OAH 28-2500-40383
MPUC IP-7135/ESS-24-238;
IP-7135/GS-22-57

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Joint Application of Northern Crescent Solar LLC for a Site Permit for the 50 MW and a Site Permit for the 150 MW Solar Generation Facility in Faribault County, Minnesota

TABLE OF CONTENTS

STATEMENT OF THE ISSUES **2**
SUMMARY OF RECOMMENDATION **2**
FINDINGS OF FACT **2**
I. The Applicant 2
II. Procedural History 2
III. Description of the Project 6
IV. Site Location and Characteristics 10
V. Summary of Public Comments 11
a. Agency Comments 11
b. Public Comments 13
c. Applicant Responses to Comments 14
VI. Site Permit Criteria 16
VII. Application of the Statutory Siting Criteria to the Proposed Project 19
a. Human Settlement 19
1. Displacement 19
2. Noise 19
3. Aesthetic Impacts 21
4. Public Service and Infrastructure 22
5. Recreational Resources 23
6. Zoning and Land Use 24
7. Property Values 25

b. Public Health and Safety 25
c. Land-Based Economies 27
1. Agriculture and Prime Farmland 27
2. Tourism and Recreation 28
3. Local Economy 28
d. Archaeological and Historic Resources 29
e. Natural Environment 30
1. Wildlife 30
2. Vegetation 31
3. Soils, Geologic, and Groundwater Resources 32
4. Surface Water and Wetlands 33
5. Air Emissions 33
6. Solid and Hazardous Waste 34
f. Rare and Unique Resources 34
g. Energy Efficiency 36
h. Use or Paralleling of Existing ROW, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries 36
i. Use of Existing Large Electric Power Generating Plant Sites 36
j. Public Service and Infrastructure 37
k. Electrical System Reliability 37
l. Costs of Constructing, Operating, and Maintaining the Facility 38
m. Adverse Human and Natural Environmental Effects Which Cannot be Avoided 38
n. Irreversible and Irretrievable Commitments of Resources 39
VIII. Site Permit Conditions 40
IX. Notice 41
X. Completeness of EA 41
CONCLUSIONS OF LAW 42
RECOMMENDATION 43
NOTICE 43

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In the Matter of the Joint Application of Northern Crescent Solar LLC for a Site Permit for the 50 MW and a Site Permit for the 150 MW Solar Generation Facility in Faribault County, Minnesota	**SUMMARY OF PUBLIC TESTIMONY, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION**

This matter was assigned to Administrative Law Judge Joseph C. Meyer to conduct joint public hearings on the Site Permit Applications (Joint Application) of Northern Crescent Solar LLC (Applicant or Northern Crescent Solar) for the up to 150 megawatt (MW) Northern Crescent Solar Project (Solar Facility)[1] and for the associated 50 MW alternating current (MWac) battery energy storage system (BESS)[2] located in Faribault County, Minnesota.[3] The Public Utilities Commission (Commission) also requested that the Administrative Law Judge prepare a full report, with recommendations, for the Project.

A public hearing on the Application was held on March 4, 2025, in Winnebago, Minnesota. A virtual public hearing was held on March 5, 2025. The factual record closed on April 14, 2025, with the filing of EERA's reply comments.

Jeremy P. Duehr and Shatal M. Pai, Fredrickson & Byron, P.A.; and Evan Hughard and Helen Roach, Primergy Solar Acquisitions, LLC (Primergy), appeared on behalf of the Applicant.

Logan Hicks, Department of Commerce, Energy Environmental Review and Analysis, appeared on behalf of Department of Commerce Energy Review and Analysis (EERA).

Sam Lobby appeared on behalf of Commission staff.

[1] MPUC Docket No. IP-7135/GS-22-57.
[2] MPUC Docket No. IP-7135/ESS-24-238.
[3] This Report will refer to the Solar Facility and BESS collectively as the "Project."

STATEMENT OF THE ISSUES

1. Has the Applicant satisfied the criteria established in Minn. Stat. § 216E.03, subd. 7 (2022)[4] and Minn. R. 7850.4100 (2023) for a site permit for the Solar Facility?

2. Has the Applicant satisfied the criteria established in Minn. Stat. § 216E.03, subd. 7 (2022) and Minn. R. 7850.4000 for a site permit for the BESS?

SUMMARY OF RECOMMENDATION

The Applicant has satisfied the applicable legal requirements and, accordingly, the Commission should **GRANT** a site permit for the Solar Facility and the BESS, subject to the conditions discussed below.

