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

In the Matter of the Application of Louise Solar Project, LLC for a Certificate of Need for the 50 MW Louise Solar Project in Mower County, Minnesota **In the Matter of the Application of Louise Solar Project, LLC for a Site Permit for the 50 MW Louise Solar Project in Mower County, Minnesota**	MPUC Docket No. IP-7039/CN-20-646; OAH Docket No. 82-2500-37579 and MPUC Docket No. IP-7039/GS-20-647 ~~**LOUISE SOLAR PROJECT, LLC'S**~~**DEPARTMENT OF COMMERCE-ENERGY, ENVIRONMENTAL REVIEW AND ANALYSIS** **PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS**

STATEMENT OF ISSUES 3

SUMMARY OF RECOMMENDATIONS 4

FINDINGS OF FACT 4
- I. APPLICANT 4
- II. CERTIFICATE OF NEED AND SITE PERMIT APPLICATIONS AND RELATED PROCEDURAL BACKGROUND 4
- III. DESCRIPTION OF THE PROJECT 9
- IV. SITE LOCATION AND CHARACTERISTICS 11
- V. SOLAR RESOURCE CONSIDERATIONS 11
- VI. PROJECT SCHEDULE 11
- VII. SUMMARY OF PUBLIC COMMENTS 12

CERTIFICATE OF NEED 14
- I. CERTIFICATE OF NEED CRITERIA 14
- II. APPLICATION OF CERTIFICATE OF NEED CRITERIA TO THE PROPOSED PROJECT 16
  - 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 Minnesota Rules 7849.0120(A)(1)-(5). Minnesota Rule 7849.0120(A). 16
  - B. A More Reasonable and Prudent Alternative to the Proposed Facility Has Not Been Demonstrated by a Preponderance of the Evidence on the Record. Minnesota Rule 7849.0120(B). 23
  - 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. Minnesota Rule 7849.0120(C). 27
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. Minnesota Rule 7849.0120(D). 29
E. Conclusion on Minnesota Rule 7849.0120 Criteria 29

SITE PERMIT 29
I. SITE PERMIT CRITERIA 29
II. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT 30
A. Human Settlement 30
B. Public Health and Safety 36
C. Land-based Economies 37
D. Archaeological and Historic Resources 41
E. Natural Environmental 42
F. Rare and Unique Natural Resources 49
III. SITE PERMIT CONDITIONS 50

CONCLUSIONS OF LAW 50

RECOMMENDATIONS 52

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Louise Solar Project, LLC for a Certificate of Need for the 50 MW Louise Solar Project in Mower County, Minnesota **In the Matter of the Application of Louise Solar Project, LLC for a Site Permit for the 50 MW Louise Solar Project in Mower County, Minnesota**	MPUC Docket No. IP-7039/CN-20-646; OAH Docket No. 82-2500-37579 and MPUC Docket No. IP-7039/GS-20-647 **DEPARTMENT OF COMMERCE-ENERGY, ENVIRONMENTAL REVIEW AND ANALYSIS~~LOUISE SOLAR PROJECT, LLC'S~~** **PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS**

This matter was assigned to Administrative Law Judge ("ALJ") Barbara J. Case to conduct a public hearing on the Certificate of Need (MPUC Docket No. CN-20-646) and Site Permit (MPUC Docket No. GS-20-647) Applications of Louise Solar Project, LLC ("Louise Solar" or "Applicant") for an up to 50 megawatt ("MW") solar energy generating system and associated facilities in Mower County, Minnesota (the "Project"). The Minnesota Public Utilities Commission ("MPUC" or "Commission") also requested that the ALJ prepare findings of fact, conclusions of law and recommendation of a preferred site and permit conditions.

Joint public hearings on the Site Permit and Certificate of Need Applications for the Project were held on October 12, 2021 (in person) and October 13, 2021 (remote access - telephone and internet). The factual record remained open until October 27, 2021, for the receipt of written public comments.

Christina Brusven, Fredrikson & Byron, P.A., 200 South Sixth Street, Suite 4000, Minneapolis, Minnesota 55402, and Scott Wentzell, Project Development Manager of EDF Renewables, Inc. ("EDFR"), 10 NE 2nd Street, Suite 400, Minneapolis, Minnesota 55413, appeared on behalf of Louise Solar.

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

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

STATEMENT OF ISSUES

Has Louise Solar satisfied the criteria established in Chapter 216B of the Minnesota Statutes and Chapter 7849 of the Minnesota Rules for a Certificate of Need for the proposed Project?

Has Louise Solar satisfied the criteria set forth in Chapter 216E of the Minnesota Statutes and Chapter 7850 of the Minnesota Rules for a Site Permit for the proposed Project?

SUMMARY OF RECOMMENDATIONS

The ALJ concludes that Louise Solar has satisfied the applicable legal requirements and, accordingly, the Commission should GRANT a Certificate of Need and a Site Permit for the Project, subject to the conditions discussed below.

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

FINDINGS OF FACT

I. APPLICANT

1. Louise Solar Project, LLC, is a wholly owned subsidiary of EDF Renewables, Inc. EDFR is a utility-scale renewable energy developer headquartered in San Diego, California.[1]

2. EDFR North America is an ~~market leading~~ independent power producer and service provider that delivers grid-scale power, including wind, solar photovoltaic, and storage. ~~EDFR develops, builds and operates clean energy power plants in more than 20 countries. EDFR's gross installed capacity is 12,607 MW worldwide, with net installed capacity standing at 8,123 MW and gross capacity under construction of 5,041 MW.~~[2]

3. EDFR has developed and permitted over 1,200 MWs of large wind energy conversion systems in Minnesota, including the Lakefield, Red Pine, Wapsipinicon, Fenton, and Nobles Wind Projects. EDFR is also currently planning the Andyville Solar Project, an up to 200 MW PV solar-energy generating system and accompanying 161 kV transmission line in Mower County, Minnesota through its subsidiary Andyville Solar Project, LLC; Byron Solar Project, an up to 200 MW PV solar-energy generating system and accompanying 345 kV transmission line in Olmsted and Dodge Counties, Minnesota through its subsidiary Byron Solar Project, LLC; and Minneota Solar, an up to 200 MW solar-energy generating system in Lyon County, Minnesota.[3]

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

4. On August 5, 2020, Louise Solar filed a Request for Exemption from Certain Certificate of Need Application Content Requirements with the Commission requesting exemptions from certain Certificate of Need data requirements.[4]

5. On August 18, 2020, the Commission issued a notice of Comment Period on Request for Exemptions from Certain Certificate of Need Filing Requirements, which opened an

[1] Ex. 101 at 3 (SP Application).
[2] Ex. 101 at 3 (SP Application).
[3] Ex. 100 at 8-9 (CN Application).
[4] Louise Solar Request for Exemption from Certain Certificate of Need Application Content Requirements (August 5, 2020) (eDocket Nos. 20208-165612-01; 20208-165612-02).

initial written comment period until August 28, 2020, and a reply comment period until September 4, 2020.[5]

6. On August 26, 2020, the Minnesota Department of Commerce, Division of Energy Resources ("DER") filed comments recommending that the Commission approve the data exemption requests.[6]

7. On August 27, 2020, Louise Solar filed reply comments concurring with DER's recommendations.[7]

8. On September 4, 2020, the Commission issued a Notice of Commission Meeting scheduling a meeting for September 17, 2020 to consider whether to grant Louise Solar's data exemption requests.[8]

9. On September 21, 2020, the Commission issued an Order approving Louise Solar's data exemption requests.[9]

10. On December 10, 2020, Louise Solar filed a notice of intent to submit a site permit application under the alternative permitting procedures of Minn. R. 7850.2800 to 7850.3900.[10]

11. On February 11 and 12, 2021, Louise Solar filed a Site Permit Application ("SP Application") with the Commission for the Project.[11]

12. Also on February 11 and 12, 2021, Louise Solar filed its Certificate of Need Application ("CN Application").[12]

13. On February 17, 2021, notice of the Louise Solar filing its CN Application and SP Application was published in the *Austin Daily Herald* and the *Saint Paul Pioneer Press*.[13]

14. On February 22, 2021, the Commission issued a Notice of Comment Period on the CN Application and SP Application Completeness announcing it would accept written comments through March 8, 2021 and reply comments through March 15, 2021.[14]

15. On March 2, 2021, a member of the public filed a public comment.[15]

---

[5] Notice of Comment Period (August 18, 2020) (eDocket No. 20208-165977-01).
[6] DER Comments (August 26, 2020) (eDocket No. 20208-166192-01).
[7] Louise Solar Reply Comments (August 27, 2020) (eDocket No. 20208-166213-01).
[8] Notice of Commission Meeting (September 4, 2020) (eDocket No. 20209-166431-01).
[9] Order (September 21, 2020) (eDocket No. 20209-166711-01).
[10] Notice of Intent to Submit SPA Under Alternative Process (December 10, 2020) (eDocket No. 202012-168926-01).
[11] Ex. 101 (SP Application).
[12] Ex. 100 (CN Application).
[13] Ex. 102 (Compliance Filing - Confirmation of Notice).
[14] Ex. 300 (Notice of Comment Period on Application Completeness).
[15] Public Comment (March 2, 2021) (eDocket Nos. 20213-171494-01; 20213-171494-02).

16. On March 4, 2021, Louise Solar filed confirmation that it had notified those persons on the Commission's general service list, landowners and local government officials that Louise Solar filed the CN Application and SP Application.[16]

17. On March 8, 2021, LIUNA Minnesota & North Dakota filed a public comment.[17]

18. On March 8, 2021, EERA Staff filed comments and recommendations recommending that the Commission accept the SP Application as substantially complete but require the Applicant to supplement the record with additional information; take no action on an advisory task force; and request a full ALJ report with recommendations. EERA Staff also noted that "it may be unnecessary for staff to present site alternatives to the commission for its input prior to issuance of the scoping decision due to the inherent difficulties in suggesting alternative site locations for a project of this size."[18]

19. On March 8, 2021, DER filed comments recommending that the Commission determine that the CN Application is complete pending submittal of additional information.[19]

20. On March 15, 2021, Louise Solar filed Reply Comments on the SP Application in response to comments filed during the public comment period.[20]

21. Also on March 15, 2021, Louise Solar filed Reply Comments on the CN Application in response to comments filed during the public comment period.[21]

22. On March 26, 2021, the Commission issued a Notice of Commission Meeting scheduling a Commission meeting on April 8, 2021 to address whether to accept the CN Application as substantially complete; whether it should authorize review of the CN Application using the Commission's informal process or refer the matter to the Office of Administrative Hearings ("OAH") for contested case proceedings; whether to accept the SP Application as substantially complete and to authorize review under the alternative permitting process; whether to process the CN Application and the SP Application jointly; what procedural process to authorize for evaluation of the SP Application; and whether to vary the time limits of Commission rules relating to application completeness.[22]

23. On May 7, 2021, the Commission issued an Order Accepting Applications as Complete, Authorizing Joint Review, and Taking Other Actions, which: accepted the CN Application as substantially complete and authorizes review of the application using the informal review process under Minn. Rule 7829.1200; accepted the SP Application as complete and authorizes review of the application under the alternative permitting process under Minn. Stat. § 216E.04 and Minn. R. 7850.2800 to 7850.3900; approved joint public meetings, joint public

[16] Ex. 102 (Compliance Filing - Confirmation of Notice).

[17] LIUNA Minnesota & North Dakota Comments (March 8, 2021) (eDocket No. 20213-171654-01; 20213-171654-02).

[18] EERA Staff Comments and Recommendations on Application Completeness (March 8, 2021) (eDocket No. 20213-171653-01).

[19] DER Comments (March 8, 2021) (eDocket No. 20213-171634-01).

[20] Ex. 104 (Reply Comments).

[21] Ex. 103 (Reply Comments).

[22] Notice of Commission Meeting (March 26, 2021) (eDocket Nos. 20213-172280-02; 20213-172280-04).

hearings, and combined environmental review of the CN Application and SP Application to the extent practical and requested that EERA prepare an EA in lieu of an ER under Minn. R. 7849.1900; requested that an ALJ from the OAH preside over a hearing and prepare a summary report; granted a variance to Minn. R. 7849.0200, subp. 5, and extended the 30-day timeline; and addressed various other administrative matters.[23]

24. On May 10, 2021, the Commission issued a Notice of Public Information and Environmental Review Scoping Meeting scheduling a meeting on May 25, 2021 via remote-access (telephone and/or internet) and announcing that written comments would be accepted through June 9, 2021. The Notice requested comments on issues and facts that should be considered in the development of the environmental assessment. The Notice of Public Information and Environmental Assessment Scoping Meeting was mailed to landowners and local units of government located within and adjacent to the Project.[24]

25. On May 12, 2021, notice of the public information and environmental review scoping meeting was published in the *Austin Daily Herald*.[25]

26. On May 25, 2021, the Commission and EERA Staff held a public meeting via remote-access to provide the public with information about the Project and to solicit comments on the scope of the environmental assessment.[26]

27. During the comment period ending June 9, 2021, written comments were filed by the Minnesota Department of Natural Resources ("MDNR")[27] and the Minnesota Department of Transportation ("MnDOT").[28]

28. On June 9, 2021, Louise Solar filed comments providing updates on the Project and additional information requested by EERA Staff regarding the point of interconnection and prime farmland, the decommissioning plan, and the vegetation management plan.[29]

29. On June 11, 2021, the ALJ issued a Notice of Prehearing Conference scheduling a prehearing conference on July 1, 2021.[30]

30. On June 22, 2021, EERA Staff filed the Environmental Assessment Scoping Decision ("EASD"), which set forth the matters proposed to be addressed in the environmental assessment and identified certain issues outside the scope of the environmental assessment. No

[23] Ex. 301 (Order Accepting Applications as Complete, Authorizing Joint Review, and Taking Other Actions).

[24] Ex. 302 (Notice of Public Information and Environmental Review Scoping Meeting).

[25] Ex. 105 (Compliance Filing – Publication Notice of Public Information and Scoping Meeting).

[26] *See generally* May 25, 2021 Public Information and Environmental Assessment Scoping Meeting Transcript.

[27] MDNR Comments (June 8, 2021) (eDocket No. 20216-174868-01).

[28] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).

[29] Ex. 106 (Comments).

