OAH 5-2500-39336
MPUC IP-7070/CN-21-791,
GS-21-792

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Applications 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

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This matter was assigned to Administrative Law Judge Jim Mortenson to conduct a joint public hearing and prepare a report on Lake Wilson Solar Energy LLC's (Applicant or Lake Wilson Solar) applications for a certificate of need (CN) (MPUC Docket No. 21-791) and site permit (SP) (MPUC Docket No. 21-792) for the up to 150 MW Lake Wilson Solar and Associated Battery Storage Project in Murray County (the Project). On April 4, 2023, the Public Utilities Commission (Commission) ordered that the CN application be reviewed using the informal review process. The Commission also ordered the public hearing on both applications be held jointly. In addition, the Commission requested the Judge prepare a full report, including findings of fact, conclusions of law, and recommendations on the merits of the SP and CN. In addition, the Commission requested recommendations, if any, on conditions and provisions of the CN and SP.

The Judge held two joint public hearings. The first hearing was convened in Murray County on November 28, 2023. The second hearing was held remotely by telephone and internet on November 29, 2023. Written comments from the public were accepted until December 11, 2023. The Applicant filed responses to the public comments on December 21, 2023. The Department of Commerce Energy Environmental Review and Analysis (EERA) filed responses to the public comments on January 10, 2024.

Jeremy P. Duehr, Fredrickson & Byron, P.A., and Korede Olagbegi, associate, Renewable Development, Invenergy, LLC (Invenergy), appeared on behalf of Lake Wilson Solar at the public hearings.

Jenna Ness, environmental review manager, EERA, appeared on behalf of EERA at the public hearings.

Cezar Panait and Jacques Harvieux, Commission staff, appeared on behalf of the Commission at the public hearings.

STATEMENT OF THE ISSUES

1. Has Lake Wilson Solar satisfied the criteria established in Minn. Stat. § 216B.243, subd. 3 (2022), and Minn. R. 7849.0120 (2023) for a certificate of need for the Project?

2. Has Lake Wilson Solar satisfied the criteria set forth in Minn. Stat. § 216E.03 (2022) and Minn. R. 7850.4000, .4100 (2023) for a site permit for the Project?

SUMMARY OF RECOMMENDATION

Lake Wilson Solar has satisfied the applicable legal requirements and the Commission should **ISSUE** a certificate of need and **GRANT** a site permit for the Project, subject to the recommendations discussed below.

Based on the Application, proceedings, and other evidence in the record, the Judge makes the following:

FINDINGS OF FACT

I. APPLICANT

1. Lake Wilson Solar Energy LLC is a limited liability company and independent power producer.[1] Lake Wilson Solar is a wholly owned subsidiary of Invenergy Solar Development North America LLC, and an affiliate of Invenergy LLC (Invenergy), an energy development company that is providing development services for the Project.[2]

2. Invenergy, through its affiliates, has developed 191 large-scale renewable energy projects across the globe, including 50 solar projects in the United States, capable of generating 6,205 megawatts (MW) of electricity, and 18 battery storage projects capable of storing 486 MW / 1,537 MWh.[3]

3. In 2019, another affiliate of Invenergy, Freeborn Wind Energy LLC, completed development, permitting, and sale of a wind project in Freeborn County, Minnesota and Worth County, Iowa.[4]

[1] Exhibit (Ex.) LW-4 at 7 (Lake Wilson Solar Energy Certificate of Need (CN) Application) (Feb. 9, 2023) (eDocket No. 20232-193061-02).
[2] Ex. LW-4 at 10 (CN Application).
[3] Ex. LW-9 at 3 (SP Application).
[4] Ex. LW-4 at 10 (CN Application).

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

4. On November 16, 2021, Lake Wilson Solar filed a Notice of its Intent to Submit a Site Permit application (SP Application) for the Project under the alternative permitting procedures of Minn. R. 7850.2800-.3900.[5]

5. On November 16, 2021, Lake Wilson Solar filed a Request for Exemption for Certain Certificate of Need Application Content Requirements with the Commission requesting exemptions from certain CN data requirements.[6]

6. On November 24, 2021, the Commission issued a Notice of Comment Period on the Request for Exemption from Certain Certificate of Need Application Content Requirements, which opened an initial written comment period, a reply comment period, and a supplemental comment period.[7]

7. On December 9, 2021, the Southwest Regional Development Commission filed written comments stating it did not have concerns with the exemptions requested by Lake Wilson Solar.[8]

8. On December 10, 2021, the DOC Division of Energy Resources (DER) filed comments recommending that the Commission approve Lake Wilson Solar's data exemption requests, subject to the provision of requiring some additional information from Lake Wilson Solar.[9]

9. On December 15, 2021, Lake Wilson Solar filed reply comments concurring with DER staff's recommendations.[10]

10. On January 4, 2022, the Commission issued an Order approving Lake Wilson Solar's data exemption requests and requiring Lake Wilson Solar to provide alternative data for certain areas.[11]

11. On February 9, 2023, Lake Wilson Solar filed the Certificate of Need Application (CN Application) and SP Application with the Commission for the Project.[12]

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[5] Ex. LW-2 (Notice of Intent to Submit SP Application under Alternative Permitting Process) (Nov. 16, 2021) (eDocket No. 202111-179832-01).
[6] Ex. LW-1 (Request for Exemption from Certain Certificate of Need Application Content Requirements) (Nov. 16, 2021) (eDocket Nos. 202111-179831-01, 202111-179831-02).
[7] Ex. PUC-1 (Notice of Comment Period on Request for Exemption from Certain Certificate of Need Application Content Requirements) (Nov. 24, 2021) (eDocket No. 202111-180125-01).
[8] Southwest Regional Development Commission Comments (Dec. 9, 2021) (eDocket No. 202112-180541-01).
[9] Ex. PUC-3 (DER Comments) (Dec. 10, 2021) (eDocket No. 202112-180569-01).
[10] Ex. LW-3 (Lake Wilson Solar Reply Comments) (Dec. 15, 2021) (eDocket No. 202112-180720-01).
[11] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements) (Jan. 4, 2022) (eDocket No. 20221-181183-01).
[12] Ex. LW-4 to LW-7 (CN Application, Public Appendix A, Trade Secret Appendix A, Figures, and Certificate of Service) (Feb. 9, 2023) (eDocket Nos. 20232-193061-01 to 20232-193061-06).

Lake Wilson Solar also filed a summary of filing.[13] Lake Wilson Solar seeks approval of the CN Application under Minn. Stat. § 216B.243 (2022).

12. Between February 16, 2023, and February 20, 2023, Lake Wilson Solar published notice of filing its applications in in the Murray County Wheel Herald Tribune, and the Pioneer Press.[14] Lake Wilson Solar also filed confirmation that it had notified those persons on the Commission's general service list, landowners, and local government officials that Lake Wilson Solar had filed both of the applications.[15]

13. On February 21, 2023, the Commission issued a Notice of Comment Period on Application Completeness for the CN Application and SP Application. Initial comments were accepted through March 7, 2023, reply comments through March 14, 2023, and supplemental comments through March 20, 2023.[16]

14. On March 7, 2023, EERA filed written comments recommending that the Commission find the applications to be substantially complete but require that the Applicant continue to coordinate with the Minnesota Department of Natural Resources (DNR). The EERA also recommended the Commission take no action on an advisory task force, request a full administrative law judge report with recommendations, and process the applications jointly, including joint environmental review.[17]

15. On March 9, 2023, the International Union of Operating Engineers (IUOE) Local 49 and North Central States Regional Council (NCSRC) of Carpenters filed written comments recommending the Commission find the applications to be compete and use a joint process without a contested case hearing.[18]

16. On March 14, 2023, the Laborers District Council of Minnesota and North Dakota (LIUNA) submitted written comments recommending the Commission find the applications to be complete and use a joint process without a contested case hearing.[19]

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[13] Ex. LW-8 (Lake Wilson Solar Summary Filling and Certificate of Service) (Feb. 9, 2023) (eDocket Nos. 20232-193314-01 to 20232-193062-02); Ex. LW-9 to LW-20 (Lake Wilson Solar SP Application) (Feb. 9, 2023) (eDocket Nos. 20232-193056-01 to -10, 20232-193057-01 to -10, 20232-193059-01 to -07, 20232-193060-01 to -09).

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

[15] *Id.*, Attachment A-C, E.

[16] Ex. PUC-5 (Notice of Comment Period on Application Completeness) (Feb. 21, 2023) (eDocket No. 20232-193314-01).

[17] Ex. EERA-1 (Comments and Recommendations Regarding Application Completeness) (March 7, 2023) (eDocket No. 20233-193694-01).

[18] Ex. PUC-6 (IUOE Local 49 and NCSRC of Carpenters Comments) (Mar. 9, 2023) (eDocket No. 20233-193757-01, 20233-193758-01).

[19] Ex. PUC-7 (LIUNA Minnesota and North Dakota Comments) (Mar. 14, 2023) (eDocket No. 20233-193962-01, 20233-193962-02).

17. On March 14, 2023, DER staff filed written comments recommending the Commission find the CN Application to be complete and that the Commission review the application using the Commission's comment process.[20]

18. On March 14, 2023, Lake Wilson Solar filed Reply Comments regarding the completeness of the applications in response to public comments and DER staff comments.[21] Lake Wilson Solar requested the Commission "accept the Applications as complete; determine that the applications should be reviewed jointly; decline to appoint an advisory task force; and request a full administrative law judge report with recommendations for the Project's public hearing."[22]

19. On April 4, 2023, the Commission issued an Order accepting the CN Application as complete and the SP Application as substantially complete.[23] In addition, the Order:

- Directed the evaluation of CN Application using the informal review process;
- Required continued coordination between Lake Wilson Solar and DNR to ensure native prairie delineation prior to public hearings;
- Approved joint public meetings, joint public hearings, and combined environmental review of the applications;
- Requested EERA to prepare an environmental assessment (EA) in lieu of an environmental report; and
- Addressed various other administrative matters.[24]

20. On April 24, 2023, the Commission issued a Notice of Public Information and Environmental Assessment Scoping Meeting. An in-person meeting was scheduled for May 10, 2023, in Slayton, Minnesota, and a remote hearing was scheduled for May 11, 2023. The Notice announced that written comments would be accepted through May 25, 2023. The Notice requested comments on issues and facts that should be considered in the development of the EA.[25]

[20] Ex. PUC-8 (DER Comments) (Mar. 14, 2023) (eDocket No. 20233-193961-01).
[21] Ex. LW-29 to LW-30 (Lake Wilson Solar Reply Comments regarding Application Completeness) (Mar. 14, 2023) (eDocket No. 20233-193951-01, 20233-193951-02).
[22] Ex. LW-29 at 3.
[23] Ex. PUC -9 (Commission Order on Lake Wilson Solar CN and SP Applications Completeness) (April 4, 2023) (eDocket Nos. 20234-194490-01, 20234-194490-02).
[24] Ex. PUC -9.
[25] Ex. PUC-10 (Notice of Public Information and EA Scoping Meeting) (April 24, 2023) (eDocket No. 20234-195079-01, 20234-195079-02).

21. On May 2, 2023, EERA also published the Notice of Public Information and EA Scoping Meetings in the Environmental Quality Board (EQB) Monitor.[26]

22. On May 10, 2023, the Minnesota Land & Liberty Coalition submitted written comments emphasizing how the Lake Wilson Solar Project protects private property rights, allows property owners to invest in their land and build a reliable energy grid, and diversifies the economy for Murray County.[27]

23. On May 10 and 11, 2023, the Commission held the public information and EA scoping meetings (scoping meetings).[28] On May 25, 2023, EERA filed the transcripts from the May 10 and 11, 2023 scoping meetings.[29] No members of the public provided comments during these two meetings.

24. On May 25, 2023, the IUOE Local 49 and NCSRC of Carpenters filed written comment on the EA scoping.[30]

25. On May 25, 2023, LIUNA Minnesota and North Dakota submitted written comments on the EA scoping.[31]

26. On May 25, 2023, the Minnesota Department of Transportation (MnDOT) filed comments on the EA scoping.[32]

27. On May 25, 2023, DNR filed comments on the EA scoping.[33]

28. On June 12, 2023, EERA staff filed written comments and recommendations for the EA scoping.[34] EERA staff asked for a variance to Minn. R. 7850.3700 subp. 3, that would require an EA scoping decision within ten days of the close of the scoping comment period.[35] EERA staff stated that granting a variance on the issuance date furthers the public interest by allowing enough time to develop an informed and robust scoping decision without imposing an excessive hardship on the applicant,

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[26] Ex. EERA-3 (EQB Monitor Notice of Public Information and Environmental Assessment Scoping Meetings) (May 2, 2023) (eDocket No. 20235-195516-01).
[27] Ex. PUC-11 (Minnesota Land & Liberty Coalition Comments) (May 10, 2023) (eDocket No. 20235-195737-01, 20235-195737-02).
[28] Commission Meeting PowerPoint Presentation and EERA Meeting Handouts (May 23, 2023) (eDocket Nos. 20235-196052-01, 20235-196070-01, 20235-196070-02).
[29] Ex. EERA-4, EERA-5 (Written and Meeting Public Comments Received on the Scope of the Environmental Assessment for the Lake Wilson Solar Energy Center Project) (May 30, 2023) (eDocket No. 20235-196213-01).
[30] Ex. PUC-12 (IUOE Local 49 and NCSRC of Carpenters Comments) (May 25, 2023) (eDocket No. 20235-196100-01, 20235-196100-02).
[31] Ex. PUC-13 (LIUNA Minnesota and North Dakota Comments) (May 25, 2023) (eDocket No. 20235-196148-01, 20235-196148-02).
[32] Ex. PUC-14 (MnDOT Comments regarding EA Scoping) (May 25, 2023) (eDocket No. 20235-196140-01).
[33] Ex. PUC-15 (DNR Comments regarding EA Scoping) (May 25, 2023) (eDocket No. 20235-196115-01).
[34] Ex. EERA-6 (EERA staff Comments and Recommendations) (June 12, 2023) (eDocket No. 20236-196498-01, 20236-196499-01).
[35] *Id.* at 7.

and it does not conflict with any standards imposed by law.[36] EERA staff recommended the Commission take no action on the Project site recommended for inclusion in the scope of the EA, and then EERA staff will proceed to finalize and issue an EA scoping decision. EERA staff also recommended passing the variance as to time to prepare the scoping decision.[37]

29. On June 15, 2023, the Office of Administrative Hearings opened a file for this matter, advising the Commission that Judge Mortenson was assigned.[38] The Judge was informed of his assignment on July 13, 2023, following a request from the Applicant to schedule a prehearing conference.[39]

30. On July 25, 2023, the Commission issued a decision which:

- Varied Minn. R. 7850.3700, subp. 3, to allow time for Commission input regarding the scope of the EA and preparation of the scoping decision.

- Took no action with respect to Lake Wilson's proposed site recommended for inclusion in the scope of the EA.[40]

31. On July 28, 2023, the Judge issued a Scheduling Order for a prehearing conference on August 2, 2023.[41] The prehearing conference was held on that date.

