Wilson will be required to consider input from the County concerning visual impacts. This should be specified in the Findings under the Summary of Public Comments. EERA proposes this revision as a new Finding 91 so that the timeline in the Findings as it's currently written is properly sequenced. Lastly, Lake Wilson stated in its reply comments that they have "engaged with the County," thus that language has been incorporated into the proposed revision.

⁵ Timothy Tyson, *Public Comment*, November 15, 2023, eDocket No. <u>202311-200664-01</u>.

91. During the public hearings held on November 28 and 29, 2023, Murray County submitted public comment requesting vegetative screening of the Project around the BESS and along State Highway 30. Section 4.3.8 of the Sample Site Permit would require Lake Wilson Solar to consider the County's input pertaining to visual impacts from the Project. Lake Wilson Solar stated it has no objection to this condition as modified by EERA. Lake Wilson Solar has engaged with the County to determine what actions, if any, are necessary to alleviate the County's concerns, and is considering its input.

Decommissioning Plan

- **A.** EERA recommends incorporating information as a new Finding 149 (151 in Attachment A redline) specifying the expected content and resubmittal procedures of the Decommissioning Plan for Lake Wilson's impending update due 14 days prior to the pre-construction meeting as required in the DSP Section 9.1.
 - <u>151.</u> Lake Wilson Solar will incorporate EERA's comments on the draft decommissioning plan in the decommissioning plan required under Section 9.1 of the Sample Site Permit.
- **B.** EERA recommends revising footnote 133 in Finding 108 to reference the Decommissioning Plan to be updated and submitted prior to the Project's pre-construction meeting rather than the Decommissioning Plan that was submitted with the site permit application, as the latter will be out of date and unapplicable.
 - 108. Normal agricultural activities can continue within some portions of the Project Area not converted to solar modules, access roads, O&M Facility, BESS, transmission facilities, and fencing. After the useful life of the Project, the current agricultural land use would be restored by decommissioning the Project^[current footnote 133] in accordance with the Decommissioning Plan to be prepared by Lake Wilson Solar and submitted to the Commission prior to operation. [new footnote referencing the Decommissioning Plan to be updated and submitted prior to the Project's pre-construction meeting]

Property Values

EERA recommends specifying more information from the EA in Findings 109 and 111 to fully characterize the impacts analysis to property values.

- 109. Impacts to the value of specific properties within the Project vicinity are difficult to determine but could occur. Because of this uncertainty, impacts to specific properties could be minimal to moderate, but are expected to be within 0.5 miles of the Project area and to decrease with distance from the Project and with time. Impacts in the Project vicinity are anticipated to decrease with distance to the Project, and significant negative effects to property values are not anticipated. However, impacts to a specific property's value are difficult to determine.
- 111. Based on analysis of other utility-scale solar projects, significant negative impacts to property values in the Project vicinity are not anticipated. Aesthetic impacts that might affect property values would be limited to residences and parcels in the Project vicinity where the solar panels are easily visible. While it is possible that specific, individual property values may be negatively impacted, such impacts can be mitigated by reducing aesthetic impacts and encumbrances to future land use, or through individual agreements with landowners.

Human Settlement; Aesthetic Impacts

EERA recommends revising Finding 118 to better reflect information from the EA that people who live near the Project may experience greater aesthetic impacts.

118. The addition of Project facilities is not expected to significantly alter the viewshed or increase visual impacts, which are unavoidable, but subjective and unique to the individual. Aesthetic impacts due to the Project are unavoidable and are anticipated to be moderate but will vary widely as visual impacts are subjective and unique to the individual. For residents outside the Project vicinity and for others with low viewer sensitivity, such as travelers along State Highway 30, aesthetic impacts are anticipated to be minimal. For residents in the Project vicinity and for others with high viewer sensitivity traveling on local roads in the Project vicinity, aesthetic impacts are anticipated to be moderate to significant.

Wildlife Management Areas (WMAs)

- **A.** EERA recommends placing Finding 135 after Findings 136 and 137 to signify that WMAs are considered recreational resources and are classified as such in the EA. This change would then apply the conclusion of Finding 135 to the preceding Findings related to WMAs.
- **B.** EERA recommends revising Finding 135 to state that <u>additional</u> mitigations are not proposed to clearly communicate that Lake Wilson plans to take some mitigation measures such as best management practices (BMPs) during construction around the WMA.
- **C.** EERA recommends revising Finding 136 to include what the impacts to the WMA are that are referred to. The proposed ordering and language of Findings 135-137 is offered below:
 - 136. 135. Wildlife Management Areas (WMAs) are in the Project vicinity outside of the Project Area, the nearest being Carlson State WMA which is directly adjacent. Construction of the Project is not expected to impact any recreation areas other than potentially Carlson WMA, which borders the Project Area. This WMA has a small, high-quality remnant prairie and seeded prairie with primarily deer and pheasants. Construction noise is expected to impact Carlson WMA because it will be across the street from some Project construction. PV panels may be visible to the East for users of Carlson WMA after construction, but their presence is not anticipated to significantly impact users due to significant vegetation buffering within the WMA and the lack of PV panels on the other WMA borders.
 - 137. 136. If construction BMPs are employed properly near the eastern border of Carlson WMA, significant permanent impacts are expected to be mitigated. The majority of the construction will not occur within 1 mile of Carlson WMA. No additional mitigation measures are proposed.
 - 135. 137. No significant impacts to any other recreational opportunities are anticipated and, therefore, no additional mitigative measures are proposed for development of the Project.

Public Health and Safety

- **A.** EERA recommends adding a new Finding 142 (144 in Attachment A redline) under the Public Health and Safety header to document permit conditions that mitigate potential impacts.
 - 144. No significant impacts to public health and safety are expected to result from construction and operation of the Project. Further, the Sample Site Permit contains conditions to address public health and safety. Section 4.3.29 (Public Safety) of the Sample Site Permit addresses public safety, including landowner educational materials, warning signs, traffic control, etc. Section 8.10 (Emergency Response) requires permittees to file an emergency response plan with the Commission prior to

construction. Section 8.11 (Extraordinary Events) requires notification of extraordinary events to the Commission such as fires, injuries, etc.

- **B.** EERA recommends revising Finding 140 to include more detail from the EA about specific standards and precautions that will be applied to the BESS as well as specific commitments from Lake Wilson in its site permit application. This will give proper attention to safety measures for this relatively new technology in the Findings.
 - 140. BESSs are a relatively new technology that come with inherent risk as they're employed in early phases of implementation, however, there is a growing body of research and standards that have been applied to avoid incidents and enhance safety. The main safety hazard of a BESS is battery failure leading to fire which has the potential to spread to nearby batteries and containers, quickly presenting an emergency situation. Safety will be Lake Wilson Solar's foremost principle during construction and operation. Safe design and operation of the BESS begins with safe equipment and compliance with safety codes, regulations, and industry recommendations. Lake Wilson Solar will stay abreast of new codes and standards to ensure its equipment vendors and designs comply with industry standards and best practices. Lake Wilson Solar has incorporated many safety precautions into the design of the proposed BESS. The BESS will be designed and operated safely by complying with safety codes, regulations, and industry recommendations. Newly developed standards described in the McMicken Battery Energy Storage System Event Technical Analysis and Recommendations along with 2023 standards from the National Fire Protection Association 855 such as the Standard on Explosion Prevention Systems, and design compliance with International Fire Code and National Electric Code are expected to prevent incidents.

Prevailing Wage

EERA recommends amending Finding 147 to include new language regarding the statutorily required prevailing wage for the Project.

147. Additionally, Section 8.5 (Labor Statistic Reporting) of the Sample Site Permit requires quarterly reports concerning efforts to hire Minnesota workers. <u>These workers will be subject to pay no less than the prevailing wage rate as defined in Minnesota Statute 177.42.</u>

Greenhouse Gases

EERA recommends acknowledging greenhouse gases (GHG) in Finding 204 with the other air emissions discussed under the Air and Water Emissions header. Although GHG is discussed in more detail under Finding 206, which EERA does not contest the accuracy of, the Project's GHG impacts should be fully characterized in Finding 204 to accompany the GHG benefits that are discussed in Finding 206.

204. Minimal intermittent air emissions are expected during construction of the Project. <u>Construction activities</u> will result in short-term increases in GHG emissions because of the combustion of fossil fuels in <u>construction equipment and vehicles</u>. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring, and they are expected to be localized and <u>temporary</u>. Once operational, the solar array would not generate criteria pollutants or carbon dioxide. <u>Operational emission sources include emergency generators, commuter and onsite vehicle traffic, and</u> <u>offsite electricity purchased</u>.

II. Minor Technical Edits to Lake Wilson's Proposed Findings

EERA proposes technical edits to Lake Wilson's proposed Findings to improve clarity and correct minor typographical errors.

Typographical Errors

A. EERA recommends revising Finding 17 to remove the following:

- 17. On March 7, 2023, EERA filed written comments recommending that the Commission find the CN and SP Applications to be substantially complete and but require that the Applicant continue to coordinate with the Department of Natural Resources...
- **B.** EERA recommends revising numbering for the headers under II. Site Permit Conditions, B. Land-based Economies to the following:
- 1. Local Economy
- 1. 2. Agriculture
- 2. 3. Prime Farmland
- **C.** EERA recommends revising Finding 116 to capitalize the word "section". This intends to maintain consistency through the Findings with how sections of the Sample Site Permit are referenced.
- 116. In its December 11, 2023, comments, EERA proposed changes to <u>Section 4.3.8</u> of the Sample Site Permit to address potential aesthetic concerns...

III. Response to Lake Wilson's DSP edits

In its reply comments, Lake Wilson proposed modifications to permit conditions in the DSP which EERA responds to in this filing. EERA has no objection to any of Lake Wilson's proposed changes to Sections 3, 4.3.8, 4.3.19, 4.3.22, 5.1, 5.2, and 5.3 in the DSP. In Lake Wilson's proposed DSP language, the exact wording from DNR's hearing comments was used for each of their suggested special conditions. Discussions about communication between Lake Wilson and EERA on inadvertent errors are presented accurately. Lake Wilson's edits to the DSP as proposed in its reply comments are incorporated into Attachment B: EERA's proposed edits to the DSP.

EERA proposes two new but minor edits to the DSP. Section 9.1 of the DSP shows both the number and word fourteen, thus EERA's revisions in Attachment B shows the word fourteen as omitted. The Table of Contents in the DSP has also been updated to ensure the numbering is as accurate with all of the new proposals, which is not shown in redline for ease of reading.

IV. Edited versions incorporating EERA's proposed edits

Please see redline (underline and strikethrough as presented in this document) incorporating EERA's proposed edits to Lake Wilson's proposed Findings in Attachment A and the Draft Site Permit in Attachment B.

EERA staff appreciates the opportunity to submit these reply comments.

Sincerely,

Jenna Ness Environmental Review Project Manager

Attachment A:

EERA's markup of Lake Wilson's Findings

OAH Docket Nos. 5-2500-39336 MPUC Docket No. IP-7070/CN-21-791 MPUC Docket No. IP-7070/GS-21-792

STATE OF MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Lake Wilson Solar Energy LLC for a Certificate of Need and Site Permit for the up to 150 MW Lake Wilson Solar and Associated Battery Storage Project in Murray County, Minnesota

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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION

This matter was assigned to Administrative Law Judge Jim Mortenson (Judge or Judge Mortenson) to conduct a public hearing on the Certificate of Need (MPUC Docket No. CN-21-791) and Site Permit (MPUC Docket No. GS-21-792) Applications of Lake Wilson Solar Energy LLC (Lake Wilson Solar or Applicant) for an up to 150 megawatt (MW) solar energy generating system and associated battery storage project in Murray County, Minnesota (the Project). The Minnesota Public Utilities Commission (MPUC or Commission) also requested that the Judge prepare findings of fact, conclusions of law and recommendation of a preferred site and permit conditions.

Jeremy P. Duehr, Fredrikson & Byron, P.A., 60 South Sixth Street, Suite 1500, Minneapolis, Minnesota 55402, and Korede Olagbegi, Associate, Renewable Development, Invenergy, LLC (Invenergy), One South Wacker Drive, Suite 1800, Chicago, IL 60606, appeared on behalf of Lake Wilson Solar.

Cezar Panait, Minnesota Public Utilities Commission Staff, 121 Seventh Place East, Suite 350, St. Paul, MN 55101 appeared on behalf of the Commission.

Jenna Ness, Environmental Review Manager, 85 Seventh Place East, Suite 280, St. Paul, MN 55101 appeared on behalf of the Department of Commerce, Energy Environmental Review and Analysis (EERA).

Judge Mortenson held joint public hearings on the Site Permit and Certificate of Need Applications on November 28, 2023 (in-person) and November 29, 2023 (remote-access - telephone and internet). The factual record remained open until December 11, 2023, for the receipt of written public comments.

STATEMENT OF ISSUES

Has Lake Wilson Solar satisfied the criteria set forth in Chapter 216E of the Minnesota Statutes and Chapters 7849 and 7850 of the Minnesota Rules for a Certificate of Need and Site Permit, respectively, for the proposed Project?

SUMMARY OF RECOMMENDATIONS

The Judge concludes that Lake Wilson Solar has satisfied the applicable legal requirements and recommends the Commission **GRANT** a Certificate of Need and Site Permit for the Project, subject to the conditions discussed below.

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

FINDINGS OF FACT

I. APPLICANT

1. Lake Wilson Solar is a Delaware limited liability company authorized to do business in Minnesota. Lake Wilson Solar is a wholly owned subsidiary of Invenergy Solar Development North America LLC, and an affiliate of Invenergy LLC (Invenergy), a leading sustainable energy and development company.¹

2. Invenergy, through its affiliates has developed several large-scale energy facilities across four core technologies: wind (110 projects; 17,600 MW), solar (50 projects; 6,205 MW), natural gas (13 projects; 5,964 MW), and battery storage (18 projects; 486 MW / 1,537 MWh). Invenergy owns approximately half of the indicated portfolio for each respective technology, operating projects it owns as well as third-party owned projects, giving the following total for operated projects: wind (65 projects, 9,965 MW), solar (16 projects, 1,541 MW), Natural gas (12 projects, 5,661 MW), Battery storage (7 projects, 127.5 MW). Invenergy projects are mainly located in the United States, but Invenergy has a global presence with other projects located in Japan, Poland, Scotland, Mexico, El Salvador, and Uruguay. Invenergy has a proven development track record of 191 largescale projects with a capacity of over 30,000 MW.²

3. In Minnesota, an affiliate of Invenergy most recently completed development, permitting, and sale of the Freeborn Wind Project located in Freeborn County, MN and Worth County, IA to Xcel Energy in 2019. Invenergy affiliates have also completed multiple projects in the neighboring states of Wisconsin, Iowa, North Dakota, and South Dakota.³

¹ Exhibit (Ex.) LW-9 at 3 (Application for a Site Permit).

² Id.

³ Ex. LW-9 at 4 (Application for a Site Permit).

II. SITE PERMIT AND CERTIFICATE OF NEED APPLICATIONS AND RELATED PROCEDURAL BACKGROUND

4. On November 16, 2021, Lake Wilson Solar 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.⁴

5. On November 16, 2021, Lake Wilson Solar filed a Notice on Intent to Submit a Site Permit under the alternative permitting procedures of Minn. R. 7850.2800 to 7850.3900. ⁵

6. On November 24, 2021, the Commission issued a notice of Comment Period on Request for Exemption from Certain Certificate of Need Application Content Requirements.⁶

7. On December 9, 2021, the Department of Commerce, Division of Energy Resources (DER) filed a request for an extension of time to file comments⁷ and on December 10, 2021, DER filed comments recommending that the Commission approve the data exemption requests, with modifications.⁸

7.____

8. On December 15, 2021, Lake Wilson Solar filed its Reply Comments regarding its Request for Exemption from Certain Certificate of Need Application Content Requirements with the Commission.⁹

9. On January 4, 2022, the Commission issued an Order approving the data exemption requests with the modifications as provided in DER's December 10, 2021 comments.¹⁰

10. On February 9, 2023, Lake Wilson Solar filed a Certificate of Need Application (CN Application) for the Project with the Commission.¹¹

11. On February 9, 2023, Lake Wilson Solar filed an Application for a Site Permit (SP Application) for the Project with the Commission.¹²

12. On February 9, 2023, Lake Wilson Solar filed confirmation that it had notified those persons on the Commission's general service list that Lake Wilson Solar filed the CN

⁴ Ex. LW-1 (Request for Exemption from Certain Certificate of Need Application Content Requirements).

⁵ Ex. LW-2 (Notice of Intent to File a Site Permit).

⁶ Ex. PUC-1 (Notice of Comment Period on Request for Exemption from Certain Certificate of Need Application Content Requirements).

⁷ Ex. PUC-2 (Request for Extension of Time to File Comments).

⁸ Ex. PUC-3 (DOC-DER Comments on Certificate of Need Exemption Request).

⁹ Ex. LW-3 (Reply Comments regarding Request for Exemption from Certain Certificate of Need Application Content Requirements with the Commission).

¹⁰ Ex. PUC-4 (Order).

¹¹ Exs. LW-4 through LW-8 (CN Application, Figures, Appendices and Summary of Filing).

¹² Exs. LW-9 through LW-28 (Application for a Site Permit, Figures and Appendices).

Application and SP Application.¹³

13. On February 16, 2023, notice of Lake Wilson Solar filing its CN Application and SP Application was published in the *Pioneer Press*.¹⁴

14. On February 20, 2023, Lake Wilson Solar also notified landowners¹⁵, local government officials,¹⁶ and the Slayton Public Library¹⁷ that Lake Wilson Solar filed the CN Application and SP Application.

15. On February 20, 2023, notice of Lake Wilson Solar filing its CN Application and SP Application was published in the *Murray County Wheel Herald Tribune*.¹⁸

16. On February 21, 2023, the Commission filed a Notice of Comment Period on the SP Application and CN Application Completeness announcing it would accept written comments through March 7, 2023, reply comments through March 14, 2023, and Supplemental Comments through March 20, 2023.¹⁹

17. On March 7, 2023, EERA filed written comments recommending that the Commission find the CN and SP Applications to be substantially complete and but require that the Applicant continue to coordinate with the Department of Natural Resources (DNR), take no action on an advisory task force, request a full Administrative Law Judge report with recommendations; and process the site permit application jointly with the project's certificate of need application, including joint environmental review.²⁰

18. On March 9, 2023, Operating Engineers Local 49 (IUOE Local 49) and North Central States Regional Council of Carpenters (NCSRC of Carpenters) filed comments in support of application completeness and proceeding without a contested case hearing.²¹

19. On March 14, 2023, the Laborers District Council of Minnesota and North Dakota (LIUNA) filed comments in support of application completeness and proceeding without a contested case hearing.²²

20. On March 14, 2023, DER filed written comments recommending that the

¹³ Lake Wilson Solar Filing Letter, Certificate of Service and Service Lists (eDocket Nos. <u>20232-193061-01</u> [CN] and <u>20232-193056-01</u> [SP]).

¹⁴ Lake Wilson Solar Compliance Filing – Notice, Attachment D (December 18, 2023) (eDocket Nos. 202312-201310-01 [SP] and 202312-201310-02 [CN]).

¹⁵ Lake Wilson Solar Compliance Filing – Notice, Attachment B (December 18, 2023) (eDocket Nos. 202312-201310-01 [SP] and 202312-201310-02 [CN]).

¹⁶ Lake Wilson Solar Compliance Filing – Notice, Attachment C (December 18, 2023) (eDocket Nos. 202312-201310-01 [SP] and 202312-201310-02 [CN]).

¹⁷ Lake Wilson Solar Compliance Filing – Notice, Attachment E (December 18, 2023) (eDocket Nos. 202312-201310-01 [SP] and 202312-201310-02 [CN]).