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

FINDINGS OF FACT

I. The Applicant

1. Northern Crescent Solar is a wholly owned indirect subsidiary of Primergy. The Applicant was formerly known as Winnebago Solar and Storage LLC. On July 24, 2024, the Applicant notified the Commission of a name change from Winnebago Solar and Storage LLC to Northern Crescent Solar LLC.[5]

2. Primergy is a specialist infrastructure investment company, focused on the development, construction, and long-term management of utility-scale solar and battery storage projects.[6]

II. Procedural History

3. On January 28, 2022, the Applicant filed a Notice of Intent to Submit Site Permit Application Under the Alternative Permitting Process for the Solar Facility.[7]

4. On July 3, 2024, the Applicant filed a Notice Intent to Submit an Application for a Site Permit under the Alternative Permitting Process for the BESS.[8]

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[4] Minn. Stat. §§ 216B.001 - .08 were repealed with an effective date of July 1, 2025. 2024 Minn. Laws ch. 127, art. 43, §§ 15-16. All citations in this report are to the 2022 version of those statutory provisions, which were in effect at all times relevant to this proceeding.

[5] Exhibit (Ex.) NCS-3 Notice of Name Change Letter) (Jul. 24, 2024); NCS-4 at § 1.2.2 (Application) (Aug. 14, 2024).

[6] Ex. NCS-4 at § 1.2.2.

[7] Ex. NCS-1 (Notice of Intent to Submit a Site Permit Application under the Alternative Permitting Process) (Jan. 28, 2022). The Applicant made this filing under the name Winnebago Solar and Storage LLC.

[8] Ex. NCS-2 (Notice of Intent to Submit an application under the Alternative Permitting Process) (Jul. 3, 2024).

5. On August 14, 2024, Northern Crescent Solar filed the Joint Application with the Commission.[9]

6. On August 16, 2024, the Commission issued a Notice of Comment Period on Application Completeness, requesting initial comments by August 30, 2024, reply comments by September 6, 2024, and supplemental comments by September 11, 2024. The notice requested comments on whether the Application contained the information required by Minn. R. 7850.3100; whether there were contested issues of fact with respect to the representations made in the Application; whether the Commission should appoint an advisory task force; whether there were any additional procedural requirements that should be considered; and whether the Commission should direct the Executive Secretary to issue an authorization to initiate consultation with the State Historic Preservation Office (SHPO).[10]

7. On August 30, 2024, EERA filed its Completeness Comments and Recommendations. EERA recommended that the Commission accept the Joint Application as substantially complete, take no action on an advisory task force, and request a full administrative law judge report with recommendations for the Project.[11]

8. Also on August 30, 2024, the International Union of Operating Engineers Local 49 (Local 49) submitted comments stating that it believed that the Joint Application met the criteria of Minn. R. 7850-3100 and that there were no contested issues of fact.[12]

9. September 6, 2024, the Applicant submitted Reply Comments concerning the Joint Application's completeness, requesting that the Commission accept the Joint Application as substantially complete, authorize review of the Application under the alternative permitting process under Minn. Stat. § 216E.04 and Minn. R. 7850.2800-.3900, find that an advisory task force is not warranted, and refer the matter for public hearing and an administrative law judge report with recommendations.[13]

10. On September 11, 2024, LIUNA Minnesota and North Dakota (LIUNA) submitted comments stating that the Applicant had provided enough information for the Commission to move forward with consideration of the Project.[14]

11. On September 17, 2024, the Commission issued an order accepting the Joint Application as substantially complete and requesting a full administrative law judge report with recommendations following the public hearings.[15]

12. On September 29, 2024, the Commission issued a Notice of Public Information and Environmental Assessment (EA) Scoping Meetings scheduling meetings for October 9, 2024 (in-person in Blue Earth, Minnesota) and October 9, 2024

[9] Ex. NCS-4.
[10] Ex. PUC-1 (Notice of Comment Period on Application Completeness) (Aug. 16, 2024).
[11] Ex. EERA-1 at 7 (Completeness Comments and Recommendations) (Aug. 30, 2024).
[12] Local 49 Comments (Aug. 30, 2024) (eDocket No. 20248-209897-01).
[13] Ex. NCS-10 at 2 (Completeness Reply Comments) (Sep. 6, 2024).
[14] LIUNA Comments (Sep. 11, 2024) (eDocket No. 20249-210145-02).
[15] Ex. PUC-2 (Order) (Sep. 17, 2024).

(remote-access via the WebEx platform); opening a public comment period until October 25, 2024; and requesting responses to three questions regarding the Project:

(1) What potential human and environmental impacts of the proposed project should be considered in the EA?

(2) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed project that should be considered in the EA?