32. On August 8, 2023, EERA filed the Notice of Environmental Assessment Scoping Decision (EA Scoping Decision), which set forth the matters proposed to be addressed in the EA and identified certain issues outside the scope of the EA. No site or system alternatives were recommended for study. Accordingly, no site alternative other than the site location proposed by Lake Wilson Solar would be considered in the EA.[42]

33. On August 9, 2021, Judge Mortenson issued a First Prehearing Order setting joint public hearings on the applications for November 28, 2023 (in-person), and November 29, 2023 (remote access), and setting forth other procedural deadlines in the proceedings.[43]

34. On September 14, 2023, the Commission issued a Notice of Comment Period on the Merits of the Application for CN announcing that initial written comments would be accepted through October 16, 2023, and reply comments through October 26,

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[36] *Id.*
[37] *Id.*
[38] Email from Davidson to Panait (June 15, 2023) (on file with the Office of Admin. Hearings).
[39] Email chain beginning with email from Bednar to Helmueller (July 13, 2023) (on file with the Office of Admin. Hearings).
[40] Ex. PUC-16 (Commission Order on EA Scoping Decision) (July 25, 2023) (eDocket No. 20237-197723-01).
[41] Scheduling Order (July 28, 2023) (eDocket No. 20237-197826-01, 20237- 197826-02).
[42] Ex. EERA-8 (Notice of EA Scoping Decision) (Aug. 8, 2023) (eDocket No. 20238-198060-01); see also Ex. EERA-12 (EA Scoping Decision) (Oct. 19, 2023 (eDocket No. 202310-199731-01).
[43] First Prehearing Order (Aug. 7, 2023) (eDocket No. 20237-197826-01, 20237-197826-02).

2023. The Notice requested comments on the CN Application's compliance with 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.[44]

35. On September 28, 2023, a written public comment on the Project was submitted asking about the glare and snow drifts from the solar panels, placement of batteries and fencing, and other items.[45]

36. On October 2, 2023, the Commission filed the Sample Site Permit.[46]

37. On October 16, 2023, DER filed a Request for an Extension of Time to File Comments on the merits of the CN Application,[47] which was granted by the Commission on October 17, 2023.[48] The Commission extended the comment period to October 30, 2023, for initial comments, and November 13, 2023, for reply comments.

38. On October 18, 2023, EERA issued the EA for the Project.[49] On October 30, 2023, EERA filed a corrected Figure 7 to Appendix A of the EA.[50] On December 18, 2023, EERA filed a corrected Appendix H of the EA.[51]

39. On October 25, 2023, EERA filed confirmation that the EA was provided to various agencies including state, federal, tribal nations, and to Murray County.[52] The EERA published notice of the availability of the EA in the October 31, 2023, EQB Monitor.[53]

40. On October 30, 2023, the Commission issued a Notice of EA Availability, Public Hearings and Comment Period.[54] The Commission notified the public about the

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[44] Ex. PUC-17 (Notice of Comment Period on the Merits of the CN Application) (eDocket No. 20239-198946-01).
[45] Ex. PUC-9 to PUC-10 (Public Comment M. Ackerman) (Sept. 28, 2023, Oct. 17, 2023) (eDocket No. 20239-199227-01, 202310-199657-01). This public comment was corrected in the record on October 17, 2023.
[46] Ex. PUC-18 (Sample Site Permit) (Oct. 2, 2023) (eDocket No. 202310-199322-01).
[47] Ex. PUC-19 (DER Request for Extension of Time to File Comments) (Oct. 16, 2023) (eDocket No. 202310-199609-01).
[48] Ex. PUC-20 (Commission Notice of Extended Comment Period) (Oct. 17, 2023) (eDocket No. 202310-199648-01).
[49] Ex. EERA-11 (Environmental Assessment) (Oct. 18, 2023) (eDocket No. 202310-199721-01 to -20, 202310-199725-02 to -14).
[50] Ex. EERA-14 (Corrected Figure 7 from Appendix A of EA) (Oct. 30, 2023) (eDocket No. 202310-199731-01, 202310-200006-01).
[51] Corrected Appendix H of the EA (Dec. 16, 2023) (eDocket No. 202312-201309-01 to -02).
[52] Ex. EERA-13 (EA Provided to Permitting Agencies) (Oct. 25, 2023) (eDocket No. 202310-199894-01, 202310-199894-02).
[53] Ex. EERA-16 (EQB Monitor Notice of EA Availability, Public Hearings, and Comment Period) (Oct. 31, 2023) (eDocket No. 202310-200060-01, 202310-200060-02).
[54] Ex. PUC-21 (Notice of EA Availability and Public Hearings) (Oct. 30, 2023) (eDocket No. 202310-199966-01, 202310-199966-02); Ex. EERA-15 (Notice of EA Availability and Public Hearings, and Comment Period) (Oct. 30, 2023) (eDocket No. 202310-199966-01).

November 28, 2023, in-person hearing, the November 29, 2023, remote-access hearing, and the close of the public comment period on December 11, 2023.

41. On October 30, 2023, DER filed a Second Request for an Extension of Time to File Comments on the merits of the CN Application,[55] which was granted by the Commission on October 31, 2023.[56] The comment period was extended to November 6, 2023, for initial comments and November 16, 2023, for reply comments.

42. On November 6, 2023, LIUNA[57] and IUOE Local 49 and NCSRC of Carpenters[58] filed comments on the merits of the CN Application.

43. On November 6, 2023, DER filed a Third Request for an Extension of Time to Filed Comments on the merits of the CN Application,[59] which was granted by the Commission on November 7, 2023.[60] The comment period was extended to November 13, 2023, for initial comments and November 21, 2023, for reply comments.

44. On November 9, 2023, DER filed comments outlining its analysis and ultimately recommending the Commission issue the CN.[61]

45. On November 14, 2023, Lake Wilson Solar filed Direct Testimony of Korede Olagbegi[62] and Lance Pan.[63]

46. On November 21, 2023, Lake Wilson Solar filed Reply Comments in response to DER's comments on the merits of the CN Application.[64] Lake Wilson Solar agreed with the recommendation that the Commission issue a CN upon finding the environmental impacts in the EA acceptable.

47. On November 28 and 29, 2023, the Judge presided over joint public hearings on the applications for the Project via in-person and remote means,

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[55] Ex. PUC-22 (DOC DER Second Request for Extension of Time to File Comments) (Oct. 30, 2023) (eDocket No. 202310-200029-01).
[56] Ex. PUC-23 (Notice of Extended Comment Period – Second Notice) (Oct. 31, 2023) (eDocket No. 202310-200045-01).
[57] Ex. PUC-24 (LIUNA Comments regarding Merits of CN Application) (Nov. 6, 2023) (eDocket No. 202311-200296-01).
[58] Ex. PUC-26 (IUOE Local 49 and NCSRC of Carpenters Comments regarding Merits of CN Application) (Nov. 6, 2023) (eDocket No. 202311-200266-01, 202311-200267-01).
[59] Ex. PUC-25 (DER Third Request for Extension of Time to File Comments) (Nov. 6, 2023) (eDocket No. 202311-200285-01).
[60] Ex. PUC-27 (Notice of Extended Comment Period – Third Notice) (Nov. 7, 2023) (eDocket No. 202311-200320-01).
[61] Ex. PUC-28 (DER-Public Comments and Recommendations regarding Merits of CN Filing) (Nov. 9, 2023) eDocket No. 202311-200384-02); Ex. PUC-29 (DER-Trade Secret Comments and Recommendations regarding Merits of CN Filing) (Nov. 9, 2023) (eDocket No. 202311-200384-01).
[62] Ex. LW-33 (Direct Testimony of Korede Olagbegi) (Nov. 14, 2023) (eDocket No. 202311-200482-03 to -04).
[63] Ex. LW-34 (Direct Testimony of Lance Pan) (Nov. 14, 2023) (eDocket No. 202311-200482-05 to -06).
[64] Ex. LW-35 (Reply Comments regarding Merits of CN Application) (Nov. 21, 2023) (eDocket No. 202311-200668-01).

respectively.[65] Commission staff, EERA staff, and representatives from Lake Wilson Solar were present. The Judge entered the exhibits into the record without objection. During the in-person public hearing on November 28, 2023, seven members of the public spoke. No members of the public spoke during the remote-access public hearing held on November 29, 2022. The comments are discussed in detail below.

48. During the public comment period, the Commission received written public comments from one individual regarding the Project.[66] The Commission also received written comments from the Southwest Regional Development Commission,[67] DNR,[68] and EERA.[69] The comments are discussed in detail below.

III. DESCRIPTION OF THE PROJECT

49. The Project is a 150-megawatt (MW) alternating current (AC or ac) nameplate solar-energy capacity project paired with a 95 MW battery energy storage system (BESS) in Leeds Township, Murray County, Minnesota.[70]

50. The expected service life of the Project is approximately 30 years.[71]

51. The Project components include photovoltaic solar modules mounted on a single axis tracking system, centralized inverters, a project substation, the BESS, a project gen-tie line, electrical collection cables, an operations and maintenance facility (O&M facility), fencing, and access roads.[72] Up to ten weather stations (approximately 15 feet high) will be interspersed throughout the Project facilities and related equipment.[73] Xcel Energy will construct, own, and operate a new Xcel switchyard, as well as a 250-300 foot long Xcel line tap.[74]

52. Lake Wilson Solar will use mounted modules affixed to tracking mechanisms that would allow the modules to follow the sun from east to west on a daily basis.[75] The panels will be installed on a tracking rack system, generally aligned in rows.[76] 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.[77] The modules and tracking rack system are generally aligned in rows oriented north and south with the photo-voltaic (PV) solar modules facing east toward the rising sun in the morning, parallel to the ground

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[65] Transcripts of Public Hearing (Nov. 28 and 29, 2023) (eDocket No. 202312-201243-01 to -04).
[66] Public Comment – Glen Talsma (Nov. 30, 2023) (eDocket No. 202312-200960-01).
[67] Written Comments – Southwest Regional Development Commission Project Review (Nov. 29, 2023) (eDocket Nos. 202311-200836-01, 202311-200836-02).
[68] Written Comments – DNR (Dec. 5, 2023) (eDocket No. 202312-200987-01).
[69] Comments – EERA (Dec. 11, 2023) (eDocket No. 202312-201104-01 to -02, 202312-201105-01 to -02).
[70] Ex. LW-9 at 13 (SP Application).
[71] Ex. LW-9 at 42 (SP Application).
[72] Ex. LW-9 at 21 (SP Application).
[73] *Id.*
[74] *Id.*
[75] Ex. LW-9 at 22 (SP Application).
[76] *Id.*
[77] *Id.*

during mid-day, and then west toward the setting sun in the afternoon.[78] The modules are rotated by a small motor connected to the tracking rack system to slowly track with the sun throughout the day.[79] 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.[80]

53. The Project will convert solar energy from sunlight into direct current (DC) electrical power.[81] 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.[82] 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 high-voltage transmission line (HVTL).[83]

54. The Project includes a BESS as an associated facility to provide frequency response, capacity on demand, generation smoothing, shifting and/or firming of the power output from the Project.[84] The BESS size will have a power output of 95 MWac and will be a four-hour system, yielding a storage capability of 380 megawatt hours (MWh).[85] The BESS itself does not generate energy, but instead stores solar-generated electrical energy and releases the stored energy to the grid when desired.[86] A BESS is 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.[87]

55. The 95 MWac/380 MWh AC-coupled BESS would consist of rows of enclosures.[88] Lake Wilson Solar plans a centralized, AC-coupled system for the BESS which has all batteries being in one location. This will have a footprint of approximately four acres by itself, and approximately six acres including setbacks and fencing.[89] The enclosures would be fully outfitted with auxiliary operations and safety systems (such as HVAC, controls, and fire detection and annunciation).[90] Adjacent to the containers would be rows of pad-mount transformers and inverters.[91] The inverters would be connected to the pad-mount transformers, which will then connect to the Project substation.[92] This type

[78] *Id.*
[79] *Id.*
[80] *Id.*
[81] Ex. LW-9 at 21 (SP Application).
[82] *Id.*
[83] *Id.*
[84] Ex. LW-9 at 14 (SP Application).
[85] Ex. LW-9 at 15 (SP Application).
[86] *Id.*
[87] *Id.*
[88] Ex. LW-9 at 16 (SP Application).
[89] Ex. LW-9 at 26 (SP Application).
[90] Ex. LW-9 at 16 (SP Application).
[91] *Id.*
[92] *Id.*

of system allows for more efficient access, monitoring, and maintenance; has more flexible energy and power capacity sizing; and has more flexible dispatch capabilities.[93]

56. The Project substation will be in the southwestern part of the Project area.[94] The Project substation will occupy an estimated 3.7 acres of land and will be graded, the ground surface dressed with crushed rock, and secondary containment areas for the transformer(s) will be installed.[95] The Project substation will consist of high voltage electrical structures (i.e., poles), breakers, and one or two MPTs to step-up the power from the 34.5 kV feeders to the grid voltage of 115 kV. There will also be metering and related equipment for connecting to the transmission grid, lightning protection, and control equipment according to the specifications of the generator interconnection agreement (GIA) with the Midcontinent Independent System Operator (MISO) and Xcel.[96]

57. The new Xcel switchyard for the Project will be used to interconnect the Project to the existing Xcel Energy Fenton - Chanarambie 115 kV HVTL.[97] It will be fenced-in and protected according to North American Electric Reliability Corporation (NERC) requirements for security and safety purposes.[98] The line tap will be installed in a new easement area from the 115 kV HVTL to the new switchyard.[99]

58. The length of each of the new lines going to the switchyard will be approximately 250 to 300 feet and will include installation of either two dead-end pole structures (for single dead-ends) or six dead-ends (for three-pole dead-ends), depending on Xcel Energy's selected design and required electric conductors. Lake Wilson Solar will acquire land needed for the new Xcel switchyard and for the line tap to the tap location. Xcel Energy will permit, design/engineer, and construct the switching facility consistent with its requirements and standards.[100]

59. 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.[101] Upon completion of the 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.[102]

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[93] Ex. LW-9 at 26 (SP Application).
[94] Ex. LW-9 at 23 (SP Application).
[95] Ex. LW-9 at 23-24 (SP Application).
[96] Ex. LW-9 at 23 (SP Application).
[97] Ex. LW-9 at 25 (SP Application).
[98] *Id.*
[99] *Id.*
[100] *Id.*
[101] Ex. LW-9 at 25 (SP Application).
[102] Ex. LW-9 at 26 (SP Application).

60. All electricity generated by the Project's solar arrays will be routed to the Project substation via underground AC collector cables.[103] 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 BESS.[104] The Xcel switchyard will serve as the point of interconnect (POI) for the Project to the MISO grid system.[105] The solar and BESS portions of the Project will operate in tandem as one combined, associated facility.[106] This interconnection configuration provides sufficient outlet to maximize the use of all solar energy generation from the Project.[107]

61. Lake Wilson Solar executed a GIA for the Project with MISO that 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.[108] Lake Wilson Solar plans to work with MISO to pursue an additional 75 MWac BESS capacity via MISO's surplus interconnection process.[109]

IV. SITE LOCATION AND CHARACTERISTICS

62. The estimated boundary (site) of the Project is approximately 2,621 acres of privately-owned rural agricultural land under solar lease and easement agreements in Leeds Township in Murray County, Minnesota.[110] Lake Wilson Solar estimates that approximately 1,526 acres will host the solar panels, the BESS, and other associated facilities.[111]

63. Based on the 2020 U.S. Census, the population of Murray County is 8,179 persons, with Leeds Township having a population of 189 persons.[112]

64. The site includes some prime farmland in Leeds Township, Murray County, Minnesota.[113] The landscape has rolling till prairies and is characterized by nearly level to rolling topography that has many depressions and drainages.[114] The site has approximately six land cover types including cultivated crops (corn and soybean), hay/pasture, grassland/herbaceous, developed land, forest, and wetland.[115]

[103] Ex. LW-9 at 14 (SP Application).
[104] *Id.*
[105] *Id.*
[106] Ex. LW-9 at 15 (SP Application).
[107] *Id.*
[108] Ex. LW-9 at 14 (SP Application).
[109] Ex. LW-9 at 15.
[110] Ex. LW-9 at 1, 18.
[111] Ex. LW-9 at 18.
[112] Ex. LW-9 at 67.
[113] Ex. LW-9 at 19.
[114] Ex. LW-9 at 49.
[115] Ex. LW-9 at 77.