¹⁸ Lake Wilson Solar Compliance Filing – Notice, Attachment D (December 18, 2023) (eDocket Nos. 202312-201310-01 [SP] and 202312-201310-02 [CN]).

¹⁹ Ex. PUC-5 (Notice of Comment Period on Application Completeness).

²⁰ Ex. EERA-1 (Comments and Recommendations regarding Application Completeness).

²¹ Ex. PUC-6 (IUOE Local 49 and NCSRC of Carpenters Comments regarding CN Application Completeness).

²² Ex. PUC-7 (LIUNA Comments regarding CN Application Completeness).

Commission find the CN and SP Applications to be substantially complete and that the Commission review the applications using the Commission's informal comment process.²³

21. On March 14, 2023, Lake Wilson Solar filed Reply Comments on the CN Application and SP Application to address DER's, LIUNA's and IUOE Local 49 and North NCSRC of Carpenters comments.²⁴

22. On March 15, 2023, Lake Wilson Solar filed the initial payment for the CN Application. 25

23. The Commission met on March 30, 2023 to discuss Application Completeness and approved the consent items on April 4, 2023.²⁶

24. On April 4, 2023, the Commission issued an Order which: accepted the CN Application as complete and authorized the use of the Commission's comment process; accepted the SP Application as substantially complete with the understanding the Lake Wilson Solar with continue to coordinate with the DNR to ensure interpretation of its native prairie delineation in or near the project area is accurate prior to the public hearing for the Project; found that an advisory task force is not warranted; determined that the SP Application is appropriately processed jointly with the CN Application; requested that a Judge from the Office of Administrative Hearings (OAH) preside over a public hearing under the Commission's Summary Proceeding process and in accordance with Minn. R. 7850.3800, and as the Judge determines appropriate, Minn. R. ch. 1405; and direct that intervention as a party is not required; and request that the Judge determine the documents needed to establish the record, and prepare a report.²⁷

25. On April 24, 2023, the Commission issued a Notice of Public Information and Environmental Assessment Scoping Meetings scheduling meetings on May 10, 2023 (inperson) and on May 11, 2023 (remote-access) and announcing that written comments would be accepted through May 25, 2023.²⁸ The Notice requested comments on issues and facts that should be considered in the development of the environmental assessment. The Notice of Public Information and Environmental Assessment Scoping Meetings was mailed to landowners and local units of government located within and adjacent to the Project.

26. On May 2, 2023, EERA also published the Notice of Public Information and Environmental Assessment Scoping Meetings in the *EQB Monitor*.²⁹

27. On May 10, 2023, the Minnesota Land & Liberty Coalition filed comments in

²³ Ex. PUC-8 (DER Comments regarding Application Completeness).

²⁴ Ex. LW-29 (Reply Comments regarding Application Completeness).

²⁵ Ex. LW-31 (CN Application Fee).

²⁶ Commission Proposed Consent Items (March 30, 2023) (eDocket No. <u>20233-194346-01</u>) and Commission Approval on Consent Items (April 4, 2023) (eDocket No. <u>20234-194488-03</u>).

²⁷ Ex. PUC-9 (Order Accepting the CN and Site Permit Applications as Complete).

²⁸ Ex. PUC-10 (Notice of Public Information and Environmental Assessment Scoping Meeting; see also Ex. EERA-2 (Notice of Public Information and Environmental Assessment Scoping Meeting).

²⁹ Ex. EERA-3 (EQB Monitor Notice of Public Information and Environmental Assessment Scoping Meetings).

support of the Project.³⁰

28. On May 10 and 11, 2023, the Commission held the Public Information and Environmental Assessment Scoping meetings.³¹

29. On May 24, 2023, the IUOE Local 49 and NCSRC of Carpenters filed comments.³² Their comments recognized the Project's impact in advancing Minnesota's new 100% carbon-free standard by 2040.

30. On May 25, 2023, LIUNA filed a comment.³³ LIUNA's comments recognize, with appreciation, Lake Wilson Solar's stated priority to use local labor, how addition of battery storage could maximize the economic and energy benefits of the project while helping to ease transmission congestion, and that this project will further Minnesota's goals of increasing renewable energy output with the potential to support the regional economy.

31. Also on May 25, 2023, the Minnesota Department of Transportation (MnDOT) filed a comment.³⁴ MnDOT's comments addressed soil impacts and erosion control related to truck highway 30, potential need for an oversize/overweight permit and that Lake Wilson Solar should coordinate with MnDOT throughout the planning process.

32. Also on May 25, 2023, the DNR filed a comment.³⁵ The DNR's comments addressed two waterways, security fencing, facility lighting, dust control and wildlife-friendly erosion control.

33. On May 25, 2023, EERA filed the transcript from the May 12, 2023 Public Information and Environmental Scoping Assessment meeting.³⁶ During the in-person meeting, two members of the public spoke and gave positive comments about the Project. Specifically, the support comes from the local economic benefits the Project is anticipated to provide.

34. On June 12, 2023, EERA filed comments and recommendations on the scoping process and the environmental assessment that will be prepared for the Project, and Lake Wilson Solar's Applications.³⁷ No alternative sites were proposed during the scoping public comment period. EERA recommended that no alternative sites be studied in the environmental assessment and to study the proposed site as amended. EERA also recommended that the environmental assessment include discussion of the interconnection status of the project, the impact of battery storage on the electric grid and any associated economic impacts, and the impact of the project on local workers.

³⁰ Ex. PUC-11 (Public Comments - Minnesota Land & Liberty Coalition).

³¹ Commission Meeting PowerPoint Presentation and EERA Meeting Handouts (May 23, 2023) (eDocket Nos. (20235-196070-01 [CN], 20235-196070-02 [SP] and 20235-196052-01).

³² Ex. PUC-12 (IUOE Local 49 and NCSRC of Carpenter Comments regarding EA Scoping).

³³ Ex. PUC-13 (LIUNA Comments regarding EA Scoping).

³⁴ Ex. PUC-14 (MnDOT Comments regarding EA Scoping).

³⁵ Ex. PUC-15 (DNR Comments regarding EA Scoping).

³⁶ See generally May 12, 2023, Public Information and Environmental Assessment Scoping Meetings Transcript; see also Ex. EERA-4 (Oral Public Comments on Scope of Environmental Assessment).

³⁷ Ex. EERA-6 (Comments and Recommendations of Scoping Process).

35. The Commission met on July 20, 2023 to discuss EERA's Scoping Recommendations and approved the consent items on July 25, 2023.³⁸

36. On July 25, 2023, the Commission issued an Order adopting EERA's recommendations on the Scoping Process filed on July 12, 2023.³⁹

37. On July 28, 2023, the Judge issued a Scheduling Order scheduling a prehearing conference on August 2, 2023.⁴⁰

38. On August 3, 2023, Lake Wilson Solar filed a Notice of Appearance for Jeremy P. Duehr and Lisa M. Agrimonti in the OAH.⁴¹

39. Also on August 3, 2023, EERA filed a Notice of Appearance for Richard Dornfeld in the OAH. 42

40. The Judge convened the prehearing conference on August 2, 2023, and on August 7, 2023, issued the First Prehearing Order setting the schedule for the proceedings.⁴³

41. On August 8, 2023, EERA filed the Notice of Environmental Assessment Scoping Decision (EA Scoping Decision),⁴⁴ which set forth the matters proposed to be addressed in the environmental assessment and identified certain issues outside the scope of the environmental assessment. No site or system alternatives were recommended for study. Accordingly, no other project sites will be addressed. The environmental assessment will analyze the availability and feasibility of system alternatives.

42. On September 14, 2023, the Commission issued a Notice of Comment Period on the Merits of the CN Application announcing that initial written comments would be accepted through October 16, 2023, and reply comments through October 26, 2023.⁴⁵ The Notice requested comments on the CN Application's compliance to Minnesota statutes and rules, whether there are any contested issues of fact with respect to the representations made in the CN Application, and whether there are any other issues or concerns related to the Project.

43. On September 28, 2023⁴⁶ (corrected filing updated on October 17, 2023⁴⁷), one written public comment was received concerning glare from the panels, facility placement, among other items.

³⁸ Commission Proposed Consent Items (July 20, 2023) (eDocket No. <u>20237-197616-01</u>) and Commission Approval on Consent Items (July 25, 2023) (eDocket No. <u>20237-197721-02</u>).

³⁹ Ex. PUC-16 (Order on EA Scoping Decision).

⁴⁰ OAH Scheduling Order – Prehearing Conference (July 28, 2023) (eDocket No. <u>20237-197826-01</u> [SP] and <u>20237-197826-01</u> [SP] and <u>20237-197826-02</u> [CN]).

⁴¹ Ex. LW-32 (Notice of Appearance of Jeremy P Duehr and Lisa M. Agrimonti).

⁴² Ex. EERA-7 (Notice of Appearance of Richard Dornfeld).

⁴³ OAH First Prehearing Order (August 7, 2023 (<u>20238-198053-01</u> [CN] and <u>20238-198053-02</u> [SP]).

⁴⁴ Ex. EERA-8 (Notice of Environmental Assessment Scoping Decision); *see also* Ex. EERA-12 (EA Scoping Decision).

⁴⁵ Ex. PUC-17 (Notice of Comment Period on the Merits of the CN Application).

⁴⁶ Ex. EERA-9 (Public Comment – M. Ackerman).

⁴⁷ Ex. EERA-10 (Public Comment – Corrected - M. Ackerman).

44. On October 2, 2023, the Commission filed the sample Site Permit.⁴⁸

45. On October 16, 2023, DER filed a Request for an Extension of Time to Filed Comments,⁴⁹ which was granted by the Commission on October 17, 2023.⁵⁰ The comment period was extended to October 30, 2023 for initial comments and November 13, 2023 for reply comments.

46. On October 18, 2023, EERA issued the Environmental Assessment (EA) for the Project.⁵¹ On October 30, 2023, EERA filed a corrected Figure 7 to Appendix A of the EA.⁵² On October 25, 2023, EERA filed confirmation that the EA was provided to various agencies and Murray County.⁵³ Notice of the availability of the EA was published in the October 31, 2023 *EQB Monitor*.⁵⁴ On December 18, 2023, EERA filed a corrected Appendix H of the EA.⁵⁵

47. On October 30, 2023, the Commission issued a Notice of Environmental Assessment Availability, Public Hearings and Comment Period, notifying the public of the November 28, 2023 in-person hearing and November 29, 2023 remote-access hearing, and initiating a public comment period ending December 11, 2023.⁵⁶

48. Also on October 30, 2023, DER filed a Second Request for an Extension of Time to File Comments,⁵⁷ which was granted by the Commission on October 31, 2023.⁵⁸ The comment period was extended to November 6, 2023 for initial comments and November 16, 2023 for reply comments.

49. On November 6, 2023, both LIUNA⁵⁹ and IUOE Local 49 and NCSRC of Carpenters⁶⁰ filed comments on the merits of the CN Application, specifically highlighting Lake Wilson Solar's interconnection agreement in place with Midcontinent Independent System Operator (MISO).

50. On November 6, 2023, DER filed a Third Request for an Extension of Time to Filed Comments,⁶¹ which was granted by the Commission on November 7, 2023.⁶² The comment period was extended to November 13, 2023 for initial comments and November 21, 2023 for reply comments.

55 EERA, Corrected Appendix H of the Environmental Assessment, eDocket No. 202312-201309-02.

⁴⁸ Ex. PUC-18 (Sample Site Permit).

⁴⁹ Ex. PUC-19 (DER Request for Extension of Time to File Comments).

⁵⁰ Ex. PUC-20 (Notice of Extended Comment Period – Merits of the CN Application).

⁵¹ Ex. EERA-11 (Environmental Assessment).

⁵² Ex. EERA-14 (Corrected Figure 7 from Appendix A of EA).

⁵³ Ex. EERA-13 (EA Provided to Permitting Agencies).

⁵⁴ Ex. EERA-16 (EQB Monitor Notice of EA Availability, Public Hearings, and Comment Period).

⁵⁶ Ex. PUC-21 (Notice of EA Availability and Public Hearings); *see also* Ex. EERA-15 (Notice of EA Availability and Public Hearings, and Comment Period).

⁵⁷ Ex. PUC-22 (DER Second Request for Extension of Time to File Comments).

⁵⁸ Ex. PUC-23 (Notice of Extended Comment Period – Second Notice).

⁵⁹ Ex. PUC-24 (LIUNA Comments regarding Merits of CN Application).

⁶⁰ Ex. PUC-26 (IUOE Local 49 and NCSRC of Carpenters Comments regarding Merits of CN Application.

⁶¹ Ex. PUC-25 (DER Third Request for Extension of Time to File Comments).

⁶² Ex. PUC-27 (Notice of Extended Comment Period – Third Notice).

51. On November 9, 2023, DER filed comments outlining its analysis and ultimately recommending that if, after considering the EA, the proposed facility will provide benefits compatible with protecting the natural and socioeconomic environments, they recommend the Commission issue the Certificate of Need.⁶³

52. On November 14, 2023, Lake Wilson Solar filed Direct Testimony of Korede $Olagbegi^{64}$ and Lance Pan. 65

53. During the public comment period, one public comment was filed on November 21, 2023, regarding the Project's interconnection agreement with MISO.⁶⁶ There was also one comment received outside the comment period on December 4, 2023 regarding concerns related to drain tile and economic effect.⁶⁷

54. On November 22, 2023, Lake Wilson Solar filed reply comments in response to DER's comments on the merits of the CN Application.⁶⁸ Lake Wilson Solar agreed with DER's recommendation that the PUC issue a CN upon finding the environmental impacts in the EA are acceptable.

55. On November 28 and 29, 2023, the Judge presided over joint public hearings on the SP Application and the CN Application for the Project via in-person and remote means, respectively.⁶⁹ Commission Staff, EERA staff, and representatives from Lake Wilson Solar were present. Four members of the public spoke during the November 28, 2023 public hearing (in-person), expressing concern about potential glare and visual impacts, reiterating the need for local coordination on emergency response issues and roads, asking questions about potential impacts to neighbors and offering support for the Project and the positive economic impact it will have on the community. No members of the public spoke during the remote-access public hearing held on November 29, 2022.

56. During the public comment period ending December 11, 2023, written comments were filed by the DNR, 70 EERA 71 , and the Southwest Regional Development Commission. 72

III. DESCRIPTION OF THE PROJECT

57. The proposed Project is an up to 150 MW AC nameplate solar-energy capacity project paired with an up to 95 MWac Battery Energy Storage System (BESS) in Leeds

⁶³ Ex. PUC-28 (DER-Comments regarding Merits of CN Application).

⁶⁴ Ex. LW-33 (Direct Testimony of Korede Olagbegi).

⁶⁵ Ex. LW-34 (Direct Testimony of Lance Pan).

⁶⁶ Public Comment – Timoth Tyson (November 21, 2023) (eDocket No. <u>202311-200664-01</u>).

⁶⁷ Public Comment – Glen Talsma (December 4, 2023) (eDocket No. <u>202312-200960-01</u>).

⁶⁸ Ex. LW-35 (Reply Comments regarding Merits of CN Application).

⁶⁹ See generally, November 28, 2023, Public Hearing Transcript.

⁷⁰ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>).

⁷¹ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

⁷² Comments – Southwest Regional Development Commission (November 30, 2023) (eDocket Nos. <u>202311-</u> <u>200836-01</u> [SP] and <u>202311-200836-02</u> [CN]).

Township, Murray County, Minnesota. The Project would also include associated facilities.⁷³

58. The Project components include PV solar modules, inverters, step-up transformers (connecting solar panel inverters to collection lines/Project Substation), electrical wiring (connecting PV solar modules to solar panel inverters), single-axis trackers, collection lines (connecting solar panel inverters to Project Substation), security fencing and gates, access roads, stormwater treatment areas (associated with the Project), O&M Facility, supervisory control and data acquisition (SCADA) system, BESS (including inverters, storage devices, emergency generators, and electrical connection to the Project Substation), Project Substation, power transformer(s), overhead 115 kV Project Gen-Tie Line (Project Substation to Xcel Switchyard), switchgear, metering equipment, and ancillary equipment or buildings as necessary.⁷⁴

59. The panels will be installed on a tracking rack system, generally aligned in rows. A tracker row is made up of modules mounted on a flat-beam-oriented north-south, with a break in the middle where the gear box is located. Lake Wilson Solar proposes to use modules affixed to tracking mechanisms that would allow the modules to "track" the sun from east to west on a daily basis. The modules and tracking rack system are generally aligned in rows oriented north and south with the PV solar modules facing east toward the rising sun in the morning, parallel to the ground during mid-day, and then west toward the setting sun in the afternoon. The modules are rotated by a small motor connected to the tracking rack system to slowly track with the sun throughout the day. The tracking rack system allows the Project to optimize the angle of the modules in relation to the sun throughout the day, thereby maximizing production of electricity and the capacity value of the Project.⁷⁵

60. Solar energy generation begins with the installed solar modules converting energy from sunlight into DC electrical power. Power blocks of tracker rows are electrically connected in series by DC cabling, which terminate at an inverter. Inverters convert the DC power from the modules to 34.5 kV AC power. AC electrical collection cables connect the inverters to the Project Substation where the power is then stepped-up by one or more main power transformers (MPT) from 34.5 kV to 115 kV, which is equal to the voltage of the existing transmission infrastructure associated with the Xcel Energy Fenton - Chanarambie 115 kV HVTL.⁷⁶

61. All electricity generated by the Project's solar arrays will be routed to the Project Substation via underground AC collector cables. The Project Substation will be connected to the new Xcel Switchyard using a short overhead Project Gen-Tie Line and will also route power to the proposed Project BESS. The Xcel Switchyard will serve as the Point of Interconnect (POI) for the Project to the MISO grid system.⁷⁷

62. The Project Substation is proposed in the southwestern part of the Project Area. The Project Substation is estimated to occupy approximately 3.7 acres of land. The Project

⁷³ Ex. LW-9 at 13 (Application for a Site Permit).

⁷⁴ Ex. LW-9 at 14 (Application for a Site Permit).

⁷⁵ Ex. LW-9 at 22 (Application for a Site Permit).

⁷⁶ Ex. LW-33 at 6 (Direct Testimony of Korede Olagbegi).

⁷⁷ Ex. LW-9 at 14 (Application for a Site Permit).

Substation will consist of high voltage electrical structures (i.e., poles), breakers, one or two MPTs to step-up the power from the 34.5 kV feeders to the grid voltage of 115 kV, metering and related equipment for connecting to the transmission grid, lightning protection, and control equipment according to the specifications of the GIA with MISO and Xcel.⁷⁸

63. The proposed new Xcel Switchyard will be used to interconnect the Project to the existing Xcel Energy Fenton - Chanarambie 115 kV HVTL. The Xcel Switchyard and Xcel Line Tap are not part of the Project, but descriptions of this infrastructure are included in the SP Application for the purposes of characterizing the environmental impacts of the Project and the ancillary facilities that will be constructed to connect the Project to the grid. Soil corrections, if determined to be necessary by Xcel Energy, will be made as part of site clearing and preparation prior to construction of the new Xcel Switchyard. Foundations will then be installed, and the new Xcel Switchyard area will be graded, with the ground surface dressed with crushed rock. The new Xcel Switchyard will be fenced-in and protected according to NERC requirements for security and safety purposes.⁷⁹

64. The Xcel Line Tap will be installed in a new easement area from the existing Xcel Energy Fenton - Chanarambie 115 kV HVTL to the new Xcel Switchyard to interconnect the Project to the grid. The length of each of these new lines going to the Switchyard, will be approximately 250-300 feet and will include installation of either two dead-end pole structures (for single dead-ends) or six dead-ends (for 3-pole dead-ends), depending on Xcel Energy's selected design and required electric conductors. Lake Wilson Solar will acquire land (via a purchase option agreement) needed for the new Xcel Switchyard and for the anticipated in/out Xcel Line Tap to the tap location. Xcel Energy will permit, design/engineer and construct the switching facility following its requirements and standards.⁸⁰

65. Upon completion of these tasks, Lake Wilson Solar will transfer the land interests associated with the new Xcel Switchyard site and transmission line easement to Xcel Energy, who will then own and operate the new Xcel Switchyard and associated Xcel Line Tap between the Xcel Switchyard and Fenton - Chanarambie 115 kV HVTL.⁸¹

66. A BESS is included as an associated facility to provide frequency response, capacity on demand, generation smoothing, shifting and/or firming of the power output from the Project. The proposed BESS size will have a power output of 95 MWac and will be a 4-hour system, yielding a storage capability of 380 MWh. The BESS itself would not generate energy, but simply store solar-generated electrical energy and release the stored energy to the grid when desired. The BESS would be a key component of the Project, complementing the solar energy production to create a net power generation that is more predictable and cost-effective than power generated by a system without a BESS.⁸²

67. Lake Wilson Solar anticipates a centralized, AC-coupled system for the BESS (i.e., all batteries being in one location as opposed to distributed throughout the Project), which

⁷⁸ Ex. LW-9 at 23 (Application for a Site Permit).