[30] Notice of Prehearing Conference (June 11, 2021) (eDocket Nos. 20216-174992-01; 20216-174992-02).

site or system alternatives were recommended for study, accordingly, no site alternative other than the site location proposed by Louise Solar would be considered in the environmental assessment.[31]

31. On August 9, 2021, the ALJ issued a Scheduling Order setting joint public hearings on the CN Application and SP Application for October 12, 2021 (in person) and October 13, 2021 (remote access) and setting forth other procedural deadlines in the proceedings.[32]

32. On September 27, 2021, EERA Staff issued the Environmental Assessment ("EA") for the Project.[33] Notice of the availability of the Environmental Assessment was also published in the *EQB Monitor*.[34]

33. On September 27, 2021, the Commission issued a Notice of EA Availability, Public Hearings and Comment Period, notifying the public of the October 12, 2021 in-person hearing and the October 13, 2021 remote-access hearing, and initiating a public comment period ending October 27, 2021.[35]

34. On September 27, 2021, the EA was mailed to Mower County, the Grand Meadow Public Library, and the Austin Public Library.[36]

35. On October 2, 2021, the Notice of EA Availability, Public Hearings and Comment Period was published in the *Austin Daily Herald*.[37]

36. On October 12 and 13, 2021, the ALJ presided over joint public hearings on the SP Application and the CN Application for the Project in-person and via remote means, respectively.[38] Commission Staff, EERA Staff, and representatives from Louise Solar were present. One member of the public spoke during the October 12, 2021 public hearing (in person).[39] During the remote-access public hearing held on October 13, 2021, two members of the public spoke.[40]

37. On October 22, 2021, EERA Staff filed Supplemental Information to the EA, providing clarification to certain information in the EA.[41]

38. On October 22, 2021, Louise Solar filed a revised Vegetation Establishment and Management Plan ("VMP") reflecting changes Louise Solar made following its review of the Vegetation and Establishment Management Plan Guidance document, as well as comments

---

[31] Ex. 200 (Environmental Assessment Scoping Decision).

[32] Scheduling Order (August 9, 2021) (eDocket Nos. 20218-176947-01; 20218-176947-02).

[33] Ex. 201 (Environmental Assessment); Ex. 202 (Environmental Assessment – Appendices).

[34] Ex. 203 (Notice of EA Availability and Hearing – EQB Monitor); Ex. 304 (Proof of Publication).

[35] Ex. 303 (Notice of Comment Period – Notice of Environmental Assessment Availability, Public Hearings, and Comment Period).

[36] Affidavit of Mailing EA (October 12, 2021) (eDocket Nos. 202110-178713-01; 202110-178713-02).

[37] Ex. 107 (Compliance Filing – Proof of Newspaper Publication).

[38] *See* Public Hearing Presentation (October 13, 2021) (eDocket Nos. 202110-178762-01; 202110-178762-02).

[39] *See* October 12, 2021 Public Hearing Transcript.

[40] *See* October 13, 2021 Public Hearing Transcript.

[41] Supplemental Information to the EA (October 22, 2021) (eDocket Nos. 202110-179063-01; 202110-179063-02).

received from and consultation with the state Vegetation Management Planning Working Group, comprised of representatives of the Minnesota Department of Commerce, EERA Staff, the MDNR, the Minnesota Department of Agriculture and the Minnesota Board of Water and Soil Resources.[42]

39. On October 25, 2021, DER filed comments recommending that the Commission issue a Certificate of Need for the Project.[43]

40. On October 26, 2021, Louise Solar filed a letter notifying the ALJ that Louise Solar planned to file Applicant's proposed findings of fact by October 29, 2021.[44]

41. On October 28, 2021, the Minnesota Pollution Control Agency ("MPCA") filed comments.[45]

42. On October 28, 2021, MDNR filed comments.[46]

III. DESCRIPTION OF THE PROJECT

43. The proposed Project is a 50 MW alternating current ("AC") nameplate capacity solar energy conversion facility in Lodi and Adams Townships, Mower County, Minnesota. The Project would also include associated facilities.[47]

44. The components of the Project include photovoltaic ("PV") solar panels and racking, inverters, a Project transmission line,[48] security fencing, a Project substation, operations and maintenance ("O&M") building, underground electrical collection system, electrical cables, conduit, switchgear, step up transformers, supervisory control and data acquisition (SCADA) systems, metering equipment, a temporary laydown yard, up to four weather stations, and gravel access roads.[49]

45. The panels will be installed on a tracking rack system, generally aligned in rows north and south with the PV panels facing east toward the rising sun in the morning, parallel to the ground during mid-day, and then west toward the setting sun in the afternoon. The panels are rotated by a small motor connected to the tracking rack system to slowly track with the sun throughout the day. When the sun is directly overhead, the PV panels will be at a zero degree angle (level to the ground) and four to six feet off the ground. The tracker rows will follow the sun from approximately 60 degrees east to 60 degrees west through the course of the day. At 60 degrees (tilted to the highest position), the edge of the panels will be a maximum of 15 feet off the ground. The tracking rack system allows the Project to optimize the angle of the panels in relation to the

[42] Louise Solar Comments – Revised Vegetation Management Plan (October 22, 2021) (eDocket Nos. 202110-179032-01; 202110-179032-03; 202110-179032-02; 202110-179032-04).

[43] DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

[44] Louise Solar Comments (October 26, 2021) (eDocket No. 202110-179197-01; 202110-179197-02).

[45] MPCA Comments (October 28, 2021) (eDocket Nos. 202110-179265-01; 202110-179265-02).

[46] MDNR Comments (October 28, 2021) (eDocket No. 202110-179230-01).

[47] Ex. 101 at 13 (SP Application).

[48] The proposed Project transmission line is planned to be a 161 kV line spanning less than 1,500 feet and thus will not trigger the need for a Route Permit from the Commission. The planned Project transmission line is further exempt from CN requirements because it does not meet the voltage and length requirements of a large energy facility under Minnesota Statutes §216B.2421, subd. 1. Ex. 101 at 8 (SP Application).

[49] Ex. 101 at 10, 18-19 (SP Application).

sun throughout the day, thereby maximizing production of electricity and the capacity value of the Project. To the extent practical, the racking system foundations will be a driven pier and will not require concrete, although some concrete foundations may be required depending upon site specific soil conditions and geotechnical analysis.[50]

46. The solar panels deliver DC power to the inverters through cabling that will typically be located in an underground trench or ploughed in place (at least four feet deep and one to two feet wide). The depth to cables may be deeper for installation under existing utilities or other features requiring avoidance. The specific electrical collection technology used will be site-specific depending on geotechnical analysis, constructability, and availability of materials. Final engineering and procurement will help determine the construction method for the electrical collection system.[51] Part of the underground collection system will be horizontally directionally drilled under TH 56 in two separate locations.[52]

47. Energy from the solar panels is directed through an underground electrical collection system to inverters where the power is converted from DC to AC power. The power is then transmitted to a step-up transformer located at the Project substation from 34.5 kV to 161 kV. Generated power is then carried to ITC Midwest's existing Adams Substation located immediately adjacent to the eastern Project Area boundary via a proposed above-ground, 161-kV transmission line where it connects to the energy grid. The short transmission line will be approximately 700-1,000 feet in length with several pole structures.[53] The transmission line will include several wood or steel direct embedded posts approximately 70-100 feet in height. The post structures are anticipated to consist of a standard horizontal braced-post design.[54]

48. The Project will use a Supervisory Control and Data Acquisition ("SCADA") system to control and monitor the Project. The SCADA communications systems provides status views of electrical and mechanical data, operation and fault status, meteorological data, and grid station data.[55]

49. Several of the Project setbacks to the solar arrays are short of Mower County's setback requirements as stated in the Mower County Zoning Ordinance. The Applicant sited the Project with Mower County's setback in mind; however, land constraints such as existing gas pipeline and transmission line easements, wetlands, trees and others make it difficult for arrays to be sited further away from road rights-of-way, side/rear property lines of lands not included as part of the solar farm, and dwellings not owned by an owner/benefactor of solar farm. Louise Solar is committed to working with Mower County to meet setback requirements where feasible.[56]

[50] Ex. 101 at 19 (SP Application).
[51] Ex. 101 at 20 (SP Application).
[52] Ex. 201 at 41 (EA).
[53] Ex. 101 at 13 (SP Application).
[54] Ex. 101 at 10 (SP Application).
[55] Ex. 101 at 29 (SP Application).
[56] Ex. 101 at 24 (SP Application).

50. Louise Solar is actively marketing the Project to a number of potential off-takers and may sell the power in the form of a Power Purchase Agreement ("PPA"), or the Project could be owned directly by a utility, such as through a Develop, Build, Sale ("DBS") agreement.[57]

51. The total installed capital costs for the Project are estimated to be approximately $62.05 million, with Project cost depending on variables including, but not limited to, construction costs, taxes, tariffs, and panel selection, along with associated electrical and communication systems, and access roads.[58]

IV. SITE LOCATION AND CHARACTERISTICS

52. The Project is sited in Lodi and Adams Townships in Mower County, in southeast Minnesota.[59]

53. The Applicant has 100% land control for the Project, which is approximately 613 acres of private land under lease (the "Project Area"). The "Project Area" refers to all land within the Project boundary under agreement with a landowner (613 acres). The Applicant estimates that approximately 325 acres of the 613 acres is necessary to accommodate the final design of the 50 MW Project (the "Preliminary Development Area"). The "Preliminary Development Area" refers to portions of the Project Area hosting solar equipment (325 acres), generally defined as the area within the security fencing and includes the access roads extending beyond the Project facility fenced area.[60]

54. The Project is located in a rural, agricultural area. Based on the 2010 U.S. Census, the population of Mower County is 39,163 persons, which represents less than 1 percent of the total population of Minnesota.[61]

V. SOLAR RESOURCE CONSIDERATIONS

55. Based on the National Renewable Energy Laboratory's Direct Normal Solar Resource of Minnesota, predicted annual average daily total solar resource near the Project are between 4.3 and 4.5 kilowatt hours per square meter per day.[62]

56. The Project is anticipated to have a net capacity factor of between approximately 25 percent and 28 percent, with projected average output of approximately 112,593 MWh annually of reliable, deliverable on-peak energy.[63]

VI. PROJECT SCHEDULE

57. Construction of the Project is generally staged for a late-year (fourth quarter) 2022 commercial operation date based on milestones set in finance and power purchase

[57] Ex. 100 at 10 (CN Application) and Ex. 101 at 2 (SP Application).
[58] Ex. 100 at 30-31 (CN Application) and Ex. 101 at 17 (SP Application).
[59] Ex. 101 at 10 (SP Application).
[60] Ex. 101 at 11, 13 (SP Application).
[61] Ex. 101 at 48 (SP Application).
[62] Ex. 101 at 13 (SP Application).
[63] Ex. 100 at 31 (CN Application).

agreements. The commercial operation date is dependent on the completion of the interconnection process, permitting, and other development activities.[64]

VII. SUMMARY OF PUBLIC COMMENTS

58. No members of the public provided verbal comments/questions during the Public Information and Environmental Assessment Scoping Meeting (remote-access) held on May 25, 2021.[65] During the comment period ending June 9, 2021, written comments were filed by MDNR,[66] MnDOT,[67] and Louise Solar.[68] No site or system alternatives were recommended for study.

59. MDNR commented on fencing of the site as relates to deer and the Applicant's VMP. MDNR noted that its *Commercial Solar Siting Guidance* document, including fencing recommendations, is being updated to reflect current best practices and specifications. MDNR stated that a six-foot fence is not high enough to exclude deer and placing smooth strand wire on top of a six-foot fence may result in entanglement. MDNR also stated that an eight-foot fence would exclude most deer, although some deer may be able to clear the fence. MDNR also commented that deer that jump the fence may not be able to jump back out, and that deer egress areas in the fencing design could allow deer a safe exit. MDNR noted that MDNR's *Fencing Handbook For 10 ft Woven Wire Deer Exclusion Fence* recommends ten-foot fencing.[69]

60. MDNR also commented that it expects to review the revised VMP for the Project prior to finalization.[70]

61. MnDOT provided comments regarding site access from TH 56, MnDOT's Utility Accommodation Policy, and verifying stormwater run-off calculations for the Project.[71] MnDOT noted that any MnDOT permits applied for as a part of the Project will not be issued until the Commission has issued an approved site permit. MnDOT also noted that for any areas where the Project intersects state highway rights of way, Louise Solar should adhere to MnDOT's Utility Accommodation Policy.[72] MnDOT commented that new access to the proposed site via TH 56 is considered unnecessary given the availability of existing county and township roads currently accessible via TH 56 within/adjacent to the Project Area.[73] MnDOT also commented that MnDOT's District 6 Water Resources Engineer would like to see and verify storm water runoff calculations, including a summary table, showing that the Louise Solar Project will not be increasing peak runoff rate to MnDOT right of way.[74]

---

[64] Ex. 103 (Reply Comments).
[65] *See generally* May 25, 2021 Public Information and Environmental Assessment Scoping Meeting Transcript.
[66] MDNR Comments (June 8, 2021) (eDocket No. 20216-174868-01).
[67] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).
[68] Ex. 106 (Comments).
[69] MDNR Comments (June 8, 2021) (eDocket No. 20216-174868-01).
[70] MDNR Comments (June 8, 2021) (eDocket No. 20216-174868-01).
[71] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).
[72] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).
[73] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).
[74] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).

62. Louise Solar submitted comments to further develop the record on prime farmland, decommissioning, and the VMP.[75]

63. On October 12 and 13, 2021, the ALJ presided over joint public hearings on the SP Application and the CN Application for the Project in-person and via remote means, respectively.[76] Commission Staff, EERA Staff, and representatives from Louise Solar were present. One member of the public spoke during the October 12, 2021 public hearing (in person), asking questions regarding fencing at the Project and how the solar arrays operate; he also commented regarding the Project's impact on property taxes and property values.[77]

64. During the remote-access public hearing held on October 13, 2021, two members of the public spoke.[78] The two commenters expressed support for the Project because it would result in construction jobs in the region.