65. The annual precipitation for the area is 26.67 inches and the growing season generally lasts 145 to 150 days.[116] Fire and drought are the main causes of natural disturbances, and windy conditions are also commonplace.[117]

V. SOLAR RESOURCE CONSIDERATIONS

66. 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 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 location with respect to prime farmland.[118]

67. The Project will provide 150 MW of renewable power capacity and generate approximately 332,800 MWh of renewable energy in its first year of operation.[119] The Project will generate an average of approximately 313,000 MWh annually.[120] 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.[121]

VI. PROJECT SCHEDULE

68. Lake Wilson Solar plans to begin construction in 2025, with commercial operations beginning by December 31, 2027.[122]

VII. SUMMARY OF PUBLIC COMMENTS

69. On May 25, 2023, the Minnesota Department of Transportation (MnDOT) filed comments noting the potential impacts from the Project for MnDOT would be minimal but asking Lake Wilson Solar to coordinate with MnDOT throughout the planning process. MnDOT stated the proximity of the Project to the current MnDOT truck highway 30 meant Lake Wilson Solar must ensure mitigation efforts for soil impacts, erosion control, and stormwater runoff ponds do not negatively impact existing infrastructure. MnDOT noted that MnDOT permits may be required for parts of the Project.[123]

70. On May 25, 2023, DNR filed comments regarding environmental impacts to be considered in the EA. DNR commented that stormwater runoff from the Project site could contribute to impairments on Beaver Creek and that light-emitting diode (LED)

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[116] Ex. LW-9 at 50.
[117] *Id.*
[118] Ex. LW-9 at 13 (SP Application).
[119] Ex. LW-9 at 2 (SP Application).
[120] *Id.*
[121] *Id.*
[122] Ex. LW-33 at 3 (Direct Test. of Korede Olagbegi).
[123] Ex. PUC-14 (MnDOT Comments regarding EA Scoping.

lighting for the site buildings is often high in blue light, which is harmful to birds, insects, and other animals. DNR recommended:

- An adequate buffer zone and erosion control be maintained between an unnamed stream and the Project border;
- Using wildlife friendly erosion control netting rather than synthetic netting;
- Treatment for dust control on the site should avoid products that contain chlorides;
- Security fence be designed in accordance with the DNR's recently updated *Commercial Solar Siting Guidance*; and
- 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.[124]

71. On June 12, 2023, EERA staff submitted written comments for the EA scoping recommending no alternative sites be studied for the EA.[125] EERA staff asked for a variance to Minn. R. 7850.3700 subp. 3, requiring an EA scoping decision within ten days of the close of the scoping comment period.[126] EERA staff stated that granting a variance for the issuance date furthers the public interest by allowing enough time to develop an informed and robust scoping decision without imposing an excessive hardship on Lake Wilson Solar, and that the variance does not conflict with any standards imposed by law.[127] EERA staff recommended the Commission take no action on the Project site recommended for inclusion in the scope of the EA, which would result in EERA staff proceeding to finalize and issue an EA scoping decision.[128] The Commission followed the recommendations passing the variance and taking no action on the Project site recommendation.[129]

72. On September 28, 2023, the Commission received a written public comment from Michael Ackerman, an adjacent property owner, regarding the Project. Ackerman asked about glare from the solar panels and the location of his property line in relation to the Project.[130]

[124] Ex. PUC-15 (DNR Comments regarding EA Scoping).
[125] Ex. EERA-6 (DOC EERA staff Comments and Recommendations).
[126] *Id.* at 7.
[127] *Id.*
[128] *Id.*
[129] Ex. PUC-16 (Commission Order on EA Scoping Decision).
[130] Ex. EERA-10 (Public Comment M. Ackerman).

73. On November 6, 2023, LIUNA[131] and IUOE Local 49 and NCSRC of Carpenters[132] filed comments stating the organizations found no contested fact issues in the CN Application and that it met the requirements under applicable statutes and rules.

74. On November 9, 2023, DER filed written comments recommending that the Commission issue the CN after considering the EA.[133]

75. On November 21, 2023, Lake Wilson Solar filed a Reply on the Merits of the CN Application.[134] Lake Wilson Solar agreed with the recommendation that the Commission issue a CN upon finding the environmental impacts in the EA are acceptable.

76. On November 28 and 29, 2023, Judge Mortenson presided over joint public hearings on the applications for the Project via in-person and remote means, respectively.[135] Commission staff, EERA staff, and representatives from Lake Wilson Solar were present. Seven members of the public spoke during the in-person public hearing on November 28, 2023. No members of the public spoke during the remote-access public hearing held on November 29, 2022.

77. Jean Christoffels of the Murray County Zoning Office spoke on November 28, 2023, asking for screening around State Highway 30 to help with possible glare from the solar panels at different times of day and screening around the battery storage facilities as the structures are different than typical agricultural structures in the area.[136] Christoffels also asked that Lake Wilson Solar make sure to go through local permitting to make sure the O&M building meets setback and sewage permitting requirements.

78. Glen Talsma, an adjacent landowner to the Project, asked two questions: Is it taken into consideration that the site of the Project is on productive agricultural land, and who will take care of the vegetation growth on the site?[137] Regarding the site consideration, Jenna Ness, environmental review manager at EERA, and Korede Olagbegi explained that no other feasible or prudent alternative was available that did not include prime farmland, the site provides good solar function, and there is interconnection to the grid at the site. Regarding the vegetation, Olagbegi added that a vegetation and soil management plan existed which includes mowing and other weed prevention.

79. Talsma also asked about whether Lake Wilson Solar would sell the project after it is completed because landowners who have leased land to Lake Wilson Solar may not know who to contact in the future.[138] Olagbegi explained that it would depend on the

[131] Ex. PUC-24 (LIUNA Comments regarding Merits of CN Application).
[132] Ex. PUC-26 (IUOE Local 49 and NCSRC of Carpenters Comments regarding Merits of CN Application).
[133] Ex. PUC-28 (DER-Public Comments and Recommendations regarding Merits of CN Filing); Ex. PUC-29 (DER-Trade Secret Comments and Recommendations regarding Merits of CN Filing).
[134] Ex. LW-35 (Reply Comments regarding Merits of CN Application).
[135] Transcripts of Public Hearing (Nov. 28 and 29, 2023).
[136] Transcript of Public Hearing (Nov. 28, 2023) at 23-24.
[137] *Id.* at 24-26.
[138] *Id.* at 36.

project, but Invenergy has both sold projects and operated projects after they are developed. However, Lake Wilson Solar would have a good transition in place if the Project got sold. Also, the community can contact the maintenance building if there are questions.

80. Carl Nyquist, the emergency manager for Murray County, asked about the first responder training for the site and whether the Emergency Response Plan (ERP) would contain emergency contact information for any incident that happens on the site.[139] Olagbegi explained that once the SP was issued, Lake Wilson Solar would begin reaching out for first responder training and about the ERP.

81. Michael Ackerman asked about how safe the site was for fire.[140] Andrew Nurz (phonetic), a solar engineer with Lake Wilson Solar, responded that the ERP would address fire response, but also most of a solar farm is metal, thus limiting a fire burning. Additionally, the staff onsite should respond as soon as a fire started. Cezar Panait, a member of Commission staff, commented about a fire that occurred at a battery storage facility in Arizona. He noted that the technology had advanced significantly since that occurrence and that he believed it would be helpful if Lake Wilson Solar would take into account fire risk in its ERP.[141] Olagbegi pointed to the CN application that addresses battery safety and also talks about the fire in Arizona. Carl Nyquist stated, "the National Fire Academy is developing, and I believe it's finished, a training program to respond to the storage facilities like this."[142]

82. Ackerman next asked about insurance and Lake Wilson Solar confirmed it had insurance. Ackerman also asked about disposal of old batteries.[143] Olagbegi stated that recycling facilities existed for battery recycling and there are also reuse possibilities. Ackerman asked about a comparison of the number of homes to be powered by the solar panels (28,000) and the number of homes powered by one windmill. While it was noted this was outside the scope of expertise at the hearing, an engineer with the Commission provided general information that windmills similar to those in Murray County produce between 1.5 to 6 MW of power, while the solar project will produce about 150 MW power. Ness offered the general information that a 1.5-MW windmill powers approximately 415 homes.[144] Ackerman asked about bringing jobs into the community for the deaf community.[145] Ness pointed out the human impact portion of the EA discusses socioeconomic and human impacts but does not get specific on employment for individual disabilities. Ackerman asked about a reduction in energy bills from the Project. Panait explained that the Project was a transition from coal to clean power, but would not necessarily translate into cost reductions.[146]

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[139] *Id.* at 26-27.
[140] *Id.* at 27-35.
[141] *Id.* at 38.
[142] *Id.* at 39.
[143] *Id. at 30-31.*
[144] *Id.* at 37.
[145] *Id*. at 35-36.
[146] *Id.* at 41-42.

83. Todd Sorter, 5623 Labor Union representing southwestern Minnesota, commented that he was in favor of the Lake Wilson Solar Project. He pointed out the economic benefit of renewable energy projects bringing more people to the area.[147]

84. An unidentified speaker asked how receptive the solar panels were to the sun.[148] Olagbegi explained that the solar panels track the direction of the sun to maximize the power generation. The same unidentified speaker followed up asking if the panels would reflect into the community. Olagbegi stated the panels have anti-reflective coating and absorb between 92 and 98 percent of the incoming light, so the glare was not significant.

85. Jim DeYonge, chairman of Leeds Township, Minnesota, stated that the fence will be very beneficial.[149] DeYonge also asked about road maintenance for the road that runs near the Project during construction of the Project. Olagbegi responded that an agreement with those involved would be determined as the Project progressed and would include the Leeds Township. DeYonge followed up stating the road is currently a low maintenance road with no gravel and it becomes mud with two inches of rain. Olagbegi stated these points would be raised as the road project was analyzed.

86. The effect on property values of a solar Project was generally discussed by Ness and Olagbegi.[150] Ness stated there was some research indicating there could be a minimal to moderate negative impact on neighboring property values depending on distance from the Project. Olagbegi stated no robust studies existed to indicate an outright negative impact on property values and the effect may vary on a state-by-state basis.

87. The Commission received two written public comments from individuals. Talsma submitted more comments asserting that if any of the hundreds of feet of drainage tile in the area are damaged by the Project construction, it would cause a lot of private drainage tile not to work.[151] Additionally, Talsma commented that taking so many acres of productive agricultural land out of production for the Project would affect other agricultural related businesses.

88. Timothy Tyson also submitted written comments asking the Commission to make sure the Project is on track to be commercial when Lake Wilson Solar claims it will be commercial, by December 2027, as set out in the GIA.[152] Tyson also asked the Commission ensure Lake Wilson Solar document where it is obtaining solar panels from and to avoid use of Chinese companies with unsavory labor practices.[153]

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[147] *Id.* at 35.
[148] *Id.* at 39.
[149] *Id.* at 42.
[150] *Id.* at 44-45.
[151] Public Comment – Glen Talsma.
[152] Public Comment – Timothy Tyson.
[153] *Id.*

89. The Commission received written comments from the Southwest Regional Development Commission stating it had no concerns about the Project.[154]

90. On December 5, 2023, DNR offered written comments to the Commission on the EA addressing security fencing, facility lighting, dust control, and wildlife friendly erosion control.[155] Specifically, DNR stated it needed clarification on the location of deer egress gates for access road entrances and asked for further coordination.[156] DNR also asks that special permit conditions be added to the SP for:

- Use of shielded and downward facing lighting for LED lighting to minimize the blue hue from LED lights;
- Use of only non-chloride products for dust control; and
- Use of only "bio-netting" or "natural netting" and mulch without synthetic (plastic) fiber additives for wildlife-friendly erosion control.[157]

91. On December 11, 2023, EERA filed comments recommending modifications to Lake Wilson Solar's draft decommissioning plan and changes to the draft site permit.[158] The details of EERA's comments are discussed below.

VIII. LAKE WILSON SOLAR RESPONSES TO COMMENTS

92. In its Reply Comments, submitted on December 21, 2023, Lake Wilson Solar addressed concerns about drainage tile systems affected during and after construction of the Project.[159] Lake Wilson Solar explained it has agreed on a 25-foot setback from county-owned drainage tile and has initiated mapping of existing private drainage tile infrastructure prior to the start of construction.[160] Lake Wilson Solar stated it would communicate with participating landowners on a parcel-by-parcel basis as construction approaches.[161]

93. Regarding impacts to agricultural-related businesses that may result from the change in use of the Project site lands, Lake Wilson Solar pointed to the EA that addressed this issue and found the impact to be minimal.[162]

94. Lake Wilson Solar addressed concerns raised about delays in procurement equipment.[163] Lake Wilson Solar stated the revised Draft Site Permit submitted by EERA

[154] Written Comments – Southwest Regional Development Commission Project Review.
[155] Written Comments – DNR (Dec. 5, 2023) (eDocket No. 202312-200987-01).
[156] *Id.*
[157] *Id.*
[158] Comments – EERA (Dec. 11, 2023) (eDocket No. 202312-201104-01 to -02, 202312-201105-01 to -02).
[159] Reply Comments —Lake Wilson Solar (Dec. 21, 2023) (eDocket No. 202312-201482-01 to -02).
[160] *Id.* at 10.
[161] *Id.*
[162] *Id.* at 11.
[163] *Id.*

requires Lake Wilson Solar to file regular status reports to the Commission to keep it apprised as to the status of the Project, the commencement of construction, and the GIA.[164] Lake Wilson stated that this requirement will keep the Commission informed of the Project's progress.[165]

95. Lake Wilson Solar stated that the Project's anticipated construction start date in 2025, and planned commercial operation by December 31, 2027, along with the current SP Application requirement that construction begin within four years of issuance of the SP, does not require further permit conditions to ensure construction proceeds in a timely matter.[166]

96. Lake Wilson Solar glare will not be an issue with the solar PV modules because they are not particularly reflective.[167] Lake Wilson Solar does not believe the requested vegetative screening is necessary or beneficial around the battery storage facility.[168] However, Lake Wilson explained that it has engaged with Murray County to discuss the topic of glare and vegetative screening to determine whether any actions are necessary to alleviate concerns. In addition, Lake Wilson Solar contends the Draft SP already requires Lake Wilson Solar to consider input from the County on visual impacts from the project.[169]

97. Lake Wilson Solar noted the Draft SP requires it to develop a site-specific ERP.[170] Lake Wilson Solar plans to reach out to local fire departments and Murray County Emergency Management Services and Safety Director in advance of developing the plan. Fire resulting from the project that then spreads to surrounding vegetation is a scenario that will be covered in training as part of the ERP.

98. Lake Wilson Solar stated it has committed to coordinating with Leeds Township and Murray County to discuss intended haul roads, potential road upgrades needed prior to construction and road maintenance obligations during construction.[171] Lake Wilson stated such coordination is already required under the Draft SP.