⁷⁹ Ex. LW-9 at 25 (Application for a Site Permit).

⁸⁰ Id.

⁸¹ Ex. LW-9 at 26 (Application for a Site Permit).

⁸² Ex. LW-9 at 15 (Application for a Site Permit).

would have a footprint of approximately 4 acres by itself, and approximately 6 acres including setbacks and fencing. This type of system allows for more efficient access, monitoring, and maintenance; has more flexible energy and power capacity sizing; and has more flexible dispatch capabilities.⁸³

68. A GIA for the Project was executed with MISO and allows for a maximum injection of 170 MWac to the grid at the POI, consisting of 150 MWac of solar generation and 20 MWac of energy stored by the BESS and later released to the grid.⁸⁴

69. Lake Wilson Solar filed two queue positions with MISO for the Project. A 150 MWac solar queue position was filed in the MISO DPP-2017-AUG study cycle and a 20 MWac BESS queue position was filed in the MISO DPP-2018-APR study cycle. Lake Wilson Solar initially obtained an executed GIA with MISO in September 2021 for the 150 MWac solar queue position. Working with MISO, the GIA was amended and restated in June 2022 to incorporate both the 150 MWac solar and 20 MWac BESS queue positions. Lake Wilson Solar will work with MISO to pursue an additional 75 MWac BESS capacity via MISO's Surplus Interconnection Process.⁸⁵

70. Lake Wilson Solar is seeking approval for up to 95 MWac of BESS capacity, of which 75 MWac of BESS capacity will come from the Surplus Interconnection process described above and the remaining 20 MWac will come from the executed GIA. Together, both avenues of BESS approvals would result in a 95 MWac BESS that would function as a single component associated with the Solar Facility.⁸⁶

71. A 95 MWac/380 MWh AC-coupled BESS would consist of rows of enclosures similar to an ISO container or outdoor-rated modular enclosure or similar. These enclosures would be fully outfitted with auxiliary operations and safety systems (such as HVAC, controls, and fire detection and annunciation). Adjacent to the containers would be rows of pad-mount transformers and inverters. The inverters would be connected to the pad-mount transformers, which will then connect to the Project Substation.⁸⁷

72. The Project's final layout will optimize electrical generation and efficiency of the proposed solar Project while avoiding and minimizing human settlement, environmental, cultural resources, and infrastructure impacts. The Project's facilities will be sited to comply with the County's setback requirements, where feasible, and will also comply with other local, state, and federal regulatory standards. The Project design setbacks meet or exceed the County's setback requirements as provided in the County's Renewable Energy Ordinance, Zoning Ordinance, and Buffer Ordinance. Lake Wilson Solar is committed to continually working with the county to meet setback requirements where feasible. In addition, all DNR buffer requirements under Minn. Stat. § 103F.48 have been met. In addition to these quantitative siting parameters, Lake Wilson Solar will meet all applicable standards of the

⁸³ Ex. LW-9 at 26 (Application for a Site Permit).

⁸⁴ Ex. LW-9 at 14 (Application for a Site Permit).

⁸⁵ Ex. LW-9 at 15 (Application for a Site Permit).

⁸⁶ Ex. LW-9 at 16 (Application for a Site Permit).

⁸⁷ Id.

County's Renewable Energy Ordinance.⁸⁸

73. Lake Wilson Solar estimates the total installed capital cost for the entire Project will be approximately \$450 to \$500 million. Actual capital costs depend on various factors such as construction labor, Project equipment and materials, electrical and communication systems, taxes/tariffs, final design considerations (e.g., access roads, O&M Facility, etc.), as well as potential ongoing impacts from COVID-19.⁸⁹

74. Lake Wilson Solar is working towards securing a Power Purchase Agreement (PPA), Build Transfer Agreement, Development Transfer Agreement, or other enforceable offtake agreements to sell the electricity, Renewable Energy Certificates and Capacity generated by the Project. The power generated by the Project will be offered to wholesale customers, including Minnesota utilities and cooperatives that have identified a need for additional renewable energy and capacity, and C&I customers that have set clean energy goals.⁹⁰

IV. SITE LOCATION AND CHARACTERISTICS

75. The Project is sited in Leeds Township in Murray County, Minnesota.⁹¹

76. Lake Wilson Solar has 100 percent land control for the Project, which is approximately 2,621 acres of private land under solar lease and easement agreements, as well as a portion of land under a purchase option agreement (the Project Area).⁹² Lake Wilson Solar estimates that approximately 1,526 acres of the 2,621 acres is necessary to accommodate the final design and engineering of the proposed up to 150 MW AC Project (i.e., the Preliminary Development Area). The 1,526-acre Project footprint is larger than what is anticipated to ultimately be required to host 150 MWac of solar generating facilities and associated 95 MWac of BESS facilities. The final Project footprint will be dependent on the permitting process, final field surveys, engineering and geotechnical studies, and equipment selection.⁹³ The Preliminary Development Area is generally defined as the area containing all Project facilities located within the Project security fencing (e.g., arrays, inverters, collection lines, etc.) and includes the access roads extending beyond the Project facility fenced area. It also includes the Project Substation, Project BESS, New Xcel Switchyard, Xcel Line Tap and O&M Facility.⁹⁴

77. The Project is located in a rural, agricultural area. Based on the 2020 U.S. Census, the population of Murray County is 8,179 persons, which represents less than one-half percent of the total population of Minnesota⁹⁵

V. SOLAR RESOURCE CONSIDERATIONS

⁸⁸ Ex. LW-9 at 36 (Application for a Site Permit).

⁸⁹ Ex. LW-9 at 20 (Application for a Site Permit).

⁹⁰ Ex. LW-9 at 3 (Application for a Site Permit).

⁹¹ Ex. LW-9 at 13 (Application for a Site Permit).

⁹² Ex. LW-9 at 18 (Application for a Site Permit).

⁹³ Ex. LW-9 at 13 (Application for a Site Permit).

⁹⁴ Ex. LW-9 at 18 (Application for a Site Permit).

⁹⁵ Ex. LW-9 at 67 (Application for a Site Permit).

78. Lake Wilson Solar selected the Project location based upon the proximity to existing electric transmission infrastructure, the successful consummation of the interconnection study process in the form of a generator interconnection agreement (GIA), minimal impact to natural resources, a sufficient solar resource, strong local support, consistency with existing land uses and local zoning, and there being no feasible or prudent alternative to the Project Area with respect to prime farmland.⁹⁶

79. The Project will provide up to 150 MWac of renewable power capacity and generate approximately 332,800 MWh of renewable energy in its first year of operation. Accounting for module degradation and averaging generation over the anticipated life of the Project (35 years), the Project will generate an average of approximately 313,000 MWh annually. Taking the average generation, the Project will provide enough energy to power approximately 28,000 homes annually and prevent approximately 244,500 short tons of carbon dioxide equivalent annually.⁹⁷

VI. PROJECT SCHEDULE

80. Lake Wilson Solar plans to start construction in 2025, with commercial operations beginning by December 31, 2027.⁹⁸

VII. SUMMARY OF PUBLIC COMMENTS

81. Two members of the public provided verbal comments during the Public Information and Environmental Assessment Scoping Meeting (in-person) held on May 10, 2023. The two commenters expressed support for the Project and the benefits to the local economy and workforce.⁹⁹

82. No members of the public spoke during the Public Information and Environmental Assessment Scoping Meeting (remote-access) held on May 11, 2023.¹⁰⁰

83. During the comment period ending August 26, 2021, written comments were filed by DNR, ¹⁰¹ MnDOT, ¹⁰² LIUNA, ¹⁰³ and IUOE Local 49. ¹⁰⁴ On May 10, 2023 the Commission filed an additional written comment from the Minnesota Land & Liberty Coalition. ¹⁰⁵ No site or system alternatives were recommended for study.

84. DNR recommended an adequate buffer and erosion control be maintained between an unnamed stream and the Project border. They also commented that stormwater

⁹⁶ Ex. LW-9 at 13 (Application for a Site Permit).

⁹⁷ Ex. LW-9 at 2 (Application for a Site Permit).

⁹⁸ Ex. LW-33 at 3 (Direct Testimony of Korede Olagbegi).

⁹⁹ Ex. EERA-4 at 10 (Oral Public Comments on Scope of Environmental Assessment).

¹⁰⁰ Ex. EERA-4 at 28 (Oral Public Comments on Scope of Environmental Assessment).

¹⁰¹ Ex. PUC-15 (DNR Comments regarding EA Scoping).

¹⁰² Ex. PUC-14 (MnDOT Comments regarding EA Scoping).

¹⁰³ Ex. PUC-13 (LIUNA Comments regarding EA Scoping).

¹⁰⁴ Ex. PUC-12 (IUOE Local 49 and NCSRC of Carpenters Comments regarding EA Scoping).

¹⁰⁵ Ex. PUC-11 (Public Comment- Minnesota Land & Liberty Coalition).

runoff from the site could contribute to impairments on Beaver Creek.¹⁰⁶

85. DNR also recommended using wildlife friendly erosion control netting rather than synthetic netting. They advised that products containing calcium chloride or magnesium chloride are often used for dust control. Additionally, DNR recommended that the security fence be designed in accordance with the DNR's recently updated *Commercial Solar Siting Guidance*. Finally, DNR advised that LED lighting is often high in blue light, which is harmful to birds, insects, and other animals. Potential project impacts related to illuminated facilities can be avoided or minimized by using shielded and downward facing lighting and lighting that minimizes blue hue.¹⁰⁷

86. MnDOT's commented on soil impacts and erosion control related to trunk highway 30, potential need for an oversize/overweight permit and that Lake Wilson Solar should coordinate with MnDOT throughout the planning process.¹⁰⁸

87. LIUNA's comments recognize with appreciation Lake Wilson Solar's stated priority to use local labor, how addition of battery storage could maximize the economic and energy benefits of the Project while helping to ease transmission congestion, and that this Project will further Minnesota's goals of increasing renewable energy output with the potential to support the regional economy.¹⁰⁹

88. The IUOE Local 49 and NCSRC of Carpenters filed comments recognizing the Project's impact in advancing Minnesota's new 100% carbon-free standard by 2040. ¹¹⁰

89. The Minnesota Land & Liberty Coalition commented in support of the Project noting how the Project's proposed development protects the private property rights of farmers and landowners by allowing them to invest in their land and will contribute to building a resilient and reliable energy grid by diversifying our electricity generation.¹¹¹

<u>90.</u> On November 28 and 29, 2023, the Judge presided over joint public hearings on the SP Application and the CN Application for the Project via in-person and remote means, respectively.¹¹² Commission staff, EERA staff, and representatives from Lake Wilson Solar were present. Four members of the public spoke during the November 28, 2023 public hearing (in-person), expressing concern about potential glare and visual impacts, reiterating the need for local coordination on emergency response issues and roads, asking questions about potential impacts to neighbors and offering support for the Project and the positive economic impact it will have on the community.¹¹³ No members of the public spoke during the remote-access public hearing held on November 29, 2023.¹¹⁴

¹⁰⁶ Ex. PUC-15 (DNR Comments regarding EA Scoping).

¹⁰⁷ Id.

¹⁰⁸ PUC-14 (MnDOT Comments regarding EA Scoping).

¹⁰⁹ Ex. PUC-13 (LIUNA Comments regarding EA Scoping).

¹¹⁰ Ex. PUC-12 (IUOE Local 49 and NCSRC of Carpenter Comments regarding EA Scoping).

¹¹¹ Ex. PUC-11 (Public Comments - Minnesota Land & Liberty Coalition)

¹¹² Ex. PUC-21 (notice of EA Availability and Public Hearing)

¹¹³ See generally, November 28, 2023, Public Hearing Transcript.

¹¹⁴ See generally, November 29, 2023, Public Hearing Transcript.

90.91. During the public hearings held on November 28 and 29, 2023, Murray County submitted public comment requesting vegetative screening of the Project around the BESS and along State Highway 30. Section 4.3.8 of the Sample Site Permit would require Lake Wilson Solar to consider the County's input pertaining to visual impacts from the Project. Lake Wilson Solar stated it has no objection to this condition as modified by EERA. Lake Wilson Solar has engaged with the County to determine what actions, if any, are necessary to alleviate the County's concerns, and is considering its input.

<u>91.92.</u> In addition, during the public comment period ending December 11, 2023, DNR, ¹¹⁵ EERA ¹¹⁶ and Southwest Regional Development Commission, ¹¹⁷ filed written comments.

<u>92.93.</u> On September 28, November 21 and 30, and December 4, $202\underline{32}$, the Commission filed written comments that had been submitted by members of the public. The comments included a broad range of topics, including: concerns regarding potential damage to drain tile, removal of farm land, glare, <u>labor practices</u>; and the GIA with MISO.

SITE PERMIT

I. SITE PERMIT CRITERIA

93.94. Large electric power generating plants (LEPGP) are governed by Minn. Stat. § 216E and Minn. R. part 7850. Minn. Stat. § 216E.01, subd. 5, defines a "large electric power generating plant" as "electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more."

94.95. On November 4, 2021, Lake Wilson Solar submitted information to the Minnesota Department of Commerce requesting a size determination for the Project. On December 22, 2021, EERA informed Lake Wilson Solar that, based on the information provided, the Project is subject to the Commission's siting authority under Minn. Stat.§ 216E. Therefore, a site permit is required prior to construction of the Project.¹¹⁸

95.96. A LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04. Lake Wilson Solar filed the SP Application under the process established by the Commission in Minn. R. parts 7850.2800- 7850.3900.¹¹⁹

96.97. Under Minn. Stat. § 216E.04, for a LEPGP permitted under the alternative permitting process, EERA prepares an environmental assessment, for the Commission, containing information on the human and environmental impacts of the proposed project and

¹¹⁵ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>).

¹¹⁶ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

¹¹⁷ Comments – Southwest Regional Development Commission (November 30, 2023) (eDocket Nos. <u>202311-</u> <u>200836-01</u> [SP] and <u>202311-200836-02</u> [CN]).

¹¹⁸ Ex. LW-11 and Ex. LW-12 (SP Application Appendix A-1 – Public Size Determination Form and SP Application Appendix A-2 – EERA Size Determination Response).

¹¹⁹ Ex. LW-2 (Notice of Intent to Submit a Site Permit).

addresses mitigating measures. The EA is the only state environmental review document required to be prepared on the Project.

<u>97.98.</u> EERA is responsible for evaluating the site permit application and administering the environmental review process.

II. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT¹²⁰

A. Human Settlement

<u>98.99.</u> The Project is sited in rural Leeds Township, Murray County, Minnesota.¹²¹ Based on the 2020 U.S. Census, the population of Murray County was 8,179 persons, which represents less than one half percent of the total population of Minnesota.¹²²

<u>99.100.</u>The construction of the Project will not displace residents or change the demographics of the Project Area.¹²³

<u>100.101.</u> The impact on cultural values is not anticipated to impact or alter the work and leisure pursuits of residents in such a way as to impact the underlying culture of the area. Differences between cultural values related to renewable energy and rural character has the potential to create tradeoffs that cannot be addressed in the site permit.¹²⁴ There are no known archaeological or historic resources in the Project Area.¹²⁵

1. <u>Zoning and Land Use</u>

<u>101.102.</u> The Project Area is zoned agricultural with lesser areas of special protection (i.e. Shoreland). The Murray County Zoning Ordinances states that large solar energy systems are conditionally allowed in the Agricultural District. Per the Murray County Renewable Energy Ordinance, the Project uses are compatible with local land use regulations for solar energy systems. The County has determined that these types of land uses are acceptable in the Agricultural District upon issuance of a permit.¹²⁶

<u>102.103.</u> The Murray County Zoning Ordinance applies to solar energy systems that are not otherwise subject to siting and oversight by the State of Minnesota under the Minnesota Power Plant Siting Act (Minn. Stat. § 216E). Pursuant to Minn. Stat. § 216E.10, subd. 1, the Site Permit is the only site approval required for construction of the proposed Project. A Site Permit supersedes and preempts all zoning, building, or land use rules, regulations, or ordinances put in place by regional, county, local and special purpose governments, although the review by the Commission will take local land use into consideration. Lake Wilson Solar

¹²⁰ See Minn. R. part 7850.4100.

¹²¹ Ex. LW-9 at 13 (Application for a Site Permit).

¹²² Ex. LW-9 at 67 (Application for a Site Permit).

¹²³ Ex. LW-9 at 56 (Application for a Site Permit).

¹²⁴ Ex. EERA-11 at 9 (Environmental Assessment).

¹²⁵ Ex. LW-9 at 86 (Application for a Site Permit).

¹²⁶ Ex. LW-9 at 76 (Application for a Site Permit).

has applied County standards to the Project where feasible.¹²⁷

<u>103.104.</u> There are no state forests, national forests, or national wildlife refuges within close proximity to the Project boundaries. Additionally, there are no state-owned Off-Highway Vehicle trails and no DNR scientific and natural areas identified within a mile of the Project boundary. Also, no lakes with public access are located in the Project boundary.¹²⁸

<u>104.105.</u> The Project will change the land use from agricultural to solar energy generation use for at least the life of the Project. The temporary conversion of agricultural land to the solar facility will have a relatively minimal impact on the rural character of the surrounding area or Murray County.¹²⁹ Upon decommissioning and removal of the Project, the affected parcels may be returned to the existing agricultural use or transitioned to other planned land uses.¹³⁰

<u>105.106.</u> Of the 461,000 acres in Murray County, the majority is classified as agricultural land. Impacts to 1,478.7 or less acres of agricultural land within the planned Project facility would reduce the amount of agricultural land in the County by less than one half percent.¹³¹

<u>106.107.</u> The Project meets or exceeds all county setback requirements for renewable energy facilities.¹³²

<u>107.108.</u> The Project has been designed in compliance with the Murray County Renewable Energy Ordinance, Zoning Ordinance, and Buffer Ordinance. Agricultural activities may be resumed upon decommissioning of the Project. Components of the Project may be located in areas where there is a planned extension of water, sewer, or other services. Construction of the Project would not preclude the future orderly extension of these services across property under Lake Wilson Solar's control as these extensions would likely be accomplished by utilizing existing public rights-of-way which will not be impacted by the Project. Since a majority of the Project land will be temporarily leased from participating landowners and land will be returned to agricultural use upon decommissioning of the Project, the Project will further the County's goals of providing long-term agricultural opportunities.¹³³

<u>108.109.</u> Normal agricultural activities can continue within some portions of the Project Area not converted to solar modules, access roads, O&M Facility, BESS, transmission facilities, and fencing. After the useful life of the Project, the current agricultural land use would be restored by decommissioning the Project¹³⁴ in accordance with the Decommissioning

¹²⁷ Id.