65. On October 22, 2021, Louise Solar filed a revised VMP reflecting changes Louise Solar made following its review of the Vegetation and Establishment Management Plan Guidance document, as well as comments received from and consultation with the state Vegetation Management Planning Working Group, comprised of representatives of the Minnesota Department of Commerce, EERA Staff, the MDNR, the Minnesota Department of Agriculture and the Minnesota Board of Water and Soil Resources.[79]

66. On October 25, 2021, DER filed comments recommending that the Commission issue a Certificate of Need for the Project.[80]

~~66.~~67. On October 27, 2021, MDNR filed comments on several topics, including the Vegetation Management Plan, prairie, security fencing, recreational trail crossings, natural resources, and potential mitigation measures. Comments on the Vegetation Management Plan include concerns about the hydric soils on site and the potential for those soils to become wetter possibly interfering with site operation; development of seed mixes appropriate for wet soil conditions; locating infiltration basins in hydric soils and verifying infiltration design rates with an infiltration test; soil compaction and damage to soil structure which reduces soil function; seeding and planting with a recommendation to time seeding to allow for winter stratification; and a recommendation to stagger mowing in the fall to retain some vegetation for overwintering habitat for insects. DNR notes that a strip of native prairie, with an associated state endangered plant species (*Parthenium integrifolium*, wild quinine), exists along State Highway 56 and recommends marking this area prior to construction to prevent inadvertent impacts associated with construction. DNR recommends 10-foot fencing to prevent deer from entering the solar facility as a standard best practice. A 10-foot fence would improve safety for wildlife and prevent damage to the facility. DNR reviewed shapefiles of the project and found that the project fence is 35-feet from the trail and not 108-feet as stated in the application and that the collection line would cross the trail. DNR is concerned that construction of the collector line could disrupt recreational activities on the trail as well as cause

[75] Ex. 106 (Comments).
[76] *See* Public Hearing Presentation (October 13, 2021) (eDocket No. 202110-178762-01).
[77] *See* October 12, 2021 Public Hearing Transcript~~.~~, (eDocket No. 202111-179335-01)
[78] *See* October 13, 2021 Public Hearing Transcript (eDocket No~~.~~ 202111-179335-03)
[79] Louise Solar Comments – Revised Vegetation Establishment and Management Plan (October 22, 2021) (eDocket Nos. 202110-179032-01; 202110-179032-03).
[80] DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

damage to the trail, and that its continued presence could pose a safety hazard for recreational trail users. Native prairie adjacent to the project area should be clearly designated, and project workers should be clearly informed that this is a designated avoidance area, and that the collector line should be directionally bored to avoid prairie impacts. DNR further recommends clarifying impacts and timing of mowing to protect birds during the nesting season; clarifying sections 8.12 and 4.38 of the permit and management practices that would or would not affect the permit's reporting requirements for wildlife injuries or fatalities; and a stronger commitment to mitigation measures.[81]

~~67.~~68. On October 28, 2021, MPCA filed comments regarding the EA and permits required by the MPCA for construction of the project~~.~~ MPCA noted~~MDNR commented~~ that the Project drains into the Little Cedar River subwatershed and that the Project partially drains to Unnamed Creek (07080201-519) which has an impaired macroinvertebrate community with nitrate identified as the pollutant stressing the macroinvertebrate community. ~~MDNR~~MPCA~~-~~ also noted that construction of the Project may require use of additional erosion and sediment control BMPs during construction, in accordance with the National Pollutant Discharge Elimination System/State Disposal System General Construction Stormwater Permit (CSW Permit) requirements.[82]

~~68.~~69. On October 28, 2021, MDNR filed comments regarding the revised VMP filed by Louise Solar, as well as potential indirect impacts to native prairie, fencing, and potential impacts to the Shooting Star State Trail.[83]

CERTIFICATE OF NEED

I. CERTIFICATE OF NEED CRITERIA

~~69.~~70. Pursuant to Minn. Stat. § 216B.243, all "large energy facilities" must receive a certificate of need from the Commission prior to construction.[84] 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."[85]

~~70.~~71. The proposed Project qualifies as a "large energy facility" as defined by Minn. Stat. § 216B.2421, subd 2(1), and a "large electric generating facility" as defined by Minn. R. 7849.0010, Subp. 13. Accordingly, the Project requires a certificate of need from the Commission.

~~71.~~72. Minn. Stat. § 216B.243 and Minnesota R. Ch. 7849 set forth the criteria for issuance of a certificate of need. The Commission has established criteria to assess the need for an LEGF in Minn. R. 7849.0120:

---

[81] MDNR Comments (October 27, 2021) (eDocket No. 202110-179230-01).

[82] MPCA Comments (October 28, 2021) (eDocket Nos. 202110-179265-01; 202110-179265-02).

[83] MDNR Comments (October 28, 2021) (eDocket No. 202110-179230-01).

[84] *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).

[85] Minn. Stat. § 216B.2421, subd. 2(1).

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 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.

~~72.~~73. The factors listed under each of the criteria set forth in Minn. R. 7849.0120 must be evaluated to the extent that the commission considers them applicable and pertinent to a proposed facility.[86]

~~73.~~74. As the Applicant, Louise Solar bears the burden of demonstrating the need for the Project,[87] with the specific burden being proof by a preponderance of the evidence.[88]

II. APPLICATION OF CERTIFICATE OF NEED CRITERIA TO THE PROPOSED 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, Considering Minnesota Rules 7849.0120(A)(1)-(5). Minnesota Rule 7849.0120(A).

~~74.~~75. The first of the four 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."[89] To do so it considers multiple

[86] Minn. R. 7849.0100.
[87] *See* Minn. Stat. § 216B.243, subd. 3.
[88] *See* Minn. R. 1400.7300, subp. 5.
[89] Minn. R. 7849.0120(A).

factors, including the forecasted need, available energy resources, and the advantages and disadvantages of utilizing alternative resources.[90]

~~75.~~76. The forecast of need does not focus merely on immediate needs. Where there is a "reasonably predicted demand" and the Project is the most efficient way to meet it, Minn. R. 7849.0120(A) is met.[91]

~~76.~~77. As an independent power producer, Louise Solar does not sell power directly to end-use (or retail) customers, but instead will sell power, or the Project, to utilities or make the energy available to wholesale power customers via the regional transmission system.[92] Because Louise Solar has applied to interconnect the Project to the MISO regional transmission system, it can serve customers not just in Minnesota but also in the surrounding states.[93]

~~77.~~78. Applicant has demonstrated that the denial of a Certificate of Need for this Project would result in adverse effects ~~up~~ on the future electricity needed to meet state and regional demand and would deny utilities and non-utilities the opportunity to purchase 50 MW of clean, low-cost energy that would count toward satisfying renewable and/or other clean energy standards and goals.[94] State legislative policy has sought to expand Minnesota's reliance on renewable energy.[95] Both utility and non-utility customers have also stated plans to increase reliance on renewable energy resources, including solar.[96]

~~78.~~79. Solar is one of the lowest cost forms of power and the costs of energy and capacity of utility scale solar are on par with those of gas peaking and combined cycle.[97] The large size of the Project also provides significant economies of scale with a competitive cost per MW of energy offered.[98]

1. Accuracy of the Applicant's Forecast of Demand for the Type of Energy That Would be Supplied by the Proposed Facility

~~79.~~80. Minnesota Rule 7849.0120(A)(1) requires consideration of "the accuracy of the applicant's forecast of demand for the type of energy that would be supplied by the proposed facility" when determining if denial of a Certificate of Need application would have an adverse effect.

---

[90] *In re Northern States Power Co*., No. A10-397, 2010 WL 4608342, at *4-5 (Minn. App. Nov. 15, 2020); *see also In re Great River Energy*, Nos. A09-1646, A09-1652, No. 2010 WL 2266138, at *3-4 (Jun. 8, 2010) (affirming grant of certificate, even when evidence showed general decreases in energy needs over the next decade because, among other things, "forecasts were only one of the factors the MPUC considered in its decision to grant the certificates of need.")

[91] *In re Northern States Power Co.,* No. A10-397, 2010 WL 4608342, at *4-5 (Minn. App. Nov. 15, 2020).

[92] Ex. 100 at 18 (CN Application).

[93] Ex. 100 at 20 (CN Application).

[94] Ex. 100 at 18 (CN Application).

[95] *See* Ex. 100 at 10-15 (CN Application).

[96] *See* Ex. 100 at 10-15 (CN Application).

[97] Ex. 100 at 14 (CN Application).

[98] Ex. 100 at 30 (CN Application).

~~80.~~81. This sub-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."

~~81.~~82. Because Louise Solar is an independent power producer and does not have a utility "system" as defined in Minn. R. 7849.0010, subp. 29, Louise Solar requested an exemption from the forecast data requirements in Minn. R. 7849.0270 and instead offered to provide data regarding the regional demand, consumption, and capacity data from credible sources to demonstrate the need for the independently produced renewable energy that will be generated by the Project.[99]

~~82.~~83. The Commission granted this exemption and use of alternative data for demonstrating demand for the energy supplied by the Project.[100]

a) Public Policy Shows Demand for the Project

~~83.~~84. Minnesota and states around the region continue to pursue renewable energy goals and standards that must be satisfied. Eleven of the MISO states, including Minnesota, currently have either mandated or voluntary renewable portfolio standards or policies, including renewable or clean energy objectives or standards that establish a specific percentage of retail energy sales that must come from renewable energy each year.[101] Pursuant to Minn. Stat. § 216B.1691, utilities in Minnesota are required to provide 25 percent of their total retail electric sales from eligible renewable resources by 2025.[102] Other policies target reductions in greenhouse case emissions, which also promote increasing use of renewable energy.[103]

~~84.~~85. Eleven of the MISO states, including Minnesota, currently have either mandated or voluntary renewable portfolio standards or policies.[104] For example, in 2021, the North Dakota Legislature enacted a statutory provision adopting a low-emission technology initiative, which establishes a goal that the "agricultural, forestry, natural resources, and working land of the United States should provide energy from low-emission technology and continue to produce safe, abundant, and affordable food, fuel, feed, and fiber."[105] Under current state policies, the total United States renewable portfolio standard demand will increase from 310 terawatt hours ("TWh") in 2019 to 600 TWh in 2030. Given existing renewable energy capacity, an additional 270 TWh increase in renewable resources will be required to meet demand through 2030. Additionally, several states have set greenhouse gas emission targets.[106]

~~85.~~86. The Minnesota legislature has considered, but has not yet passed, legislation on multiple occasions in recent legislative sessions to increase Minnesota's renewable energy

[99] Louise Solar Request for Exemption from Certain Certificate of Need Application Content Requirements (August 5, 2020) (eDocket Nos. 20208-165612-01; 20208-165612-02).

[100] Order (September 21, 2020) (eDocket No. 20209-166711-01).

[101] Ex. 100 at 12-13 (CN Application).

[102] Ex. 100 at 13 (CN Application).

[103] *See, e.g.,* Minn. Stat. § 216H.02.

[104] Ex. 100 at 12-13 (CN Application).

[105] *See* N.D.C.C. § 17-01-01. As used in this initiative, low-emission technology includes, among others, solar.

[106] *See* Ex. 100 at 12-14 (CN Application).

requirements requiring utilities to obtain additional electricity from renewable sources beyond that which is required by current RES, and to further reduce carbon from energy sources.[107]

b) Planning by the Commission and Utilities Shows Demand for the Project

~~86.~~87. Because Louise Solar is an independent power producer that plans to sell energy, capacity and renewable energy credits, either bundled or unbundled, produced by the Project to one or more electric utilities and/or commercial customers, traditional utilities are potential customers.[108] The Commission has indicated that the demonstration of corporate demand and internal utility goals is sufficient evidence to demonstrate need under Minnesota Rules, part 7849.0120.[109]

~~87.~~88. The Commission and the utilities continue to set independent renewable energy goals, as well as to plan for additional requirements to reduce carbon from energy sources and an increase to the Renewable Energy Standards ("RES") by seeking additional renewable energy sources above and beyond that which is currently required by the RES.[110] Minnesota utilities are advancing efforts to transition to renewable energy. For example, the Minnesota Transmission Owners' Biennial Transmission Report's compliance filing outlining gaps between existing and planned transmission lines and the transmission system that will be required to meet the companies' publicly stated clean energy goals lists the following clean energy goals of Minnesota utilities:

• Dairyland Power Cooperative is transitioning to a more diverse generation portfolio, with carbon reduction and system reliable stated as "central issues";

• Great River Energy has a goal to serve its all-requirements member-owner cooperatives with energy that is 50 percent renewable by 2030; • Minnesota Municipal Power Agency has a goal to have 100 percent renewable generation "when economical";

• Minnkota Power Cooperative is committed to finding opportunities to reduce carbon emissions; and

• Rochester Public Utilities has a goal to transition to 100 percent renewable energy by 2030.[111]

~~88.~~89. A review of utilities' integrated resource plans ("IRPs"), requests for proposals, and similar documents demonstrates that utilities will seek additional renewable generation resources in the next several years.[112] As Minnesota's utilities strive to achieve ambitious renewable energy targets, "aggressive renewable additions" will be necessary. For example, Xcel Energy's "Upper Midwest Integrated Resource Plan" alone calls for 80 percent carbon emissions

[107] Ex. 100 at 12 (CN Application).
[108] Ex. 100 at 10 (CN Application).
[109] DER Comments (October 25, 2021) (eDocket No. 202110-179134-01) (citing Docket No. IP-6997/CN-18-699).
[110] *See* Ex. 100 at 11 (CN Application).
[111] Ex. 100 at 11 (CN Application).
[112] Ex. 100 at 39 (CN Application).

reductions by 2030, and 100 percent reductions by 2050. By Xcel Energy's estimation, these are "some of the most ambitious carbon reduction goals of any utility in the U.S." Translating these goals into action, Xcel Energy's preferred plan proposes to add 3,500 MW of cost-effective, utility-scale solar generation by 2030 and approximately 2,250 MW of wind by 2034.[113] Similarly, other Minnesota utilities are advancing efforts to transition to renewable energy. Otter Tail Power will be at 30% renewable energy by 2022, and ALLETE's Minnesota Power is targeting 50% renewables by end of 2021. Likewise, Southern Minnesota Municipal Power Agency (SMMPA) announced its plan for a 90 percent reduction in carbon dioxide emissions from 2005 levels and 80 percent carbon-free energy on an annual basis in 2030.[114] As DER noted, utilities will in general need to acquire additional solar energy to meet the 10 percent solar energy goal for the state of Minnesota by 2030. Additionally, there is a regional trend towards retirements of coal units, indicating a market exists for new renewable energy.[115] Louise Solar is well-positioned to help meet the resource needs of Minnesota's electric utilities.[116]

c) Commercial and Industrial Customer Demand Also Supports the Project

~~89.~~90. Commercial and industrial ("C&I") entities also are potential wholesale customers for energy generated by the Project. Corporations such as Apple, Google and Facebook, along with many others, have recently set goals to obtain 100 percent of their energy from renewables. These clean energy goals fuel the demand for corporate renewables procurement and subsequent PPAs.[117] 2020 saw an immense demand for C&I renewable energy PPAs. Corporate PPA volumes in MISO have increased each of the past five years and Minnesota has seen an increase in cumulative operational and in-development C&I renewable capacity, which highlights the broader trend of increased demand for renewables across the United States. Similarly, according to a 2019 research report, corporate contracts accounted for 22 percent of 2018 power-purchase agreements for renewables in the United States. Further, the buyers are not just large corporations; smaller companies are entering into aggregated purchasing models and further driving additional market expansion.[118] DER agreed that Louise Solar provided sufficient evidence demonstrating corporate demand for renewables.[119]

~~90.~~91. Given the demand for renewable energy, a market exists for independently produced electricity generated from solar and other renewables, including the 50 MW to be generated by the Project.[120]

~~91.~~92. The accuracy of the demand data provided is undisputed, and the Applicant has satisfied Minn. R. 7849.0120(A)(1).