99. Lake Wilson Solar points to the Decommissioning Plan for the Project attached to the SP Application as Appendix G, which discusses battery recycling and how Lake Wilson Solar expects that more battery recycling facilities will exist by the time decommissioning comes about for the Project many years from now.[172]

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[164] *Id;* Comments – EERA, Attachment A (Section 8.4 Status Reports).
[165] Reply Comments —Lake Wilson Solar at 11.
[166] *Id.* at 11-12.
[167] *Id.* at 12-13.
[168] *Id.* at 13.
[169] Comments – EERA, Attachment A (Section 3.8 Aesthetics).
[170] *Id.* at 13.
[171] *Id.* at 14.
[172] *Id.* at 14; Ex. LW-20 (SP Application Appendix G—Decommissioning Plan).

IX. LAKE WILSON SOLAR RESPONSE TO AGENCY COMMENTS

100. Lake Wilson Solar responded to DNR's comments, submitted on December 5, 2023, regarding security fencing design.[173] Lake Wilson Solar pointed out the EA found the potential impact to deer was expected to be minimal and that DNR also indicated the current fencing design for the Project meets DNR standards. As a result, Lake Wilson Solar does not plan to install deer egress gates as requested by DNR.

101. Regarding lighting, Lake Wilson Solar stated it has no objection to the DNR request for a special condition with DNR's proposed language regarding lighting of the operation and maintenance facility and the Project substation.[174]

102. Regarding dust control, Lake Wilson Solar stated it has no objection to the DNR request for a special condition with DNR's proposed language regarding the use of non-chloride products for dust control activities.[175]

103. Regarding erosion control, Lake Wilson Solar stated it has no objection to the DNR request for a special condition with DNR's proposed language regarding use of only "bionetting" or "natural netting" types and mulch products without synthetic fiber additives in order to ensure wildlife-friendly erosion control.[176]

104. Lake Wilson Solar stated that it agrees with the changes to the Draft SP recommended by EERA staff in its December 11, 2023 comments.[177] Lake Wilson Solar will incorporate the requested changes prior to the "pre-construction meeting" as required under the SP regarding:

- decommissioning objectives;
- scheduled updates;
- project description;
- use of generation output;
- permits and notifications;
- tasks and timing; and
- financial assurance.[178]

[173] *Id.* at 8.
[174] *Id.* at 8-9.
[175] *Id.* at 9.
[176] *Id.*
[177] *Id. at* 2-3.
[178] *Id.* at 2-3.

105. Lake Wilson Solar accepted many other EERA staff recommendations and edits to the draft SP, as set out in the December 11, 2023, comments.[179] These will be discussed in more detail below.

CERTIFICATE OF NEED

I. CERTIFICATE OF NEED CRITERIA

106. Pursuant to Minn. Stat. § 216B.243, all "large energy facilities" must receive a certificate of need from the Commission prior to construction.[180] A "large energy facility" is defined, in relevant part, as "any electric power generating plant or combination of plants at a single site with a combined capacity of 50,000 kilowatts or more and transmission lines directly associated with the plant that are necessary to interconnect the plant to the transmission system."[181]

107. The proposed Project qualifies as a "large energy facility" as defined by Minn. Stat. § 216B.2421, subd 2(1) (2022), and a "large electric generating facility" (LEGF) as defined by Minn. R. 7849.0010, subp. 13 (2023). Accordingly, the Project requires a certificate of need from the Commission.

108. Minn. Stat. § 216B.243 and Minn. R. 7849.0010 - .2100 (2023) set forth the criteria for issuance of a certificate of need. The Commission has established criteria to assess the need for a CN for a LEGF in Minn. R. 7849.0120:

> A certificate of need must be granted to the applicant on determining that:
>
> A. the probable result of denial would be an adverse effect upon the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states, considering:
>
> (1) the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility;
>
> (2) the effects of the applicant's existing or expected conservation programs and state and federal conservation programs;
>
> (3) the effects of promotional practices of the applicant that may have given rise to the increase in the energy

[179] *Id.* at 3.
[180] *See also* Minn. R. 7849.0030 (requiring a certificate of need for "large electric generating facilities" as defined in Minn. R. 7849.0010, subp. 13).
[181] Minn. Stat. § 216B.2421, subd. 2(1).

demand, particularly promotional practices which have occurred since 1974;

(4) the ability of current facilities and planned facilities not requiring certificates of need to meet the future demand; and

(5) the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources;

B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record, considering:

(1) the appropriateness of the size, the type, and the timing of the proposed facility compared to those of reasonable alternatives;

(2) the cost of the proposed facility and the cost of energy to be supplied by the proposed facility compared to the costs of reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives;

(3) the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives; and

(4) the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives;

C. by a preponderance of the evidence on the record, the proposed facility, or a suitable modification of the facility, will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health, considering:

(1) the relationship of the proposed facility, or a suitable modification thereof, to overall state energy needs;

(2) the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility;

(3) the effects of the proposed facility, or a suitable modification thereof, in inducing future development; and

(4) the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality; and

D. the record does not demonstrate that the design, construction, or operation of the proposed facility, or a suitable modification of the facility, will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.[182]

109. The factors listed under each of the criteria set forth in Minn. R. 7849.0120 must be evaluated to the extent the Commission considers them applicable and pertinent to a proposed facility.[183]

110. The Applicant, Lake Wilson Solar, bears the burden of demonstrating the need for the Project by a preponderance of the evidence.[184]

II. APPLICATION OF CERTIFICATE OF NEED CRITERIA TO THE PROJECT

A. The Probable Result of Denial Would be an Adverse Effect Upon the Future Adequacy, Reliability, or Efficiency of Energy Supply to the Applicant, to the Applicant's Customers, or to the People of Minnesota and Neighboring States.

111. The first of the criteria established by the Commission for the granting of a CN calls for an examination of whether "the probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states."[185]

112. The Commission issued an Order approving Lake Wilson Solar's data exemption requests and requiring Lake Wilson Solar to provide alternative data for certain components.[186] The approved exemptions and alternative data requirements affect the analysis for the CN criteria as discussed in detail below.

[182] Minn. R. 7849.0120.
[183] Minn. R. 7849.0100.
[184] *See* Minn. Stat. § 216B.243, subd. 3; Minn. R. 1400.7300, subp. 5 (2023).
[185] Minn. R. 7849.0120(A).
[186] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements).

1. Accuracy of the Applicant's Forecast of Demand.

113. Pursuant to Minn. R. 7849.0120 A(1). the Commission must consider "the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility." This factor relates to Minn. Stat. § 216B.243, subd. 3(1), which requires the Commission, in assessing need, to consider "the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based."

114. The Commission exempted Lake Wilson Solar from the requirement under Minn. R. 7849.0270, which more specifically requires an applicant to provide information regarding system peak demand and annual energy consumption.[187] Instead, the Commission required Lake Wilson Solar to provide alternative data about regional demand, consumption, and capacity.[188]

115. During the 2023 legislative session, Minnesota enacted a carbon-free standard for electric utilities requiring that they must generate, from carbon free generation sources, 80 percent of their energy by 2030, 90 percent by 2035, and 100 percent by 2040.[189] This law specifically requires new solar generation to address peak energy demand and annual consumption.

116. Many corporations are looking to renewable energy to save money and meet sustainability goals.[190] The Commission has indicated that the demonstration of corporate demand and internal utility goals is sufficient evidence to demonstrate need under Minn. R. 7849.0120.[191]

117. Given the demand for renewable energy, a market exists for electricity generated from solar and other renewables, including the 150 MW AC nameplate solar-energy capacity paired with an up to 95 MW BESS to be generated by the Project.[192]

118. The accuracy of the demand data provided is undisputed, and the Applicant has satisfied Minn. R. 7849.0120(A)(1).

2. Applicant's Existing or Expected Conservation Programs

119. The Commission's Order exempted Lake Wilson Solar from providing information on conservation programs and Minn. R. 7849.0290.[193]

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[187] Ex. PUC-4.
[188] *Id.*
[189] Minn. Stat. § 216B.1691 (2023) (Laws of Minnesota 2023, chapter 7, section 32).
[190] *Id.* at 17-18.
[191] Ex. PUC-28 (DER-Public Comments and Recommendations regarding Merits of CN Filing) at 7.
[192] Ex. LW-9 at 13 (SP Application).
[193] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements).

3. Promotional Practices of Applicant that May Have Given Rise to the Increase in Energy Demand

120. Minn. R. 7849.0120(A)(3) requires consideration of the effects of promotional practices of the applicant that may have given rise to the increase in the energy demand, particularly promotional practices which have occurred since 1974. This factor relates to Minn. Stat. § 216B.243, subd. 3(4), which requires the Commission, in assessing need, to consider "promotional activities that may have given rise to the demand for this facility."

121. Because Lake Wilson Solar "has not engaged in any promotional activity" and does not have retail customers, the Commission's Order exempted Lake Wilson Solar from this requirement.[194]

4. Ability of Current Facilities and Planned Facilities Not Requiring a Certificate of Need to Meet the Future Demand

122. Minn. R. 7849.0120(A)(4) requires consideration of "the ability of current facilities and planned facilities not requiring Certificates of Need to meet the future demand." This sub-factor relates, in part, to Minn. Stat. § 216B.243, subd. 3(6), which requires the Commission, in assessing need, to consider "possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation."

123. The Commission exempted Lake Wilson Solar from the requirement in Minnesota R. 7849.0340.[195] Instead, the Commission required Lake Wilson Solar to provide only alternative data regarding the impact on the wholesale market of the "no facility" alternative.[196]

124. Minn. R. 7849.0340 requires data for the alternative of "no facility," including a discussion of the impact of this alternative on the applicant's generation and transmission facilities, system and operations.

125. The Project is designed to increase the amount of energy available for purchase on the wholesale market that will satisfy clean energy standards.[197] If the facility is not built, there will be 150 MW less of renewable energy available for utilities to purchase to satisfy clean energy standards.[198] This outcome is contrary to Minnesota's renewable energy policy and the need for renewable energy in both the state and regionally.

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[194] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements).
[195] *Id*.
[196] *Id.*
[197] Ex. LW-4 at 45 (CN Application).
[198] *Id.*

126. Lake Wilson Solar has satisfied Minn. R. 7849.0120(A)(4).

5. The Effect of the Proposed Facility, or a Suitable Modification, in Making Efficient Use of Resources

127. Minn. R. 7849.0120(A)(5), requires consideration of "the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources."

128. The Project site is favorable to a solar project due to the identified transmission capacity and proximity to an existing transmission line (Fenton-Chanarambie 115 kV transmission line) which minimizes the need for extensive new transmission facilities.[199] Additionally, willing landowners and community interest in the Project, minimal human settlement impacts, the lack of other environmental constraints, adequate roads for access, and flat terrain, results in the Project's efficient use of resources.

129. Lake Wilson Solar has satisfied Minn. R. 7849.0120(A)(5).

6. The Project Satisfies the Criterion at Minn. R. 7849.0120(A)

130. Based on the consideration of the five factors in Minn. R. 7849.0120(A), the probable result of denial of the CN would be an adverse effect upon the future adequacy, reliability, and efficiency of energy supply to meet future renewable energy obligations and for the people of Minnesota and neighboring states.

B. A More Reasonable and Prudent Alternative to the Proposed Facility Has Not Been Demonstrated by a Preponderance of the Evidence on the Record.

131. Minn. R. 7849.0120(B) requires that "a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record." This factor relates to Minn. Stat. § 216B.243, subd. 3(6), which requires the Commission, in assessing need, to consider "possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation."

132. The Commission granted Lake Wilson Solar exemptions to Minn. R. 7849.0250 (B) (Description of Certain Alternatives), Minn. R. 7849.0250 (C) 1 to 6, 8 and 9 (Availability of Alternatives to the Facility), and Minn. R. 7849.0330 (Alternatives Involving a Large High Voltage Transmission Line).[200] Only a discussion of the Project's

[199] *Id.* at 23.
[200] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements).

estimated "effect on rates systemwide and in Minnesota, assuming a test year beginning with the proposed in-service date" must be provided.[201]

1. Appropriateness of the Size, Type, and Timing of the Proposed Facility Compared to a Reasonable Alternative

133. Minn. R. 7849.0120(B)(1) requires consideration of "the appropriateness of the size, type, and timing of the proposed facilities relative to reasonable alternatives."

134. The Commission has previously concluded that with renewable energy projects, the analysis of the size of the project should focus on the appropriateness of the size of the project to the overall state and regional energy needs.[202]

135. With respect to the Project's size, the need for renewable energy in the coming years exceeds the amount of energy to be supplied by the Project.[203] In addition, Minnesota's carbon-free standard requires significant investment in new renewable generation.[204]

136. DER noted that this Project will compete with other renewable energy projects in the solar energy market, encouraging Applicant to build a cost competitive facility, "or in other words a facility sized to take advantage of economic incentives for economies of scale and limiting interconnection costs that may vary based on the facilities size."[205] DER concluded the Project's size is reasonable compared with alternative sizes.[206]

137. Regarding the type of facility, the Commission granted Lake Wilson Solar an exemption from Minn. R. 7849.0250(B) with respect to evaluating non-renewable alternatives because such alternatives do not meet the Project's objective of providing energy that will satisfy renewable energy and other clean energy standards and goals.[207]

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[201] Minn. R. 7849.0250 C (7).
[202] Ex. LW-4 at 23 (CN Application); Ex. PUC-28 at 9 (DER-Public Comments and Recommendations regarding Merits of CN Filing).
[203] Ex. LW-4 at 23 (CN Application).
[204] Ex. LW-4 at 23 (CN Application); Ex. PUC-28 at 9 (DER-Public Comments and Recommendations regarding Merits of CN Filing).
[205] Ex. PUC-28 at 9 (DER-Public Comments and Recommendations regarding Merits of CN Filing). However, DER noted that the direct impacts of economies of scale are unclear when comparing different sized facilities.
[206] Ex. PUC-28 at 10 (DER-Public Comments and Recommendations regarding Merits of CN Filing).
[207] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements). Of note, DER had requested and interprets the exemptions for Lake Wilson Solar under Minn. R. 7849.0250(B) as exemptions to subparts (1)-(3) and (5) and partial exemption to subpart (4) such that no discussion of non-renewable alternatives is required. Ex. PUC-28 at 10-11 (DER-Public Comments and Recommendations regarding Merits of CN Filing). DER understood the exemption to still require a discussion of new renewable generating facilities as alternatives to the proposed Project.

With the preference for renewable non-carbon-emitting energy resources in Minnesota Statutes, DER concluded that the Project type is reasonable.[208]

138. With respect to timing, the Project is expected to be on-line and operational by December 2027, depending on completion of regulatory approvals.[209] This will help Minnesota achieve the necessary renewable energy levels required to meet clean energy standards.

139. The Applicant has satisfied Minn. R. 7849.0120(B)(1).

2. The Cost of the Proposed Facility and Energy to Be Supplied by the Proposed Facility compared to Reasonable Alternatives

140. Minn. R. 7849.0120(B)(2) requires consideration of "the cost of the proposed facility and the cost of the energy to be supplied by the proposed facility as compared to the costs of the reasonable alternatives and the cost of energy that would be supplied by reasonable alternatives."

141. Because the Commission exempted Lake Wilson Solar from Minn. R. 7849.0250(C) requirements to provide a description of alternatives that could provide electric power at the asserted level of need, only details regarding renewable alternatives are required, including an estimate of the proposed Project's effect on wholesale rates in Minnesota or the region.[210]

142. Lake Wilson Solar showed that the Project will generate electricity at a lower cost per kilowatt hour than would other possible fossil fuel and renewable energy options, such as coal and biomass.[211] Although Lake Wilson Solar does not currently have a power purchase agreement, these lower costs should allow it to secure long-term purchasers at attractive prices and terms. Importantly, as an independent power producer, Lake Wilson Solar, rather than the State or its ratepayers, bears the risk of not securing a power purchase agreement or otherwise not selling the Project's output.[212]

143. DER concluded that the cost of the Project and the cost of energy to be supplied by the Project is reasonable as it is lower than current utility rates, provides a service that competes with peaking generation, and will need to compete with alternative generators to find a buyer.[213] The Judge finds no flaws in DER's analysis and conclusion and, therefore, agrees.