(3) Are there any unique characteristics of the proposed project that should be considered in the EA?[16]

13. On October 8 and 9, 2024, the Commission and EERA conducted Public Information and Scoping meetings.[17] On November 6, 2024, EERA filed transcripts from the October 8 and 9, 2024 scoping meetings.[18] One member of the International Union of Operating Engineers Local 49 (Local 49) spoke at the meeting to note the importance of constructions jobs from solar projects to Local 49's members.[19]

14. On October 24, 2024, the Minnesota Department of Transportation (MnDOT) submitted comments on the Project.[20]

15. On October 25, 2024, the Minnesota Department of Natural Resources (DNR) submitted comments for the Project.[21]

16. On November 13, 2024, EERA issued a scoping decision for the EA (Scoping Decision).[22]

17. On November 14, 2024, the Administrative Law Judge issued an Order for Prehearing Conference giving notice of a prehearing conference to be held on November 18, 2024.[23]

18. On November 21, 2024, the Administrative Law Judge issued the First Prehearing Order establishing a schedule for this proceeding.[24]

[16] Ex. EERA-2 (Notice of Public Information and Environmental Assessment Scoping Meetings) (Sep. 20, 2024).
[17] Ex. PUC-3 (Meeting Presentation (info/scoping)) (Oct. 10, 2024).
[18] Ex. EERA-3 (Oral Public Comments on Scope of EA) (Nov. 6, 2024).
[19] Ex. EERA-4 (Oral Public Comments on Scope of Environmental Assessment) (Jun. 26, 2024).
[20] MnDOT Comments (Oct. 24, 2024) (eDocket No. 202410-211284-01). The substance of these comments is summarized in section V of this Report.
[21] DNR Comments (Oct. 25, 2024) (eDocket No. 202410-211343-01). The substance of these comments is summarized in section V of this Report.
[22] Ex. EERA-5 (Scoping Decision) (Nov. 13, 2024).
[23] Order for Prehearing Conference (Nov. 14, 2024).
[24] First Prehearing Order (Nov. 21, 2024).

19. On February 11, 2025, the Commission issued a Notice of Public Hearings and Availability of Environmental Assessment.[25]

20. On February 12, 2025, EERA filed the EA for the Project.[26] Also on February 12, 2025, EERA notified state agencies and the Tribal Historic Preservation Officers of the availability of the EA.[27]

21. On February 19, 2025, the Administrative Law Judge issued the Second Prehearing Order, providing notice of a prehearing conference to be held on February 26, 2025, to discuss logistics and preparation for the public hearings.[28]

22. On February 20, 2025, EERA filed a copy of the February 18, 2025 *EQB Monitor* which provided notice of public hearings, comment period, and the EA's availability.[29]

23. Also on February 20, 2025, EERA mailed a copy of the EA to the Muir Public Library in Winnebago, Minnesota, and asked the Muir Public Library to make the EA available for patrons of the library.[30]

24. On February 26, 2024, Northern Crescent Solar filed the direct testimony of Helen Roach.[31]

25. On March 4, 2025, a public hearing was held in Winnebago, Minnesota. Five members of the public offered comments at this hearing.[32]

26. On March 5, 2025, a remote public hearing was held via the Webex platform. One public comment was offered at that hearing.[33]

27. On March 5, 2025, the Minnesota Pollution Control Agency (MPCA) submitted comments indicating that its staff had reviewed the EA and had no comments at that time.[34]

28. On March 18, 2025, EERA filed Draft Site Permits for the Solar Facility and BESS.[35]

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[25] Ex. EERA-6 (Notice of Public Hearing and Availability of EA) (Feb. 11, 2025).
[26] Ex. EERA-7 (Environmental Assessment) (Feb. 12, 2025).
[27] Notification of EA to State Agencies and Tribal Historic Preservation Officers (Feb. 12, 2025) (eDocket No. 20252-215310-01).
[28] Second Prehearing Order (Feb. 19, 2025).
[29] Ex. EERA-9 (Notice of Public Hearings and EA Availability on EQB Monitor) (Feb. 20, 2025).
[30] Notification of EA Mailed to Public Library (Feb. 20, 2025) (eDocket No. 20252-215587-02).
[31] Ex. NCS-12 (Roach Direct) (eDocket No. 20252-215783-02).
[32] Winnebago 6:00 p.m. Public Hearing Transcript (Tr.) at 24-61 (Mar. 4, 2025).
[33] WebEx 6:00 p.m. Public Hearing Tr. at 23-24 (Mar. 5, 2025).
[34] MPCA Comments (Mar. 4, 2025) (eDocket No. 20253-216065-01). The MPCA Comments were dated March 4, 2025, but filed into eDockets on March 5, 2025.
[35] Ex. EERA-7 at Appendix C and D.