2. Effects of the Applicant's Existing or Expected Conservation Programs

[113] Ex. 100 at 10-11 (CN Application).
[114] Ex. 100 at 11 (CN Application).
[115] DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).
[116] Ex. 100 at 11 (CN Application).
[117] Ex. 100 at 14 (CN Application).
[118] Ex. 100 at 14-15 (CN Application).
[119] DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).
[120] Ex. 100 at 15 (CN Application).

~~92.~~93. Minnesota Rule 7849.0120(A)(2) requires consideration of "the effects of the applicant's existing or expected conservation programs and state and federal conservation programs."

~~93.~~94. This sub-factor relates to Minn. Stat. § 216B.243, subd. 3, which states that "no proposed large energy facility shall be certified for construction unless the applicant can show that demand for electricity cannot be met more cost effectively through energy conservation and load management."

~~94.~~95. Similarly, Minn. Stat. § 216B.243, subd. 3(2) requires that the Commission consider the effect of existing or possible energy conservation programs under Sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand.

~~95.~~96. Also, Minn. Stat. § 216B.243, subd. 3(8) provides that the Commission, in assessing need, shall consider any feasible combination of energy conservation improvements, required under section 216B.241, that can . . . (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically.

~~96.~~97. Likewise, Minnesota Rule 7849.0290 provides additional details on the information the applicant is to include on conservation programs.

~~97.~~98. These statutory requirements are contained in this rule subpart and Minn. R. 7849.0290.

~~98.~~99. Louise Solar is not a utility and does not have a system or retail customers to implement conservation projects.[121]

~~99.~~100. In its September 21, 2021 Order, the Commission granted Louise Solar an exemption from these requirements. Thus, the Applicant does not need to satisfy Minn. R. 7849.0120(A)(2), Minn. R. 7849.0290, and Minn. Stat. § 216B.243, subd. 3, 3(2), and 3(8).[122]

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

~~100.~~101. Minnesota Rule 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.

~~101.~~102. This sub-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."

~~102.~~103. Applicant did not engage in promotional activities to give rise to the Project.[123] In its September 21, 2021 Order, the Commission granted Louise Solar an exemption from these

[121] *See* Ex. 100 at 40 (CN Application).
[122] Order (September 21, 2020) (eDocket No. 20209-166711-01).
[123] Ex. 100 at 16 (CN Application).

requirements.[124] Thus, the Applicant does not need to satisfy Minn. R. 7849.0120(A)(3), Minn. R. 7849.0290, and Minn. Stat. § 216B.243, subd. 3(4).

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

~~103.~~104. Minnesota Rule 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."

~~104.~~105. 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."

~~105.~~106. Minnesota Rule 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. As an IPP, Applicant does not have a system, nor does it have other generation or transmission facilities in Minnesota. The Commission granted Applicant an exemption from Minnesota Rule 7849.0340.[125]

~~106.~~107. Further, existing facilities and other non-build alternatives are not available to meet future demand.[126] The Project is designed to increase the amount of energy available for purchase on the wholesale market that will satisfy clean energy standards. Not building the facility would result in no increase in renewable energy and, in turn, no opportunity for utilities to purchase the Project's output to satisfy clean energy standards and goals.[127]

~~107.~~108. The Project also has the advantage of economies of scale not available to smaller, non-CN facilities. To secure PPAs with either a utility or non-utility customer, Applicant will have to compete against alternatives, including non-CN facilities, at that time. In both circumstances, the potential customers will evaluate the projects attributes and price against those alternative options.[128]

~~108.~~109. The Applicant has satisfied Minn. R. 7849.0120(A)(4).

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

~~109.~~110. Minnesota Rule 7849.0120(A)(5) requires consideration of "the effect of the proposed facility, or a suitable modification thereof, in making efficient use of resources."

[124] Order (September 21, 2020) (eDocket No. 20209-166711-01).
[125] Order (September 21, 2020) (eDocket No. 20209-166711-01).
[126] Ex. 100 at 35 (CN Application).
[127] Ex. 100 at 35 (CN Application).
[128] Ex. 100 at 30, 34 (CN Application).

~~110.~~111. No fuel will be burned in the production of energy at the Project, and solar is a highly efficient and cost-effective recourse for the generation of energy.[129] Louise Solar is sized to take advantage of economies of scale associated with a commercial solar project. At 50 MW, the Project is cost competitive on a per MW basis and is well positioned to meet the needs of a load serving utility or a C&I customer.[130]

~~111.~~112. The Applicant has satisfied Minn. R. 7849.0120(A)(5).

6. Conclusion Regarding Minnesota Rule 7849.0120(A)

~~112.~~113. As discussed above, the Applicant has satisfied each of the five sub-factors of Minn. R. 7849.0120(A).

~~113.~~114. The Commission must consider the effects of a denial of the certification of need on the applicant, its customers, and the people of Minnesota and neighboring states. The record demonstrates there are adverse effects of denying a permit to the Project, including the risk that wholesale customers across the MISO market—including utilities and C&I customers—will be deprived of clean, efficient, and cost-efficient energy that can also be used to meet current and future renewable energy obligations, and the loss of local economic benefits.[131]

~~114.~~115. Furthermore, looking at the specific factors delineated above, the Applicant has demonstrated that there is a reasonably predicted need for low-cost renewable energy, both in the short and long-term, in Minnesota and in neighboring states, and for utility and non-utility customers. DER agrees, that due its size, the Project is a highly efficient and cost-effective resource to meet those energy demands.[132]

B. A More Reasonable and Prudent Alternative to the Proposed Facility Has Not Been Demonstrated by a Preponderance of the Evidence on the Record. Minnesota Rule 7849.0120(B).

~~115.~~116. Minnesota Rule 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."

~~116.~~117. 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."

[129] Ex. 100 at 31 (CN Application).
[130] Ex. 100 at 16, 25, 30-31 (CN Application).
[131] *See, e.g.,* Ex. 100 at 18-19, 21-23 (CN Application).
[132] *See* DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

~~117.~~118. The Applicant's burden of proof is met by providing evidence establishing the needs and showing that the proposed Project is a reasonable and prudent way to satisfy the articulated needs.

~~118.~~119. Consistent with state requirements, the Applicants analyzed multiple alternatives for meeting the identified needs. No reasonable and prudent alternative was proposed or demonstrated.

1. Appropriateness of the Size, Type, and Timing of the Proposed Facility Compared to those of Reasonable Alternatives

~~119.~~120. Minnesota Rule 7849.0120(B)(1) requires consideration of "the appropriateness of the size, type, and timing of the proposed facilities relative to reasonable alternatives." With respect to renewable energy projects, the Commission has concluded that the proper inquiry in evaluating the size of the Project is the appropriateness of the size of the Project to the overall state and regional need for renewable energy.

~~120.~~121. As demonstrated above, the regional need for renewable energy in the coming years exceeds the amount of energy to be supplied by the Project.[133]

~~121.~~122. Regarding the type of facility, the Commission granted Louise 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.[134]

~~122.~~123. With respect to timing, the Project is expected to be on-line and operational by the end of 2022 or 2023, depending on completion of regulatory approvals and the MISO interconnection process. This will help Minnesota and other electric utilities achieve the necessary renewable energy levels required to meet pending clean energy standards milestones.[135]

~~123.~~124. DER agreed that the proposed size, type, and timing of the Project are appropriate and recommended Commission approval.[136]

~~124.~~125. As summarized above, the record reflects that the Applicant has appropriately considered the size, type, and timing of the Project compared to those of the reasonable alternatives and found that the Project is superior in all respects.

~~125.~~126. Thus, the Applicant has satisfied Minn. R. 7849.0120(B)(1).

2. The Cost of the Proposed Facility and the Cost of the 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

[133] Ex. 100 at 20 (CN Application).
[134] Order (September 21, 2020) (eDocket No. 20209-166711-01); Ex. 100 at 20 (CN Application).
[135] Ex. 100 at 20 (CN Application).
[136] *See* DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

~~126.~~127. Minnesota Rule 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."

~~127.~~128. Applicant provided data 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. Even though the Solar Investment Tax Credits ("ITC") phases down over the next several years, solar generation growth is anticipated to continue because the costs for solar continue to fall faster than for other sources. Although Louise Solar does not currently have a PPA, these low costs should allow it to secure long-term purchasers at attractive prices and terms. Importantly, as an independent power producer, Louise Solar, rather than the State or its ratepayers, bears the risk of not securing a PPA or otherwise not selling the Project's output.[137]

~~128.~~129. Thus, the Applicant has satisfied Minn. R. 7849.0120(B)(2).

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

~~129.~~130. Minnesota Rule 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."

~~130.~~131. The Applicant submitted information show minimal impacts on socioeconomic resources.[138]

~~131.~~132. The socioeconomic impacts associated with the Project will be positive. Wages will be paid and expenditures will be made to local businesses and landowners during the Project's construction and operation. The construction and operation of the Project will increase Mower County's tax base. In addition, purchase payments to landowners will offset potential financial losses associated with removing a portion of their land from agricultural production. The Project will impact up to 325 acres of agricultural land within the Preliminary Development Area by taking land out of row-crop production but will not result in a significant impact to land-based economies in the Project vicinity. Of the 455,680 acres in Mower County, the majority (approximately 447,193 acres) are cropland. Impacts to 325 acres of agricultural land within the solar facility would temporarily reduce the amount of agricultural land in the County by approximately 0.0008 percent. Agricultural production would be allowed to continue in the area within the Project Area but outside the fence of the Preliminary Development Area during construction and operation of the Project. The Project will be sited in a way that minimizes environmental impacts.[139] Project construction will not negatively impact leading industries within the Project Area. There is no indication that any minority or low-income population is concentrated in any one area of the Project.[140]

---

[137] Ex. 100 at 20-21 (CN Application).
[138] *See* Ex. 100 at 21 (CN Application).
[139] Ex. 100 at 22-22 (CN Application).
[140] Ex. 101 at 48-49 (SP Application).

~~132.~~133. EERA Staff prepared an EA for the Project that considers the natural and socioeconomic effects of the Project, which found that socioeconomic impacts of the Project are anticipated to be positive.[141]

~~133.~~134. The Project is estimated to provide annual production tax revenues to Mower County of approximately $105,000-$115,000 annually over 35 years or longer. Additionally, Lodi and Adams Townships will receive approximately $25,000-$30,000 annually over 35 years. 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.[142]

~~134.~~135. The Project will create approximately 350-400 jobs during the construction and installation phases, and up to 21 indirect and 2 full time permanent jobs during the operations phase. Temporary construction jobs within Mower County will generate indirect economic benefits as employees spend their income on local goods and services and pay local sales tax. As an operating facility, Louise Solar will annually generate $2.7 million in economic output by supporting approximately 21 indirect jobs and distributing nearly $2 million in direct earnings.[143]

~~135.~~136. The Applicant also demonstrated that the Project would impose minimal environmental impacts, especially as compared to a fossil-fuel based facility. The Project will not release carbon dioxide, sulfur dioxide, nitrogen oxides, mercury, or particulate matter. It will not require water for power generation and will not discharge wastewater containing any heat or chemicals during operation. It will produce energy without the extraction, processing, transportation, or combustion of fossil fuels. The Project has been designed to minimize environmental impacts.[144]

~~136.~~137. The EA states that the Project would create human and environmental impacts similar to or less than other large solar and renewable projects located in Minnesota.[145] It also states that the impacts to farmland and soil during construction of the Project will be minimal and temporary, and that the change in land use would take productive farmland out of production but would result in a negligible loss of farmland in Mower County.[146] Overall, EERA did not find any significant environmental impacts as a result of the Project.

~~137.~~138. Thus, the Applicant has satisfied Minn. R. 7849.0120(B)(3).

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

~~138.~~139. Minnesota Rule 7849.0120(B)(4) requires consideration of "the expected reliability of the proposed facility compared to the expected reliability of reasonable alternatives."

~~139.~~140. 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

[141] *See* Ex. 201 at 53 (EA).
[142] Ex. 101 at 17 (SP Application).
[143] Ex. 101 at 17 (SP Application).
[144] Ex. 101 at 21 (SP Application).
[145] *See* Ex. 201 at 25-26 (EA).
[146] *See* Ex. 201 at 59 (EA).

the extent these factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota."

~~140.~~141. Solar is a proven and reliable resource. Louise Solar estimates that the Project facilities will be available approximately 99 percent of the year, which is consistent with industry standards.[147]

~~141.~~142. Thus, the Applicant has satisfied Minn. R. 7849.0120(B)(4).

5. Conclusion Regarding Minnesota Rule 7849.0120(B)

~~142.~~143. As discussed above, the Applicant has satisfied each of the four sub-factors of Minn. R. 7849.0120(B).

~~143.~~144. No other party submitted a more reasonable and prudent alternative to the proposed Project that satisfies the requirements of Minn. R. 7849.0110 and 7849.0120.

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. Minnesota Rule 7849.0120(C).

~~144.~~145. Minnesota Rule 7849.0120(C) requires that "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 Thereof, to Overall State Energy Needs

~~145.~~146. Minnesota Rule 7849.0120(C)(1) requires consideration of "the relationship of the Project, or a suitable modification thereof, to overall state energy needs."

~~146.~~147. As DER noted, the proposed Project could help Minnesota meet its energy needs while supporting the state's renewable energy and greenhouse gas emissions-reduction goals (see Minnesota Statutes, sections §216B.1691 and §216H.02). Therefore, the proposed Project fits the state's overall energy needs.[148]

~~147.~~148. As set forth above, states, utilities, and C&I customers continue to require renewable energy to meet renewable and other clean energy goals, as well as consumer demand.

[147] Ex. 100 at 37 (CN Application).
[148] *See* DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

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

~~148.~~149. Minnesota Rule 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."

~~149.~~150. While not building the Project would avoid some human and environmental impacts, not building the Project would also not provide an additional source of tax revenues to the county, an increase in the income stream to residents and businesses, or an increase in the amount of low-cost, clean, reliable renewable energy available to state or regional utilities and their customers.[149] Not building the facility would result in no increase in renewable energy and, in turn, no opportunity for utilities to purchase the Project's output to satisfy clean energy standards.[150]

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

~~150.~~151. Minnesota Rule 7849.0120(C)(3) requires consideration of "the effects of the proposed facility, or a suitable modification thereof, in inducing future development."