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[208] Ex. PUC-28 at 12 (DER-Public Comments and Recommendations regarding Merits of CN Filing).
[209] Ex. LW-4 at 12-13 (CN Application).
[210] Ex. PUC-4 (Commission Order on Lake Wilson Solar Request for Exemption from Certain Certificate of Need Application Content Requirements).
[211] Ex. LW-4 at 24 (CN Application).
[212] *Id*.
[213] Ex. PUC-28 at 17 (DER-Public Comments and Recommendations regarding Merits of CN Filing).

3. Effects of the Proposed Facility on the Natural and Socioeconomic Environments Compared to Reasonable Alternatives

144. Minn. R. 7849.0120(B)(3) requires consideration of "the effects of the proposed facility upon the natural and socioeconomic environments compared to the effects of reasonable alternatives."

145. Lake Wilson Solar demonstrated that the Project would impose minimal environmental impacts, especially as compared to a fossil-fuel based facility.[214] The Project will not release toxins into the environment.[215] It will not require water for power generation and will not discharge any wastewater during operation. It will produce energy without the extraction, processing, transportation, or combustion of fossil fuels. The Project is designed to minimize environmental impacts.[216]

146. Lake Wilson Solar described that recent research suggests solar farms may have some net benefit to soil resources over the lifetime of a project.[217] DER agreed there will likely be soil quality improvement over the lifetime of the Project through the use of native perennial vegetation over the life of the Project.[218]

147. The socioeconomic impacts associated with the Project are positive. Individuals will receive wages and there will be an increase in expenditures at local businesses during the Project's construction and, to a lesser degree, during operation. Construction and operation of the Project will increase Murray County's tax base. In addition, lease and purchase payments paid to the landowners will offset potential financial losses associated with removing a portion of their land from agricultural production.

148. Of the 461,000 acres in Murray County, the majority (approximately 362,082 acres) is classified as cropland. Impacts to approximately 1,526 acres of agricultural land within the Preliminary Development Area will temporarily reduce the amount of farmland land in the County by roughly 0.4 percent.[219] Agricultural production will continue in the area within the Project Area but outside the fence of the Preliminary Development Area during construction and operation of the Project.[220]

149. The Project is estimated, over the life of the project, to generate annual solar energy production and property tax revenue of approximately $330,000 for Murray County

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[214] Ex. LW-4 at 24, 26-27 (CN Application).
[215] Ex. LW-4 at 24 (CN Application).
[216] Ex. LW-4 at 26 (CN Application).
[217] Ex. LW-4 at 24. (citing Jeffrey S. Briberg, *Utility and Community Solar Should Use Native Landscaping* CLEANTECHNICA (Mar. 15, 2016), https://cleantechnica.com/2016/03/15/utility-and-community-solar-should-use-native-landscaping/.) (CN Application).
[218] Ex. PUC-28 at 17 (DER-Public Comments and Recommendations regarding Merits of CN Filing); Ex. EERA-11 at 74.
[219] Ex. LW-4 at 25 (CN Application).
[220] *Id.*

and approximately $75,000 for Leeds Township. The Project is expected to generate over $12 million in local tax revenues over a 30-year period.[221]

150. EERA staff prepared an EA for the Project that considers the natural and socioeconomic effects of the Project, which anticipates the overall socioeconomic impacts of the Project to be positive.[222]

151. The Project will create approximately 250 jobs during the construction period and approximately five full time onsite jobs during operation, 11 indirect jobs in Murray County, and an additional 19 jobs in the State.[223] Temporary construction jobs will generate indirect economic benefits as employees spend their income on local goods and services.[224] As an operating facility, Lake Wilson Solar will annually generate $4.5 million in economic output in the State by supporting on-site and indirect jobs and distributing nearly $1.7 million in direct earnings.[225]

152. The Applicant has satisfied Minn. R. 7849.0120(B)(3).

4. Expected Reliability of the Proposed Facility Compared to Reasonable Alternatives

153. Minn. R. 7849.0120(B)(4) requires consideration of "the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives." This sub-factor relates, in part, to Minn. Stat. § 216B.243, subd. 3(9), which requires consideration of "the benefits of enhanced regional reliability, access, or deliverability to the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota."

154. Lake Wilson Solar estimates that the Project energy will be available approximately 99 percent of the year, which is consistent with industry standards.[226]

155. The Applicant has satisfied Minn. R. 7849.0120(B)(4).

5. The Project Satisfies the Criterion at Minn. R. 7849.0120(B)

156. The Judge recommends that based on consideration of the four factors in in Minn. R. 7849.0120(B), a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence in the record. Therefore, this criterion supports granting of a CN.

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[221] Ex. LW-4 at 26 (CN Application).
[222] Ex. EERA-11 at 51 (EA).
[223] *Id.* at 52.
[224] *Id.*
[225] *Id.*
[226] Ex. LW-4 at 47 (CN Application).

C. By a Preponderance of Evidence on the Record, the Proposed Facility, or a Suitable Modification of the Facility, Will Provide Benefits to Society in a Manner Compatible With Protecting the Natural and Socioeconomic Environments, Including Human Health.

1. The Relationship of the Proposed Facility or Suitable Modification to Overall State Energy needs

157. Minn. R. 7849.0120(C)(1) requires consideration of "the relationship of the Project, or a suitable modification thereof, to overall state energy needs."

158. The Project will help Minnesota meet its energy needs while supporting the state's renewable energy and greenhouse gas emissions-reduction goals under Minn. Stat. §§ 216B.1691 and 216H.02.[227]

159. The Project fits the state's overall energy needs and Lake Wilson Solar has satisfied Minn. R. 7849.0120(C)(1).

2. The Effects of the Proposed Facility or a Suitable Modification Upon the Natural and Socioeconomic Environments Compared to Not Building the Facility

160. Minn. R. 7849.0120(C)(2) requires consideration of "the effects of the proposed facility, or a suitable modification thereof, upon the natural and socioeconomic environments compared to the effects of not building the facility."

161. The no build alternative for the Project would avoid some human and environmental impacts. Nonetheless, the no build alternative would also fail to provide the additional source of tax revenues to the county, an increase in the income stream to residents and businesses, an increase in perennial grasses that is expected to increase carbon sequestration and storage capacity of the soils over the life of the Project, or an increase in the amount of low-cost, clean, reliable renewable energy available to state or regional utilities and their customers.[228]

162. Therefore, Lake Wilson Solar has satisfied Minn. R. 7849.0120(C)(2).

3. The Effects of the Proposed Facility or a Suitable Modification in Inducing Future Development

163. Minn. R. 7849.0120(C)(3) requires consideration of "the effects of the proposed facility, or a suitable modification thereof, in inducing future development."

164. The Applicant does not expect the Project to directly induce future development in Murray County.[229] The Judge finds this expectation questionable. As a

[227] Ex. PUC-28 at 8 (DER-Public Comments and Recommendations regarding Merits of CN Filing).
[228] Ex. LW-4 at 26-27 (CN Application).
[229] Ex. LW-4 at 26-27 (CN Application).

result of the money generated directly, through the full-time staff operating and maintaining the Project who may support families, and through the tax revenues generated directly and indirectly, future development within the county may well be induced as a result of the Project. Lake Wilson Solar has satisfied Minn. R. 7849.0120(C)(3).

4. The Socially Beneficial Uses of the Output of the Proposed Facility or a Suitable Modification Including Its Uses to Protect or Enhance Environmental Quality

165. Minn. R. 7849.0120(C)(4) requires consideration of "the socially beneficial uses of the output of the proposed facility, or a suitable modification thereof, including its uses to protect or enhance environmental quality." This sub-factor relates to Minn. Stat. § 216B.243, subd. 3(5), which, in relevant part, requires the Commission to consider "the benefits of this facility, including its uses to protect or enhance environmental quality…."

166. The Project will provide up to 150 MW of capacity and roughly 313,000 MWh annually of clean and reliable electricity without producing toxic byproducts or waste. The affordable and clean renewable energy produced will help meet energy demands and clean energy and carbon reduction standards and voluntary goals.[230]

167. The Project is expected to offset approximately 489,000,000 pounds (~244,500 short tons) of carbon dioxide equivalent and provide electricity for approximately 28,000 homes annually.[231] In addition, the local economy will benefit from the landowner lease, easement, and purchase payments for the Project, production taxes, income from jobs created, and local spending.[232]

168. The Applicant has satisfied Minn. R. 7849.0120(C)(4).

D. The Record Does Not Demonstrate That the Project Will Fail to Comply with Relevant Policies, Rules, and Regulations

169. Minn. R. 7849.0120(D) requires that "the design, construction, or operation of the proposed facility, or a suitable modification of the facility" will not "fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments." This factor relates to Minn. Stat. § 216B.243, subd. 3(7), which requires the Commission, in assessing need, to consider "the policies, rules, and regulations of other state and federal agencies and local governments."

170. The record shows the Project offers a cost-competitive and environmentally superior alternative to fossil fuel generators that is clearly in the public interest as clean,

[230] Ex. LW-4 at 27 (CN Application).
[231] *Id.*
[232] *Id.*

reliable, efficient, and has little negative land use impact when compared to other land uses.[233]

171. The Project will meet or exceed the requirements of all applicable federal, state, and local environmental laws and regulations.[234] Approval of the Project is in the public interest because it meets all of Minnesota's laws supporting acquisition of clean, renewable energy and provides an opportunity for utilities and other customers seeking to diversify and build their energy generation portfolios.[235]

172. Based on the foregoing, the Applicant has satisfied Minn. R. 7849.0120(D).

E. Conclusion on Minnesota Rule 7849.0120 Criteria

173. Considering all the factors under each of the four criteria specified in Minn. R. 7849.0120, the Judge recommends the Commission find:

1. The probable result of denial of the CN will be an adverse effect upon the future adequacy, reliability, and efficiency of energy supply for Lake Wilson Solar, and the people of Minnesota and neighboring states;

2. There has been no showing of a more reasonable and prudent alternative to the Project;

3. The Project will provide benefits to society in a manner compatible with protecting the natural and socioeconomic environments, including human health; and

4. The record does not demonstrate that the design, construction, or operation of the Project will fail to comply with relevant policies, rules, and regulations of other state and federal agencies and local governments.

SITE PERMIT

I. SITE PERMIT CRITERIA

174. Large electric power generating plants (LEPGP) are governed by Minn. Stat. § 216E (2022) and Minn. R. 7850.1000 - .5600 (2023). Minn. Stat. § 216E.01, subd. 5, defines an LEPGP as "electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more."

[233] *Id*. at 31.
[234] *Id.*
[235] *Id.*

175. On November 4, 2021, Lake Wilson Solar submitted a solar Size Determination Request for the Project with DOC EERA.[236] On December 22, 2021, EERA informed Lake Wilson Solar that the Project met the criteria for an LEPGP and was subject to the Commission's siting authority under Minn. Stat. § 216E and a SP was required.[237]

176. A LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04. Lake Wilson Solar filed its SP Application under the process established by the Commission in Minn. R. 7850.2800 -.3900.[238]

177. Under Minn. Stat. § 216E.04, for a LEPGP permitted under the alternative permitting process, EERA prepares an EA containing information on the human and environmental impacts of the proposed project and addresses mitigating measures. The EA is the only state environmental review document required to be prepared on the Project.[239]

178. EERA is responsible for evaluating the SP Application and administering the EA process.

II. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT

A. Human Settlement

179. The Project is sited in rural Leeds Township, Murray County, Minnesota.[240] 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.[241]

180. The construction of the Project will not displace residents or change the demographics of the Project Area.[242]

1. Zoning and Land Use

181. The Project Area is zoned agricultural with lesser areas of special protection (i.e. shoreland). The Murray County Zoning Ordinances outline standards for large solar energy systems in the County's agricultural district. Under the Murray County Renewable Energy Ordinance, the Project uses are compatible with local land use regulations for solar energy systems.[243] Solar Energy Systems over 40 kW in areas zoned agriculture require a conditional use permit from Murray County.[244]

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[236] Ex. LW-11 (SP Application Appendix A-1 – Public Size Determination Form and SP Application).
[237] Ex. LW-12 (SP Application Appendix A-2 – EERA Size Determination Response).
[238] Ex. LW-2 (Notice of Intent to Submit a Site Permit).
[239] Minn. Stat. § 216E.04, subd. 5.
[240] Ex. LW-9 at 13 (SP Application).
[241] Ex. LW-9 at 67 (SP Application).
[242] Ex. LW-9 at 56 (SP Application).
[243] Ex. LW-9 at 76 (SP Application).
[244] Ex. EERA-11 at 40 (EA).

182. 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, a 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 has applied County standards to the Project where feasible.[245]

183. No state forests, national forests, or national wildlife refuges are near to the Project boundaries. Additionally, no state-owned off-highway vehicle trails and no DNR scientific and natural areas are identified within a mile of the Project boundary. There are also no lakes with public access located in the Project boundary.[246] The Project boundary abuts Carlson State Wildlife Management Area, and three other state wildlife areas are within a mile of the Project.[247] The Beaver Creek Trail passes east-west less than a mile north of the Project.[248]

184. The Project will change the land use from agricultural to solar energy generation use for the life of the Project. The temporary conversion of agricultural land to the solar facility will have a minimal impact on the rural character of the surrounding area of Murray County.[249] Upon decommissioning and removal of the Project, the affected parcels may be returned to the existing agricultural use or transitioned to other land uses.[250]

185. Of the 461,000 acres in Murray County, the majority is classified as agricultural land.[251] An impact to approximately 1,478 acres of agricultural land within the planned Project area will reduce the available agricultural land in the County by less than one half percent.[252]

186. The Project meets or exceeds all county setback requirements for renewable energy facilities.[253]

187. The Project has been designed in compliance with the Murray County Ordinances and Comprehensive Plan. Agricultural activities may be resumed upon decommissioning of the Project. No known planned extension of water, sewer, or other services is planned within the Project Area. Construction of the Project would not preclude the future orderly extension of services across property under Lake Wilson Solar's control as these extensions would likely be to existing residences and farm buildings, which will

[245] Ex. LW-9 at 76 (SP Application).
[246] Ex. LW-9 at 72 (SP Application).
[247] Ex. EERA-11 at Appendix A, Figure 6.
[248] *Id.*
[249] Ex. LW-9 at 78 (SP Application).
[250] Ex. LW-9 at 79 (SP Application); Ex. EERA-11 at 40 (EA).
[251] Ex. LW-9 at 80 (SP Application).
[252] Ex. LW-9 at 78, 80 (SP Application).
[253] Ex. LW-9 at 36-37 (SP Application).

not be impacted by the Project and any such extensions would likely be accomplished by utilizing existing public rights-of-way which will not be impacted by the Project. Because a majority of the Project land will be temporarily leased from participating landowners and land will likely be returned to agricultural use upon decommissioning of the Project, the Project may further the County's goals of providing long-term agricultural opportunities.[254]

2. Property Values

188. The "land control area" is the area where the Applicant has lease agreements for use of the land, and includes areas where fencing contains the solar panels and the Project substation.[255]

189. The "Project area" is defined as the area within one mile of the land control area.[256]

190. The "Project vicinity" is the area within 1,600 feet of the land control area.[257]

191. 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, however because the Project is relatively low to the ground (in comparison to a wind turbine or a smokestack) impacts would be localized and limited in geographic scope.[258]

192. There are 17 residences within Project vicinity and at least eight more very close to the Project vicinity.[259] These properties could experience minimal to moderate property value impacts as a result of the Project.[260] Based on analysis of other utility-scale solar projects, significant negative impacts to property values in the Project Area 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.[261]

193. The public hearings and comments did not indicate significant concern from local property owners about the impact of the Project on property values. Only one neighboring landowner within the Project vicinity, Ackerman, expressed concern.