¹²⁸ Ex. LW-9 at 72 (Application for a Site Permit).

¹²⁹ Ex. LW-9 at 78 (Application for a Site Permit).

¹³⁰ Ex. LW-9 at 79 (Application for a Site Permit).

¹³¹ Ex. LW-9 at 78 and 80 (Application for a Site Permit).

¹³² Ex. LW-9 at 36-37 (Application for a Site Permit).

¹³³ Ex. LW-9 at 78 (Application for a Site Permit).

¹³⁴ Ex. LW-9 at 79 (Application for a Site Permit).

Plan to be prepared by Lake Wilson Solar and submitted to the Commission prior to operation. 135 136

2. Property Values

109.110. Impacts to the value of specific properties within the Project vicinity are difficult to determine but could occur. Because of this uncertainty, impacts to specific properties could be minimal to moderate, but are expected to be within 0.5 miles of the Project area and to decrease with distance from the Project and with time. Impacts in the Project vicinity are anticipated to decrease with distance to the Project, and significant negative effects to property values are not anticipated. However, impacts to a specific property's value are difficult to determine.¹³⁷

<u>110.111.</u> Electrical generating and transmission facilities can impact property values. Often, negative effects result from impacts that extend beyond the project location. Examples include emissions, noise, and visual impacts. Unlike fossil-fueled electric generating facilities, the Project would not generate emissions through the energy production process. Potential impacts from operational noise are not anticipated. Aesthetic impacts will occur, but because the Project is relatively short (in comparison to a wind turbine or a smokestack) impacts would be localized and limited in geographic scope.¹³⁸

<u>111.112.</u> Based on analysis of other utility-scale solar projects, significant negative impacts to property values in the Project vicinity are not anticipated. Aesthetic impacts that might affect property values would be limited to residences and parcels in the Project vicinity where the solar panels are easily visible. ¹³⁹ While it is possible that specific, individual property values may be negatively impacted, such impacts can be mitigated by reducing aesthetic impacts and encumbrances to future land use, or through individual agreements with landowners.¹⁴⁰

<u>112.113.</u> Unlike fossil-fueled electric generating facilities, the Project would not generate emissions through the energy production process.¹⁴¹ Noise levels during operation of the Project are anticipated to be negligible.¹⁴²

3. Aesthetic Impacts

<u>113.114.</u> The existing landscape in the Project Area is rural and agricultural consisting of flat to gently rolling row crop fields of corn and dry beans.¹⁴³

<u>114.115.</u> There are 3 residences and no businesses within the Project Area, and 22

⁴³⁵ Ex. LW 9 at 79 (Application for a Site Permit).

¹³⁶ See Section 9.1 of the Sample Site Permit.

¹³⁷ Ex. EERA-11 at 10 (Environmental Assessment).

¹³⁸ Ex. EERA-11 at 45 (Environmental Assessment).

¹³⁹ Ex. EERA 11 at 46 (Environmental Assessment).

¹⁴⁰ Ex. EERA-11 at 46 (Environmental Assessment).

¹⁴¹ Ex. EERA-11 at 45 (Environmental Assessment).

¹⁴² Ex. EERA-11 at 43 (Environmental Assessment).

¹⁴³ Ex. EERA-11 at 34 (Environmental Assessment).

residences in the Project vicinity.¹⁴⁴ Farmsteads in the area (often containing a farmhouse with barns, machine sheds and grain storage) are sprinkled across the landscape approximately 0.25 to 1 mile apart. Most farms have planted windbreaks consisting of trees and shrubs around them. Untilled lines of trees and shrubs can be seen along fence rows.¹⁴⁵

<u>115.116.</u> Since the Project Area and vicinity are generally flat with existing trees along agricultural fields and vegetative cover along wind rows, the visual impact of the Project is expected to be limited to higher elevation points, as well as immediately surrounding land, which is mitigated to an extent by existing vegetative screening at most residences. The feedback that Lake Wilson Solar has gathered from surrounding landowners or community for the Project to date, aside from the County's concerns about potential visual impacts from the BESS¹⁴⁶, has not indicated aesthetic or visual concerns associated with the Project. The Project has garnered strong positive landowner involvement and support, as well as overall wide community support.¹⁴⁷

<u>116.117.</u> In its December 11, 2023, comments, EERA proposed changes to <u>Section</u> 4.3.8 of the Sample Site Permit to address potential aesthetic concerns.¹⁴⁸ In its response to comments, Lake Wilson Solar stated it has no objection to EERA's proposed changes, but recommended a minor change to remove reference to a permit condition that does not exist.¹⁴⁹ The resulting suggested permit language for Section 4.3.8 is:

The Permittee shall consider input pertaining to visual impacts from the local unit of government having direct zoning authority over the area in which the Project is located. The Permittee shall use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Project during construction and operation.¹⁵⁰

<u>117.118.</u> The Project PV solar modules (surrounded by security fence) will be visible from adjacent roadways and parcels up to approximately 0.5 mile from the arrays given their relative low profile and color. Project fencing will look similar to existing agricultural field fencing. While relatively few trees exist within the Project Area, Lake Wilson Solar has designed the Project to avoid tree clearing which will help to break up the view of the arrays in some areas.¹⁵¹

<u>118.119.</u> The addition of Project facilities is not expected to significantly alter the viewshed or increase visual impacts, which are unavoidable, but subjective and unique to the individual. Aesthetic impacts due to the Project are unavoidable and are anticipated to be moderate but will vary widely as visual impacts are subjective and unique to the individual. For residents outside the Project vicinity and for others with low viewer sensitivity, such as travelers along State Highway 30, aesthetic impacts are anticipated to be minimal. For residents

¹⁴⁴ Id.

¹⁴⁵ Ex. LW-9 at 63 (Application for a Site Permit).

¹⁴⁶ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. _____ [SP] and _____ [CN]).

¹⁴⁷ Ex. LW-9 at 65 (Application for a Site Permit).

¹⁴⁸ Comments – EERA (December 11, 2023) (eDocket Nos. 202312-201104-01 [SP] and 202312-201104-02 [CN]).

¹⁴⁹ Reply Comments – Lake Wilson Solar (December 21, 2023) eDocket Nos. ____ [SP] and ____ [CN]).

¹⁵⁰ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

¹⁵¹ Ex. LW-9 at 66 (Application for a Site Permit).

in the Project vicinity and for others with high viewer sensitivity traveling on local roads in the Project vicinity, aesthetic impacts are anticipated to be moderate to significant.¹⁵²

<u>119.120.</u> Impacts to light-sensitive land uses are not anticipated given the rural Project location coupled with minimal required lighting for operations. Exterior security lighting will be installed at the substation, O&M facility, and switchyard. Lights will be used as needed by maintenance personnel if work is required after dark. A motion-sensing, down casting security light will be installed at the entrance, and switch activated lights will be placed at each inverter for repair purposes. The motion-activated and down lit aspects of the lighting system will minimize impacts and effects.¹⁵³

<u>120.121.</u> In its December 5, 2023 written comments, DNR recommended a special permit condition requiring the Applicant to use shielded and downward facing lighting and LED lighting that minimizes blue hue at the Project substation and O&M building. ¹⁵⁴ In its response to comments, Lake Wilson Solar stated it has no objection to such a special condition, and proposed the following language based on the example provided by DNR:

*The Permittee must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation and operations and maintenance facility. Downward facing lighting must be clearly visible on the site plan submitted for the project.*¹⁵⁵

4. <u>Public Service and Infrastructure</u>

<u>121.122.</u> Access to the Project will be via existing Township and County roads. The major roadways in the area are MN State Highway 30 to the north of the Project running west/east, and County Highway 28 which is through the Project Area running north/south. Other roads providing access points to the solar facility are 70th Avenue, 90th Avenue, 81st Street, and 91st Street.¹⁵⁶

<u>122.123.</u> During the construction phase, temporary impacts are anticipated on some public roads within the vicinity of Project facilities, primarily through additional construction worker traffic, equipment and material deliveries and potentially slow-moving construction vehicles.¹⁵⁷

<u>123.124.</u> There will be several access points to the Project. The western portion of the Project will be accessed from 70th Avenue. The central portion of the Project will be accessed from County Highway 28, 90th Avenue, 81st Street, and 91st Street. The eastern portion of the Project will be accessed from 90th Avenue, 81st Street, and 91st Street.¹⁵⁸

124.125. Section 4.3.22 (Roads) of the Sample Site Permit, as modified by EERA

¹⁵⁷ Ex. LW-9 at 74 (Application for a Site Permit).

¹⁵² EA at 4 and 9

¹⁵³ Ex. EERA-11 at 35 (Environmental Assessment).

¹⁵⁴ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>).

¹⁵⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

¹⁵⁶ Ex. EERA-11 at 48 (Environmental Assessment).

¹⁵⁸ Id.

and agreed to by Lake Wilson Solar, addresses roads.¹⁵⁹ That permit condition requires the Permittee to inform road authorities of roads that will be used during construction and acquire necessary permits and approvals for oversize and overweight loads.¹⁶⁰ Additionally, Section 4.3.5 (Public Services and Public Utilities) of the Sample Site Permit, as modified by EERA and agreed to by Lake Wilson Solar, requires the Permittee to minimize disruption topublic services and public utilities and to restore service promptly if disrupted by the Permittee.¹⁶¹

125.126. The electric providers in the Project Area are Nobles Cooperative Electric and Xcel Energy. Xcel Energy provides electric service to the cities of Lake Wilson and Hadley as well as areas along the Lake Wilson-Chandler Tap 69 kV and the Hadley-Lake Wilson 69 kV HVTL that travel east to west across the center of the Project Area. Nobles Cooperative Electric provides electric service to the rest of the Project Area. There are electric distribution lines and four other HVTLs throughout the Project Area.¹⁶² The Project Area is not serviced by city water supply or sanitary sewer and residents in the Project Area have private wells for domestic or farming water needs and private septic systems of drain fields for domestic wastewater. The Minnesota Well Index (MWI) identifies seven domestic wells or boring holes within the Project Area; four of these records are sealed and three are listed as active domestic wells.¹⁶³

<u>126.127.</u> No AM, FM, microwave, television, or other radio towers were identified in the Project Area according to publicly available FCC sources. Three Private Mobile Transmission Towers were identified within one mile of the Project Area boundary. There are numerous telephone services and broadband providers in Murray County.¹⁶⁴

<u>127.128.</u> Lake Wilson Solar will coordinate with Gopher State One Call before and during construction to fully understand infrastructure, utility locations and safety concerns and to avoid possible structural conflicts. Lake Wilson Solar will also conduct an American Land Title Association survey to identify the locations of underground utilities. Final design will minimize and avoid impacts to underground utilities; if conflicts are unavoidable Lake Wilson Solar will coordinate with the utility to develop an approach to reroute or otherwise protect the utility. Underground utilities will be marked prior to construction start.¹⁶⁵

<u>128.129.</u> No long-term impacts to utilities will occur as a result of the Project. Limited, temporary impacts to service may occur during interconnection of the Project into the existing Xcel Energy Fenton - Chanarambie 115 kV HVTL. These outages are anticipated to be of short duration and closely coordinated with utilities and landowners.¹⁶⁶

<u>129.130.</u> The solar facility is not expected to impact air safety given that the nearest

¹⁵⁹ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]). ¹⁶⁰ Sample Site Permit at 4 (October 2, 2023) (eDocket No. <u>202310-199322-01</u>). Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

¹⁶¹ Sample Site Permit at 9 (October 2, 2023) (eDocket No. 202310-199322-01). Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

¹⁶² Ex. EERA-11 at 48 (Environmental Assessment).

¹⁶³ Id.

¹⁶⁴ Ex. LW-9 at 73 (Application for a Site Permit).

¹⁶⁵ Id.

¹⁶⁶ Ex. EERA-11 at 50 (Environmental Assessment).

airport is over four miles away. PV panels typically reflect approximately three percent of the sunlight when the panels are directly facing the sun. Because of this, glare and reflection are expected to be minor and are not expected to affect flight paths or air traffic control.¹⁶⁷.

<u>130.131.</u> No natural gas or hazardous liquid pipelines were identified in the Project Area; therefore, no mitigation is needed or planned concerning airports¹⁶⁸.

5. <u>Recreational Resources</u>

<u>131.132.</u> Murray County has many various recreational opportunities, primarily including snowmobiling, swimming, kayaking, hiking, camping, bicycling, nature walking, picnicking, boating, and fishing. Murray County also provides people with opportunities to explore museums, parks, and nature centers. There are recreational lakes present in Murray County, including Lake Chetek, Lake Sarah, Lake Wilson, Moon Lake, and Summit Lake.¹⁶⁹

<u>132.133.</u> According to the DNR Recreation Compass, there are no state forests, national forests, or national wildlife refuges in proximity to the Project Area. Additionally, there are no state-owned Off-Highway Vehicle (OHV) trails and no DNR Scientific & Natural Areas (SNAs) identified within a mile of the Project Area boundary. Also, no lakes with public access are located in the Project Area.¹⁷⁰

<u>133.134.</u> There are no snowmobile, biking, or walking trails within the Project vicinity. The nearest trail is Beaver Creek snowmobile trail 1 mile north of the Project Area and parallel to 111th street.¹⁷¹

<u>134.135.</u> Camp Summit is an RV park with recreational activities located in Hadley about 1 mile away from the Project Area, and is the only local park located within one mile of the Project Area. No adverse impacts on Camp Summit are anticipated from construction or operation of the Project due to Camp Summit's distance from the proposed Project.¹⁷²

135.4._No significant impacts to any other recreational opportunities are anticipated and, therefore, no mitigative measures are proposed for development of the Project.¹⁷³

136. Wildlife Management Areas (WMAs) are in the Project vicinity outside of the Project Area, the nearest being Carlson State WMA which is directly adjacent. Construction of the Project is not expected to impact any recreation areas other than potentially Carlson WMA, which borders the Project Area. This WMA has a small, high-quality remnant prairie and seeded prairie with primarily deer and pheasants.¹⁷⁴ Construction noise is expected to impact Carlson WMA because it will be across the street from some Project construction. PV panels may be visible to the East for users of Carlson WMA after construction, but their presence is

¹⁶⁷ *Id*.

¹⁶⁸ Ex. EERA-11 at 48 (Environmental Assessment).

¹⁶⁹ Ex. LW-9 at 71 (Application for a Site Permit).

¹⁷⁰ Ex. LW-9 at 72 (Application for a Site Permit).

¹⁷¹ Ex. EERA-11 at 46 (Environmental Assessment).

¹⁷² Ex. LW-9 at 72 (Application for a Site Permit).

⁴⁷³ Ex. EERA-11 at 47 (Environmental Assessment).

not anticipated to significantly impact users due to significant vegetation buffering within the WMA and the lack of PV panels on the other WMA borders.¹⁷⁵

<u>137.</u> If construction BMPs are employed properly near the eastern border of Carlson WMA, significant permanent impacts are expected to be mitigated.¹⁷⁶ The majority of the construction will not occur within 1 mile of Carlson WMA. No additional mitigation measures are proposed.¹⁷⁷

——No significant impacts to any other recreational opportunities are anticipated and, therefore, no additional mitigative measures are proposed for development of the Project.¹⁷⁸

137.138.

6. Public Health and Safety

<u>138.139.</u> The term "EMF" refers to electric and magnetic fields that are present around any electrical device. Electrical lines in the United States have a frequency of 60 cycles per second or 60 hertz, which is extremely low frequency EMF (ELFEMF).¹⁷⁹

<u>139.140.</u> Potential impacts are anticipated to be negligible and are not expected to negatively affect human health. Impacts will be long-term and localized but can be minimized. The primary sources of EMF from the generating facility will be from the solar arrays, buried electrical collection lines, and the transformers installed at each inverter. The EMF generated by solar arrays is at the level generally experienced near common household appliances. Measured magnetic fields at utility-scale PV projects drop to very low levels of 0.5 mG or less at distances of 150 feet from inverters. For electrical collection lines, a study found at 27.5 kV (slightly lower voltage than the project lines) that magnetic fields are within background levels at 1 meter above ground. The nearest residence to solar arrays is approximately 238 feet. At this distance, magnetic fields from the Project dissipate to background levels.¹⁸⁰

140.141. BESSs are a relatively new technology that come with inherent risk as they're employed in early phases of implementation, however, there is a growing body of research and standards that have been applied to avoid incidents and enhance safety. The main safety hazard of a BESS is battery failure leading to fire which has the potential to spread to nearby batteries and containers, quickly presenting an emergency situation.¹⁸¹ Lake Wilson Solar has incorporated many safety precautions into the design of the proposed BESS. The BESS will be designed and operated safely by complying with safety codes, regulations, and industry recommendations. Newly developed standards described in the McMicken Battery Energy Storage System Event Technical Analysis and Recommendations along with 2023 standards from the National Fire Protection Association 855 such as the Standard on Explosion Prevention Systems, and design compliance with International Fire Code and National Electric

¹⁷⁷ *Id*.

¹⁷⁵ Ex. EERA-11 at 47 (Environmental Assessment)

¹⁷⁶ Id.

 $[\]frac{178}{170}$ Id.

¹⁷⁹ Ex. EERA-11 at 53 (Environmental Assessment).

¹⁸⁰ Ex. EERA-11 at 56 (Environmental Assessment).

¹⁸¹ Ex. EERA-11 at 58 (Environmental Assessment).

<u>Code are expected to prevent incidents</u>Safety will be Lake Wilson Solar's foremost principle during construction and operation. Safe design and operation of the BESS begins with safe equipment and compliance with safety codes, regulations, and industry recommendations. Lake Wilson Solar will stay abreast of new codes and standards to ensure its equipment vendors and designs comply with industry standards and best practices.¹⁸²

141.142. Construction and operation of the Project will have minimal impacts on the health and safety of the local populace, and the level of use/service potentially needed by the Project is expected to be low. The Project is being engineered and designed and will be constructed to meet applicable NSC, MISO, state, and local electrical standards, including fencing and locked gates to exclude people who are not authorized to access the Project, and therefore will pose minimal safety and security risks to the public. The Project arrays will be fenced/secured, and access allowed for authorized personnel via lockable gates. The Project Substation, new Xcel Switchyard, and BESS will also be fenced with controlled/locking access gates. Signs will be posted to warn unauthorized persons not to enter fenced areas and of the presence of electrical equipment associated with Project facilities.¹⁸³

<u>143.</u> Lake Wilson will provide training resources for local responders, as well as the collaborative development of an emergency response plan (ERP) specific to the Project prior to operation as required by Section 8.10 of the Sample Site Permit. The Project's ERP will require quarterly safety drills for the team and annual safety training with local first responders covering a wide breadth of possible incidents at the site such as fire and medical emergencies. The ERP will provide BESS minimum approach distances for first responders and will require any first responder to wear a self-contained breathing apparatus if they need to enter the minimum approach distance.¹⁸⁴

142.144. No significant impacts to public health and safety are expected to result from construction and operation of the Project. Further, the Sample Site Permit contains conditions to address public health and safety. Section 4.3.29 (Public Safety) of the Sample Site Permit addresses public safety, including landowner educational materials, warning signs, traffic control, etc. Section 8.10 (Emergency Response) requires permittees to file an emergency response plan with the Commission prior to construction. Section 8.11 (Extraordinary Events) requires notification of extraordinary events to the Commission such as fires, injuries, etc.

B. Land-based Economies

1. Local Economy

<u>143.145.</u> The Project will result in both short- and long-term benefits to the local economy.¹⁸⁵

144.146. Landowner compensation is established by voluntary solar lease and

¹⁸² Ex. LW-9 at 28 (Application for a Site Permit).