~~151.~~152. The Project is not expected to directly affect development in Mower County or hinder future development that can otherwise occur in surrounding agricultural areas. The Project is designed to be socioeconomically beneficial to landowners, local governments, and communities. Landowner compensation is established by voluntary leases or purchase agreements between the landowner and Louise Solar for Louise Solar's lease or purchase of the land. Solar energy infrastructure will also provide an additional source of revenue to the townships and county in which the Project is sited. The Project is estimated to provide annual production tax revenues to Mower County of approximately $105,000-$115,000 annually over 35 years or longer. Additionally, Lodi and Adams Townships will receive approximately $25,000-$30,000 annually over 35 years. 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. At the same time, the increase in renewable energy will also help to lessen wholesale energy market volatility.[151]

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

~~152.~~153. Minnesota Rule 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."

[149] Ex. 100 at 37 (CN Application).
[150] Ex. 100 at 35 (CN Application).
[151] Ex. 100 at 16-17 (CN Application).

~~153.~~154. 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…."

~~154.~~155. Applicant showed that the Project will produce affordable, clean, renewable energy to meet energy demands and renewable and other clean energy standards. The Project is expected to produce emissions free energy to meet the energy needs of consumers in Minnesota and neighboring states. As discussed above, the Project is designed to be socioeconomically beneficial to landowners, local governments, and communities through landowner lease and/or purchase payments, job creation, production taxes, and local spending.

~~155.~~156. Thus, the Applicant has satisfied Minn. R. 7849.0120(C)(4).

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. Minnesota Rule 7849.0120(D).

~~156.~~157. Minnesota Rule 7849.0120(D) requires that "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."

~~157.~~158. 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."

~~158.~~159. The Project will meet or exceed the requirements of all applicable federal, state, and local environmental laws and regulations.[152] The Applicant states that it will secure all necessary permits and authorizations prior to commencing construction on the portions of the Project requiring such approvals.[153]

~~159.~~160. Based on the foregoing, the Applicant has satisfied Minn. R. 7849.0120(D).

E. Conclusion on Minnesota Rule 7849.0120 Criteria

~~160.~~161. As discussed in detail above, the Applicant has satisfied each of the relevant factors and sub-factors set forth in Minn. R. 7849.0120(A) through (D) necessary to determine that a Certificate of Need must be granted.

SITE PERMIT

I. SITE PERMIT CRITERIA

[152] Ex. 100 at 27 (CP Application); *see also* DER Comments (October 25, 2021) (eDocket No. 202110-179134-01).

[153] Ex. 100 at 27, 61 (CN Application).

~~161.~~162. Large electric power generating plants ("LEPGP") are governed by Minn. Stat. § 216E and Minn. R. part 7850. Minn. Stat. § 216E.01, subd. 5, defines a "large electric power generating plant" as "electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more."

~~162.~~163. On August 4, 2020, Louise Solar submitted information to the Minnesota Department of Commerce requesting a size determination for the Project. On September 10, 2020, EERA informed Louise Solar that, based on the information provided, the Project is subject to the Commission's siting authority under Minn. Stat. § 216E. Therefore, a site permit is required prior to construction of the Project.[154]

~~163.~~164. An LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04. Louise Solar filed the SP Application under the process established by the Commission in Minn. R. parts 7850.2800-7850.3900.[155]

~~164.~~165. Under Minn. Stat. § 216E.04, for an LEPGP permitted under the alternative permitting process, EERA prepares for the Commission an environmental assessment 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.

~~165.~~166. EERA Staff is responsible for evaluating the site permit application and administering the environmental review process.

II. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT

A. Human Settlement

~~166.~~167. The Project is sited in rural southeastern Minnesota.[156] Based on the 2010 U.S. Census, the population of Mower County is 39,163 persons, which represents less than 1 percent of the total population of Minnesota.[157]

~~167.~~168. The construction of the Project will not displace residents or change the demographics of the Project Area.[158]

1. Zoning and Land Use

~~168.~~169. The Project Area is zoned as agricultural. The Mower County Zoning Ordinance states that solar farms (exceeding 1 MW nameplate capacity) are allowed in the Agricultural district upon approval of a conditional use permit ("CUP"). Mower County Zoning Ordinance Section 14-51 states that transmission lines exceeding 35 kV must acquire a CUP prior to construction. Per the Mower County Ordinance, the Project uses are compatible with local land

[154] Ex. 101 at 1, 11 (SP Application).
[155] *See* Notice of Intent to Submit SPA Under Alternative Process (December 10, 2020) (eDocket No. 202012-168926-01).
[156] Ex. 101 at 10 (SP Application).
[157] Ex. 101 at 48 (SP Application).
[158] Ex. 101 at 38 (SP Application).

use regulations for solar energy facilities and transmission lines. The County has determined that these types of land uses are acceptable in the Agricultural Zoning District upon approval of a CUP.[159,160]

~~169.~~170. The Mower 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, Subdivision 1, the Site Permit from the Commission is the only site approvals required for construction of the 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.[161] Louise Solar has applied county standards to the Project where feasible.[162] For example, Mower County staff requested a setback of 50 feet from the state trail located directly north of the Project Area, which has been incorporated into the Project design. In addition, Louise Solar, in coordination with Mower County, excluded lands within ½-mile of the City of Adams border to avoid future urban expansion areas.[163]

~~170.~~171. Louise Solar will pursue a CUP from Mower County for the short transmission line prior to construction.[164]

~~171.~~172. Public conservation and recreation lands include lands administered by federal, state, or local agencies, or conservation easements. There are no public conservation or recreation lands in the Project Area or within one mile of the Project Area.[165]

~~172.~~173. Development of the Project would result in the change of land use from a generally agricultural use to a solar energy use for at least the life of the Project. The conversion of agricultural land to the solar facility will have a relatively minimal impact on the rural character of the surrounding area or Mower County.[166] Upon decommissioning and removal of the Project,

---

[159] Ex. 101 at 10 (SP Application); Ex. 201 at 46 (EA).

[160] Note that the EA used different terms/definitions than the SP Application when referring to the Project. Specifically, the EA used the term "land control area" (defined as "the review area for the solar array"), "project area" (defined as "one mile from the land control area and collection line corridor"), and "collection line corridor" (defined as "the review area for the collection line, project substation, and gen-tie transmission line"). The SP Application used the terms "Preliminary Development Area" (defined as "Approximate 325-acre area where Louise Solar Project, LLC proposes to build the Louise Solar Project facilities"), and "Project Area" (defined as "Approximately 613-acre area of privately-owned land for which Louise Solar Project, LLC has leases and purchase options to allow siting and construction of the Project"). For purposes of these Findings of Fact, Conclusions of Law, and Recommendations, references from the EA to the "land control area" have been replaced with the term "Project Area" (with the meaning designated in the SP Application). References from the EA to "project area" have been replaced with "EA Project Area", which means "one mile from the land control area ['Project Area'] and collection line corridor").

[161] Ex. 201 at 46 (EA); Ex. 101 at 55 (SP Application).

[162] Ex. 101 at 55 (SP Application); Ex. 201 at 46 (EA).

[163] Ex. 101 at 55 (SP Application).

[164] Ex. 101 at 10 (SP Application); Supplemental Information to the EA (October 22, 2021) (eDocket No. 202110-179063-02).

[165] Ex. 101 at 78 (SP Application).

[166] Ex. 201 at S-4 (EA); Ex. 101 at 56 (SP Application).

the affected parcels may be returned to the existing agricultural use or transitioned to other planned land uses.[167]

~~173.~~174. Of the 455,680 acres in Mower County, the majority is classified as agricultural land. Impacts to 325 or less acres of agricultural land within the solar facility and transmission line footprint would reduce the amount of agricultural land in the county by less than one percent.[168]

~~174.~~175. The Project has been designed in compliance with the Mower County Comprehensive Plan (2002), and does not propose infrastructure or other construction activities in areas noted as Urban Service Management Areas or other future development areas specified in the Future Land Use Plan. Components of the Project may be located in areas where there is a planned extension of water, sewer, or other services. Construction of the Project would not preclude the future orderly extension of these services across property under Louise Solar's control as these extensions would likely be accomplished by utilizing existing public rights-of-way which will not be impacted by the Project.[169]

~~175.~~176. Normal agricultural activities can continue within the EA Project Area not converted to solar panels, access roads, transmission, and fencing. The Project will not preclude current or planned land use on adjacent parcels.[170]

2. Property Values

~~176.~~177. Because property values are influenced by a complex interaction between factors specific to each individual piece of real estate as well as local and national market conditions, the effect of one particular project on the value of one particular property is difficult to determine.[171]

~~177.~~178. The installation of the Project would create a limited visual impact at ground level or from adjacent roadways, parcels, and state trails.[172] The short, 700-1,000- foot transmission line will be visible from a greater distance than the solar array, but the change is likely to be barely perceptible given its short length and proximity to the Adams Substation and other existing transmission lines.[173]

~~178.~~179. The Project is not expected to have emissions during operation of the facilities.[174] Noise levels during operation of the Project are anticipated to be negligible.[175]

~~179.~~180. Widespread negative impacts to property value as a result of the Project are not anticipated. While it is possible that specific, individual property values may be negatively

[167] Ex. 201 at S-4 (EA); Ex. 101 at 57 (SP Application).
[168] Ex. 201 at S-4 (EA); Ex. 101 at 56 (SP Application).
[169] Ex. 101 at 57 (SP Application); Ex. 201 at 47 (EA).
[170] Ex. 201 at 47 (EA).
[171] *See* Ex. 201 at 49 (EA).
[172] Ex. 201 at 44-45 (EA).
[173] Ex. 101 at 44 (SP Application).
[174] Ex. 201 at 63 (EA).
[175] Ex. 201 at 48 (EA).

impacted, such impacts can be mitigated by reducing aesthetic impacts, encumbrances to future land use, and through individual agreements with neighboring landowners.[176]

3. Aesthetic Impacts

~~180.~~181. The existing landscape in the EA Project Area is generally flat and agricultural.[177]

~~181.~~182. There are no residences or businesses within the Project boundary; however the EA Project Area is surrounded by farmsteads with residences and outbuildings. Most of these farmsteads are at least partially surrounded by woodlands or shelterbelts, which fractionally prevents uninterrupted views of the surrounding landscape.[178] State Highway 56 bisects the northern and southern portions of the Project. There are multiple transmission lines within or adjacent to the EA Project Area that interrupt natural agricultural views. At least six transmission lines extend south of the Adams Substation with even more to the north. Additional transmission lines run east and west just south of the EA Project Area, with other lines transecting the northern portion of the EA Project Area. Views in the area are also naturally interrupted by Trunk Highway 56 located between the northern and southern portions of the Project, and other county and township roadways. Notable infrastructure on the landscape includes transmission lines, the Adams substation, and surrounding roadways as well as wind turbines at several operating wind farms.[179]

~~182.~~183. Locations where visual impacts will be the greatest are adjacent to residences and along public roadways and trails. There are no residences or businesses within the Project boundary; however, there are eleven residences and several agricultural buildings on parcels adjacent to the Project. The solar arrays will be visible from adjacent roadways, parcels, and state trail. Impacts are unavoidable but can be mitigated in part by vegetative screening.[180]

~~183.~~184. Operational lighting will be required at gates and perimeter areas as necessary for safety and security. If practicable, lighting will be motion-activated and down lit to minimize impacts and effects. Impacts to light-sensitive land uses are not anticipated given the rural location coupled with minimal required lighting for operations.[181]

~~184.~~185. Section 4.3.7 of the ~~Sample Site Permit~~Draft Site Permit requires the Applicant to consider visual impacts from landowners and land management agencies.[182]

4. Public Service and Infrastructure

~~185.~~186. The Project is located in a rural area in southeastern Minnesota. Access to the Project will be via existing township, county, or state roads. The major roadway in the area is State

[176] Ex. 201 at 49-50 (EA).
[177] Ex. 201 at 40 (EA).
[178] Ex. 201 at 40 (EA).
[179] Ex. 201 at 40, 44 (EA).
[180] Ex. 201 at 44 (EA).
[181] Ex. 201 at 45 (EA).
[182] Ex. 201 at 45 (EA); *see also* Sample Site Permit, included with Briefing Papers – April 8, 2021 Agenda (March 31, 2021) (eDocket No. 20213-172442-02) [hereinafter, "Sample Site Permit"].

Highway 56, which bisects the proposed Project. Other roads that surround the EA Project Area are local county or township roads. The Project is bordered on the north by 150th Street and 690th Avenue to the west.[183]

~~186.~~187. Utilities within the EA Project Area are typical of rural areas across central Minnesota. The EA Project Area is not serviced by city water supply or sanitary sewer. There are no wells within the Project boundary. There are numerous distribution lines and high voltage transmission lines throughout the local vicinity. A natural gas pipeline is located immediately southwest of the EA Project Area. Another gas line runs east to west through the northern portion of the Project.[184]

~~187.~~188. During construction, temporary impacts are anticipated on some public roads. Construction activities will increase the amount of traffic using local roadways, and such use might result in congestion which would be noticeable to neighboring landowners. Operation of the Project after construction will not noticeably increase traffic. No impacts to roads are anticipated during the operation; negligible traffic increases would occur for maintenance. The impact intensity level will be minimal. Potential impacts associated with construction are anticipated to be short-term, intermittent, and localized.[185]

~~188.~~189. There will be several access points to the Project. The northern units of the Project will be accessed from 150th Street and 690th Avenue, and the Applicant will likely seek driveway access from State Highway 56. Access from State Highway 56 is not currently being contemplated for the southern portions of the Project; access to the southern arrays will likely be from 140th and 680th Streets. Louise Solar may utilize the existing driveway to the ITC Adams substation (from State Highway 56) for access to the Project substation.[186]

~~189.~~190. Louise Solar will coordinate with Gopher State One Call before and during construction to avoid impacts to pipelines and other underground utilities. Louise Solar will also conduct an American Land Title Association survey to identify underground utilities. Final design will minimize and avoid impacts to underground and overhead utilities; if conflicts are unavoidable Louise Solar will coordinate with the utility to develop an approach to protect the utility. Underground utilities will be marked prior to construction start.[187]

~~190.~~191. Limited, temporary impacts to service may occur during interconnection of the Project substation via the short 161kV transmission line to the Adams Substation. These outages are anticipated to be of short duration and closely coordinated with utilities and landowners.[188]

~~191.~~192. There is one Federal Aviation Administration ("FAA") registered airport located within three nautical miles of the Project boundary. Gilgenbach's Private Airport is located 2.25

[183] Ex. 201 at 56 (EA).
[184] Ex. 201 at 57 (EA).
[185] Ex. 201 at 56-57 (EA).
[186] Ex. 201 at 56 (EA).
[187] Ex. 201 at 57 (EA).
[188] Ex. 201 at 58 (EA).

miles south of the Project and operates one turf runway. The Project will not impact this airport; therefore, no mitigation is proposed.[189]

~~192.~~193. Section 4.3.1~~62~~ of the sample permit addresses roads.[190] Section 4.3.1~~63~~ of the ~~Sample Site Permit~~Draft Site Permit ~~-~~requires the Applicant to inform road authorities of roads that will be used during construction and acquire necessary permits and approvals for oversize and overweight loads. Section 4.3.4 of the ~~Sample Site Permit~~Draft Site Permit also requires the Applicant to minimize disruption to public services and public utilities and to restore service promptly if disrupted by the Applicant.