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[254] Ex. LW-9 at 79 (SP Application).
[255] Ex. EERA-11 at 31 (EA).
[256] Ex. EERA-11 at 31-32 (EA).
[257] Ex. EERA-11 at 31 (EA).
[258] Ex. EERA-11 at 45 (EA).
[259] Ex. EERA-11 at Appendix A, Fig. 3.(R1-R10, R12, R14, R16, R21-R23, R25.
[260] Ex. EERA-11 at 45 (EA).
[261] Ex. EERA-11 at 46 (EA).

3. Aesthetic Impacts

194. 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.[262]

195. Farmsteads in the area (often containing a farmhouse with barns, machine sheds and grain storage) are sprinkled across the landscape approximately 0.25 to one mile apart.[263] Most farms have planted windbreaks consisting of trees and shrubs around them.[264]

196. The visible elements of the solar facility consist of new PV arrays, the BESS, a substation, a switchyard, an O&M facility, up to ten weather stations, up to 55 inverter skids, and eight-foot-high agricultural woven wire fencing. The overhead transmission line taps will be 250-300 feet long on each circuit in and out of the Xcel Switchyard with two-six dead end wood or metal pole structures about 100 feet high. Transmission structures for the gen-tie line will be 200-400 feet in a single span between two A-frame dead-end metal structures up to 100 feet high.[265]

197. 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.[266]

198. The addition of Project facilities is not expected to significantly alter the viewshed or increase visual impacts. 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 area 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.[267]

199. In its December 11, 2023, comments, EERA proposed changes to Section 4.3.8 of the Draft Site Permit to address potential aesthetic concerns.[268] In its response, Lake Wilson Solar stated it has no objection to the changes but proposed a minor language change.[269]

200. Impacts to light-sensitive land uses are not anticipated given the rural location coupled with minimal required lighting for operations. Exterior security lighting

[262] Ex. EERA-11 at 34 (EA).
[263] Ex. LW-9 at 63 (SP Application).
[264] *See e.g.* EERA-11 at Appendix A, Figures 2, 4, 6, 9.
[265] Ex. EERA-11 at 34 (EA).
[266] Ex. LW-9 at 65 (SP Application).
[267] Ex. EERA-11 at 4, 9, 34 (EA).
[268] Comments – EERA, Attachment A at 6.
[269] Reply Comments —Lake Wilson Solar at 4-5.

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.[270]

201. In its December 5, 2023, written comments, DNR recommended a special permit condition requiring the use of shielded and downward facing lighting and LED lighting that minimizes blue hue.[271] In its response to comments, Lake Wilson Solar stated it has no objection to such a special condition.[272]

202. The public comments about the Project and aesthetic have focused on questions and concerns about solar glare,[273] and approval of existing fencing plans with request for some additional fencing around the BESS by the County.[274]

4. Public Service and Infrastructure

203. 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 and east, and County Highway 28 which is through the Project area running north and south. Other roads providing access points to the Project are 70th Avenue, 90th Avenue, 81st Street, and 91st Street.[275]

204. 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.[276]

205. Prior to start of construction, Lake Wilson Solar indicates it will work towards an agreement with Murray County and Leeds Township on road usage.[277]

206. The electric providers for the Project site 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 which 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.[278] Temporary

[270] Ex. EERA-11 at 35 (EA).
[271] Written Comments – DNR at 1.
[272] Reply Comments – Lake Wilson Solar at 8-9.
[273] Ex. EERA-10 (Public Comment M. Ackerman); Transcript of Public Hearing (Nov. 28, 2023) at 39 (Comment by unidentified speaker).
[274] Transcript of Public Hearing (Nov. 28, 2023) at 23-24 (Comments by Jean Christoffels, Murray County Zoning Office), 42 (Comment by Jim DeYonge).
[275] Ex. EERA-11 at 48 (EA).
[276] Ex. LW-9 at 74 (SP Application).
[277] Ex. EERA-11 at 50 (EA).
[278] Ex. EERA-11 at 48 (EA).

impacts to service may occur during interconnection of the project into the existing Xcel Energy Fenton - Chanarambie 115 kV HVTL.[279]

207. The Project site does not have city water supply or sanitary sewer. Residents in the area use private wells and private septic systems or drain fields for domestic wastewater. The Minnesota Well Index (MWI) identifies seven domestic wells or boring holes within the Project area; four of these wells are sealed and three are listed as active domestic wells.[280] Lake Wilson Solar will likely need to install a domestic-sized private well and onsite septic system to provide for the requirements of the facility.[281]

208. 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. The 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.[282]

209. No AM, FM, microwave, television, or other radio towers were identified in the Project area according to publicly available Federal Communications Commission (FCC) sources. Three private mobile transmission towers were identified within one mile of the Project area boundary. There are numerous telephone and broadband providers in Murray County.[283]

210. The solar facility is not expected to impact air safety given that the nearest 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.[284]

211. No natural gas or hazardous liquid pipelines were identified in the Project area.[285]

212. In the Draft Site Permit, the following sections address public service and infrastructure: Section 4.3.22 (Roads) as modified by EERA and agreed to by Lake Wilson Solar;[286] and Section 4.3.5 (Public Services and Public Utilities) as modified by EERA and agreed to by Lake Wilson Solar.[287]

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[279] Ex. EERA-11 at 49-50 (EA).
[280] Ex. EERA-11 at 48-49 (EA).
[281] Ex. EERA-11 at 49 (EA).
[282] *Id*.
[283] Ex. LW-9 at 73 (SP Application).
[284] *Id*.
[285] Ex. EERA-11 at 48 (EA).
[286] Comments – EERA, Attachment A at 11-12.
[287] Comments – EERA, Attachment A at 5.

5. Recreational Resources

213. Murray County has many recreational opportunities, 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 Shetek, Lake Sarah, Lake Wilson, Moon Lake, and Summit Lake.[288]

214. No snowmobile, biking, or walking trails are within the Project vicinity. The nearest trail is Beaver Creek snowmobile trail, less than one mile north of the land control area and parallel to 111th Street.[289] Camp Summit is an RV park with recreational activities located in Hadley, less than a mile away from the land control area. No adverse impacts on Beaver Creek snowmobile trail or Camp Summit are anticipated from construction or operation of the Project due to their distance from the Project.[290]

215. According to the DNR Recreation Compass, no state forests, national forests, or national wildlife refuges are in proximity to the Project area. Additionally, no state-owned Off-Highway Vehicle trails and no DNR Scientific and Natural Areas are identified within a mile of the Project Area boundary. Likewise, no lakes with public access are in the Project Area.[291]

216. Wildlife management areas (WMAs) are in the Project vicinity, the nearest being Carlson State WMA which is directly adjacent. This WMA has a small, high-quality remnant prairie and seeded prairie with primarily deer and pheasants.[292] 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.[293]

217. No significant impacts to other recreational opportunities are anticipated and, therefore, no additional mitigative measures are proposed for development of the Project.[294]

[288] Ex. LW-9 at 71 (SP Application).
[289] Ex. EERA-11 at 46 (EA).
[290] Ex. LW-9 at 72 (SP Application).
[291] Ex. LW-9 at 72 (SP Application).
[292] Ex. EERA-11 at 47 (EA).
[293] Ex. EERA-11 at 47 (EA).
[294] Ex. EERA-11 at 47 (EA).

6. Public Health and Safety

218. Construction and operation of the Project will have minimal impacts on the health and safety of the local populace. Construction-related injuries and electrocution are always risks with electrical infrastructure.[295]

219. 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.[296]

220. Electrical lines in the United States have a frequency of 60 cycles per second or 60 hertz, which creates an extremely low frequency electric and magnetic field (EMF).[297]

221. The primary sources of EMF for the Project 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 milligauss (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 one 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.[298]

222. BESSs are a relatively new technology that come with inherent risk as they are employed in early phases of implementation. There is, however, 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.[299]

223. 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.[300]

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[295] Ex. EERA-11 at 57.
[296] Ex. LW-9 at 52 (SP Application).
[297] Ex. EERA-11 at 53 (EA).
[298] Ex. EERA-11 at 56 (EA).
[299] Ex. EERA-11 at 58 (EA).
[300] Ex. EERA-11 at 59 (EA) (citing Arizona Public Service. 2020. McMicken Battery Energy Storage System Event Technical Analysis and Recommendations. Document No.: 10209302-HOU-R-01. Retrieved from: https://coaching.typepad.com/files/mcmicken.pdf).

224. Public comments with questions about fire and first responder response training show this is an area of concern for the community.[301]

225. Lake Wilson Solar has pointed to newly developed standards which have been recommended after a BESS fire in Arizona. That incident resulted in improved fire-safety practices for the BESS, as described in the McMicken Battery Energy Storage System Event Technical Analysis and Recommendations. The newly developed standards, 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, will further prevent future incidents associated with BESS and fire.[302]

226. Lake Wilson will provide training resources for local responders, as well as the collaborative development of an ERP specific to the Project prior to operation as required by Section 8.10 of the Draft 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.[303]

227. The Draft SP contains the following conditions to address public health and safety: Section 4.3.29 (Public Safety) addresses public safety, including landowner educational materials, warning signs, traffic control, etc.; Section 8.10 (Emergency Response) requires permittees to file an ERP with the Commission prior to construction; and Section 8.11 (Extraordinary Events) requires notification of extraordinary events to the Commission such as fires, injuries, etc.[304]

B. Land-based Economies

1. Local Economy

228. The Project will result in both short- and long-term benefits to the local economy.[305]

229. Landowner compensation is established by voluntary solar lease and easement or purchase option agreements between the landowners and Lake Wilson Solar for lease or purchase of the land for the Project.[306]

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[301] Transcript of Public Hearing (Nov. 28, 2023) at 26-27 (Comments of Carl Nyquist, the Emergency Manager for Murray County), 27-35 (Comments of Michael Ackerman).
[302] Ex. EERA-11 at 59 (EA) (citing Arizona Public Service. 2020. McMicken Battery Energy Storage System Event Technical Analysis and Recommendations. Document No.: 10209302-HOU-R-01. Retrieved from: https://coaching.typepad.com/files/mcmicken.pdf).
[303] Ex. EERA-11 at 57 (EA).
[304] Comments – EERA, Attachment A at 14, 20.
[305] Ex. EERA-11 at 51 (EA).
[306] Ex. LW-9 at 4-5 (SP Application).

230. 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.[307]

231. The O&M 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 30-year operational life of the Project it is expected to support up to 11 indirect jobs in Murray County, and an additional nine indirect jobs in the State of Minnesota. The Project will also contribute to the local economy through land rent payments to participating landowners and purchases of goods and services.[308]

232. Public comments regarding the economic benefits of the Project have been positive.[309]

233. The Draft SP contains the following conditions to address public health and safety: Section 8.5 (Labor Statistic Reporting) requires quarterly reports concerning efforts to hire Minnesota workers;[310] and Section 9 (Decommissioning and Restoration) as modified by EERA and agreed to by Lake Wilson Solar, addresses Project decommissioning.[311]

2. Agriculture

234. Agricultural use encompasses nearly 100 percent of the land within the Project area, with corn and soybean crops and fallow field covering roughly 82 percent of the total land area.[312]

235. The Project will impact up to approximately 1,526 acres of 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 percent 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.[313]

[307] Ex. LW-9 at 70 (SP Application).
[308] Ex. LW-9 at 70 (SP Application).
[309] Ex. PUC-11 (Minnesota Land & Liberty Coalition Comments); Ex. PUC-12 (IUOE Local 49 and NCSRC of Carpenters Comments); Ex. PUC-13 (LIUNA Minnesota and North Dakota Comments); Transcript of Public Hearing (Nov. 28, 2023) at 35 (Comments of Todd Sorter, 5623 Labor Union representing southwestern Minnesota).
[310] Comments – EERA, Attachment A at 18-19.
[311] Comments – EERA, Attachment A at 20-22.
[312] Ex. LW-9 at 80 (SP Application).
[313] Ex. LW-9 at 80 (SP Application).

236. 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.[314]

237. Potential impacts are localized and unavoidable with the Project but can be minimized.[315] Lost farming revenues will be offset by easement agreements.[316]

238. EERA staff proposed moving the requirement for an Agricultural Impact Mitigation Plan (AIMP) from a special condition to a standard condition under 4.3.18 (Agricultural Impact Mitigation Plan). EERA staff noted Lake Wilson Solar included a draft AIMP as Appendix E to its SP Application.[317] In its response, Lake Wilson Solar stated it has no objection to this permit condition.[318]

3. Prime Farmland

239. Prime farmland is defined by federal regulation in 7 CFR 657.5 (a) (1) (2023) 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."[319]

240. Subject to certain exceptions, Minn. R. 7850.4400, subp. 4, prohibits a LEPGP 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. 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. [320]

241. Given the up to 150 MW 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 seven acres of prime farmland if protected from flooding or not frequently flooded during the growing season are located within the Project area.[321]

242. Public comments raised concerns about the use of agricultural land for the Project.[322]

243. 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

[314] Ex. LW-9 at 80 (SP Application).
[315] Ex. EERA-11 at 61 (EA).
[316] Ex. EERA-11 at 10 (EA).
[317] Comments – EERA at 13.
[318] Reply Comments – Lake Wilson Solar at 5.
[319] Ex. EERA-11 at 60 (EA).
[320] Ex. LW-9 at 52 (SP Application).
[321] *Id*.
[322] Public Comment – Glen Talsma; Transcript of Public Hearing (Nov. 28, 2023) at 24-26 (Comments of Glen Talsma).

farmland.[323] The potential alternative site was ruled out "because the project area did not have a suitable point of interconnection" and was also unable to meet the 0.5-acre prime farmland per MW of net generating capacity limit.[324]

244. Lake Wilson Solar selected the 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.[325]

245. As noted above, under Minn. Stat. §216E.04, subd. 2(8), the Project qualifies for the alternative review process under Minn. R. 7850.2800-.3900 because it is a LEPGP powered by solar energy. As such, Lake Wilson Solar is not required to analyze alternative sites pursuant to Minn. 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.[326]

246. The Draft SP, as modified by EERA and Lake Wilson Solar,[327] contains multiple sections addressing soil and agricultural related issues associated with the Project: Sections 4.3.1 (Field Representative), 4.3.2 (Site Manager), 4.3.9 (Topsoil Protection), 4.3.10 (Soil Compaction), 4.3.11 (Soil Erosion and Sediment Control), 4.3.14 (Native Prairie), 4.3.15 (Vegetation Removal), 4.3.16 (Beneficial Habitat), 4.3.19 (Application of Pesticides), 4.3.20 (Invasive Species), 4.3.21 (Noxious Weeds), and 4.3.25 (Restoration) [328]

C. Archaeological and Historic Resource

247. The Phase I Archaeological field survey for the original planned development area 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.[329]

248. 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 results.[330]

249. The Draft SP contains Section 4.3.23 (Archaeological and Historic Resources) which directs that, if previously unknown archaeological resources are 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

[323] Ex. EERA-11 at 62 (EA).
[324] Ex. EERA-11 at 62-63 (EA).
[325] *Id.*
[326] Ex. LW-9 at 52 (SP Application).
[327] *See* Comments – EERA; Comments – Lake Wilson Solar.
[328] Comments – EERA, Attachment A at 4-13 (Draft SP).
[329] Ex. EERA-11 at 64 (EA).
[330] Ex. EERA-11 at 64, Appendix F (EA).

be a significant cultural resource, the State Historic Preservation Office and Office of the State Archaeologist will be notified.[331]

D. Natural Environment

1. Wildlife

250. 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.[332]

251. Individual wildlife will be displaced to adjacent habitats during construction. Because the Project area does not provide important habitat, this should not impact life cycle functions such as nesting.[333]

252. 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.[334] Lake Wilson Solar plans to utilize lightweight agricultural woven wire fencing to reduce entanglements.[335] Barbed wire will not be used at the top of the fence around the Project arrays or construction units.[336]

253. The EA suggested the SP include requirements for visibility markers on perimeter fencing and wildlife ramps.[337] Both of which would improve the possibility of escape for wildlife.