29. On March 21, 2025, LIUNA submitted comments on the Project.[36]

30. Also on March 21, 2025, DNR submitted comments on the Project.[37]

31. Also on March 21, 2025, EERA submitted comments recommending modification to the draft decommissioning plan, recommending modifications to the draft Vegetation Management Plan (VMP), summarizing changes between the draft site permit filed by the Commission and the Draft Site Permits included in the EA, and responding to direct testimony.[38]

32. On April 4, 2025, the Applicant submitted Proposed Findings of Fact, Conclusions of Law, and Recommendation,[39] as well as a response to public comments.[40]

33. On April 14, 2026, EERA submitted reply comments to the Applicant's Proposed Findings of Fact, Conclusions of Law, and Recommendation.[41]

III. Description of the Project

34. The Applicant proposes to construct and operate an up to 150 MW alternating current solar energy generating system, an associated 50 MWac BESS, and other associated facilities, including access roads, fencing, a substation, an operations and Maintenance (O&M) facility, and other facilities and equipment in Verona and Prescott Townships, Minnesota.[42] The Solar Facility and the BESS are expected to operate in tandem, which will reduce the variability of solar energy generation.[43]

35. Primergy is the owner of Northern Crescent Solar. Northern Crescent Solar will construct, own, and operate the Project with technical and administrative support from Primergy.[44]

36. The expected service life of the Project is 30 years. At the end of 30 years, Northern Crescent Solar reserves the right to extend operations of the Project.[45]

37. The Applicant plans to use solar modules with a total equivalent generating capacity of 167.7 MWac (which accounts for an approximate 2 percent energy loss). This design will allow for a maximum of 150 MWac of solar energy generation and transmission onto the grid. The output of the Solar Facility will be capped at 150 MWac as part of the

[36] LIUNA Comments (Mar. 21, 2025) (eDocket No. 20253-216694-01). The substance of these comments is summarized in section V of this Report.
[37] DNR Comments (Mar. 21, 2025) (eDocket No. 20253-216679-01).
[38] EERA Comments (Mar. 21, 2025) (eDocket No. 202412-213122-02).
[39] Applicant Proposed Findings of Fact, Conclusions of Law, and Recommendations (Apr. 4, 2025) (eDocket No. 20254-217279-01).
[40] Applicant Response to Public Comments (Apr. 4, 2025) (eDocket No. 20254-217277-01).
[41] EERA Reply Comments (Apr. 14, 2025) (eDocket No. 20254-217570-01).
[42] Ex. NCS-4 at §§ 2.1, 2.3.1.
[43] Ex. NCS-4 at § 1.1.
[44] Ex. NCS-12 at 1:27-30.
[45] Ex. NCS-4 at § 4.3.6

interconnection request and Generator Independent Agreement that Northern Crescent Solar will sign prior to Project construction.[46]

38. The Solar Facility components will include solar modules mounted on a linear axis tracking system, centralized inverters, alternating current (AC) electrical collection cables, a Project Substation, a gen-tie line, an O&M facility, fencing, and access roads.[47] The modules will be affixed to tracking mechanisms that will allow the modules to track the sun to maximize electricity production. A specific solar module has not yet been selected for the Solar Facility. The Solar Facility will also include up to four weather stations that will be up to ten feet tall.[48]

39. The Project Substation will occupy approximately 1.3 acres in the western part of the Project Area,[49] and will include the substation and transformer, and a parking area. The substation facility will be surrounded by a six-foot-tall chain link fence topped with barbed wire. The substation will include high voltage electrical structures, breakers, a 34.5/161 kilovolt (kV) step-up transformer, metering, and related equipment. Underground 34.5 kV collector lines from the solar and BESS inverters will deliver energy to the substation. Energy will then be transmitted to a new, adjacent Xcel Switchyard[50] via an overhead gen-tie line.[51]

40. The electric collection system will include electrical cables and accessories, a conduit, inverter pads, switchgears, step up transformers, a Supervisory Control and Data Acquisition (SCADA) system, and metering equipment. Based on the preliminary design, the inverters will convert approximately 1,500 volts of direct current (DC) power from the solar modules to between 3,900 to 4,200 kV-amps of AC power. Step-up transformers will convert the AC voltage to an intermediate voltage of 34.5 kV. Collection cables carry the converted voltage to the substation. The DC electrical collection cables will be installed either underground (at a depth of two to five feet), under the solar modules and racking, or suspended above ground via the CAB solar management system. The CAB system is a cable management system designed to deliver a safe, strong, and durable support for utility-scale wiring for ground-mount solar power generation facilities. CAB systems are designed to be quick and easy to install and provide potential labor and material cost benefits on solar projects.[52]