5. Recreational Resources

~~193.~~194. Recreational opportunities in Mower County primarily include softball, hiking, camping, hunting, bicycling, snowmobiling, golfing, and fishing, and opportunities to explore museums, parks, nature centers, numerous landmarks, and caves.[191]

~~194.~~195. There are no designated public (federal, state, or local) recreational lands within the Project Area boundaries. According to the MDNR Recreational Compass, there are no state forests, national forests, or national wildlife refuges within close proximity to the Project boundaries. Additionally, there are no state-owned Off-Highway Vehicle trails and no MDNR Scientific & Natural Areas identified within a mile of the Project boundaries. Also, no lakes with public access are located in the Project Area.[192]

~~195.~~196. The Project is within ~~1083~~35 feet of the Shooting Star State trail. The trail is located on an old railroad right-of-way, and provides biking, running, and walking opportunities for area residents. The trail is paved between LeRoy and Austin. A portion of nearby snowmobile track 176 is located about 0.5 miles from the Project boundary. State Highway 56 is a designated State Scenic Byway and was one of the first wildflower routes in the state. It is 31 miles long and located between I-90 and Hwy 63 near the Iowa border.[193] Impacts will occur and may temporarily interrupt recreational activities on the Shooting Star State Trail while deliveries are made to the southern portion of the site at the intersection of Highway 56 and 680th Avenue. If trail use is interrupted, it is anticipated to be temporary and short in duration. Louise Solar will coordinate with MDNR staff if the trail is closed for any length of time.[194]

197. No significant impacts to recreational opportunities are anticipated.[195]

198. Minnesota DNR (MDNR) comments indicate that DNR's inspection of the shapefiles indicate that the project fence is approximately 35 feet from the trail, not 108 feet, and that a collector line is proposed to run across the trail. DNR is concerned that construction of the collector line could disrupt recreational activities on the trail as well as cause damage to the trail,

[189] Ex. 201 at 42 (EA).
[190] Ex. 201 at 57 (EA).
[191] Ex. 101 at 51 (SP Application).
[192] Ex. 101 at 51 (SP Application).
[193] Ex. 201 at 50 (EA).
[194] Ex. 201 at 50-51 (EA).
[195] Ex. 201 at 51 (EA).

and that its continued presence could pose a safety hazard for recreational trail users and requests additional mitigation measures.[196]

~~1.~~199. Applicant reply comments do not address the discrepancy between the 108 foot distance described by the applicant and the 35 foot distance found during MDNR's review of the shapefiles.[197] In reply comments, applicant notes "the collection line will be bored under the Shooting Star State Trail. Accordingly, no construction-related impacts or operational impacts to trail use are anticipated."[198] Section 5.7 of the Draft Site Permit addresses these concerns.

B. Public Health and Safety

~~2.~~200. The term EMF refers to electric and magnetic fields that are present around any electrical device. Electric fields arise from the voltage or electrical charges and magnetic fields arise from the flow of electricity or current that travels along transmission lines, power collection lines, substation transformers, house wiring, and electrical appliances.[199]

~~3.~~201. The primary sources of EMF from the Project will be from buried electrical collection lines, the gen-tie transmission line and from the transformers installed at each inverter. EMF from electrical collection lines, transmission lines, and transformers dissipates rapidly with distance from the source. The internationally accepted guideline for general public exposure to electric fields is 4.2 kV/m and 833 milliGauss ("mG") for magnetic fields.[200]

~~4.~~202. The Project includes a 700-1,000-foot long 161 kV overhead gen-tie transmission line running from the Project substation to the Adams Substation. Several evaluations have concluded that transmission lines of a similar voltage are unlikely to have EMF impacts.[201] The EMF levels generated by the proposed Project 161 kV transmission line are anticipated to be well below the internationally accepted guideline for general public exposure.[202]

~~5.~~203. Based on the most current research on electromagnetic fields, and the distance between the Project and houses, the Project will have no impact to public health and safety due to EMF or magnetic fields.[203]

---

[196] See Comments from the Minnesota Department of Natural Resources, October 27, 2021, eDockets No. 202110-179230-01.

[197] Ex. 101 at 51, Ex. 201 at 50, and Comments from the Minnesota Department of Natural Resources, October 27, 2021, eDockets No. 202110-179230-01

[198] See Reply Comments (Applicant), November 2, 2021, eDockets No. 202111-179444-01

[199] *See* Ex. 201 at 52-54 (EA).
[200] Ex. 201 at 54 (EA).
[201] Ex. 201 at 54 (EA).
[202] Ex. 201 at 55 (EA).
[203] Ex. 201 at 55 (EA).

~~6.~~204. The Project substation, collection line, and transmission line will be designed and constructed in compliance with applicable electric codes. Electrical inspections will ensure proper installation of all components, and the Project will undergo routine inspection.[204]

~~7.~~205. There are two types of stray voltage: induced voltage and neutral-to-earth voltage. Induced voltage is associated with an electric field extending from a transmission line to nearby conductive objects. Neutral-to-earth voltage is a type of stray voltage that can occur where distribution lines enter structures causing extraneous voltage to appear on metal surfaces in buildings, barns, and other structures. The Project will not result in the construction of large transmission lines; interconnect to businesses, farms, or residences; or change local electrical service. Impacts are not expected.[205]

~~8.~~206. No significant impacts to public safety are expected to result from construction and operation of the Project.

~~9.~~207. The ~~Sample Site Permit~~Draft Site Permit contains conditions to address public safety. For example, Section 4.3.~~19~~23 of the ~~Sample Site Permit~~Draft Site Permit addresses public safety, including landowner educational materials, appropriate signs and gates, etc. Section 8.10 requires permittees file an emergency response plan with the Commission prior to operation. Section 8.11 requires disclosure of extraordinary events, such as fires, etc.[206]

C. Land-based Economies

1. Local Economy

~~10.~~208. The Project will result in both short- and long-term benefits to the local economy.

~~11.~~209. Landowner compensation is established by voluntary leases or purchase agreements between the landowners and the Applicant's lease or purchase of the land.[207]

~~12.~~210. The Applicant anticipates the Project to generate around $125,000 of property tax annually. It is also expected to support 350-400 jobs during the construction and installation phases, and up to 21 indirect and 2 full time permanent jobs during the operations phase. Indirect economic benefits will occur from additional local spending on goods and services and local sales tax. Adverse impacts associated with the loss of agricultural land and agricultural production will be mitigated through lease payments to landowners.[208]

~~13.~~211. Wages will be paid, and expenditures will be made to local businesses and landowners during the Project's construction and operation. Construction of the Project would provide temporary increases to the revenue of the area through increased demand for lodging, food services, fuel, transportation, and general supplies. The Project will also create new local job opportunities for various trade professionals that live and work in the area, and it is typical to

[204] Ex. 201 at 55 (EA).
[205] Ex. 201 at 43 (EA).
[206] Ex. 201 at 56 (EA).
[207] Ex. 101 at 49 (SP Application).
[208] Ex. 201 at 51 (EA).

advertise locally to fill required construction positions. Opportunity exists for sub-contracting to local contractors for gravel, fill, and civil work. Additional personal income will also be generated by circulation and recirculation of dollars paid out by the Project as business expenditures and state and local taxes.[209]

~~14.~~212. The Project will provide production tax payments to Mower County of approximately $105,000-$115,000 annually over 35 years or longer. Additionally, Adams and Lodi Townships will receive approximately $25,000-$30,000 annually over 35 years. 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.[210]

~~15.~~213. Socioeconomic impacts are anticipated to be positive. Section 8.5 of the ~~Sample Site Permit~~Draft Site Permit requires quarterly reports concerning efforts to hire Minnesota workers. Section 9 addresses Project decommission, specifically requiring the permittee to file a decommissioning plan with the Commission prior to operation; establishing the permittee as the responsible party for carrying out decommissioning tasks, and sets out minimum standards for restoration and timelines; and addresses abandoned solar installations.[211]

2. Agriculture

~~16.~~214. The majority of the Project Area is in agricultural use, comprising 590.1 acres (96.2%). The remainder of the Project Area consists of developed land (2.3%) and a small amount of herbaceous or hay/pasture land (1.2%). The remaining identified land uses include deciduous forest, emergent herbaceous wetlands, barren land, and open water. In total, the remaining land uses comprise a minor 0.3% of the Project Area. [212]

~~17.~~215. The Project will result in up to 325 acres of farmland being removed from agricultural production for the life of the Project. Impacts to 325 or less acres of agricultural land within the solar facility and transmission line footprint would reduce the amount of agricultural land in Mower County by less than one percent. This change in land use would take productive farmland out of production but would result in a negligible loss of farmland in Mower County. The Applicant indicates that the land could be returned to agricultural uses after the Project is decommissioned and the site is restored.[213]

~~18.~~216. Normal agricultural activities can continue within portions of the Project Area not converted to solar panels, access roads, transmission and fencing. After the useful life of the Project, the current agricultural land use could be restored by removing the solar panels, short transmission line and associated facilities.[214]

[209] Ex. 101 at 49-50 (SP Application); Ex. 201 at 52 (EA).
[210] Ex. 101 at 50 (SP Application); Ex. 201 at 52 (EA).
[211] Ex. 201 at 53 (EA).
[212] Ex. 101 at 55-56 (SP Application).
[213] Ex. 201 at S-4, 59 (EA).
[214] Ex. 101 at 57 (SP Application).

~~19.~~217. The revenue lost or reduced from removing land from agricultural production ~~will~~ may be offset by leasing agreements.[215]

~~20.~~218. The presence of the Project will not result in a significant impact to land-based economies in the Project vicinity, as impacts to 325 or less acres of agricultural land within the solar facility and transmission line footprint would reduce the amount of agricultural land in Mower County by less than one percent.[216]

3. Prime Farmland

~~21.~~219. Prime Farmland as defined by Federal regulation at 7 C.F.R. 657.5(a)(1) "is 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."[217]

~~22.~~220. Subject to certain exceptions, Minnesota Rules 7850.4400, subp. 4 prohibits large energy power generating plants from being sited on more than 0.5-acre of prime farmland per MW of net generating capacity unless there is no feasible and prudent alternative.

~~23.~~221. Given the 50 MW net generating capacity of the Project, Minn. R. part 7850.4400, subp. 4 would allow up to 25 acres of prime farmland for the Project unless there is no feasible and prudent alternative.[218]

~~24.~~222. Approximately 149.2 acres of prime farmland and 165.1 acres of prime farmland if drained are located within the Preliminary Development Area.[219]

~~25.~~223. Louise Solar explored Mower County for a solar project based on the high solar resource in the southeastern portion of Minnesota and lower expected interconnection costs and transmission congestion.[220]

~~26.~~224. Louise Solar conducted a screening analysis to assess whether the Project meets the "feasible and prudent alternative" threshold. The analysis looked at factors such as high solar resource areas, interconnect locations, and open farmland, focusing on the southern portion of the state. Within this area, Louise Solar screened for substations and transmission lines with available capacity, leading to a relatively narrow subset of possible points of interconnection ("POI") with low or no network upgrade requirements. Financial constraints further focused on potential locations within 3 miles of the identified POIs which had to meet the following criteria: "cleared and otherwise undeveloped, not currently encumbered by other easements (wind farms, etc.), contained minimal wetlands, streams, transmission lines, pipelines, roads, or other obstacles that would limit the buildable land or lead to irregularly shaped development areas." Once potential

[215] Ex. 101 at 50 (SP Application); Ex. 201 at 60 (EA).
[216] Ex. 201 at S-4, 59 (EA).
[217] Ex. 201 at 58-59 (EA).
[218] Ex. 101 at 11 (SP Application).
[219] Ex. 101 at 59 (SP Application); Ex. 201 at 59 (EA). Note that the Table 11 (Prime Farmland Classifications within the Project Boundary) in the EA states that it provides the "Percent of Project Area", but, as shown in the corresponding Table 19 from the SP Application, these calculations show the percent in the Preliminary Development Area, not the Project Area. *See* Ex. 101 at 59 (SP Application).
[220] Ex. 101 at 13-14 (SP Application).

sites were identified, the Applicant approached landowners for voluntary leases and easements. The Project site was selected due to its proximity to the POI, supportive landowners, and no competition with other potential renewable energy projects in the area. There are several wind developments in this area, which limits siting options while remaining close to the Adams Substation.[221]

~~27.~~225. Three POIs made it through the screening exercise: the Adams Substation POI, Huntley POI, and Renville POI. In Mower County, 95.6 percent of the farmland is classified as prime farmland. Louise Solar also calculated the percentages of prime farmland within a five-mile radius of the three POIs. The Renville POI had the highest percentage of prime farmland within a five-mile radius. While the percentage of prime farmland within five miles of the Huntley POI is lower than the other two POIs, the non-prime farmland areas within five files of the Huntley POI are closely associated with the Blue Earth River. Additionally, the slopes and woodlands in those areas make the area unsuitable for a solar facility. Accordingly, the Huntley POI and Renville POI do not provide feasible and prudent non-prime farmland alternatives. In addition to having a lower percentage of prime farmland within a five-mile radius than the Renville POI, Louise Solar identified the Adams Substation POI as having available capacity, low interconnection costs, and interested landowners.[222]

~~28.~~226. The Applicant completed a GIS evaluation of regional prime farmland and farmland of statewide importance to a distance of approximately 10 miles surrounding the Adams Substation to address Minnesota Rules 7850.4400, subp. 4 prime farmland limitations. The selected distance was determined based on transmission line costs and losses, and a reasonable geographic scope for the alternatives analysis. Moving further away from the POI would not result in less impact to prime farmland. In the case of this Project, where the POI is so close to the proposed solar facility, increasing the distance would ultimately result in longer transmission, an enlargement of the Project's overall footprint, a corresponding increase in prime farmland conversion, and increase in Project cost. Prime farmland, and its sub-categories, are mapped throughout Mower County except along larger waterway drainages and wetlands. Accordingly, there is no reasonably sized area in Mower County, or within ten miles of the Adams Substation that could facilitate solar development of approximately 325 contiguous acres not defined as prime farmland.[223]

~~29.~~227. No alternatives to Louise Solar's proposed site were presented at the public meeting or during the public comment period.[224]

~~30.~~228. Therefore, there is no feasible and prudent alternative available to Louise Solar, including near the Adams Substation or otherwise in Mower County to construct the Project and not impact prime farmland. A finding that there is no feasible and prudent alternative to avoidance of prime farmland for the Project is consistent with past Commission decisions for large solar

[221] Ex. 201 at 60 (EA); *see also* Ex. 106 (Comments).
[222] Ex. 106 (Comments).
[223] Ex. 101 at 14-15 (SP Application).
[224] Ex. 201 at 1 (EA).

generating systems sited in prime farmland due to the fact that areas surrounding the Project substation also contain similar amounts of prime farmland as the proposed site.[225]

229. Louise Solar developed its revised VMP which reflects changes Louise Solar made following its review of the Vegetation and Establishment Management Plan Guidance document, as well as comments received from and consultation with the state Vegetation Management Planning Working Group, comprised of representatives of EERA staff, MDNR, the Minnesota Department of Agriculture and the Minnesota Board of Water and Soil Resources.[226]

230. MDNR submitted comments on the Revised Vegetation Management Plan and notes several areas of concern, including soils (hydric and wet, compaction) seed mixes, planting, and establishment efforts.[227]

231. The applicant responded to all of MDNR's comments on the Revised Vegetation Management Plan.[228] Applicant states "Louise Solar will consider MDNR's comments in the final design of the Project and the final VMP to be filed prior to commencement of construction."[229]

~~1.~~232. Sections 4.3.15 and 4.3.12 of the Draft Site Permit address Beneficial Habitat and the Vegetation Management Plan. Seed mixes must be developed and approved in coordination with MDNR and BWSR before submitting the plan 14-days prior to pre-construction.