254. In its December 5, 2023, comments, DNR recommended that Lake Wilson Solar engage in further coordination with the agency to clarify location of deer egress gates.[338] In its response to comments, Lake Wilson Solar stated that it does not plan to install deer egress gates. Lake Wilson Solar pointed out that DNR indicated the current fencing design met DNR standards. [339]

[331] Comments – EERA, Attachment A at 12-13 (Draft SP).
[332] Ex. EERA-11 at 82 (EA).
[333] Ex. EERA-11 at 83 (EA).
[334] *Id.*
[335] Ex. EERA-11 at 85 (EA).
[336] Ex. LW-9 at 34 (SP Application).
[337] Ex. EERA-11 at 85 (EA).
[338] Written Comments – DNR at 1.
[339] Reply Comments – Lake Wilson Solar at 10.

255. In its December 11, 2023, comments, EERA recommended that the condition regarding security fencing (Section 4.3.31) be moved from a special condition to a standard condition.[340] Lake Wilson Solar had no objection to this proposed change.[341]

256. 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.[342]

257. 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.[343] In its response to comments, Lake Wilson Solar stated it has no objection to this special condition.[344]

258. EERA also proposed changes to Section 4.3.16 of the Draft SP (Beneficial Habitat), which addresses the objective to use beneficial habitat for wildlife and for Lake Wilson Solar to meet the standards for Minnesota's Habitat Friendly Solar Program.[345] Lake Wilson Solar stated it has no objection to this condition as modified by EERA.[346]

2. Vegetation

259. The Project 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.[347]

260. After coordination with the DNR, Lake Wilson Solar confirmed with a native prairie field survey that no native prairies exist in the Project area. With the coordination, Lake Wilson removed two trackers from the Project area that were originally proposed because they were in suspected native prairies mapped by the DNR. Due to this adjustment, DNR determined no prairie protection management plan would be required for the Project.[348]

261. Public comment raised the question of maintenance of the vegetation that will be planted instead of crops.[349]

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[340] Comments – EERA at 13.
[341] Reply Comments – Lake Wilson Solar at 7.
[342] Ex. EERA-11 at 83 (EA).
[343] Written Comments – DNR at 2.
[344] Reply Comments – Lake Wilson Solar at 9.
[345] Comments – EERA at 11-12; Attachment A at 9 (Draft SP).
[346] Reply Comments – Lake Wilson Solar at 5.
[347] Ex. EERA-11 at 79 (EA).
[348] Ex. EERA-11 at 80 (EA).
[349] Transcript of Public Hearing (Nov. 28, 2023) at 24-26 (Comments by Glen Talsma).

262. Agricultural row crop fields at the solar facility will 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.[350]

263. 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's agriculture impact mitigation plan (AIMP) and vegetative management plans (VMP).[351]

264. Lake Wilson Solar has developed its VMP in consultation with the DNR and other state agencies to guide site preparation, installation of prescribed seed mixes, and management of invasive species and noxious weeds. Lake Wilson Solar must file the final VMP prior to a pre-construction meeting.[352]

265. In its December 11, 2023, comments, EERA proposed changes to Section 4.3.17 of the Draft Site Permit regarding the timing of the VMP and distribution of the VMP to landowners.[353] Lake Wilson Solar had no objection to these changes.[354]

266. 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.[355]

267. All areas not containing 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.[356]

268. In its December 5, 2023, comments, DNR recommended Lake Wilson Solar utilize non-chloride products for dust control activities.[357] In its response to comments, Lake Wilson Solar stated it has no objection to this special condition.[358]

269. The Draft SP contains the following conditions to address 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

[350] *Id*.
[351] Ex. EERA-11 at 79 (EA).
[352] Ex. EERA-11 at 81 (EA).
[353] Comments – EERA at 12-13.
[354] Reply Comments – Lake Wilson Solar at 5.
[355] Ex. LW-9 at 102 (SP Application).
[356] Ex. EERA-11 at 81 (EA).
[357] Written Comments – DNR at 2.
[358] Reply Comments – Lake Wilson Solar at 9.

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 it with the Commission 30 days prior to the pre-construction meeting; and Section 4.3.21 (Noxious Weeds) requires the Applicant to take all reasonable precautions against the spread of noxious weeds during all phases of construction.[359]

3. Soils, Geologic, and Groundwater Resources

270. 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 help minimize impacts to soil.[360]

271. 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 conditions include construction of the access roads, substation, BESS, Xcel switchyard, and O&M facility.[361]

272. There is potential for soil compaction and erosion. Primary impacts to soils include compaction from construction equipment and soil profile mixing. Impacts to soils are likely to be greatest with the below-ground electrical collection system because trenching will be required to bury cables. Some soil mixing may occur during the installation of the transmission structures. Construction requires removing and handling soils, which will expose soils to wind and water erosion. Topsoil could be lost to improper handling or erosion. Topsoil will be separated from the other subsoil materials when earthmoving activities, excavation, or trenching are taking place. Stripped topsoil will be stored on site and any topsoil that is respread will be loosely compacted.[362]

273. During operation of the Project, ongoing soil compaction may 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. However, with the establishment of permanent vegetation, the Project should reduce the potential for erosion. 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.[363]

274. The Project is not expected to impact geology.[364]

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[359] Comments – EERA, Attachment A at 9-11 (Draft SP).
[360] Ex. LW-9 at 91 (SP Application).
[361] Ex. EERA-11 at 75 (EA).
[362] Ex. EERA-11 at 75-76.
[363] Ex. LW-9 at 91 (Application for a Site Permit).
[364] Ex. EERA-11 at 88.

275. The Project is generally expected to have “very low” groundwater pollution sensitivity where contaminants from the land surface would not reach groundwater for months to a year. Because of the shallow depth to groundwater in some areas of the Project, dewatering may be required during construction.[365]

276. Stormwater management is important to ensure that structure foundations maintain integrity and that runoff drains away from the site in a way that does not adversely affect existing drainage systems, roads, or nearby properties. Appropriate permanent stormwater management measures, including minimizing the area of impervious surfaces at the site to reduce the volume and velocity of the stormwater runoff and the establishment of stormwater ponds, will address drainage from the newly established impervious areas.[366]

277. Soil cover and management will change from cultivated cropland to a mixture of impervious surfaces, for example, PV panels, access roads, BESS, substation, switchyard, etc., underlain and surrounded by native groundcover plantings. Once permanent vegetation is established, stormwater management, as well as general soil health, might improve due to use of native plants.[367]

278. Because the project will disturb more than one acre, Lake Wilson must obtain a construction storm water (CSW) permit from the Minnesota Pollution Control Agency (MPCA). The CSW permit will identify best management practices for erosion prevention and sediment control. As part of the CSW permit, Lake Wilson will also develop a stormwater pollution prevention plan (SWPPP). The SWPPP will include best management practices such as silt fencing (or other erosion control devices), revegetation plans, and management of exposed soils to prevent erosion. 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.[368]

279. Lake Wilson Solar‘s AIMP for the Project 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 AIMP specifically addresses construction in the type of soil conditions present in the Project area. Additionally, Lake Wilson Solar’s VMP lists best management practices, that while directly related to vegetation, also stabilize soils.[369]

[365] Ex. EERA-11 at 74-75.
[366] Ex. EERA-11 at 75.
[367] Ex. EERA-11 at 75.
[368] Ex. EERA-11 at 74 (EA).
[369] Ex. EERA-11 at 76 (EA).

280. As noted above, private wells exist in the area around the Project. The Project facilities will avoid the wells mapped by Minnesota Department of Health in the project area.[370]

281. A public comment raised concerns about damage to existing drainage tiles owned by the County and private individuals.[371]

282. According to the Murray County Drainage Ditch and Tile data, the Project Area contains multiple segments of private drainage tile and lateral ditches.[372] Draft SP Section 4.3.18 requires in part that Lake Wilson Solar maintain the existing drainage conditions through appropriate maintenance and repair of existing drain tile.[373] Section 4.3.28 requires Lake Wilson Solar to fairly restore or compensate landowners for damages to crops, fences, drain tile, etc. during construction.[374]

283. In its Reply Comments submitted on December 21, 2023, Lake Wilson Solar addressed concerns about drainage tile systems affected during and after construction of the Project.[375] It stated it has an agreement with the county for a 25-foot setback from county-owned drainage tile and has initiated mapping of existing private drainage title infrastructure prior to the start of construction.[376] Lake Wilson Solar stated it would communicate with participating landowners on a parcel-by-parcel basis as construction approaches.[377]

284. 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.[378] Lake Wilson Solar has no objection to this special condition.[379]

285. The Draft SP contains the following conditions to address soil, geologic and groundwater: Section 4.3.11 (Soil Erosion and Sediment Control); Sections 4.3.9 (Topsoil Protection), 4.3.10 (Soil Compaction).[380]

4. Surface Water and Wetlands

286. The Project area is in the hydrologic unit code-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 Project area. Public waters include wetlands, water basins, and watercourses of

[370] Ex. EERA-11 at 72-3 (EA).
[371] Public Comment – Glen Talsma.
[372] Ex. LW-9 at 97-98 (SP Application).
[373] Ex. EERA-11 at 63 (EA).
[374] Ex. EERA-11 at 63 (EA).
[375] Reply Comments —Lake Wilson Solar.
[376] *Id.*at 10.
[377] *Id.*
[378] Comments – EERA at 11.
[379] Reply Comments – Lake Wilson Solar at 5.
[380] Comments – EERA, Attachment A at 6-7 (Draft SP).

significant recreational or natural resource value in Minnesota.[381] The Minnesota Pollution Control Agency's "Impaired Waters Viewer" indicates no mapped impaired waters in the Project area. There are also no mapped lakes or rivers within the Project vicinity.[382]

287. Lake Wilson Solar has made efforts to avoid all water resource impacts to the extent practicable through Project design and construction methods.[383] Standard construction management practices, including, but not limited to containment of excavated soils, protection of exposed soils, stabilization of restored soils, and controlling fugitive dust will minimize the potential for eroded soils to reach surface waters.[384]

288. No permanent negative impacts to water resources are anticipated during operation of the Project. Due to the establishment of perennial vegetation at the solar facility, the project is expected to have a long-term positive impact on water quality.[385]

289. The USFWS National Wetlands Inventory identified 39 wetlands, including 25 freshwater emergent wetlands, 12 riverine wetlands, one freshwater pond, and one freshwater forested/shrub wetland totaling 78.6 acres, or less than three percent of the project area and zero acres of the preliminary development area. Lake Wilson Solar and the DNR coordinated on Project design relating to distance to wetlands, which has resulted in the Project completely avoiding wetlands.[386] Because the design avoids all wetlands, the Project does not require any approvals under Minnesota's Wetland Conservation Act. Current design also does not require any approvals under Section 404 of the Clean Water Act.[387]

290. Lake Wilson Solar has initiated a 100-foot setback from all wetlands for the Project. Since no impacts are expected to public watercourses, the DNR buffer rule around public ditches, and public waters permits do not apply to the Project's current design.[388]

291. The Draft SP contains the following conditions to address issues connected to surface water and wetlands: Section 4.3.13 (Wetlands and Water Resources) addresses the impacts to wetlands and other water resources; and Section 4.3.11 (Soil Erosion and Sediment Control) requires reasonable measures to minimize erosion and sedimentation during construction.[389]

[381] Ex. EERA-11 at 77 (EA).
[382] Ex. LW-9 at 98 (SP Application).
[383] Ex. LW-9 at 98 (SP Application).
[384] Ex. EERA-11 at 77 (EA).
[385] Ex. EERA-11 at 77 (EA).
[386] Ex. EERA-11 at 78 (EA).
[387] Ex. LW-9 at 99 (SP Application).
[388] Ex. EERA-11 at 79 (EA).
[389] Comments – EERA, Attachment A at 7-8 (Draft SP).

5. Air and Water Emissions

292. Minimal intermittent air emissions are expected during construction of the Project. Construction activities will result in short-term increases in greenhouse gas emissions because of the combustion of fossil fuels in construction equipment and vehicles. 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.[390]

293. Once operational, the solar array will not generate criteria pollutants or carbon dioxide. Operational emission sources include emergency generators, commuter and onsite vehicle traffic, and offsite electricity purchased.[391]

294. Emissions from construction vehicles will be minimized by using modern equipment with lower emissions ratings and properly functioning exhaust systems.[392] Applicable best management practices used during construction and operation of the Project will minimize dust emissions. Additional best management practices will be implemented as part of the VMP and AIMP addressing emissions (e.g., mulching exposed soils, installing and maintaining vegetative cover, engineering controls, reducing vehicle and equipment speed, maintaining equipment and exhaust/mufflers, etc.).[393]

295. 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, without agricultural operations at the Project site during construction and operation of the Project, reduced particulate emissions, dust and farm equipment exhaust will occur and further improve air quality at and in the site. [394]

296. Following construction, the facility will not directly emit pollutant emissions.[395]

297. Additionally, the change from row crop agriculture to ground cover, the slowing of runoff and the 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.[396]

6. Solid and Hazardous Waste

298. Solar facility and wind farm construction generates solid waste, such as scrap wood and metal, plastics, and cardboard. Petroleum products will be present

[390] Ex. EERA-11 at 66 (EA).
[391] Ex. EERA-11 at 66-68 (EA).
[392] Ex. LW-9 at 89 (SP Application).
[393] Ex. LW-9 at 90 (SP Application).
[394] Ex. EERA-11 at 66-67 (EA).
[395] Ex. EERA-11 at 66-67 (EA).
[396] Ex. EERA-11 at 73 (EA).

on-site, including engine and hydraulic oil, lubricants, grease, cleaning solvents, and fuel. Operation is not expected to generate significant quantities of solid and hazardous wastes. Small quantities of petroleum products will be kept onsite for routine maintenance activities. Certain electronic components in solar facilities, such as circuit boards, contain hazardous materials commonly found in electronic devices.[397]

299. The Draft SP contains the following conditions to address solid and hazardous waste: Section 4.3.26 (Cleanup) requires that all waste and scrap that is the product of construction be removed and properly disposed of upon completion of each task; and Section 4.3.27 (Pollution and Hazardous Wastes) requires the Permittee to take all appropriate precautions against pollution of the environment.[398]

E. Rare and Unique Natural Resources

300. Lake Wilson Solar initiated project coordination with DNR in December of 2017; a meeting with DNR was also held in September of 2021 to discuss the proposed Project details and address agency questions. DNR reviewed the proposed Project and stated no state-listed endangered or threatened species have been documented in the vicinity of the Project Area. [399]

301. The Natural Heritage Information System review of the Project documented the possibility of rare features in the vicinity of the Project.[400] 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 the Project area (within one mile of the land control area).[401]

302. 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 it. Species of special concern are not protected by Minnesota's Endangered Species Statute or the associated rules. However, the National Heritage Review 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 low.[402]

303. Project coordination took place with the US Fish and Wildlife Service (USFWS) in October 2017 using an earlier version of the Project area. A meeting with the USFWS was also held on September 15, 2021. The 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) and

[397] Ex. EERA-11 at 106 (EA).
[398] Comments – EERA, Attachment A at 13 (Draft SP).
[399] Ex. LW-9 at 105 (SP Application).
[400] Ex. EERA-11 at 88-89, Appendix M (EA).
[401] Ex. LW-9 at 105 (SP Application).
[402] Ex. EERA-11 at 89 (EA).

one candidate species, the monarch butterfly (Danaus plexippus), were mapped as potentially occurring within or near the Project area.[403]

304. Preferred summer habitat for the northern long-eared bat consists of mature forests, although this species is also known to forage in wooded areas near water sources and within cleared forest tracts. The Project area is heavily dominated by agricultural land use with limited areas of individual trees or small tree stands, and according to DNR and USFWS, there are no known northern long-eared bat maternity roost trees or hibernaculum in Murray County or any of the surrounding counties. Therefore, the probability of occurrence for the northern long-eared bat is considered low.[404]

305. The monarch butterfly is a candidate species currently with no federal protections. 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 has been observed during field surveys, but broadleaf herbicide use in agricultural fields have greatly reduced the likelihood of milkweeds occurring in the Project area.[405]

306. The bald eagle 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.[406] 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.[407]

III. SITE PERMIT CONDITIONS

307. The Draft SP, as revised by EERA and Lake Wilson Solar, includes several proposed permit conditions, many of which have been discussed above.