41. Inverter skids will be installed at locations throughout the Preliminary Development Area. Each skid includes a DC to AC inverter and a step-up transformer to which the inverters will feed electricity. The Project's preliminary design proposes 43 inverters, but this may change depending on inverter size and availability, as well as

[46] Ex. NCS-4 at § 2.4.
[47] Ex. NCS-4 at § 4.1
[48] Ex. NCS-4 at § 4.1.1.
[49] The Project Area is a 1,179-acre area of privately owned, predominantly agricultural land. Ex. NCS-4 at § 2.1.
[50] The Xcel Switchyard is further described in Ex. NCS-4 at § 4.1.3.
[51] Ex. NCS-4 at § 4.1.2.
[52] Ex. NCS-4 at § 4.1.4.

panel availability. Skids are placed on concrete slab or pier foundations typically measuring 10 by 25 feet. Each skid is approximately 8 to 12 feet above grade.[53]

42. Northern Crescent Solar intends to use lithium iron phosphonate (LFP) barriers, which is a type of lithium-ion battery. The BESS could dispatch up to an additional 50 MWac of power to utilize the full Project capacity allowed under the GIA. This will reduce the variability of the energy supplied by the Solar Facility. It will be able to shift the output of the Solar Facility from a peak of midday to early evening. It may also be able to serve as an electrical "suspension" to smooth the output of the Solar Facility on partly cloudy days.[54]

43. The BESS is planned to be located on 3.2 acres in the western portion of the Project Area and adjacent to the Project Substation and Xcel Switchyard. The storage cells (batteries) will be arranged in modules and housed in racks within shipping containers or similar structures.[55] This ensures that all BESS components are accessible from the outside so that a person cannot become trapped inside a building in the event of a fire.[56]

44. The BESS will also include a complex monitoring system to monitor many different aspects within the system. Each battery is equipped with cell level, module level, rack level, and system level monitoring points that produce real-time data, which feeds into automatic control logic housed in the battery management system (BMS) and site controller. These systems ensure the BESS facility is operating within the original equipment manufacturer's operating parameters. If any operating limit is exceeded or an alarm is triggered, either a fault signal is sent to the whole battery string to disconnect from the inverter, or the rack contacts will open to disconnect individual racks.[57]

45. The Applicant will select equipment suppliers that manufacture to its quality standards, and equipment must be tested and certified by third party professionals. Standards, certifications, and code requirements from multiple nationally-recognized organizations will be required for the engineering, design, manufacture, and testing of the enclosures and equipment included in the BESS. The BESS equipment will be tested to safety standards, including International Electrotechnical Commission (IEC) 62619, IEC 6244-1, Underwriters Laboratories (UL) 1973, and UL 9540A. BESS design shall comply with International Fire Code (IFC) 2018, National Fire Protection Association 855 (NFPA 855), and National Electric Code (NFPA 70).[58]

46. Automatic fire suppression systems will be installed on the BESS containers, which include both inverters and storage batteries. These systems use Environmental Protection Agency (EPA)-approved suppression agents tested for BESS systems and meet all relevant codes and regulations. Northern Crescent Solar anticipates

[53] Ex. NCS-4 at § 4.1.4
[54] Ex. NCS-4 at §§ 1.1, 4.1.5.
[55] Ex. NCS-4 at § 4.1.5 and Appendix C.
[56] Ex. NCS-4 at § 4.1.5.3.
[57] Ex. NCS-4 at § 4.1.5.3.
[58] Ex. NCS-4 at § 4.1.5.2.

using a non-water-based fire suppression system, which can effectively suppress fires but will not cause electrical shorts if deployed. The automatic fire suppression system will be activated by smoke and/or heat detectors throughout the enclosure.[59]

47. The BESS will include inverters and medium voltage transformers. Low voltage cables will connect from the containers to pad-mounted switchgear, step-up transformers, and a power distribution system. The BESS will also include access roads and fencing, as well as monitoring and hazard mitigation systems.[60]

48. Northern Crescent Solar has incorporated reasonable safety precautions into the design of the BESS. The lithium-ion batteries will be stored in weather-proof enclosures, similar in size to shipping containers. Each enclosure includes a fully integrated system of HVAC for temperature control, sensors, and controls for remote monitoring, and built-in fire detection and suppression. No off-gassing or air emissions are produced in day-to-day operations.[61]