¹⁸³ Ex. LW-9 at 52 (Application for a Site Permit).

¹⁸⁴ Ex. EERA-11 at 57 (Environmental Assessment).

¹⁸⁵ Ex. EERA-11 at 51 (Environmental Assessment).

easement or purchase option agreements between the landowners and Lake Wilson Solar for lease or purchase of the land for the Project.¹⁸⁶

<u>145.147.</u> The Project is expected to generate an estimated average annual solar energy production and property tax revenue over the life of the Project of approximately \$330,000 for Murray County and approximately \$75,000 for Leeds Township.¹⁸⁷

<u>146.148.</u> Effects on temporary or permanent housing are anticipated to be negligible. During construction, out-of-town laborers will likely use lodging facilities nearby. The operations and maintenance of the facility will require approximately four or five long-term personnel. The Project is also expected to support up to 250 jobs during the construction and installation phases, and during the anticipated 35-year operational life of the Project it is expected to support up to 5 onsite jobs and 11 indirect jobs in Murray County, and an additional 9 indirect jobs in the State of Minnesota. The Project will also contribute to the local economy through land rent payments to participating landowners and direct/indirect purchases of goods and services.¹⁸⁸

147.—Additionally, Section 8.5 (Labor Statistic Reporting) of the Sample Site Permit requires quarterly reports concerning efforts to hire Minnesota workers.¹⁸⁹ <u>These workers will</u> be subject to pay no less than the prevailing wage rate as defined in Minnesota Statute 177.42.

148,149. Section 9 (Decommissioning and Restoration) of the Sample Site Permit as modified by EERA and agreed to by Lake Wilson Solar, addresses Project decommissioning, specifically requiring the Permittee to file a decommissioning plan with the Commission prior to operation; establishing the Permittee as the responsible party for carrying out decommissioning tasks and sets out minimum standards for restoration and timelines; and addresses abandoned solar installations.

> Lake Wilson Solar will incorporate EERA's comments on the draft decommissioning plan in the decommissioning plan required under Section 9.1 of the Sample Site Permit.

150.

2. Agriculture

<u>149.151.</u> Agricultural use encompasses nearly 100% of the land within the Project Area, with corn and soybean crops and fallow field covering roughly 82% of the total land area. The remaining land is mostly made up of other agricultural land.¹⁹⁰

150.152. The Project will temporarily impact up to approximately 1,526 acres of

¹⁸⁶ Ex. LW-9 at 4 (Application for a Site Permit).

¹⁸⁷ Ex. LW-9 at 70 (Application for a Site Permit).

¹⁸⁸ Ex. LW-9 at 70 (Application for a Site Permit).

¹⁸⁹ Sample Site Permit at 14 (October 2, 2023) (eDocket No. <u>202310-199322-01</u>).

¹⁹⁰ Ex. LW-9 at 80 (Application for a Site Permit).
cropland and will not allow those landowners to use that land for agricultural purposes during the life of the Project. The Project will not result in a significant impact to land-based economies in Murray County as this acreage constitutes less than 0.5% of the cropland land in the county (362,082 acres). Agricultural production would continue in the surrounding areas during construction and operation of the Project.¹⁹¹

<u>151.153.</u> Agricultural production would be allowed to continue in certain areas within the Project Area but outside the fenced portion of the Project during construction and operation of the Project.¹⁹²

<u>152.154.</u> Livestock operations are located within the Project Area and adjacent to the Project Area; however, no direct impacts to livestock are anticipated except for minor disturbances during construction. No conversion of feedlots or pastureland is proposed by Lake Wilson Solar.¹⁹³

<u>153.155.</u> Potential impacts to agricultural producers are anticipated to be minimal—lost farming revenues will be offset by easement agreements.¹⁹⁴

<u>154.156.</u> EERA staff proposed moving the requirement for an Agricultural Impact Mitigation Plan (AIMP) from a special condition to a standard condition. The condition would require that Lake Wilson Solar develop an AIMP in coordination with the Minnesota Department of Agriculture (MDA) and file the AIMP with the Commission 14 days prior to the pre-construction meeting.¹⁹⁵ In its response to comments, Lake Wilson Solar stated it has no objection to this permit condition.¹⁹⁶

3. Prime Farmland

<u>155.157.</u> Prime farmland is defined by federal regulation in 7 CFR 657.5 (a) (1) as "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses."¹⁹⁷

<u>156.158.</u> Subject to certain exceptions, Minn. Admin. R. 7850.4400, Subp. 4 prohibits large energy power generating plants from being sited on more than 0.5-acre of prime farmland per MW of net generating capacity unless there is no feasible and prudent alternative.¹⁹⁸

<u>157.159.</u> Given the up to 150 MWac net generating capacity of the Project, the prime farmland exclusion rule would allow use of up to 75 acres of prime farmland for the Project. Approximately 762 acres of prime farmland, 415 acres of prime farmland if drained, and 7 acres of prime farmland if protected from flooding or not frequently flooded during the

¹⁹¹ Ex. EERA-11 at 100 (Environmental Assessment).

¹⁹² Ex. LW-9 at 80 (Application for a Site Permit).

¹⁹³ Ex. LW-9 at 81 (Application for a Site Permit).

¹⁹⁴ Ex. EERA-11 at 10 (Environmental Assessment).

¹⁹⁵ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

¹⁹⁶ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

¹⁹⁷ Ex. EERA-11 at 60 (Environmental Assessment).

¹⁹⁸ Ex. LW-9 at 52 (Application for a Site Permit).

growing season are located within the Preliminary Development Area.¹⁹⁹

158.160. The prime farmland exclusion rule allows use of a site that exceeds the rule's allowance of 0.5-acre of prime farmland per MW of net generating capacity if there is no feasible or prudent alternative. Lake Wilson Solar completed a detailed evaluation of a potential alternative site in an attempt to find a location for the Project that would utilize fewer acres of prime farmland and presented evidence that Lake Wilson Solar was unable to find a feasible or prudent alternative to the Project and therefore satisfied the prime farmland exclusion rule.²⁰⁰

159.161. In accordance with Minn. Stat. §216E.04, Subd. 2(8), the Project qualifies for the alternative review process under Minn. Admin. R. 7850.2800-7850-3900 because it is a large electric power generating plant that is powered by solar energy. As such, Lake Wilson Solar is not required to analyze alternative sites pursuant to Minn. Admin. R. 7850.3100 unless it rejected alternative sites. Lake Wilson Solar did seek and analyze other areas in Minnesota where the Project could have been sited to be compliant with the prime farmland exclusion rule. However, these areas were determined to not be feasible or prudent for siting the Project and were not carried forward as Project alternatives. No site control leases or easements are held on the areas by Lake Wilson Solar or its affiliates.²⁰¹

<u>160.162.</u> Lake Wilson Solar selected the proposed Project Area due to minimal environmental impacts, proximity to the electrical grid and existing transmission infrastructure, willing landowner participation, and available capacity on the grid to which the Project will interconnect.²⁰²

<u>161.163.</u> The Sample Site Permit, as modified by EERA²⁰³ and Lake Wilson Solar,²⁰⁴ contains multiple sections addressing soil and agricultural related issues associated with the Project.²⁰⁵

C. Archaeological and Historic Resources

<u>162.164.</u> The Phase I Archaeological field survey for the original planned development areas was completed in November 2021. Results of the field investigation concluded that no new or previously recorded archaeological, architectural, or historic sites were present in the original development area.²⁰⁶

²⁰² Id.

Weeds), and 4.3.23 (Restoration) (October 2, 2023) (eDocket No. 202310-199322-01)

¹⁹⁹ Id.

²⁰⁰ Ex. EERA-11 at 62 (Environmental Assessment).

²⁰¹ Ex. LW-9 at 52 (Application for a Site Permit).

²⁰³ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>); Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

²⁰⁴ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>); Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

 ²⁰⁵ See Sample Site Permit at Sections 4.3.1 (Field Representative), 4.3.2 (Site Manager), 4.3.8 (Topsoil Protection),
 4.3.9 (Soil Compaction), 4.3.10 (Soil Erosion and Sediment Control), 4.3.13 (Native Prairie), 4.3.14 (Vegetation Removal), 4.3.15 (Beneficial Habitat), 4.3.15 (Application of Pesticides), 4.3.18 (Invasive Species), 4.3.19 (Noxious

²⁰⁶ Ex. EERA-11 at 64 (Environmental Assessment).

<u>163.165.</u> An additional Phase I Archaeological field survey of areas not previously surveyed due to the shift east in the Project's Preliminary Development Area was completed in late October 2022 with similar results²⁰⁷

<u>164.166.</u> Should previously unknown archaeological resources be inadvertently encountered during Project construction and/or operation, work will stop, and the discovery will be examined by an archaeologist. If the discovery is determined to be a significant cultural resource, SHPO and OSA will be notified.²⁰⁸

D. Natural Environment

1. <u>Wildlife</u>

<u>165.167.</u> Wildlife utilizing the Project Area are common species associated with disturbed habitats and are accustomed to human activities (e.g., agricultural activities and road traffic) occurring in the area. Mammals, reptiles, amphibians, and insects are present.²⁰⁹

<u>166.168.</u> Individuals will be displaced to adjacent habitats during construction. Because the land control area does not provide important habitat, this should not impact life cycle functions, for example, nesting.²¹⁰

<u>167.169.</u> The largest impact to wildlife associated with solar facilities is fencing. Studies estimate that one hoofed mammal (ungulate) per year becomes entangled for every two and one-half miles of fence. Although deer can jump many fences, they can become tangled in both smooth and barbed-wire fences, especially if the wires are loose or installed too closely together. Predators can use fences to corner and kill prey species.²¹¹ Lake Wilson Solar has committed in their application to utilizing lightweight agricultural woven wire fencing to reduce entanglements²¹². Barbed wire will not be used at the top of the fence around the Project arrays/construction units. "High Voltage Keep Out" signs will be placed in accordance with National Electric Code (NEC) requirements along the fence line.²¹³

<u>168.170.</u> In its December 5, 2023, comments DNR recommended that Lake Wilson Solar engage in further coordination with the agency to address its concerns regarding the location of deer egress gates.²¹⁴ In its response to comments, Lake Wilson Solar stated that it does not plan to install deer egress gates. Lake Wilson Solar also pointed out that the EA prepared by EERA staff indicates that the potential impacts to deer are expected to be minimal. ²¹⁵

²⁰⁷ Id.

²⁰⁸ Ex. LW-9 at 87 (Application for a Site Permit); *See* Sample Site Permit at Sections 4.3.23 (Archaeological and Historic Resources) (October 2, 2023) (eDocket No. <u>202310-199322-01</u>).

²⁰⁹ Ex. EERA-11 at 82 (Environmental Assessment).

²¹⁰ Ex. EERA-11 at 83 (Environmental Assessment).

²¹¹ Id.

²¹² Ex. EERA-11 at 85 (Environmental Assessment).

²¹³ Ex. LW-9 at 83 (Application for a Site Permit).

²¹⁴ Comments – DNR (December 5, 2023) (eDocket No. 202312-200987-01).

²¹⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

<u>169.171.</u> In its December 11, 2023, comments, EERA recommended that the following condition regarding security fencing be moved from a special condition to a standard condition:

The Permittee shall design the security fence surrounding the solar energy generating system to minimize the visual impact of the Project while maintaining compliance with the National Electric Safety Code. The Permittee shall develop a final fence plan for the specific site in coordination with EERA and the DNR. The final fence plan shall be submitted to the Commission as part of the site plan pursuant to Section 8.3.²¹⁶

In his Direct Testimony, Korede Olagbegi stated that in Lake Wilson Solar's review of DNR's Commercial Solar Siting Guidance, it believed that the Project's proposed security fencing design was in line with the design considerations specified in the guidance.²¹⁷ Also, in its response to comments, Lake Wilson Solar stated it has no objection to this condition.²¹⁸

<u>170.172.</u> Plastic erosion control netting is frequently used for erosion control during construction and landscape projects and can negatively impact wildlife populations. Wildlife entanglement and death from plastic netting and other plastic materials has been documented in birds, fish, mammals, and reptiles.²¹⁹

<u>171.173.</u> In its December 5, 2023 comments, DNR recommended that, due to entanglement issues with small animals, the site permit include a special condition requiring erosion control blankets to be limited to "bio-netting" or "natural netting" types and mulch products without synthetic fiber additives. ²²⁰ In its response to comments, Lake Wilson Solar stated it has no objection to this special condition.²²¹

<u>172.174.</u> Lake Wilson Solar will not use products containing plastic mesh netting or other plastic components and will limit its erosion control blankets to the "bio-netting" or "natural netting" types.²²² In its response to comments, Lake Wilson Solar stated it has no objection to this special condition.²²³

<u>173.175.</u> EERA also proposed changes to Section 4.3.8 of the Sample Site Permit (Beneficial Habitat), which addresses beneficial habitat for wildlife.²²⁴ Lake Wilson Solar stated it has no objection to this condition as modified by EERA.²²⁵

<u>174.176.</u> The record demonstrates that Lake Wilson Solar has taken steps to avoid and minimize impacts to wildlife. Further, the Sample Site Permit, as modified by EERA and Lake Wilson Solar, contains general conditions that adequately protect wildlife. Section 8.12

²¹⁶ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²¹⁷ Ex. LW-33 at 8 (Direct Testimony of Korede Olagbegi).

²¹⁸ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

²¹⁹ Ex. LW-9 at 83 (Application for a Site Permit).

²²⁰ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>).

²²¹ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

²²² Ex. LW-33 at 9 (Direct Testimony of Korede Olagbegi).

²²³ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

²²⁴ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²²⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

(Wildlife Injuries and Fatalities) of the Sample Site Permit requires Permittees to report any wildlife injuries and fatalities to the Commission on a quarterly basis.²²⁶

2. <u>Vegetation</u>

<u>175.177.</u> The land control area is dominated by cultivated crops established and maintained by humans. Non-native invasive species are limited due to weed management associated with agriculture. Trees in the Project Area are largely limited to homes and farmsteads.²²⁷

<u>176.178.</u> After coordination with the DNR, Lake Wilson Solar confirmed with a native prairie field survey that no native prairies exist in the Preliminary Development Area. As a result of this coordination, Lake Wilson removed two trackers from the Project that were originally proposed in suspect native prairies mapped by the DNR. Due to this adjustment, DNR determined that no prairie protection management plan would be required for the Project.²²⁸

<u>177.179.</u> Agricultural row crop fields at the solar facility would be converted to perennial, low growing vegetative cover, resulting in a net increase in vegetative cover for the life of the Project. Native seed mixes developed in cooperation with state agencies will be used. Once established, vegetation would most likely be maintained by mowing.²²⁹

<u>178.180.</u> Overall, the Project will result in a net improvement to the perennial vegetative cover in the Project Area because of revegetation efforts in former agricultural areas and the significant decrease in the use of herbicides and pesticides typical of agricultural practices through implementation of the Project AIMP and VSMP plans (discussed above), as well as the Stormwater Pollution Prevention Plan (SWPPP).²³⁰

<u>179.181.</u> Lake Wilson Solar has developed its VMP in consultation with DNR and other state agencies to guide site preparation, installation of prescribed seed mixes, and management of invasive species and noxious weeds.²³¹ Lake Wilson Solar met with MDA staff on December 10, 2021, to discuss the AIMP and VMP plan contents and site-specific characteristics.²³²

180.182. Section 4.3.17 [sic] of the Sample Site Permit requires the Permittee to develop a VMP in coordination with state agencies and to file the VMP prior to construction.²³³

181.183. In its December 11, 2023, comments, EERA proposed changes to Section

²²⁶ Sample Site Permit at 16 (October 2, 2023) (eDocket No. 202310-199322-01).

²²⁷ Ex. EERA-11 at 79 (Environmental Assessment).

²²⁸ Ex. EERA-11 at 80 (Environmental Assessment).

²²⁹ Id.

²³⁰ Ex. LW-9 at 102 (Application for a Site Permit).

²³¹ Ex. EERA-11 at 81 (Environmental Assessment).

²³² Ex. LW-9 at 78 (Application for a Site Permit).

²³³ Ex. EERA-11 at 81 (Environmental Assessment); *See also* Sample Site Permit at 7 (October 2, 2023) (eDocket No. <u>202310-199322-01</u>).

4.3.17 of the Sample Site Permit.²³⁴ Lake Wilson Solar has no objection to these changes.²³⁵

<u>182.184.</u> To mitigate potential impacts to vegetation, Lake Wilson Solar anticipates site restoration, seeding, establishing, maintaining, and monitoring disturbed areas and areas below the PV solar modules in accordance with the AIMP and VMP plans. Control of invasive and noxious weeds will be ongoing during the construction and operation of the Project.²³⁶

<u>183.185.</u> All areas that will not contain permanent facilities (area under the arrays and the laydown yards) will be stabilized with erosion control measures, such as silt fence, sediment control logs, temporary seeding, and mulching as needed, until permanent vegetation has been established.²³⁷

<u>184.186.</u> In its December 5, 2023 comments, DNR recommended the Permittee utilize non-chloride products for dust control activities.²³⁸ In its response to comments, Lake Wilson Solar stated it has no objection to this special condition.²³⁹

185.187. The record demonstrates that Lake Wilson Solar has taken steps to avoid and minimize impacts to vegetation. Further, the Sample Site Permit, as modified by EERA and Lake Wilson Solar, contains adequate conditions to monitor and mitigate the Project's potential impacts on vegetation. Section 4.3.15 (Vegetation Removal) requires that vegetation clearing be limited to only the extent necessary for construction access and safe operation and maintenance of the Project. Section 4.3.19 (Application of Pesticides) discusses restricted pesticide use. Section 4.3.20 (Invasive Species) requires Permittees to develop an Invasive Species Prevention Plan to prevent the introduction and spread of invasive species on lands disturbed by project construction activities and file with the Commission 30 days prior to the pre-construction meeting. Section 4.3.21 (Noxious Weeds) requires Permittees to take all reasonable precautions against the spread of noxious weeds during all phases of construction.²⁴⁰

<u>186.188.</u> Lake Wilson Solar will use an adaptive management approach for vegetation maintenance, an important aspect being monitoring vegetation during the active growing season (June-September). All areas that will not contain permanent facilities will be stabilized with erosion control measures, such as silt fence, sediment control logs, temporary seeding, and mulching as needed, until permanent vegetation has been established. Monitoring and treating species, mowing, and re-seeding are main VMP establishment and maintenance tasks.²⁴¹

3. <u>Soils, Geologic, and Groundwater Resources</u>

Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

²³⁴ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

 ²³⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).
 ²³⁶ Ex. LW-9 at 102 (Application for a Site Permit).

²³⁷ Ex. LW-9 at 41 (Application for a Site Permit).

²³⁸ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>).

 ²³⁹ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).
 ²⁴⁰ See generally, Sample Site Permit (October 2, 2023) (eDocket No. <u>202310-199322-01</u>); Reply Comments –

²⁴¹ Ex. EERA-11 at 81 (Environmental Assessment).