~~2.~~233. Sections 4.3.8~~1~~, 4.3.9~~2~~, 4.3.10~~3~~, ~~4.3.7~~, 4.3.15~~8~~, 4.3.16~~9~~, 4.3.17~~0~~, 4.3.14~~1~~, and 4.3.~~16~~ 19 of the ~~Sample Site Permit~~Draft Site Permit address soil and agricultural related issues associated with the Project.

D. Archaeological and Historic Resources

~~3.~~234. A Phase I archaeological survey of the Project Area, including the short transmission line route, was completed in October 2020, and no archaeological sites were identified.[230] Three previously recorded archaeological sites are within one mile of the Project Area, none of which are within the Project Area boundaries. Eighteen historic/architectural

[225] Ex. 101 at 16 (SP Application); *see also In the Matter of the Site Permit Application for the 100 MW Aurora Distributed Solar Energy Project at Multiple Facilities in Minnesota*, PUC Docket No. E-6928/GS-14-515, Order Issuing Site Permit, As Amended (June 30, 2015); *In the Matter of the Application of Marshall Solar, LLC for a Site Permit for the Marshall Solar Energy Project and Associated Facilities in Lyon County*, PUC Docket No. IP-6964/GS-14-1052, Order Issuing Site Permit (May 5, 2016); *In the Matter of the Application of Elk Creek Solar, LLC for a Site Permit for the up to 80- Megawatt Elk Creek Solar Project in Rock County, Minnesota*, PUC Docket No. IP-7009/GS-19-495, Order Adopting Findings of Fact, Conclusions of Law, and Recommendations, Granting Certificate of Need, and Issuing Site Permit (December 31, 2020).

[226] Ex. 201 at 70 (EA); Louise Solar Comments – Revised Vegetation Management Plan (October 22, 2021) (eDocket Nos. 202110-179032-01; 202110-179032-03).

[227] See Comments from the Minnesota Department of Natural Resources, October 27, 2021, eDockets No. 202110-179230-01.

[228] See Reply Comments (Applicant), November 2, 2021, eDockets No. 202111-179444-01

[229] Id.

[230] Ex. 101 at 61 (SP Application).

resources have been previously inventoried within one mile, but outside of the Project Area. Trunk Highway 56 bisects the Project boundary and one-mile buffer. The First National Bank of Adams (MW-ADA-001), located within the buffer, is listed in the NRHP. Built in 1924, it was designed by the noted Prairie School architects Purcell & Elmslie. The remaining resources, including businesses and houses in the City of Adams, and rural bridges within the buffer, have either not been evaluated for NRHP eligibility or the SHPO inventory forms could not be located.[231]

235. Louise Solar also reached out to the eleven Minnesota Tribal Nations' Tribal Historic Preservation Officers and the Minnesota Indian Affairs Council for additional information or comment on the Project. Prior to construction, Louise Solar will prepare an Unanticipated Discoveries Plan outlining steps to be taken if previously unrecorded cultural resources or human remains are encountered during construction.[232]

~~4.~~236. In response to tribal outreach efforts, the Cultural Director of the Shakopee Mdewakanton Sioux Community requests notification of an inadvertent discovery and project updates.[233] Section 5.1 of the Draft Site Permit addresses special permit conditions regarding on-going tribal coordination.

~~5.~~237. No previously recorded archaeological or historic sites will be directly impacted by the proposed Project.[234]

~~6.~~238. Section 4.3.14 of the sample permit addresses archeological and historic resources. If previously unidentified archaeological sites are found during construction, the Applicant would be required to stop construction and contact SHPO to determine how best to proceed. Ground disturbing activity will stop and local law enforcement will be notified should human remains be discovered. Because impacts to archeological and historic resources are not anticipated, additional mitigation is not proposed.[235]

E. Natural Environment~~al~~

1. Wildlife

~~7.~~239. Wildlife utilizing the Project Area are common species associated with disturbed habitats and are accustom to human activities occurring in the area, for example, agricultural activities and road traffic. Mammals, reptiles, amphibians, and insects are present. These species include white-tailed deer, red fox, striped skunk, wild turkey, ring-necked pheasant, sandhill crane, passerines, rodents, garter snake, gopher snake, and insects. Due to the lack of water resources in the EA Project Area and vicinity, waterfowl are not common in the area.[236]

[231] Ex. 101 at 61 (SP Application); Ex. 201 at 62 (EA).
[232] Ex. 201 at 62 (EA).
[233] Ex. 101 at Appendix B.

[234] Ex. 201 at 62 (EA).
[235] Ex. 201 at 62 (EA).
[236] Ex. 201 at 73 (EA).

~~8.~~240. Given the agricultural nature of the EA Project Area, impacts to the current wildlife inhabiting the area are expected to be minimal. Population level impacts are not anticipated.[237]

~~9.~~241. The largest impact to wildlife associated with the Project would be fencing. Studies estimate that one ungulate per year becomes entangled for every two and one-half miles of fence. Deer can jump many fences, but smooth or barbed-wire can snag animals and tangle legs, especially if wires are loose and spaced too closely together. Predators can use fences to corner and kill prey species. Bird injuries or mortality occurs from fencing due to lack of visibility, and low flying birds such as grouse and owls are also vulnerable to fence collisions.[238]

~~10.~~242. In its June 8, 2021 comments, MDNR commented on potential impacts to deer mortality and movement due to fencing. MDNR commented that an eight-foot fence would exclude most deer, but to ensure complete deer exclusion from the solar facility, MDNR recommended ten-foot fencing and deer egress areas.[239] In its October 28, 2021 comments, MDNR clarified that its *DNR's Fencing Handbook for 10 ft Woven Wire Deer Exclusion Fence* is being updated to reflect best practices and specifications, and that 10-foot fencing would nearly eliminate the possibility of deer getting in and would not require egresses.[240] MDNR did not provide any data or other evidence indicating deer are likely to be trapped in the fenced area or that any such occurrences are documented at other solar facilities in Minnesota. This concern was also raised as a comment at the Public Hearing in LeRoy, Minnesota.[241]

243. Louise Solar has stated that it will implement MDNR 2016 guidance of wildlife-friendly fencing by installing either a 6-foot chain-link fence with top guard angled out and upward at 45 degrees with 3-4 strands of smooth wire (no barbs), or 8-foot chain link for security and safety purposes. At the request of MDNR, barbed wire will not be used around the perimeter of the Project. Louise Solar's proposed fencing was designed in accordance with MDNR's 2016 *Guidance for Commercial Solar Projects*.[242] The fencing proposed by Louise Solar is appropriately protective of the deer population and supported by the record.

244. MDNR provided comments and recommendations for security fencing that "would improve safety for wildlife and prevent damage to the facility MDNR Section."[243] 5.5 of the Draft Site Permit addresses security fencing and wildlife concerns.

[237] Ex. 201 at 72-73, 74 (EA).
[238] Ex. 201 at 74 (EA).
[239] MDNR Comments (June 8, 2021) (eDocket No. 20216-174868-01).
[240] MDNR Comments (October 28, 2021) (eDocket No. 202110-179230-01).
[241] *See* October 12, 2021 Public Hearing Transcript, (eDocket No. 202111-179335-01)

[242] *See* Ex. 101 at 82 and 88 (SP Application); October 12, 2021 Public Hearing Transcript at 24.
[243] MDNR Comments (October 28, 2021) (eDocket No. 202110-179230-01).

~~11.~~245. MDNR commented on the need for a definitive commitment by Louise Solar to use natural fiber materials for erosion control. Permit Condition 5.4 addresses the use of wildlife friendly erosion control material.[244]

~~12.~~246. Section 8.12 of the ~~Sample Site Permit~~Draft Site Permit requires permittees to report any wildlife injuries and fatalities to the Commission on a quarterly basis. Section 4.3.~~8~~ 15 requires use of "site restoration and management practices that provide for native perennial vegetation and foraging habitat beneficial to gamebirds, songbirds, and pollinators".

2. Vegetation

~~13.~~247. The majority of the land within the Project Area is cultivated agricultural land.[245]

~~14.~~248. There is no MDNR-mapped native prairie in the Project Area.[246] There are no records of native prairie or native plant communities within with the Project Area.[247]

~~15.~~249. Forested land within the Project Area is predominately comprised of riparian deciduous woodlands areas along streams and wetlands. There are 11 wetlands and waterways located within the Project Area. Most wetlands that were identified within the Project Area are seasonally-flooded basins (many of which have been farmed), some of the wetlands were identified as floodplain forest or wet meadow.[248]

~~16.~~250. Conversion of existing vegetation will be limited as most of the land within the EA Project Area is tilled on an annual basis for row crops. Agricultural land within the solar array area will be seeded with herbaceous vegetation except for the substation, inverter skids, and access roads, which will be converted to developed land and impervious surfaces. The Project will avoid tree clearing to the extent practicable. Low growing native seed mixes developed in cooperation with MDNR will be used to seed the site. Once established, vegetation will be maintained by mowing.[249]

~~17.~~251. Louise Solar developed a Vegetation Establishment and Management Plan to guide site preparation, installation of prescribed seed mixes, management of invasive species and noxious weeds, and control of erosion/sedimentation. Additionally, Louise Solar developed an Agricultural Impact Mitigation Plan ("AIMP") that details methods to minimize soil compaction, preserve topsoil, and establish and maintain appropriate vegetation to ensure the Project is designed, constructed, operated and ultimately restored in a manner that ~~would~~ preserves soils to potentially allow ~~for~~ the land to be returned to agricultural use in the future.[250]

~~18.~~252. Any revisions to the Vegetation Establishment and Management Plan must be done in coordination MDNR, BWSR, MDA, MPCA, and the Minnesota Department of

[244] Id.

[245] Ex. 101 at 71 (SP Application).
[246] Ex. 101 at 77 (SP Application).
[247] Ex. 101 at 77-78 (SP Application).
[248] Ex. 101 at 72 (SP Application).
[249] Ex. 201 at 71-72 (EA).
[250] Ex. 201 at 72 (EA).

Commerce. The vegetation management plan and documentation of the coordination efforts between the permittee and the coordinating agencies shall be filed at least 14 days prior to the preconstruction meeting.[251]

~~19.~~253. After construction, the Project Area will be graded to natural contours (as possible) and soils will be de-compacted. Disturbed areas will be reseeded with native seed mixes in accordance with the Project's VMP and Stormwater Pollution Prevention Plan ("SWPPP"). Erosion control measures will be used until seeded vegetation has established – e.g., silt fences, hydro-mulch, sediment control logs. Additionally, a cover crop will be planted to prevent erosion during the time it takes for native seeds / vegetation to establish.[252]

~~20.~~254. Section 4.3.~~7~~ 14 of the ~~Sample Site Permit~~Draft Site Permit ~~–~~requires that vegetation clearing be limited to only the extent necessary for construction access and safe operation and maintenance of the Project. Section 4.3.~~8~~ 15 requires that site restoration and management practices provide for native perennial vegetation. ~~and the development of Vegetation Monitoring Plan.~~ Section 4.3.~~9~~ 16 discusses development of the Vegetation Management Plan, to be prepared in coordination with the Department of Commerce, DNR, BWSR, and MPCA. ~~pesticide use~~. Section 4.3.~~10~~ 17 addresses application of pesticides and notice to landowners of pesticide application. 4.3.18 adresses invasives species and best management practices ~~requires permittees to employ best management practices~~ to avoid the potential introduction and spread of invasive species on lands disturbed by Project construction. Section 4.3.1~~9~~1 requires permittees to take all reasonable precautions against the spread of noxious weeds during all phases of construction.

3. Soils, Geologic, and Groundwater Resources

~~21.~~255. Construction of the Project will disturb approximately 325 acres within the Project Area. As with any ground disturbance, there is potential for soil compaction and erosion. Approximately 104 acres will be graded, which consists of cutting and filling earth in targeted areas to provide a level and stable base the solar panels. Primary impacts to soils include compaction from construction equipment, soil profile mixing during grading and pole auguring, rutting from tire traffic, drainage interruptions, and soil erosion.[253]

~~22.~~256. The type of electrical collection system used will impact soils differently. In all systems, some trenching will be required to bury electrical cables. Impacts are most substantial with the belowground system due to trenching.[254]

257. Impacts to soils would be temporary and minor and mitigated through the proper use and installation of Best Management Practices ("BMPs") such as using soil ripping equipment to decompact soils following construction, separating and stockpiling topsoil for later spreading and seeding to prevent topsoil mixing with subsoils, halting construction during wet weather conditions to prevent soil rutting from equipment tires, and avoiding and repairing drain tiles to maintain proper site drainage. Louise Solar will also develop a SWPPP that complies with

[251] Ex. 201 at 72 (EA).
[252] Ex. 201 at 19 (EA).
[253] Ex. 201 at 69 (EA).
[254] Ex. 201 at 69 (EA).