49. The O&M facility will include a building with a domestic water well and septic system, gravel parking area, and perimeter security fence. It will be located on 0.4 acres in the western portion of the Project Area, off of U.S. Highway 169, near the substation and Xcel Switchyard. The building will be used for storage of parts, equipment, and other O&M supplies, and be used to conduct maintenance and report on Project equipment and components. The O&M building will also house the SCADA system used to remotely monitor Project facilities.[62]

50. The Xcel Switchyard and line tap will be permitted, constructed, owned, and operated by Xcel Energy. The Xcel Switchyard is not part of the Project but is proposed to occupy approximately 1.3 acres adjacent to the proposed substation. Structures in the Xcel Switchyard will likely be up to 75 feet tall.[63]

51. The Project will contribute to the goals set forth in Minnesota's Clean Energy Law. In particular, the Project will contribute to meeting the carbon-free energy standards, as well the renewable energy standard requiring that 55 percent of energy sold to Minnesota customers comes from renewable sources by 2035.[64]

52. The Applicant anticipates procuring equipment starting in late 2024 and throughout 2025. Final contractor selections will be made contingent on Commission approval of the Application and issuance of the Site Permits.[65]

53. Northern Crescent Solar plans to construct the Project between the second quarter of 2025 and the end of 2026. Testing and commissioning will occur at the end of

[59] Ex. NCS-4 at § 4.1.5.3.
[60] Ex. NCS-4 at §§ 4.1.5, 4.1.5.1
[61] Ex. NCS-4 at § 4.1.5.1.
[62] Ex. NCS-4 at § 4.1.6 and Appendix C.
[63] Ex. NCS-4 at § 4.1.3.
[64] Ex. NCS-4 at § 1.1.
[65] Ex. NCS-4 at §1.3

construction and prior to the Commercial Operations Date (COD). The COD is anticipated to occur by the end of 2026.[66]

IV. Site Location and Characteristics

54. The Project Area encompasses approximately 1,179 acres of privately owned, relatively level land. The region in which the Project is located is sparsely populated and predominantly agricultural. Northern Crescent Solar has secured site control for the entire Project Area via lease or purchase option agreements. The Preliminary Development Area is expected to occupy approximately 929 acres. The excess acreage between the Preliminary Development Area and Project Area allows for planned buffers and flexibility in final Project design.[67]

55. The Project Area is located in Verona and Prescott Townships, approximately one mile southeast of the City of Winnebago in Faribault County, Minnesota. The Project Area is bordered by 380th Avenue on the east and 180th Street on the north. It is intersected by 170th Street that runs through the middle of the Project going from east to west.[68]

56. The landscape in which the Project Area is located ranges in elevation from 300 to 400 meters. Most of the historic wetlands in the landscape have been drained via tiles or ditches. Agricultural uses are primarily row crops, such as corn and soybeans, and cattle and hog operations.[69]

57. Northern Crescent Solar selected the Project Area because development of the land will result in minimal environmental impacts, the area is proximate to the electrical grid, existing transmission infrastructure, and available capacity, and existing landowners voluntarily granted leases and easements to the Applicant.[70]

58. According to data compiled by the Minnesota Solar Suitability Analysis Program (MSSA), southern Minnesota has some of the best locations for exposure to solar radiation and, thus, highest net capacity factors in the state. In Minnesota, there is a strong correlation between high solar resource and prime farmland. Areas without prime farmland generally have a lower solar resource.[71]

59. Pursuant to Minn. R. 7850.3100, the Applicant was not required to analyze alternative sites. The Applicant did consider another site located west of the Chisago County Substation (Herbst Site). The Herbst Site would impact more woodlands, wetlands, lakes, and rural residential developments. Further, the Herbst Site would have

[66] Ex. NCS-4 at § 1.3
[67] Ex. NCS-4 at §§ 2.1, 2.2, 5.1. The Preliminary Development Area is described in more detail in Ex. NCS-4 at § 4.2.2.
[68] Ex. NCS-4 at §§ 5.1, 5.2.5.
[69] Ex. NCS-4 at §§ 5.1, 5.2.1, 5.4.2.
[70] Ex. NCS-4 at § 1.0.
[71] Ex. NCS-4 at Appendix D § 4.2.

required at least 455 more continuous acres than the Project. Based on its analysis, the Applicant concluded that the Herbst Site was not a feasible or prudent alternative.[72]