<u>187.189.</u> Construction will disturb approximately 1,526 acres. Of this, about 58.5 acres will be graded. Grading with the greatest potential for impacts to topsoil condition include construction of the access roads, substation, BESS, Xcel Switchyard, and O&M facility.²⁴²

<u>188.190.</u> Impacts to soils will occur during both the construction and, to a much lesser degree, operational stages of the Project. Grading impacts will primarily be with the construction of foundations for the Project Substation, O&M Facility, BESS site, new Xcel Switchyard, access roads, and, as needed, for the solar array, foundations, and inverter skid locations. Use of direct-embedded pier foundations for the inverters will further minimize impacts to soil.²⁴³

<u>189.191.</u> In its December 11, 2023, comments, EERA proposed a revision to condition 4.3.9, removing language allowing landowners to opt out of topsoil protection.²⁴⁴ Lake Wilson Solar has no objection to this special condition.²⁴⁵

<u>190.192.</u> During operation of the Project, ongoing soil compaction could occur from the use of access roads. This impact is expected to be negligible, confined to the roadbed and mainly from relatively light duty maintenance vehicles. Overall, the Project is expected to reduce the potential for erosion by establishing permanent vegetation, in contrast to the current amount of exposed soils common to row cropping in the existing agriculture fields. Potential erosion will be further minimized by dressing access roads with gravel and installing culverts under access roads where necessary to redirect concentrated surface water runoff.²⁴⁶

<u>191.193.</u> Because the Project will disturb more than 50 acres, Lake Wilson Solar will submit the National Pollutant Discharge Elimination System (NPDES) construction stormwater permit application and Storm Water Pollution Prevention Plan (SWPPP) to the Minnesota Pollution Control Agency (MPCA) for review and approval prior to construction and obtaining coverage under the General Construction Stormwater Permit program. Implementation of the protocols outlined in the SWPPP will minimize the potential for soil erosion and detail stormwater management methods during construction and operation of the facility. Section 4.3.11 of Sample Site Permit require Permittees to obtain an MPCA NPDES construction stormwater permit and implement the BMPs within for erosion prevention and sediment control.²⁴⁷

<u>192.194.</u> Lake Wilson Solar has developed an AIMP for the Project that details methods to minimize soil compaction, preserve topsoil, and establish and maintain appropriate vegetation to ensure the Project is designed, constructed, operated, and ultimately restored in a manner that would preserve soils to allow for the land to be returned to agricultural use. The Project's AIMP specifically addresses construction in the type of soil conditions present in the Project Area. Lake Wilson Solar will follow the best management practices (BMPs) set forth in the AIMP during construction and operation, including erosion and sediment control measures.

²⁴² Ex. EERA-11 at 75 (Environmental Assessment).

²⁴³ Ex. LW-9 at 91 (Application for a Site Permit).

²⁴⁴ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²⁴⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

²⁴⁶ Ex. LW-9 at 91 (Application for a Site Permit).

²⁴⁷ Ex. EERA-11 at 74 (Environmental Assessment).

Additionally, Lake Wilson Solar's VMP lists BMPs, that while directly related to vegetation, will stabilize soils. Additionally, Lake Wilson Solar will obtain a NPDES permit from MPCA to discharge stormwater from construction facilities. BMPs will be used during construction and operation to protect topsoil and adjacent resources and to minimize soil erosion from water or wind²⁴⁸. In addition, a SWPPP will be developed for the Project prior to construction that will include BMPs such as silt fencing (or other erosion control devices), revegetation plans, and management of exposed soils to prevent erosion.²⁴⁹

<u>193.195.</u> The Project Area is not serviced by city water supply or sanitary sewer and residents in the Project Area have private wells for domestic or farming water needs and private septic systems of drain fields for domestic wastewater.²⁵⁰ The Minnesota Well Index (MWI) identifies six wells within the solar facility boundary; three of these records are sealed boreholes, two are listed as active domestic wells, and the last is active with an undefined use.²⁵¹

<u>194.196.</u> According to the Murray County Drainage Ditch and Tile data, the Project Area contains multiple segments of private drainage tile and lateral ditches that drain north into Judicial Ditch 14. The eastern portion of the Project site contains segments of County Ditch 47 that drains northeast towards Summit Lake.²⁵²

<u>195.197.</u> Localized impacts, should they occur, would be intermittent, but have the potential to occur over the long-term. Impacts can be mitigated. Impacts to surface waters can lead to indirect impacts to groundwater. Surface water impacts are anticipated to be minimal.²⁵³

<u>196.198.</u> Because of the shallow depth to groundwater in some areas of the Project, dewatering may be required during construction. If dewatering exceeds 10,000 gallons of water per day, a DNR water appropriation permit will be required.²⁵⁴

<u>197.199.</u> The record demonstrates that Lake Wilson Solar has taken steps to avoid and minimize negative impacts to soils, geologic, and groundwater resources. Further, the Sample Site Permit contains adequate conditions to monitor and mitigate the Project's potential impacts on soils, geologic, and groundwater resources. Sections 4.3.9 (Topsoil Protection), 4.3.10 (Soil Compaction), and 4.3.11 (Soil Erosion and Sediment Control) of the Sample Site Permit, as revised by EERA and Lake Wilson Solar, address soil related impacts: 4.3.9 requires protection and segregation of topsoil; 4.3.10 requires measures to minimize soil compaction; and 4.3.11 requires the Permittee to implement erosion prevention and sediment control practices recommended by the MPCA and to obtain a NPDES Construction Stormwater Permit from the MPCA, which requires both temporary and permanent stormwater controls.²⁵⁵ Section 4.3.11 also requires implementation of reasonable erosion and sediment control measures, contours graded to provide for proper drainage, and all disturbed areas be returned

²⁴⁸ Id.

²⁴⁹ Id.

²⁵⁰ Ex. EERA-11 at 48 (Environmental Assessment).

²⁵¹ Ex. EERA-11 at 72 (Environmental Assessment).

²⁵² Ex. LW-9 at 97 (Application for a Site Permit).

²⁵³ Ex. EERA-11 at 73 (Environmental Assessment).

²⁵⁴ Id.

²⁵⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

to pre-construction conditions.²⁵⁶

4. <u>Surface Water and Wetlands</u>

<u>198.200.</u> Lake Wilson Solar identified surface water and floodplain resources for the Project Area.²⁵⁷

<u>199.201.</u> The Project Area is in the hydrologic unit code (HUC)-8 Des Moines River – Headwaters Watershed. The DNR's Public Waters Inventory identified no basins and approximately 2,614 feet of one public watercourse (Judicial Ditch 14) within the solar facility site.²⁵⁸

<u>200.202.</u> Lake Wilson Solar has made significant efforts to avoid all water resource impacts to the extent practicable through Project design and construction methods as shown in the Preliminary Facility Design and Preliminary Site Plan. No permanent impacts to water resources are anticipated during operation of the Project.²⁵⁹

<u>201.203.</u> Current design avoids all wetlands and would not require any approvals under Minnesota's Wetland Conservation Act. Current design also would not require any approvals under Section 404 of the Clean Water Act.²⁶⁰

202.204. The DNR requires a Public Waters Work Permit for any alteration of the course, current, or cross section below the Ordinary High Water (OHW) level of DNR public waters, wetlands, and watercourses. No impacts to the DNR public watercourses are expected from the Project, and no borings under any Public Water Watercourses are expected.²⁶¹

203.205. The record demonstrates that Lake Wilson Solar has taken steps to avoid and minimize impacts to surface waters and wetlands. Further, the Sample Site Permit, as revised by EERA contains conditions that adequately address potential impacts. Section 4.3.13 (Wetlands and Water Resources) addresses impacts to wetlands and other water resources. Section 4.3.11 (Soil Erosion and Sediment Control) requires reasonable measures to minimize erosion and sedimentation during construction. ²⁶²

5. <u>Air and Water Emissions</u>

<u>204.206.</u> Minimal intermittent air emissions are expected during construction of the Project. <u>Construction activities will result in short-term increases in GHG emissions because of the combustion of fossil fuels in construction equipment and vehicles.</u> Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring, and they are expected to be localized and temporary. Once operational, the solar array would not generate criteria pollutants or carbon dioxide. <u>Operational emission</u>

²⁵⁶ See generally, Sample Site Permit (October 2, 2023) (eDocket No. <u>202310-199322-01</u>).

²⁵⁷ Ex. LW-9 at 97 (Application for a Site Permit).

²⁵⁸ Ex. EERA-11 at 77 (Environmental Assessment).

²⁵⁹ Ex. LW-9 at 98 (Application for a Site Permit).

²⁶⁰ Ex. LW-9 at 99 (Application for a Site Permit).

²⁶¹ Id.

²⁶²Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

sources include emergency generators, commuter and onsite vehicle traffic, and offsite electricity purchased.²⁶³

205.207. Emissions from construction vehicles will be minimized by using modern equipment with lower emissions ratings and properly functioning exhaust systems.²⁶⁴ Applicable BMPs will be used during construction and operation of the Project to minimize dust emissions. Additional BMPs will be implemented as part of the VMP and AIMP which will also address emissions (e.g., mulching exposed soils, installing and maintaining vegetative cover, engineering controls, reducing vehicle and equipment speed, maintaining equipment and exhaust/mufflers, etc.).²⁶⁵

206.208. The Project is expected to have an overall effect of improving air quality by replacing electrical generation produced from the burning of fossil fuels. This is expected to reduce harmful greenhouse gas and other pollutant emissions detrimental to air quality. Additionally, since agricultural operations at the Project site will no longer occur during construction and operation of the facility, reduced particulate emissions, dust and farm equipment exhaust would occur and further improve air quality at and in the vicinity of the site. Following construction, the facility will not directly emit pollutant emissions.²⁶⁶

207.209. The slowing of runoff and reduction in the amount of nutrients leaving the site is expected to have a direct, positive effect on the water quality of any surface waters receiving runoff from the site, and also expected to positively benefit onsite wildlife and plant communities.²⁶⁷

6. <u>Solid and Hazardous Wastes</u>

<u>208.210.</u> Solar facility and wind farm construction generates solid waste, such as scrap wood and metal, plastics, and cardboard. Petroleum products would be present on-site, including engine and hydraulic oil, lubricants, grease, cleaning solvents, and fuel. Operation is not expected to generate significant qualities of solid and hazardous wastes. Small quantities of petroleum products would be kept onsite for routine maintenance activities. Certain electronic components in both solar facilities and wind farms, such as circuit boards, contain hazardous materials commonly found in electronic devices.²⁶⁸

<u>209.211.</u> Section 4.3.26 (Cleanup) of the Sample Site Permit, as revised by EERA, 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 4.3.27 (Pollution and Hazardous Wastes) of the Sample Site Permit, as revised by EERA, requires the Permittee to take all appropriate precautions against pollution of the environment and makes the Permittee responsible for compliance with all laws applicable to the generation, storage, transportation, clean up, and

²⁶³ Ex. EERA-11 at 66<u>-68</u> (Environmental Assessment).

²⁶⁴ Ex. LW-9 at 89 (Application for a Site Permit).

²⁶⁵ Ex. LW-9 at 90 (Application for a Site Permit).

²⁶⁶ Ex. EERA-11 at 66 (Environmental Assessment).

²⁶⁷ Ex. EERA-11 at 73 (Environmental Assessment).

²⁶⁸ Ex. EERA-11 at 106 (Environmental Assessment).

disposal of all wastes generated during construction and operation of the facility, including decommissioning.²⁶⁹

E. Rare and Unique Natural Resources

210.212. Project coordination was first initiated with the DNR in December of 2017; a meeting with the DNR was also held in September of 2021 to discuss the proposed Project details and address agency questions. The DNR reviewed the proposed Project and stated that no state-listed endangered or threatened species have been documented in the vicinity of the Project Area ²⁷⁰ A formal Natural Heritage Review (NHR) request was submitted and a review of the MNDNR NHIS database licensed to Westwood (MNDNR, 2021b) was conducted for records of federal or state-listed rare, threatened or endangered species or habitats in, and within one mile of the Project Area. One vascular plant, the red three-awn (Aristida purpurea var. longiseta) was identified. No other vascular plants, vertebrate animals, invertebrate animals, animal assemblages, or terrestrial communities were identified in a one-mile buffer surrounding the Project Area.²⁷¹

211.213. The red three-awn is a mid-height perennial grass that is considered a special concern species in Minnesota. No federal protections are afforded to the red three-awn species. Species of special concern are not protected by Minnesota's Endangered Species Statute or the associated rules. However, the NHR recommends avoiding impacts to these species. Based on the lack of suitable habitat within the Project Area as assessed during the native prairie assessment, likelihood of occurrence of this species within the Project Area is considered to be low.²⁷²

<u>212.214.</u> Project coordination took place with the USFWS in October 2017 using an earlier version of the Project Area. A meeting with the USFWS was also held on September 15, 2021, reviewing an earlier version of the Project Area. The USFWS provided comments in October 2021. USFWS Information for Planning and Consultation (IPaC) responses were received on November 8, 2021, and June 6, August 8, and October 10, 2022. In the most recent IPaC using the current Project Area, one federally threatened species, the northern long-eared bat (*Myotis septentrionalis*; NLEB) and one candidate species, the monarch butterfly (*Danaus plexippus*), was mapped as potentially occurring within or near the Project Area.²⁷³

213.215. Preferred NLEB summer habitat consists of mature forests, although this species is also known to forage in wooded areas near water sources and within cleared forest tracts (MNDNR, 2018; USFWS, 2022). The Project Area is heavily dominated by agricultural land use with limited areas of individual trees or small tree stands, and according to MNDNR and USFWS (2021), there are no known NLEB maternity roost trees or hibernaculum in Murray County or any of the surrounding counties. Therefore, the probability of occurrence

²⁶⁹ See generally, Sample Site Permit (October 2, 2023) (eDocket No. <u>202310-199322-01</u>); Comments – EERA (December 11, 2023) (eDocket No. 202312-201104-01).

²⁷⁰ Ex. LW-9 at 105 (Application for a Site Permit).

²⁷¹ Ex. LW-9 at 105 (Application for a Site Permit).

²⁷² Id.

²⁷³ Ex. LW-9 at 106 (Application for a Site Permit).

for NLEB is considered low.²⁷⁴

214.216. The monarch butterfly is a candidate species with no federal protections at this time. The eastern, migratory population of monarch butterflies are common in the summer months in areas with floral resources or milkweeds. These areas include pastures, roadsides, and grasslands. Common milkweed was observed during field surveys, but broadleaf herbicide use in agricultural fields have greatly reduced the likelihood of milkweeds occurring in the Project Area.²⁷⁵

215.217. The Bald Eagle (Haliaeetus leucocephalus) is no longer a federally-listed threatened species; however, disturbances to the Bald Eagle are regulated under the Bald Eagle and Golden Eagle Protection Act (BGEPA) (16 U.S.C. §668, 2010). Bald Eagles are highly associated with aquatic habitats (e.g., coastal areas, rivers, lakes, and reservoirs) for both breeding and wintering. Large, higher-canopy trees that are open and accessible are required for both roosting and nesting. While eagles have the potential to utilize the Project Area for stopover or foraging, the limited suitable nesting substrate and comparatively fewer water resources within the Project Area suggests a low likelihood that Bald Eagle nests would be present. Further, no Bald Eagle nests were observed in the Project Area during field surveys.²⁷⁶

III. SITE PERMIT CONDITIONS

169. The Sample Site Permit, as revised by EERA and Lake Wilson Solar, includes a number of proposed permit conditions, many of which have been discussed above. The conditions apply to Project ownership, site preparation, construction, cleanup, restoration, operation, maintenance, decommissioning, transfer of permit, and other aspects of the Project.

170. Many of the conditions contained in the Sample Site Permit, as revised by EERA and Lake Wilson Solar, were established as part of the site permit proceedings of other solar projects permitted by the Commission. Comments received by the Commission have been considered in development of the permit conditions for this Project.

171. On December 11, 2023, EERA suggested revisions to Section 2.2 of the Sample Site Permit related to Project Ownership. The revised section is as follows:

2.2 Project Ownership

<u>At least 14 days prior to the pre-construction meeting, the Permittee shall file a</u> <u>description of its ownership structure, identifying, as applicable:</u>

(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*

²⁷⁴ Id.

²⁷⁵ Id.

²⁷⁶ Ex. LW-9 at 106 (Application for a Site Permit).

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

The Permittee shall notify the Commission of:

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

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

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

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

Also, in the event of an ownership change, the Permittee must provide the Commission with a certification that it has read, understands and is able to comply with the plans and procedures it filed and all conditions of this permit.²⁷⁷

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA. ²⁷⁸

172. On December 11, 2023, EERA suggested changes to Section 4.3 of the Draft Site Permit related to Construction and Operation Practices. The revisions are as follows:

4.3 Construction and Operation Practices

The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the *[Site Permit Application date and title], and the* record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.²⁷⁹

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁸⁰

173. On December 11, 2023, EERA suggested moving to the requirement of an Independent Third-Party Monitor from a Special Condition to a standard condition. The revisions are as follows:

4.3.4 Independent Third-Party Monitor

Prior to any construction, the Permittees shall propose a scope of work and

²⁷⁷ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²⁷⁸ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]). ²⁷⁹ *Id*.

²⁸⁰ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

identify one independent third party monitor on behalf of the Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. The Permittee shall file the scope of work, and the name, address, email, phone number, and emergency phone number of the third-party monitor with the Commission at least 14 days prior to the pre-construction meeting, and upon changes to the scope of work or third-party monitor contact information.²⁸¹

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁸²

174. On December 11, 2023, EERA provided suggested changes to Section 4.3.8 of the Sample Site Permit related to Aesthetics.

The Permittee shall consider input pertaining to visual impacts from landowners and land management agencies. Carethe local unit of government having direct zoning authority over the area in which the Project is located when developing the Visual Screening Plan required in Section 5.5. The Permittee shall be used use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project Project during construction and operation.

In its response to EERA, Lake Wilson Solar proposed the following revisions to reflect the fact that no visual screening plan is necessary or otherwise required by the Sample Site Permit:

The Permittee shall consider input pertaining to visual impacts from <u>the</u> local unit of government having direct zoning authority over the area in which the Project is located when developing the Visual Screening Plan required in Section 5.5. The Permittee shall use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Project during construction and operation.²⁸³

175. On December 11, 2023, EERA provided suggested changed to Section 4.3.9 of the Sample Site Permit related to Topsoil Protection. The revisions are as follows:

4.3.9 Topsoil Protection

*The Permittee shall implement measures to protect and segregate topsoil from subsoil on all lands unless otherwise negotiated with affected landowners.*²⁸⁴

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as

²⁸¹ Id.

²⁸² Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

 ²⁸³ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).
 ²⁸⁴ Id.

proposed by EERA.²⁸⁵

176. EERA provided suggested changes to Section 4.3.16 of the Draft Site Permit related to Beneficial Habitat. The revisions are as follows:

4.3.16 Beneficial Habitat

The Permittee shall implement site restoration and management practices that provide for native perennial vegetation and foraging habitat beneficial to gamebirds, songbirds, and pollinators; and that improves enhances soil water retention and reduces storm water runoff and erosion. To ensure continued management and recognition of beneficial habitat, the Permittee is encouraged to meet the standards for Minnesota's Habitat Friendly Solar Program by submitting project plans, seed mixes, a completed project planning assessment form, and any other applicable documentation used to meet the standard to the Board of Water and Soil Resources (BWSR). All If the Permittee chooses to participate in Minnesota's Habitat-Friendly Solar Program, it shall file documents required by to be filed with BWSR for meeting and maintaining Habitat Friendly Solar Certification and maintenance of that Certification should also be filed with the Commission.²⁸⁶

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁸⁷

177. EERA provided suggested changed to Section 4.3.17 of the Draft Site Permit related to the VMP. The revisions are as follows:

4.3.17 Vegetation Management Plan

The Permittee shall develop a vegetation management plan <u>(VMP), in</u> <u>coordination with the Department of Commerce, and the Vegetation</u> <u>Management Working Group (VMWG),</u> using best management practices established by the DNR and BWSR. The vegetation management plan shall be prepared in coordination with the Department of Commerce, DNR, and BWSR. The vegetation management plan <u>The Permittee shall file the VMP</u> and documentation of the coordination efforts between the <u>pP</u>ermittee and the coordinating agencies shall be filed with the Commission at least 14 days prior to the pre-construction meeting. <u>Landowner-specific vegetation requests</u> resulting from individual consultation between the Company and a landowner <u>need not be included in the Vegetation Management Plan</u>. The Permittee shall provide all affected landowners within the Project Boundary with copies of the plan-VMP. The Permittee shall file with the Commission an affidavit of its distribution of the <u>VMP to landowners at least 14 days prior</u> to the pre-

²⁸⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

²⁸⁶ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²⁸⁷ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

construction meeting.