Minnesota Pollution Control Agency rules and guidelines. Implementation of the protocols outlined in the SWPPP will minimize the potential for soil erosion during construction.[255]

~~23.~~

258. Sections 4.3.~~8~~1, 4.3.~~9~~2, 4.3.~~10~~3, and 4.3.~~8~~ 15 of the ~~sample~~ Draft Site P~~p~~ermit address soil related impacts: 4.3.~~8~~1 requires protection and segregation of topsoil; 4.3.~~9~~2 requires measures to minimize soil compaction; and 4.3.~~10~~3 requires the permittee to "implement erosion prevention and sediment control practices recommended by the [MPCA]" and to "obtain a [CSW Permit]." A CSW Permit requires both temporary and permanent stormwater controls. Section 4.3.3 also requires implementation of reasonable erosion and sediment control measures, contours graded to provide for proper drainage, and all disturbed areas be returned to pre-construction conditions. Section 4.3.8 requires that "site restoration and management" practices enhance "soil water retention and reduces storm water runoff and erosion".[256]

~~24.~~259. MPCA submitted comments regarding the Pollutant Discharge Elimination System/State Disposal System General Construction Stormwater Permit (CSW Permit) requirements for sites within 1 mile of an impaired water.[257] At least a portion of the site is within 1 mile of an unnamed stream that has construction related impairments. Louise Solar indicates it will obtain all of the necessary "downstream" permits necessary to construct and operate the project, including a Stormwater Pollution Prevention Plan. Section 4.3 of the permit states "The Permittee shall comply with the construction practices, operation and maintenance practices, and material specifications described in the *February 11, 2021 Site Permit Application* and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail." This permit condition addresses MPCA's concern regarding stormwater permits and additional permit conditions included in downstream permits needed to construct and operate the project.

~~25.~~260. There are no wells located withing the Project boundary. If one is discovered that was not mapped on available mapping resources, Louise Solar will assess whether the well is open and cap it, if necessary, in accordance with Minnesota Department of Health requirements.[258]

~~26.~~261. Impacts to geologic and groundwater resources are not anticipated.[259] Louise Solar developed and is committed to an AIMP that details methods to minimize soil compaction, preserve topsoil, and establish and maintain appropriate vegetation to ensure the Project is designed, constructed, operated and ultimately restored in a manner that would preserve soils to allow for the land to be returned to agricultural use. The VMP lists best management practices, that while directly related to vegetation, will stabilize soils.[260]

[255] Ex. 201 at 69 (EA).
[256] Ex. 201 at 70 (EA).
[257] MPCA Comments (October 28, 2021) (eDocket Nos. 202110-179265-01; 202110-179265-02).

[258] Ex. 201 at 65 (EA).
[259] Ex. 201 at 65 (EA).
[260] Ex. 201 at 70 (EA).

4. Surface Water and Wetlands

~~27.~~262. Louise Solar identified surface water and floodplain resources for the Project Area.[261]

~~28.~~263. The Project is located in the Cedar River Watershed Basin. A full jurisdictional waters field delineation of the Project Area was conducted the week of November 2, 2020. No rivers or lakes were identified as part of the field delineation. One delineated stream in the northwest portion of the Project Area is associated with an unnamed MDNR Public Watercourse. No other rivers, streams or lakes are mapped within the Project Area.[262]

~~29.~~264. The majority of the Project is outside the 500-year and 100-year Federal Emergency Management Agency ("FEMA") flood zone. A small portion of the Project Area in the northwest corner of the Project boundary is located withing the 100-year floodplain. According to FEMA, the risk index for Mower County is relatively low. The Project will not significantly impact FEMA-mapped floodplains and no mitigation is proposed. Solar panels have been sited completely outside of mapped FEMA flood zones.[263] Security fencing along the north and northwest boundaries of the Project Area intersect the mapped FEMA floodplain boundary. It is Louise Solar's intent to fully avoid mapped floodplain with security fencing.[264]

265. Louise Solar conducted a wetland delineation survey within the Project boundary in November 2020. Eleven wetlands were delineated totaling 6.24 acres. The Project is designed to avoid impacts to wetlands. Solar arrays and other Project infrastructure will not be located in wetlands. There may be potential for temporary, short-term impacts to wetlands to occur during installation of the electrical collection lines and temporary access roads. Construction BMPS will be followed, including that include temporary construction mats for work in wetlands, directional bores under wetlands, as necessary, for the installation of electrical collection lines, and other erosion control measures identified in the MPCA Storm Water Best Management Practices Manual.[265]

~~30.~~266. In comments submitted by the MPCA the agency notes "due to other waterbodies within the site, including wetlands, existing 50-foot buffers to the waterbodies must be preserved during construction. If that is not possible, then redundant (double) downgradient sediment controls must be utilized. This requirement applies to all surface waters, public or nonpublic." Section 5.2 of the Draft Site Permit addresses this concern.

267. The Project will not directly impact surface waters.[266]

~~1.~~ MnDOT requests Louise Solar submit storm water runoff calculations, including a summary table, showing that the Louise Solar Project will not be increasing peak runoff rate.

[261] *See* Ex. 101 at 68-70 (SP Application).
[262] Ex. 201 at 70-71 (EA).
[263] Ex. 201 at 42 (EA).
[264] Ex. 101 at 70 (SP Application); Ex. 201 at 41-42 (EA).
[265] Ex. 201 at 43-44 (EA).
[266] Ex. 201 at 71 (EA).

The stormwater run-off calculations should be submitted to MnDOT's District 6 Water Resources Engineer for verification.[267]

~~2.~~268. Temporary dewatering may be required during construction. Any dewatering required during construction will be discharged to the surrounding surface, thereby allowing it to infiltrate back into the ground to minimize potential impacts. If dewatering is necessary, the Applicant will obtain a Water Appropriation Permit from MNDNR.[268]

~~3.~~269. Section 4.3.12~~5~~ of the ~~Sample Site Permit~~Draft Site Permit addresses impacts to wetlands and other water resources. No additional mitigation is proposed.[269] Section 4.3.10~~3~~ of the ~~Sample Site Permit~~ Draft Site Permit ~~requires reasonable~~ measures to minimize erosion and sedimentation during construction.

5. Air and Water Emissions

~~4.~~270. Temporary short-term air quality impacts would occur during the construction phase of the Project. Once operational, the Project will not generate criteria pollutants or carbon dioxide.[270]

~~5.~~271. Short-term air emissions during the construction phase of the Project are anticipated as a result of vehicle exhaust from the construction equipment and from vehicles traveling to and from facility locations as well as fugitive dust emissions due to travel on unpaved roads and limited amounts of excavation that may be needed for foundations (either for inverter boxes, or in some limited cases, the array piers).[271]

~~6.~~272. When necessary, dust from construction traffic will be controlled using standard construction practices such as watering of exposed surfaces, covering of disturbed areas, and reduced speed limits at each facility. Emission from construction vehicles will be minimized by keeping construction equipment in a good working order.[272]

6. Solid and Hazardous Wastes

~~7.~~273. MPCA regulates generation, handling, and storage of hazardous wastes.[273] The Project is not expected to generate significant quantities of solid waste during operation. The Project may require use of certain petroleum products such as gear box oil, hydraulic fluid, and gear grease. These materials will be stored, recycled, and/or disposed of in accordance with applicable local, State, and Federal regulations.[274] A Spill Prevention, Control, and Countermeasure ("SPCC") will be required for the main industry standard power transformer. The

[267] MnDOT Comments (June 9, 2021) (eDocket No. 20216-174922-01).

[268] Ex. 101 at 68 (SP Application).
[269] Ex. 201 at 43-44 (EA).
[270] Ex. 201 at 63 (EA).
[271] Ex. 201 at 63 (EA).
[272] Ex. 201 at 63-64 (EA).
[273] Ex. 201 at 11 (EA).
[274] Ex. 100 at 56 (CN Application).

transformer will be properly contained per Environmental Protection Agency ("EPA") requirements.[275]

~~8.~~274. Section 4.3.~~17~~ 24 of the ~~Sample S~~site ~~P~~permit requires that all waste and scrap that is the product of construction shall be removed from the site and all premises on which construction activities were conducted and properly disposed of upon completion of each task. In addition, Section 4.3.~~18~~ 25 of the ~~Sample~~ Draft ~~S~~ite ~~P~~permit requires the permittee to take all appropriate precautions against pollution of the environment and makes the permittee responsible for compliance with all laws applicable to the generation, storage, transportation, clean up, and disposal of all wastes generated during construction and restoration of the site.

F. Rare and Unique Natural Resources

~~9.~~275. Louise Solar reviewed the U.S. Fish and Wildlife Service ("USFWS") Information for Planning and Conservation ("IPaC") database for the potential occurrence of federally-listed species, candidate species, or designated critical habitat that may occur within or near the Project Area. Louise Solar also reviewed MNDNR's Natural Heritage Information System ("NHIS") for documented occurrences of federally- or state-listed species, state Species of Concern, and rare habitats within the Project Area and within one mile of the Project Area.[276]

~~10.~~276. No rare plant or animal communities have been identified within the Project boundary.[277]

~~11.~~277. According to the USFWS IPaC, two federally-listed species may occur within or near the Project Area: the federally-threatened northern long-eared bat ("NLEB") and prairie bush clover.[278] There are no documented occurrences of NLEB in the Project boundary or within one mile of the Project.[279] NLEB may be present in the EA Project Area but given the lack of hibernacula and limited tree cover, it is unlikely. The EA Project Area is primarily agricultural land with no remnant prairie or existing prairie habitat.[280] There are no documented occurrences of the Prairie Bush Clover in the Project boundary or within one mile of the Project.[281]

278. A record of a state-endangered vascular plant was documented within one mile of the Project Area. These records were confirmed by the MDNR NHIS response.[282] There are no documented occurrences within the Project boundary, however it has been documented within one mile of the Project.[283] Construction and operation of the Project will not impact wild quinine.[284]

~~12.~~ In comments submitted by MDNR, reviewers note "that a strip of native prairie, with an associated state endangered plant species (*Parthenium integrifolium*, wild quinine),

[275] Ex. 101 at 68 (SP Application).
[276] Ex. 101 at 75 (SP Application).
[277] Ex. 201 at 66, 67 (EA).
[278] Ex. 101 at 75 (SP Application).
[279] Ex. 201 at 66 (EA).
[280] Ex. 201 at 67 (EA).
[281] Ex. 201 at 66, 67 (EA).
[282] Ex. 101 at 76 (SP Application).
[283] Ex. 201 at 66 (EA).
[284] Ex. 201 at 67 (EA).

exists along State Highway 56. None of the planned work is expected to occur in this strip, but the strip could be adversely affected if construction equipment, supplies, or personal vehicles are stored or move across this area, or if the collection line proposes to cut across the area."[285] In response, Louise Solar will "mark the area during construction."[286] Permit Condition 5.3 addresses this concern.

III. SITE PERMIT CONDITIONS

~~13.~~279. The~~ Draft Site Permit ~~Sample Site Permit ~~includes a number of proposed permit conditions, many of which have been discussed above. The conditions apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

280. Many of the conditions contained in the ~~Sample Site Permit~~Draft Site Permit were established as part of the site permit proceedings of other solar projects permitted by the Commission. Comments received by the Commission have been considered in development of the ~~Sample Site Permit~~Draft Site Permit for this Project.~~ No special conditions have been identified in this record~~.

~~14.~~281. The record indicates special permit conditions are warranted for this project. Section 5 of the Draft Site Permit addresses special permit conditions. Permit condition 5.1 addresses Unanticipated Discoveries; permit condition 5.2 addresses Waterbody and Wetland Buffers; permit condition 5.3 addresses Endangered Species Habitat; permit condition 5.4 addresses Wildlife Friendly Erosion Control; permit condition 5.5 addresses Security Fencing; permit condition 5.6 addresses MnDOT concerns (5.6.1 Access Roads and 5.6.2 Stormwater Run-Off); permit condition 5.7 addresses the Shooting Star Trail; and permit condition 5.8 addresses the need for an Independent Monitor.

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

CONCLUSIONS OF LAW

1. Any of the forgoing Findings of Fact more properly designated as Conclusions of Law are hereby adopted as such.

2. The Commission and the Administrative Law Judge have jurisdiction over the Certificate of Need and ~~Site Permit~~Draft Site Permit applied for by Louise Solar for the up to 50 MW AC proposed Project pursuant to Minn. Stat. §§ 216B.243, 216E.02, and 216E.03.

[285] MDNR Comments (October 27, 2021) (eDocket No. 202110-179230-01).

[286] See Reply Comments (Applicant), November 2, 2021, eDockets No. 202111-179444-01

3. The Commission accepted the Certificate of Need and ~~Site Permit~~Draft Site Permit Applications as substantially complete on May 7, 2021.[287]

4. Louise Solar, EERA, and the Commission provided all notices required under Minnesota Statutes and Rules for a Certificate of Need and ~~Site Permit~~Draft Site Permit proceedings.

5. EERA has conducted an appropriate environmental analysis of the Project for purposes of the Certificate of Need and ~~Site Permit~~Draft Site Permit proceedings pursuant to Minn. R. 7849.1200 and 7850.3700.

6. Public hearings were held on October 12, 2021 (in person) and October 13, 2021 (remote access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.

7. Louise Solar and the Commission have substantially complied with the procedural requirements of Minn. Stat. Ch. 216B, Minn. Stat. Ch. 216E, and Minn. R. Ch. 7829, 7849, and 7850.

8. No party or person has demonstrated by a preponderance of the evidence that there is a more reasonable and prudent alternative to address those needs met by the Project.

9. No conditions on the Certificate of Need are necessary.

10. The Commission has the authority under Minn. Stat. § 216E.03 to place conditions in a LEPGP ~~site permit~~Draft Site Permit.

11. The ~~sample site permit~~Draft Site Permit contains a number of important mitigation measures and other reasonable conditions.

12. The ~~sample site permit~~Draft Site Permit includes a number of sample special conditions. No special conditions have been identified as necessary in this record.

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

14. The record in this proceeding demonstrates that Louise Solar has satisfied the criteria for a Certificate of Need set forth in Minn. Stat. § 216B.243 and Minn. R. 7849.0120 and all other applicable legal requirements.

15. The record in this proceeding demonstrates that Louise Solar has satisfied the criteria for a ~~Site Permit~~Draft Site Permit as set forth in Minn. Stat. § 216E.03 and Minn. R. Ch. 7850 and all other applicable legal requirements.

---

[287] Ex. 301 (Order Accepting Applications as Complete, Authorizing Joint Review, and Taking Other Actions).

16. The Project with the general permit conditions contained in the ~~sample site permit~~Draft Site Permit, satisfies the ~~site permit~~Draft Site Permit criteria for an LEPGP in Minn. Stat. § 216E.03 and meets all other applicable legal requirements.

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

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

RECOMMENDATIONS

Based upon these Conclusions, the ALJ recommends that the Commission issue a Certificate of Need and ~~Site Permit~~Draft Site Permit to Louise Solar Project, LLC, to construct and operate the up to 50 MW Louise Solar Project in Mower County, and that the permit include the general permit conditions contained in the ~~sample site permit~~Draft Site Permit.