308. On November 14, 2023, Lake Wilson Solar proposed a modification to Section 3, Designated Site, filed in the Direct Testimony of Olagbegi.[408] Lake Wilson stated that it:

> [W]ould like to amend the estimated temporary laydown area mentioned in Section 3.2.2 and 3.3.1 of the Application w[h]ere we state the following:

[403] Ex. LW-9 at 105-06 (SP Application).
[404] Ex. LW-9 at 106 (SP Application).
[405] Ex. LW-9 at 106 (SP Application).
[406] 16 U.S.C. §668 (2018).
[407] Ex. LW-9 at 106 (SP Application).
[408] Ex. LW-33 at 3 (Direct Testimony of Korede Olagbegi).

> Temporary staging/laydown areas are currently proposed to be approximately 3-10 acres each and located in the eastern and central portions of the Project Area. Any additional temporary laydown yards that may be used during construction would be located within the fenced array areas.
>
> We now expect that there will be approximately five to ten laydown areas throughout the Project area. The size of the main laydown yard would be up to 15 acres and the other smaller staging areas spread out through the Project area would range from approximately 1-5 acres in size.[409]

309. EERA responded with a slight modification to the proposed changes to Section 3:

> 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."[410]

310. In its Reply Comments, Lake Wilson Solar explained that it had engaged in discussions with EERA staff and consequently proposed the following language be reinstated after its 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

[409] Ex. LW-33 at 3.
[410] Comments – EERA at 15-16.

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.[411]

311. On January 10, 2024, EERA confirmed it had no objection to Lake Wilson's proposed change.[412]

312. The Judge finds EERA's and Lake Wilson Solar's proposed changes for Section 3 of the Draft SP is reasonable.

313. In its December 5, 2023, comments, DNR recommended adding a special permit condition on lighting at the Project substation and O&M building to Section 5.1 with the following language:

> **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.[413]

Lake Wilson Solar has no objection to the addition of this permit condition.[414]

314. The Judge finds DNR's proposed changes adding a special permit condition Section 5.1 to the Draft SP is reasonable.

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

> **5.2 Dust Control**
> The Permittee shall utilize non-chloride products for dust control activities.[415]

Lake Wilson Solar had no objection the addition of this permit condition as a new Section 5.2.[416]

[411] Reply Comments – Lake Wilson Solar at 3-4.
[412] Reply Comments—EERA at 6.
[413] Written Comments – DNR at 1.
[414] Reply Comments – Lake Wilson Solar at 8-9.
[415] Written Comments – DNR at 2.
[416] Reply Comments – Lake Wilson Solar at 9.

316. The Judge finds DNR's proposed changes adding a special permit condition Section 5.2 to the Draft SP is reasonable.

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

> **5.3 Wildlife Friendly Erosion Control**
> The Permittee shall use only "bio-netting" or "natural netting" types and mulch products without synthetic (plastic) fiber additives.[417]

Lake Wilson Solar had no objection to the addition of this permit condition as a new Section 5.2.[418]

318. The Judge finds DNR's proposed changes adding a special permit condition Section 5.3 to the Draft SP is reasonable.

319. On December 11, 2023, 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.[419]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[420]

320. The DNR is responsible for all wild animals in the state.[421] Lake Wilson Solar asserts the EA that potential impact to deer is expected to be minimal and as a result, the deer egress gates will not be included in the fencing design.[422] However, the EA found that studies estimate that one hoofed mammal 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. Predators can use fences to corner and kill prey species.[423] DNR's expertise should be given deference and deer egress gates should be included as advised by the DNR.

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[417] Written Comments – DNR at 2.
[418] Reply Comments – Lake Wilson Solar at 9.
[419] Comments – EERA at 13.
[420] Reply Comments – Lake Wilson Solar at 7.
[421] Minn. Stat. § 84.027, subd. 2 (2022).
[422] Reply Comments – Lake Wilson Solar at 7.
[423] Ex. EERA-11 at 83 (EA).

321. The Judge finds Lake Wilson Solar should be required to coordinate with DNR to add and determine the location of the deer egress gates.

322. On December 11, 2023, EERA proposed a new section regarding the Project's Ownership Structure as Section 2.2 of the Draft SP related to Project Ownership. The revised section is as follows:

> **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.[424]

Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[425]

323. The Judge finds EERA's proposed new section for Section 2.2 of the Draft SP is reasonable and will establish a solid base of understanding of the Project's ownership structure.

324. 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:

[424] Comments – EERA at 10-11.
[425] Reply Comments – Lake Wilson Solar at 3.

> **2.3 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.[426]

Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[427]

325. The Judge finds EERA's changes for Section 4.3 of the Draft SP are reasonable.

326. On December 11, 2023, EERA suggested moving 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 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.[428]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[429]

327. The Judge finds EERA's proposed changes for Section 4.3.4 of the Draft SP are reasonable. The Judge notes that due to the large amount of land disturbance for a utility-scale solar generating facility, third-party monitors have been required of many solar site permits issued by the Commission.[430]

328. On December 11, 2023, EERA provided the following suggested changes to Section 4.3.8 of the Draft SP related to Aesthetics:

> The Permittee shall consider input pertaining to visual impacts from ~~landowners and land management agencies. Care~~the local unit of

[426] Comments – EERA at 11.
[427] Reply Comments – Lake Wilson Solar at 4.
[428] Comments – EERA at 11.
[429] Reply Comments – Lake Wilson Solar at 4.
[430] *See* Comments – EERA at 11; Ex. EERA-11 at 11 (EA).

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.[431]

329. 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 Draft SP:

> 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 ~~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.[432]

On January 10, 2024, EERA confirmed it had no objection to Lake Wilson's proposed change.[433]

330. The Judge finds EERA and Lake Wilson Solar's changes for Section 4.3.8 of the Draft SP are reasonable.

331. On December 11, 2023, EERA provided suggested changed to Section 4.3.9 of the Draft 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~~.[434]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[435]

332. The Judge finds EERA's changes for Section 4.3.9 of the Draft SP are reasonable.

333. On December 11, 2023, EERA provided suggested changes to Section 4.3.16 of the Draft Site Permit related to Beneficial Habitat to clarify the objective of using

[431] Comments – EERA, Attachment A at 6 (Draft SP).
[432] Reply Comments – Lake Wilson Solar at 5.
[433] Reply Comments—EERA at 6 (Jan. 10, 2024) (eDocket No. 20241-202052-01).
[434] Comments – EERA at 11.
[435] Reply Comments – Lake Wilson Solar at 5.

beneficial habitat and encourages Lake Wilson Solar to meet the standards for Minnesota's Habitat Friendly Solar Program. 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.[436]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[437]

334. The Judge finds EERA's changes for Section 4.3.16 of the Draft SP are reasonable.

335. EERA provided suggested changed to Section 4.3.17 of the Draft SP related to the VMP. The revisions are as follows:

> **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 vegetation management plan shall be prepared in coordination with the Department of Commerce, DNR, and BWSR. The vegetation management plan~~ The Permittee shall file the VMP and documentation of the coordination efforts between the ~~p~~Permittee and the coordinating agencies ~~shall be filed~~ 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

[436] Comments – EERA at 11-12.
[437] Reply Comments – Lake Wilson Solar at 5.

~~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 VMP to landowners at least 14 days prior to the pre-construction meeting.

The ~~vegetation management plan~~ VMP must include the following:
(a) management objectives addressing short term (year 0-~~3~~5, seeding and establishment) and long term (year 4~~5~~ through the life of the ~~permit~~ 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.) ~~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; 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.[438]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[439]

336. The Judge finds EERA's changes for Section 4.3.17 of the Draft SP are reasonable.

337. 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 the AIMP. The Permittee shall file with the

[438] Comments – EERA at 12-13.
[439] Reply Comments – Lake Wilson Solar at 5.

Commission the AIMP and an affidavit of the AIMP distribution to landowners at least 14 days prior to the preconstruction meeting.[440]

In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[441]

338. The Judge finds EERA's proposed changes for Section 4.3.18 of the Draft SP are reasonable.

339. EERA provided suggested changed to Section 4.3.19 of the Draft Site Permit related to the Application of Pesticides. EERA explained the changes to add recordkeeping requirements to clarify compliance.[442] 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 ~~any~~pesticide 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~~ beekeepers operating apiaries within three miles of the ~~project site~~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.[443]

340. In its Reply 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

[440] Comments – EERA at 13.
[441] Reply Comments – Lake Wilson Solar at 5.
[442] Comments – EERA at 7.
[443] Comments – EERA, Attachment A at 11 (Draft SP).

> no application within the landowner's property. The Permittee shall provide notice of pesticide application to adjacent landowners and 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.[444]

Lake Wilson Solar explained its proposed changes stating only adjacent landowners are anticipated to be affected by pesticides. Additionally, Lake Wilson Solar stated it is not aware of a requirement that beekeeping apiaries be registered or otherwise listed in a manner that would make locations readily available to provide notice to others of their presence or existence. Accordingly, Lake Wilson Solar contended it should only be required to notify beekeepers when Lake Wilson Solar is aware of the existence of their apiaries.[445] On January 10, 2024, EERA confirmed it had no objection to Lake Wilson's proposed change.[446]

341. The Judge finds EERA and Lake Wilson Solar's changes for Section 4.3.19 of the Draft SP are reasonable.

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

> 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 ~~facility. Oversize~~Project. The Permittee shall not haul oversize or overweight loads associated with ~~the facility shall not be hauled across public roads~~Project 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 ~~least~~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.

[444] Reply Comments – Lake Wilson Solar at 5-6.
[445] Reply Comments – Lake Wilson Solar at 6.
[446] Reply Comments—EERA at 6.

> 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.[447]

343. 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 on public roads 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.[448]

Lake Wilson Solar explained it changed the language 'on public roads' to clarify that oversize and overweight permits are only applicable on public roads and not applicable on private land.[449]

[447] Comments – EERA, Attachment A at 11-12 (Draft SP).
[448] Reply Comments – Lake Wilson Solar at 6-7.
[449] Reply Comments – Lake Wilson Solar at 7.

344. On January 10, 2024, EERA confirmed it had no objection to Lake Wilson's proposed change.[450]

345. The Judge finds EERA and Lake Wilson Solar's proposed changes for Section 4.3.22 of the Draft SP are reasonable.

346. EERA provided suggested changed to Section 9.1 of the Draft SP for 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 Appendix G to the Site Permit Application. The Permittee shall file an updated decommissioning plan incorporating comments and information from the permit ~~issuance~~ 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 ~~shall be updated~~ 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 ~~projec~~t 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~~ Project components. The decommissioning plan may also include anticipated costs for the replacement of panels or repowering the ~~project~~ 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~~ 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~~ 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.[451]

[450] Reply Comments—EERA at 6.
[451] Comments – EERA at 14.

347. In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[452]

348. The Judge finds EERA's changes for Section 9.1 of the Draft SP are reasonable.

349. EERA provided suggested changes to Section 12 of the Draft SP 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.
>
> 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.[453]

350. In its response to EERA, Lake Wilson Solar stated it had no objection to the condition as proposed by EERA.[454]

[452] Reply Comments – Lake Wilson Solar at 7-8.
[453] Comments – EERA at 14-15.
[454] Reply Comments – Lake Wilson Solar at 8.

351. The Judge finds EERA's proposed changes for Section 12 of the Draft SP are reasonable.

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

2. The Commission has jurisdiction over the Applications pursuant to Minn. Stat. §§ 216B.243 and 216F.04.

3. Lake Wilson Solar, EERA, and the Commission provided all required notices for the CN and SP proceedings.

4. Lake Wilson Solar has adequately addressed all of the CN requirements for which the Commission did not provide an exemption. Therefore, a CN should be issued without any conditions.

5. The Commission has the authority under Minn. Stat. § 216E.03 to place conditions on a SP.

6. The Draft SP, with the permit conditions revised as set forth above, contains a number of important mitigation measures, other reasonable conditions, and sample special conditions, permissible under Minn. R. 7850.4000 and related laws.

7. There is no feasible or prudent alternative to the Project under Minn. R. 7850.4400, subp. 4.

8. The record in this proceeding demonstrates that Lake Wilson Solar has satisfied the criteria for a CN, as set forth in Minn. Stat. § 216B.243 and Minn. R. 7849.0120 and all other applicable legal requirements.

9. The record in this proceeding demonstrates that Lake Wilson Solar has satisfied the criteria for a SP as set forth in Minn. Stat. § 216E.03 and Minn. R. 7850.4000 and all other applicable legal requirements.

10. The Project with the general permit conditions contained in the Draft SP with the permit conditions revised as set forth above, satisfies the SP criteria for an LEPGP and meets all other applicable legal requirements.

11. The Project does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act or the Minnesota Environmental Policy Act.

Based on the findings of fact and conclusions of law contained herein and the entire record of this proceeding, the Judge hereby makes the following:

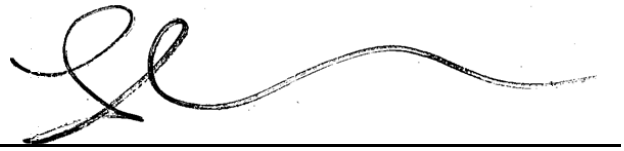
RECOMMENDATION

1. The Commission should issue a certificate of need for the Project because required legal criteria have been met.

2. The Commission should grant the Applicant a site permit for the Project because required legal criteria have been met.

3. The conditions in the Draft Site Permit, as amended and agreed to by the parties and addressed herein, should be incorporated into the final site permit.

Dated: February 7, 2024



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 Prehearing Order of August 7, 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.