The vegetation management plan <u>VMP</u> must include the following:

- (a) management objectives addressing short term (year 0-<u>35</u>, seeding and establishment) and long term (year 4<u>5</u> through the life of the permit <u>Project</u>) goals;
- (b) a description of planned restoration and vegetation management activities, including how the site will be prepared, timing of activities, how seeding will occur (broadcast, drilling, etc.), and the types of seed mixes to be used;
- *(c) a description of how the site will be monitored and evaluated to meet management goals;*
- (d) a description of the management tools used to maintain vegetation (e.g., mowing, spot spraying, hand removal, fire, grazing, etc.), including the timing and frequency of maintenance activities;
- (e) identification of the third-party (e.g., consultant, contractor, site manager, etc.) responsible contracted for restoration, monitoring, and long-term vegetation management of the site;
- (f) identification of on-site noxious weeds and invasive species (native and non-native) and the monitoring and management practices to be utilized; <u>and</u>
- (g) <u>a marked-up copy of the</u> site plan showing how the site will be revegetated and that identifies the corresponding seed mixes.

*Best management practices should be followed concerning seed mixes, seeding rates, and cover crops.*²⁸⁸

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁸⁹

178. EERA proposed adding the AIMP as a standard condition. The proposed Section 4.3.18 is as follows:

4.3.18 Agricultural Impact Mitigation Plan

The Permittee shall develop an agricultural impact mitigation plan (AIMP) in coordination with the Minnesota Department of Agriculture (MDA). The Permittee shall provide landowners within the Project Boundary with a copy of

²⁸⁸ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²⁸⁹ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

the AIMP. The Permittee shall file with the Commission the AIMP and an affidavit of the AIMP distribution to landowners at least 14 days prior to the preconstruction meeting.²⁹⁰

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁹¹

179. EERA provided suggested changed to Section 4.3.19 of the Sample Site Permit related to the Application of Pesticides. The revisions are as follows:

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the Minnesota Department of Agriculture (MDA), MDA, DNR, and the U.S. Environmental Protection Agency (EPA). Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner or designee to obtain approval for the use of pesticide at least 14 days prior to anypesticide application on their property. The The Permittee may not apply any pesticide if 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 bekeepers operating apiaries within three miles of the project siteProject Boundary at least 14 days prior to such application. The Permittee shall keep pesticide communication and application records and provide them upon the Commission's request.

In its response to EERA, Lake Wilson Solar proposed the following revisions:

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the MDA, DNR, and the U.S. Environmental Protection Agency (EPA). Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner at least 14 days prior to pesticide application on their property. The Permittee may not apply any pesticide if the landowner may request that there be no application within the landowner's property. The Permittee shall provide notice of pesticide application to <u>adjacent</u> landowners and beekeepers operating <u>known</u> apiaries within three miles of the Project Boundary at least 14 days prior to such application. The Permittee shall keep pesticide communication and application records and provide them upon the Commission's request.²⁹²

180. On December 11, 2023, EERA suggested changes to Section 4.3.22 of the Sample Site Permit related to Roads. The revisions are as follows:

The Permittee shall advise the appropriate governing bodies having jurisdiction over

²⁹⁰ Id.

²⁹¹ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

²⁹² Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

all state, county, city or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the *facility*. OversizeProject. The Permittee shall not <u>haul oversize</u> or overweight loads associated with the facility shall not be hauled across public roadsProject without required permits and approvals.

The Permittee shall locate all perimeter fencing and vegetative screening in a manner that does not interfere with routine road maintenance activities and allows for continued safe travel on public roads.

The Permittee shall construct the <u>leastfewest</u> number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner. <u>The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.</u>

In its response to EERA, Lake Wilson Solar proposed the following revisions:

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the Project. The Permittee shall not haul oversize or overweight loads associated with Project <u>on public roads</u> without required permits and approvals.

The Permittee shall locate all perimeter fencing and vegetative screening in a manner that does not interfere with routine road maintenance activities and allows for continued safe travel on public roads.

The Permittee shall construct the fewest number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

181. EERA proposed adding a standard condition for Security Fencing. The proposed Section 4.3.31 is as follows:

4.3.31 Security Fencing

The Permittee shall design the security fence surrounding the solar energy generating system to minimize the visual impact of the Project while maintaining compliance with the National Electric Safety Code. The Permittee shall develop a final fence plan for the specific site in coordination with EERA and the DNR. The final fence plan shall be submitted to the Commission as part of the site plan pursuant to Section 8.3.²⁹³

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.

182. EERA provided suggested changed to Section 9.1 of the Sample Site Permit related to the Decommissioning Plan. The revisions are as follows:

9.1 Decommissioning Plan

The Permittee shall comply with the provisions of the most recently filed and accepted decommissioning plan. The initial version of the decommissioning plan was submitted for this project as <u>Appendix G</u> to the Site Permit Application. The Permittee shall file an updated decommissioning plan incorporating comments and information from the permit <u>issuance application</u> process and any updates associated with the final construction plans with the Commission at least fourteen 14 days prior to the preconstruction meeting. The <u>Permittee shall update and file the</u> decommissioning plan shall be updated with the Commission every five years following the commercial operation date.

The <u>decommissioning</u> plan shall provide information identifying all surety and financial securities established for decommissioning and site restoration. The decommissioning plan shall provide an itemized breakdown of costs of decommissioning all <u>project</u> <u>Project</u> components, which shall include labor and equipment. The plan shall identify cost estimates for the removal of solar panels, racks, underground collection cables, access roads, transformers, substations, and other <u>project</u> <u>Project</u> components. The <u>decommissioning</u> plan may also include anticipated costs for the replacement of panels or repowering the <u>project</u> <u>Project</u> by upgrading equipment.

The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the area in which the <u>project Project</u> is located. The Permittee shall ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the <u>project</u> <u>Project</u> at the appropriate time. The Commission may at any time request the Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.²⁹⁴

 ²⁹³ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).
 ²⁹⁴ Id.

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁹⁵

183. EERA provided suggested changed to Section 12 of the Sample Site Permit related to permit transfers. The revisions are as follows:

12. Transfer of Permit

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

(a) the name and description of the transferee;

(b) the reasons for the transfer;

(c) a description of the facilities affected; and

(d) the proposed effective date of the transfer.

<u>The transferee must provide the Commission with the name and contact</u> information for the site manager, as described in Section 4.3.2, and either a current version with e-docket reference, or a revised version of the following:

(a) VMP, as described in Section 4.3.17;

(b) complaint procedures, as described in Section 7 and Attachment 1;

(c) ERP, as described in Section 8.10; and

(d) decommissioning plan, as described in Section 9.²⁹⁶

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.²⁹⁷

184. Finally, EERA proposed a modification to Lake Wilson Solar's proposed modification to Section 3, Designated Site, filed in the Direct Testimony of Korede

²⁹⁵ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

²⁹⁶ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

²⁹⁷ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

Olagbegi.²⁹⁸ Their proposed revision is as follows:

"The site maps show the Project Boundary and the approximate location of the solar energy generating system and associated facilities within the Project Boundary. The Commission sought to locate the solar energy generating system and associated facilities in a way that minimizes the overall potential human and environmental impacts of the Project, which were evaluated in the permitting process. The Project Boundary serves to provide the Permittee with the flexibility to make minor adjustments to the layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. The Permittee shall make any modification to the location of the solar energy generating system or associated facilities in such a manner to have comparable overall human and environmental impacts <u>relative to the siting factors of Minnesota Rule 7850.4100</u> and shall specifically identify them in the site plan pursuant to Section 8.3."

In its response to comments, Lake Wilson Solar stated that it had engaged in discussions with EERA staff and consequently proposed the following language be reinstated following an inadvertent removal by EERA staff:

The layout represents the approximate location of photovoltaic tracker rows and associated facilities within the project boundary and identifies a layout that seeks to minimize the overall potential human and environmental impacts of the project, which were evaluated in the permitting process. The project boundary serves to provide the Permittee with the flexibility to make minor adjustments to the layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. Any modification to the location of a photovoltaic tracker row or other associated facility depicted in the preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts relative to the siting factors of Minnesota Rule 7850.4100 and shall be specifically identified in the site plan pursuant to Section 8.3.³⁰⁰

185. In its December 5, 2023 comments³⁰¹, DNR noted that although the security fencing proposed in the SP Application meets DNR standards, it recommends further coordination with Applicant to clarify the location of deer egress gates, if any are utilized. In its response to comments, Lake Wilson Solar stated that it does not plan to install deer egress gates. Lake Wilson Solar also pointed out that the EA prepared by EERA staff indicates that the potential impacts to deer are expected to be minimal.³⁰²

186. DNR also recommended adding a special permit condition on lighting at the

²⁹⁸ Ex. LW-33 at 6 (Direct Testimony of Korede Olagbegi).

²⁹⁹ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

³⁰⁰ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. _____ [SP] and _____ [CN]).

³⁰¹ Comments – DNR (December 5, 2023) (eDocket No. <u>202312-200987-01</u>)

³⁰² Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]).

Project substation and O&M building with the following language:

*The Permittee must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation and operations and maintenance facility. Downward facing lighting must be clearly visible on the site plan submitted for the project.*³⁰³

Lake Wilson Solar consented to the addition of this permit condition as a new Section 5.1.³⁰⁴

187. DNR also recommended adding a special permit condition requiring dust erosion control:

The Permittee shall utilize non-chloride products for dust control activities.³⁰⁵

Lake Wilson Solar consented to the addition of this permit condition as a new Section 5.2.³⁰⁶

188. DNR also recommended adding a special permit condition requiring wildlife-friendly erosion control:

*The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.*³⁰⁷

Lake Wilson Solar consented to the addition of this permit condition as a new Section 5.2.³⁰⁸

Based on the foregoing findings of fact and the record in this proceeding, the Judge makes the following:

CONCLUSIONS OF LAW

1. Any of the forgoing findings of fact more properly designated as conclusions of law are hereby adopted as such.

2. The Commission and the Administrative Law Judge have jurisdiction over the application for a site permit for the up to 150 MW AC proposed Project pursuant to Minn. Stat. §§ 216E.02 and 216E.03.

3. Lake Wilson Solar has adequately addressed all of the certificate of need requirements for which the Commission did not provide an exemption. Therefore, a Certificate

³⁰³ Comments – EERA (December 11, 2023) (eDocket No. <u>202312-201104-01</u>).

³⁰⁴ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]). ³⁰⁵ *Id*.

³⁰⁶ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. [SP] and [CN]). ³⁰⁷ *Id*.

³⁰⁸ Reply Comments – Lake Wilson Solar (December 21, 2023) (eDocket Nos. ____ [SP] and ____ [CN]).

of Need should be issued.

4. The Commission accepted the SP Application as substantially complete on April 4, 2023.³⁰⁹

5. Lake Wilson Solar has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.

6. The Commission has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.

7. EERA has conducted an appropriate environmental analysis of the Project for purposes of the Site Permit proceeding pursuant to Minn. R. 7850.3700.

<u>8.</u> Public hearings were held on November 28, 2023 (in-person) and November 29, 2023 (remote-access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.

9. The Environmental Assessment (EA) prepared for the Project and the record created at the public hearing address the issues identified in the EA scoping decision.

8.10. The Commission has the authority under Minn. Stat. § 216E.03 to place conditions in a LEPGP site permit.

9.11. The Sample Site Permit, as revised by EERA staff and Lake Wilson Solar, contains a number of important mitigation measures and other reasonable conditions.

<u>10.12.</u> It is reasonable to amend the Sample Site Permit to include the changes proposed by EERA staff and the subsequent changes proposed by Lake Wilson Solar.

<u>11.13.</u> It is reasonable to amend the Sample Site Permit to include the special permit conditions 5.1, 5.2 and 5.3 regarding lighting at the Project substation and O&M building, dust control and wildlife-friendly erosion control, respectively, as proposed by DNR, and agreed to by the Applicant.

<u>12.14.</u> The record in this proceeding demonstrates that Lake Wilson Solar has satisfied the criteria for a Site Permit as set forth in Minn. Stat. § 216E.03 and Minn. R. Ch. 7850 and all other applicable legal requirements.

13.15. The Project, with the permit conditions discussed above, satisfies the site permit criteria for an LEPGP in Minn. Stat. § 216E.03 and meets all other applicable legal requirements.

14.16. The Project, with the permit conditions discussed above, does not present a potential for significant adverse environmental effects pursuant to the Minnesota

³⁰⁹ Ex. PUC-9 (Order Accepting the CN and SP Applications as Complete).

Environmental Rights Act and/or the Minnesota Environmental Policy Act.

15.17. Any of the foregoing conclusions of law which are more properly designated findings of fact are hereby adopted as such.

RECOMMENDATION

Based upon these Conclusions, the Judge recommends that the Commission issue a Site Permit and Certificate of Need to Lake Wilson Solar LLC, to construct and operate the up to 150 MW Lake Wilson Solar and Associated Battery Storage Project in Murray County, and that the permit include the sample site permit conditions amended as set forth in Findings of fact 171-188, inclusive, above.

Dated:

Jim Mortenson Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the Commission's rules of practice and procedure, Minn. R. 7829.1275, .2700 (2023), unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Minn. R. 7829.2700, subp. 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

The Commission may, at its own discretion, accept, modify, or reject the Administrative Law Judge's recommendations. The recommendations of the Administrative Law Judge have no legal effect unless expressly adopted by the Commission as its final order.

Attachment B:

EERA's proposed edits to the DSP

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

SITE PERMIT FOR A SOLAR ENERGY GENERATING SYSTEM

IN

MURRAY COUNTY

ISSUED TO LAKE WILSON SOLAR ENERGY, LLC

PUC DOCKET NO. IP-7070/GS-21-792

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this site permit is hereby issued to:

Lake Wilson Solar Energy LLC

The Permittee is authorized by this site permit to construct and operate a 150-megawatt solar energy generating system with 95-megawatt battery energy storage system and associated facilities. The solar energy generating system and associated facilities shall be built and operated within the site identified in this permit and as portrayed in the official site maps, and in compliance with the conditions specified in this permit.

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

Approved and adopted this _____ day of ______

BY ORDER OF THE COMMISSION

Will Seuffert,

Executive Secretary

To request this document in another format such as large print or audio, call 651-296-0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

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ATTACHMENTS

Attachment 1 – Complaint Handling Procedures for Permitted Energy Facilities Attachment 2 – Site Maps

1 SITE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to Lake Wilson Solar Energy LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes Lake Wilson Solar Energy LLC to construct and operate a 150-megawatt solar energy generating system with 95-megawatt battery energy storage system and associated facilities, and as identified in the attached site maps, hereby incorporated into this document (Lake Wilson Solar Energy Center Project, henceforth known as Project).

1.1 Preemption

Pursuant to Minn. Stat. § 216E.10, this permit shall be the sole site approval required for the location, construction, and operation of the solar energy generating system and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

2 PROJECT DESCRIPTION

The Project is a 150 MW solar energy generating system with a 95-megawatt battery energy storage system and associated facilities on approximately 1,526 acres. The primary components of the solar energy generating system and associated facilities include:

- (a) photovoltaic panels affixed to a linear ground-mounted single-axis tracking system;
- (b) 95 MW of battery energy storage capacity
- (c) power inverters and transformers;
- (d) belowground electrical collection lines;
- (e) security fencing;
- (f) a project substation;
- (g) access roads and parking lot;
- (h) up to ten weather stations;
- (i) an operations and maintenance building;
- (j) stormwater treatment areas

2.1 Project Location

The project is located in the following:

County Township Name Township Range Sections
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Murray Leeds	106N	42W	15-17, 20-22, 27
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2.2 Project Ownership

At least 14 days prior to the pre-construction meeting, the Permittee shall file a description of 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 notify the Commission of:

- (a) a change in the owner(s) of the majority* financial or governance interests in the Permittee; or
- (b) a change in the owner(s) of the majority* financial or governance interests of the Permittee's owners; or
- (c) a sale which changes the ultimate parent entity of the Permittee
 * When there are only co-equal 50/50 percent interests, any change shall be considered a change in majority interest.

Also, in the event of an ownership change, the Permittee must provide the Commission with a certification that it has read, understands and is able to comply with the plans and procedures it filed and all conditions of this permit.

3 DESIGNATED SITE

The site maps show the Project Boundary and the approximate location of the solar energy generating system and associated facilities within the Project Boundary. The Commission sought to locate the solar energy generating system and associated facilities in a way that minimizes the overall potential human and environmental impacts of the Project, which were evaluated in the permitting process. The Project Boundary serves to provide the Permittee with the flexibility to make minor adjustments to the layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. The Permittee shall make any modification to the location of the solar energy generating system or associated

facilities in such a manner to have comparable overall human and environmental impacts relative to the siting factors of Minnesota Rule 7850.4100 and shall specifically identify them in the site plan pursuant to Section 8.3.

The site designated by the Commission for the [Project Name] is the site depicted on the site maps attached to this permit. [As applicable, provide a detailed description of the authorized site. Example: The site is generally described as follows...]

The layout represents the approximate location of photovoltaic tracker rows and associated facilities within the project boundary and identifies a layout that seeks to minimize the overall potential human and environmental impacts of the project, which were evaluated in the permitting process. The project boundary serves to provide the Permittee with the flexibility to make minor adjustments to the layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. Any modification to the location of a photovoltaic tracker row or other associated facility depicted in the preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts and shall be specifically identified in the site plan pursuant to Section 8.3.

4 GENERAL CONDITIONS

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

4.1 Permit Distribution

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

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

4.2 Access to Property

The Permittee shall contact landowners prior to entering the property or conducting maintenance within the site, unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3 Construction and Operation Practices

The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

4.3.1 Field Representative

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

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to the pre-construction meeting. The Permittee shall provide the field representative's contact information to affected landowners within or adjacent to the Project Boundary, local government units and other interested persons 14 days prior to the pre-construction meeting. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, local government units and other interested persons. The Permittee shall file with the Commission an affidavit of distribution of its field representative's contact information at least 14 days prior to the pre-construction meeting and upon changes to the field representative.

4.3.2 Site Manager

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

The Permittee shall file the name, address, email, phone number, and emergency phone number of the site manager with the Commission within 14 days prior to the pre-operation meeting. The Permittee shall provide the site manager's contact information to landowners

within or adjacent to the Project Boundary, local government units and other interested persons at least 14 days prior to the pre-operation meeting. The Permittee may change the site manager at any time upon notice to the Commission, landowners within or adjacent to the Project Boundary, local government units, and other interested persons. The Permittee shall file with the Commission an affidavit of distribution of its site manager's contact information at least 14 days prior to the pre-operation meeting and upon changes to the site manager.

4.3.3 Employee Training and Education of Permit Terms and Conditions

The Permittee shall train and educate all employees, contractors, and other persons involved in the construction and ongoing operation of the solar energy generating system of the terms and conditions of this permit. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.4 Independent Third-Party Monitor

Prior to any construction, the Permittees shall propose a scope of work and identify one independent third party monitor on behalf of the Department of Commerce. The scope of work shall be developed in consultation with and approved by the Department of Commerce. This third-party monitor will report directly to and will be under the control of the Department of Commerce with costs borne by the Permittee. The Permittee shall file the scope of work, and the name, address, email, phone number, and emergency phone number of the third-party monitor with the Commission at least 14 days prior to the pre-construction meeting, and upon changes to the scope of work or third-party monitor contact information.