V. Summary of Public Comments

a. Agency Comments

60. MnDOT submitted comments on October 24, 2024. MnDOT noted that, at the time of its letter, it had not received a Utility Early Notification Memo (ENM) from Northern Crescent Solar regarding the Project and therefore could not provide additional information around actual or perceived impacts. Pending receipt of the ENM, MnDOT recommended minimizing parking, staging, and operating equipment in a known protected vegetation area within the trunk highway right-of-way (ROW). MnDOT also noted that disturbances of vegetation within the ROW would require re-establishment with MnDOT Seed Mix: Patch Mix at a rate of 30 pounds per acre. MnDOT further recommended consultation with the U.S. Fish and Wildlife Service (USFWS) and DNR with respect to listed protected species that may exist in the Project Area. MnDOT further indicated that the Applicant should utilize access points from local roads due to the direct connection between crash rates and access density on state trunk highways. MnDOT also stated that the Applicant should ensure that the location of the water basin near US 169 ROW not negatively impact existing land and infrastructure surrounding the Project Area.[73]

61. DNR submitted comments on October 25, 2024. DNR recommended that: (1) travel corridors for small and large wildlife be included in project design; (2) Northern Crescent Solar not use chloride products for dust suppression; (3) the Applicant select plighting products that emit the lowest levels of blue hue possible and use luminaries with the lowest levels of backlight and glare possible; and (4) the Applicant use biodegradable erosion control materials that are flexible and rectangular.[74]

62. DNR submitted additional comments on March 21, 2025. In those comments, DNR: (1) expressed support for section 4.3.31 of the Draft Site Permit, which requires the Applicant to coordinate final fencing design with DNR and the Department of Commerce; (2) recommended a special permit condition requiring use of motion activated, down-it, and shielded lighting that minimizes blue hue and downward facing lighting to be clearly visible on the site plan submitted for the Project; (3) recommended a special permit condition requiring use of erosion control materials that do not contain plastic or synthetic fibers or malachite green dye; (4) recommended a special permit condition requiring non-chloride products for onsite dust control during construction; (5) supported section 4.3.17 of the Draft Site Permit requiring the Applicant to develop a VMP in coordination with the VMP Working Group (VMPWG); and (6) supported

[72] Ex. NCS-4 at Appendix D §§ 5.2. Pursuant to Minn R 7850.3100, the Applicant was not required to analyze alternative sites but, upon having rejected an alternative site, Northern Crescent Solar was required to identify the rejected site and explain the reasons for rejecting it. The Applicant's explanation is reasonable and satisfies the requirement of Minn. R. 7850.3100.
[73] MnDOT Comments (Oct. 24, 2024) (eDocket No. 202410-211284-01).
[74] DNR Comments (Oct. 25, 2024) (eDocket No. 202410-211343-01).

section 4.3.16 of the sample site permit encouraging the Applicant to meet the standards of the Minnesota Habitat Friendly Solar Program by submitting the necessary documentation with the Board of Water and Soil Resources.[75]

63. EERA submitted comments on March 21, 2025. EERA's comments recommended that the draft decommissioning plan be modified to: (1) refer to the docket numbers for both the Solar Facility and the ESS on the cover; (2) omit discussion of the feasibility and prudence of the project location; (3) replace "contractors" with "Northern Crescent Solar" in the introduction to make clear that the Applicant has the ultimate responsibility for permit compliance, even when using contractors; (4) clarify the definition of "project owner;" and (5) use "site" rather than "project area" to refer to the area for which the Applicant has a land interest.[76]

64. EERA's comments also recommended seven changes to the VMP:

- Change section 3.3 to provide for a seed mix with more forbs (instead of grass-only) to reduce fire risk, reduce maintenance time, and meet the standards of the Minnesota Habitat Friendly Solar Program.

- Clarify which "lists" are referred to in Section 4.8.

- Clarify the seed mixes that Section 4.8.1 indicates were developed in consultation with the Board of Water and Soil Resources because the Board of Water and Soil Resources was not familiar with those mixes.

- Verify the 60-degree Fahrenheit starting temperature for seeding in Section 4.8 as EERA believed that temperature seemed high.

- Update Section 4.7 to refer to 2022 *BWSR Native Vegetation Establishment and Enhancement Guidelines* instead of the 2019 version.

- Verify whether there are any noxious weeds listed from Faribault County that need to be mitigated and controlled in addition to the Minnesota Department of Agriculture's list of noxious weeds.