4.3.5 Public Services and Public Utilities

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

The Permittee shall cooperate with county and city road authorities to develop appropriate signage and traffic management during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.6 Temporary Workspace

The Permittee shall select temporary workspace and equipment staging areas that limit the removal and impacts to vegetation. The Permittee shall not site temporary workspace in wetlands or native prairie as defined in sections 4.3.10 and 4.3.11. The Permittee shall site temporary workspace to comply with standards for development of the shorelands of public waters as defined in Section 4.3.10. The Permittee shall obtain temporary easements outside of the authorized Project Boundary from affected landowners through rental agreements as these are not provided for in this permit.

4.3.7 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0010 to 7030.0080, at all times and at all appropriate locations during operation of the Project. Construction and maintenance activities shall be limited to daytime working hours to the extent practicable.

4.3.8 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners and the local unit of government having direct zoning authority over the area in which the Project is located <u>when developing the Visual Screening Plan required in Section 5.5.</u> The Permittee shall use care to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Project during construction and operation.

4.3.9 Topsoil Protection

The Permittee shall implement measures to protect and segregate topsoil from subsoil on all lands.

4.3.10 Soil Compaction

The Permittee shall implement measures to minimize soil compaction of all lands utilized for Project construction and travelled on by cranes, heavy equipment, and heavy trucks.

4.3.11 Soil Erosion and Sediment Control

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

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

4.3.12 Public Lands

In no case shall photovoltaic tracker rows and associated facilities including foundations, access roads, underground cable, and transformers, be in the public lands identified in Minn. R. 7850.4400, subp. 1, or in federal waterfowl production areas. Photovoltaic tracker rows and associated facilities shall not be in the public lands identified in Minn. R. 7850.4400, subp. 3, unless there is no feasible and prudent alternative.

4.3.13 Wetlands and Water Resources

The Permittee shall not place the solar energy generating system or associated facilities in public waters and public waters wetlands, as shown on the public water inventory maps prescribed by Minnesota Statutes Chapter 103G, except that electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to permits and approvals by the Minnesota Department of Natural Resources (DNR) and the United States Army Corps of Engineers (USACE), and local units of government as implementers of the Minnesota Wetlands Conservation Act. The Permittee shall locate the solar energy generating system and associated facilities in compliance with the standards for development of the
shorelands of public waters as identified in Minn. R. 6120.3300, and as adopted, Minn. R. 6120.2800, unless there is no feasible and prudent alternative.

The Permittee shall construct in wetland areas during frozen ground conditions, to the extent feasible, to minimize impacts. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. The Permittee shall contain and manage soil excavated from the wetlands and riparian areas in accordance with all applicable wetland permits. The Permittee shall access wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts.

The Permittee shall restore wetland and water resource areas disturbed by construction activities to pre-construction conditions in accordance with the requirements of applicable state and federal permits or laws and landowner agreements. The Permittee shall meet the USACE, DNR, and local units of government requirements.

4.3.14 Native Prairie

The Permittee shall not place the solar energy generating system or associated facilities in native prairie, as defined in Minn. Stat. § 84.02, subd. 5, unless addressed in a prairie protection and management plan and not located in areas enrolled in the Native Prairie Bank Program. The Permittee shall not impact native prairie during construction activities, as defined in Minn. Stat. § 216E.01, unless addressed in a prairie protection and management plan.

The Permittee shall prepare a prairie protection and management plan in consultation with the DNR if native prairie, as defined in Minn. Stat. § 84.02, subd. 5, is identified within the Project Boundary. The Permittee shall file the prairie protection and management plan with the Commission at least 30 days prior to submitting the site plan required by Section 8.3 of this permit. The prairie protection and management plan shall address steps that will be taken to avoid impacts to native prairie and mitigation to unavoidable impacts to native prairie by restoration or management of other native prairie areas that are in degraded condition, by conveyance of conservation easements, or by other means agreed to by the Permittee, the DNR, and the Commission.

4.3.15 Vegetation Removal

The Permittee shall minimize the number of trees removed in selecting the site layout specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow

fences, and other vegetation, to the extent that such actions do not violate sound engineering principles or interfere with the safe operation of the Project.

4.3.16 Beneficial Habitat

The Permittee shall implement site restoration and management practices that provide for native perennial vegetation and foraging habitat beneficial to gamebirds, songbirds, and pollinators; and that enhances soil water retention and reduces storm water runoff and erosion. To ensure continued management and recognition of beneficial habitat, the Permittee is encouraged to meet the standards for Minnesota's Habitat Friendly Solar Program by submitting project plans, seed mixes, a completed project planning assessment form, and any other applicable documentation used to meet the standard to the Board of Water and Soil Resources (BWSR). If the Permittee chooses to participate in Minnesota's Habitat-Friendly Solar Program, it shall file documents required to be filed with BWSR for meeting and maintaining Habitat Friendly Solar Certification with the Commission.

4.3.17 Vegetation Management Plan

The Permittee shall develop a vegetation management plan (VMP), in coordination with the Department of Commerce, and the Vegetation Management Working Group (VMWG), using best management practices established by the DNR and BWSR. The Permittee shall file the VMP and documentation of the coordination efforts between the Permittee and the coordinating agencies with the Commission at least 14 days prior to the pre-construction meeting. Landowner-specific vegetation requests resulting from individual consultation between the Company and a landowner need not be included in the Vegetation Management Plan. The Permittee shall provide all landowners within the Project Boundary with copies of the VMP. The Permittee shall file with the Commission an affidavit of its distribution of the VMP to landowners at least 14 days prior to the pre-construction meeting.

The VMP must include the following:

- (a) management objectives addressing short term (year 0-5, seeding and establishment) and long term (year 5 through the life of the Project) goals;
- (b) a description of planned restoration and vegetation management activities, including how the site will be prepared, timing of activities, how seeding will occur (broadcast, drilling, etc.), and the types of seed mixes to be used;

- (c) a description of how the site will be monitored and evaluated to meet management goals;
- (d) a description of the management tools used to maintain vegetation (*e.g.*, mowing, spot spraying, hand removal, fire, grazing, etc.), including the timing and frequency of maintenance activities;
- (e) identification of the third-party (*e.g.*, consultant, contractor, site manager, etc.) contracted for restoration, monitoring, and long-term vegetation management of the site;
- (f) identification of on-site noxious weeds and invasive species (native and non-native) and the monitoring and management practices to be utilized; and
- (g) a marked-up copy of the site plan showing how the site will be revegetated and that identifies the corresponding seed mixes.

Best management practices should be followed concerning seed mixes, seeding rates, and cover crops.

4.3.18 Agricultural Impact Mitigation Plan

The Permittee shall develop an agricultural impact mitigation plan (AIMP) in coordination with the Minnesota Department of Agriculture (MDA). The Permittee shall provide landowners within the Project Boundary with a copy of the AIMP. The Permittee shall file with the Commission the AIMP and an affidavit of the AIMP distribution to landowners at least 14 days prior to the pre-construction meeting.

4.3.19 Application of Pesticides

The Permittee shall restrict pesticide use to those pesticides and methods of application approved by the MDA, DNR, and the U.S. Environmental Protection Agency (EPA). Selective foliage or basal application shall be used when practicable. All pesticides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner at least 14 days prior to pesticide application on their property. The Permittee may not apply any pesticide if the landowner request that there be no application within the landowner's property. The Permittee shall provide notice of pesticide application to <u>affected adjacent</u> landowners and known beekeepers operating known apiaries within three miles of the Project Boundary at least 14 days prior to such application. The Permittee shall keep pesticide communication and application records and provide them upon the Commission's request.

4.3.20 Invasive Species

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

4.3.21 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil, the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.22 Roads

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the Project. The Permittee shall not haul oversize or overweight loads associated with the Project <u>on public roads</u> without required permits and approvals.

The Permittee shall locate all perimeter fencing and vegetative screening in a manner that does not interfere with routine road maintenance activities and allows for continued safe travel on public roads.

The Permittee shall construct the fewest number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits. The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when accessing construction workspace, unless otherwise negotiated with the affected landowner. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.23 Archaeological and Historic Resources

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

Prior to construction, the Permittee shall train workers about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. The Permittee shall not resume construction at such location until authorized by local law enforcement or the State Archaeologist. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.24 Interference

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the project, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the project. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.25 Restoration

The Permittee shall restore the areas affected by construction of the Project to the condition that existed immediately before construction began to the greatest extent possible. The time period to complete restoration may be no longer than 12 months after the completion of construction, unless otherwise negotiated with the affected landowner. Restoration shall be

compatible with the safe operation, maintenance and inspection of the Project. Within 60 days after completion of all restoration activities, the Permittee shall notify the Commission in writing of the completion of such activities.

4.3.26 Cleanup

The Permittee shall remove and properly dispose of all construction waste and scrap from the site and all premises on which construction activities were conducted upon completion of each task. The Permittee shall remove and properly dispose of all personal litter, including bottles, cans, and paper from construction activities on a daily basis.

4.3.27 Pollution and Hazardous Wastes

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

4.3.28 Damages

The Permittee shall fairly restore or compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.29 Public Safety

The Permittee shall provide educational materials to landowners within and adjacent to the Project Boundary and, upon request, to interested persons about the Project and any restrictions or dangers associated with the Project. The Permittee shall also implement any necessary safety measures such as placing warning signs and gates for traffic control or to restrict public access. The Permittee shall submit the location of all underground facilities, as defined in Minn. Stat. § 216D.01, subd. 11, to Gopher State One Call following the completion of the construction of the Project. The Permittee shall keep records of compliance with this section and provide them upon the request of Department of Commerce or Commission staff.

4.3.30 Site Identification

The Permittee shall mark the solar energy generating system with a clearly visible identification number and or street address.

4.3.31 Security Fencing

The Permittee shall design the security fence surrounding the solar energy generating system to minimize the visual impact of the Project while maintaining compliance with the National Electric Safety Code. The Permittee shall develop a final fence plan for the specific site in coordination with EERA and the DNR. The final fence plan shall be submitted to the Commission as part of the site plan pursuant to Section 8.3.

4.4 Feeder Lines

The Permittee may use a hybrid electrical collection system of aboveground and belowground conductors to balance direct and indirect aesthetic impacts, electrical interference potential, bird collisions and electrocution, and soil impacts.

The Permittee may use overhead or underground feeder lines that carry power from an internal project interconnection point to the project substation or interconnection point on the electrical grid. The Permittee shall place overhead and underground feeder lines that parallel public roads within the public right-of-way or on private land immediately adjacent to the road. The Permittee shall obtain approval from the landowner or government unit responsible for the affected right-of-way.

The Permittee shall locate feeder lines in such a manner as to minimize interference with agricultural operations including, but not limited, to existing drainage patterns, drain tile, future tiling plans, and ditches. The Permittee shall place safety shields on all guy wires associated with overhead feeder lines. The Permittee shall submit the engineering drawings of all collector and feeder lines with the site plan pursuant to Section 8.3.

4.5 Other Requirements

4.5.1 Safety Codes and Design Requirements

The Permittee shall design the solar energy generating system and associated facilities to meet or exceed all relevant local and state codes, Institute of Electrical and Electronics Engineers, Inc. standards, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. The Permittee shall keep records of compliance with these standards and provide them upon the request of Department of Commerce or Commission staff.

4.5.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of those permits unless those permits conflict with or are preempted by federal or state permits and regulations. The Permittee shall submit a copy of such permits to the Commission upon request.

4.5.3 Prevailing Wage

The Permittee, its contractors, and subcontractors shall pay no less than the prevailing wage rate as defined in Minnesota Statute 177.42, and shall be subject to the requirements and enforcement provisions under Minnesota Statute sections 177.27, 177.30, 177.32, 177.41 to 177.435, and 177.45.

5 SPECIAL CONDITIONS

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

5.1 Facility Lighting

The Permittee must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation and operations and maintenance facility. Downward facing lighting must be clearly visible on the site plan submitted for the project.

5.2 Dust Control

The Permittee shall utilize non-chloride products for dust control activities.

5.3 Wildlife Friendly Erosion Control

<u>The Permittee shall use only "bionetting" or "natural netting" types and mulch products</u> <u>without synthetic (plastic) fiber additives.</u> [Add Special Conditions in accordance with the record of the docket]

6 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the site within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

7 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

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

8 COMPLIANCE REQUIREMENTS

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

8.1 Pre-Construction Meeting

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

8.2 Pre-Operation Meeting

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

8.3 Site Plan

At least 30 days prior to the pre-construction meeting, the Permittee shall file with the Commission, and provide the Department of Commerce, and Murray County with a site plan that includes specifications and drawings for site preparation and grading; specifications and locations of the solar energy generating system and associated facilities; and procedures for cleanup and restoration. The documentation shall include maps depicting the Project Boundary, solar energy generating system and associated facilities layout in relation to that approved by this permit.

The Permittee may not commence construction until the earlier of (i) 30 days after the preconstruction meeting or (ii) until the Commission has notified the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Commission notifies the Permittee in writing within 30 days after the pre-construction meeting that it has completed its review of the documents and planned construction, and finds that the planned construction in not consistent with this permit, the Permittee may submit additional and/or revised documentation and may not commence construction until the Commission has notified the Permittee in writing that it has determined that the planned construction is consistent with this permit.

If the Permittee intends to make any significant changes to its site plan or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission, the Department of Commerce, and Murray County at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

8.4 Status Reports

The Permittee shall file monthly status reports on progress regarding site construction with the Commission. Reports shall begin with the issuance of the site permit and continue until completion of restoration. Reports shall describe construction activities and progress, and activities undertaken in compliance with this permit. Reports shall include text and photographs.

If the Permittee does not commence construction of the Project within six months of the permit issuance, the Permittee shall file status reports on the anticipated timing of construction every six months beginning with the issuance of this permit until the pre-construction meeting. The status updates shall include information on the Project's Midcontinent Independent System Operator (MISO) interconnection process.

8.5 Labor Statistic Reporting

The Permittee shall file quarterly reports with the Commission within 45 days of the end of the quarter regarding construction workers that participated in the construction of the Project. The reports shall:

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

8.6 In-Service Date

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

8.7 As-Builts

Within 90 days after completion of construction, the Permittee shall submit copies of all final as-built plans and specifications developed during the project.

8.8 GPS Data

Within 90 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the solar energy generating system.

8.9 Project Energy Production

The Permittee shall, by February 1st following each complete or partial year of project operation, file a report with the Commission on the monthly energy production of the facility including:

- (a) the installed nameplate capacity of the permitted facility;
- (b) the total daily energy generated by the facility in MW hours;
- (c) the total monthly energy generated by the facility in MW hours;
- (d) the monthly capacity factor of the facility;
- (e) yearly energy production and capacity factor for the facility;
- (f) the average monthly and average annual solar strength gradient measured in kWh/m²/Day observed at the facility;
- (g) the operational status of the facility and any major outages, major repairs, or performance improvements occurring in the previous year; and
- (h) any other information reasonably requested by the Commission.

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

8.10 Emergency Response

The Permittee shall prepare an Emergency Response Plan (ERP) in consultation with the emergency responders having jurisdiction over the Project prior to construction. The Permittee shall file the ERP, along with any comments from emergency responders, to the Commission at least 14 days prior to the pre-construction meeting and a revised ERP, if any, at least 14 days prior to the pre-operation meeting. At least 14 days prior to the pre-construction meeting the Permittee shall file with the Commission an affidavit of the distribution of the ERP to emergency responders and Public Safety Answering Points (PSAP) with jurisdiction over the

Project. The Permittee shall obtain and register the Project address or other location indicators acceptable to the emergency responders and PSAP having jurisdiction over the Project.

8.11 Extraordinary Events

Within 24 hours of discovery of an occurrence, the Permittee shall notify the Commission of any extraordinary event. Extraordinary events include but shall not be limited to: fires, solar panel collapse, acts of sabotage, collector or feeder line failure, and injured worker or private person. The Permittee shall, within 30 days of the occurrence, file a report with the Commission describing the cause of the occurrence and the steps taken to avoid future occurrences.

8.12 Wildlife Injuries and Fatalities

The Permittee shall report any wildlife injuries and fatalities to the Commission quarterly.

9 DECOMMISSIONING AND RESTORATION

9.1 Decommissioning Plan

The Permittee shall comply with the provisions of the most recently filed and accepted decommissioning plan. The initial version of the decommissioning plan was submitted for this project as Appendix G to the Site Permit Application. The Permittee shall file an updated decommissioning plan incorporating comments and information from the permit application process and any updates associated with the final construction plans with the Commission at least fourteen-14 days prior to the pre-construction meeting. The Permittee shall update and file the decommissioning plan with the Commission every five years following the commercial operation date.

The decommissioning plan shall provide information identifying all surety and financial securities established for decommissioning and site restoration. The decommissioning plan shall provide an itemized breakdown of costs of decommissioning all Project components, which shall include labor and equipment. The plan shall identify cost estimates for the removal of solar panels, racks, underground collection cables, access roads, transformers, substations, and other Project components. The decommissioning plan may also include anticipated costs for the replacement of panels or repowering the Project by upgrading equipment.

The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the area in which the Project is located. The Permittee shall

ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the Project at the appropriate time. The Commission may at any time request the Permittee to file a report with the Commission describing how the Permittee is fulfilling this obligation.

9.2 Site Final Restoration

Upon expiration of this permit or upon termination of operation of the project, the Permittee shall have the obligation to dismantle and remove from the site all solar panels, mounting steel posts and beams, inverters, transformers, overhead and underground cables and lines, foundations, buildings, and ancillary equipment in accordance with the most recently filed and accepted decommissioning plan. To the extent feasible, the Permittee shall restore and reclaim the site to pre-project conditions. Landowners may require the site be returned to agricultural production or may retain restored prairie vegetation, or other land uses as agreed to between the landowner and the Permittee. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. All such agreements between the Permittee and the affected landowner shall be submitted to the Commission prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within 18 months of termination.

The Permittee shall restore the site in accordance with the requirements of this condition and file a notification of final restoration completion to the Commission within 18 months of termination of operation of the Project.

9.3 Abandoned Solar Installations

The Permittee shall notify the Commission of any solar equipment that is abandoned prior to termination of operation of the Project. Equipment shall be considered abandoned after one year without energy production and the land restored pursuant to Section 9.2 unless a plan is submitted to and approved by the Commission outlining the steps and schedule for returning the equipment to service.

10 COMMISSION AUTHORITY AFTER PERMIT ISSUANCE

10.1 Final Boundaries

After completion of construction the Commission shall determine the need to adjust the final Project Boundary required for the Project. This permit may be modified, after notice and opportunity for hearing, to represent the actual Project Boundary required by the Permittee to operate the Project authorized by this permit.

10.2 Expansion of Site Boundaries

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

10.3 Periodic Review

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

10.4 Modification of Conditions

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

- (a) violation of any condition in this permit;
- (b) endangerment of human health or the environment by operation of the project; or
- (c) existence of other grounds established by rule.

10.5 More Stringent Rules

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

10.6 Right of Entry

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

- (a) To enter upon the facilities easement of the property for the purpose of obtaining information, examining records, and conducting surveys or investigations.
- (b) To bring such equipment upon the facilities easement of the property as is necessary to conduct such surveys and investigations.
- (c) To sample and monitor upon the facilities easement of the property.
- (d) To examine and copy any documents pertaining to compliance with the conditions of this Permit.

11 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

12 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity (transferee). In its request, the Permittee must provide the Commission with:

- (a) the name and description of the transferee;
- (b) the reasons for the transfer;
- (c) a description of the facilities affected; and
- (d) the proposed effective date of the transfer.

The transferee must provide the Commission with the name and contact information for the site manager, as described in Section 4.3.2, and either a current version with e-docket reference, or a revised version of the following:

- (a) VMP as described in Section 4.3.17;
- (b) complaint procedures, as described in Section 7 and Attachment 1;
- (c) ERP, as described in Section 8.10; and
- (d) decommissioning plan, as described in Section 9

13 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.

14 EXPIRATION DATE

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