- Add information about adjuvants and/or surfactants to Section 4.10.2.[77]

65. EERA further recommended four special permit conditions: (1) requiring a noise study of surrounding residential processes and submission of those findings to the Commission; (2) requiring an Unanticipated Discoveries Plan outlining steps to be taken if previously unrecorded cultural resources or human remains are encountered during construction; (3) requiring compliance with USFWS guidance to minimize impacts to the northern long-eared bat and the tricolored bat; and (4) requiring that, if in consultation with the USFWS, a bald eagle's nest must be removed for construction, the Applicant will

[75] DNR Comments (Mar. 21, 2025) (eDocket No. 20253-216-689-01).
[76] EERA Comments (Mar. 21, 2025) (eDocket No. 20253-216679-01).
[77] EERA Comments (Mar. 21, 2025) (eDocket No. 20253-216679-01).

file documentation authorizing nest removal at least 14 days prior to a preconstruction meeting.[78]

66. EERA submitted additional reply comments on April 14, 2025. In these comments, EERA recommended an additional permit condition requiring the Applicant to develop and file a visual screening plan for the Project.[79]

b. Public Comments

67. Four people offered oral comments during the public hearing in Winnebago, Minnesota, on March 4, 2025.[80]

68. Marcus Raines, a business representative with the North Central States Regional Counsel of Carpenters expressed support for the socioeconomic benefits to local families and communities from construction jobs offered by the Project.[81]

69. Makayla Nepp, a local resident of Winnebago discussed the potential impact of the Project on local first responders, specifically raising concerns about whether the local government would need to purchase specialized equipment to be able to respond to any emergencies at the Project. This same resident also noted that the EA did not account for greenhouse gas emissions caused by production of component parts for the Project. The resident expressed concern about what would happen to the Project if ownership changed or Northern Crescent Solar went out of business, as well as concern about the impact on wildlife that fencing around the Project might pose. This resident also asked if there was reason to be concerned about brush fires causing solar panels to release toxins into the environment.[82]

70. Dennis Koziolek, a local resident who works with planning and zoning, asked about what would happen to the Project if it were damaged and expressed concerns about local governments incurring clean-up costs.[83]

71. Dillon Johanson, a local resident, expressed concern about the heat given off by the Project; whether it was fair to put a solar project in Winnebago when it will produce energy used elsewhere in the country; the hazardous materials used to construct solar equipment (including any impact they may have on children); and the aesthetic impact of the Project on the community and surrounding properties.[84]

72. John Schavey, a local resident, expressed concerns about the aesthetic impact of the Project on the rural landscape.[85]

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[78] EERA Comments (Mar. 21, 2025) (eDocket No. 20253-216679-01).
[79] EERA Reply Comments (Apr. 14, 2025) (eDocket No. 20254-217570-01).
[80] Winnebago 6:00 p.m. Public Hearing Tr. at 24-61 (Mar. 4, 2025).
[81] Winnebago 6:00 p.m. Public Hearing Tr. at 24-25 (Mar. 4, 2025).
[82] Winnebago 6:00 p.m. Public Hearing Tr. at 25-35. 41-49, 56-59 (Mar. 4, 2025).
[83] Winnebago 6:00 p.m. Public Hearing Tr. at 35-40 (Mar. 4, 2025).
[84] Winnebago 6:00 p.m. Public Hearing Tr. at 49-56 (Mar. 4, 2025).
[85] Winnebago 6:00 p.m. Public Hearing Tr. at 59-61 (Mar. 4, 2025).

73. One commenter offered oral comments during the virtual public hearing held via the WebEx platform on March 5, 2025. Kevin Pranis, a representative from LIUNA, spoke in favor of the Project, noting the Project's potential impact on meeting Minnesota's clean energy goals and the importance of construction jobs that may be created by the Project.[86]

74. LIUNA also supported the Project in written comments filed on March 21, 2025. In those comments, LIUNA again noted the potential benefits of the Project in reaching Minnesota's clean energy goals. LIUNA also expressed appreciation for Primergy's commitment to employing local union labor for construction of the Project.[87]

75. Makayla Nepp also filed written comments on March 5, 2025 and March 15, 2025. In her March 5, 2025 comments, this resident expressed concern about productive agricultural land being used for a solar facility and the aesthetic impacts of the Project on the landscape.[88] In her March 15, 2025 comments, this resident expressed concern about safety issues if there was a vehicle crash near high voltage lines. She noted concern that emergency response protocols would be finalized after a decision on the site permits and she believes these protocols should be addressed prior to a permit being issued.[89]

76. John Schavey filed written comments on March 6, 2025. This resident explained how he had always wanted to move to the country, that he loves the view from his property, and he does not want his views obstructed by what he characterized as an "organized junkyard." This resident also believes it is inequitable that local residents will be the ones who will have to see the Project, while the benefits of the Project flow to people who live far away from it.[90]

c. Applicant Responses to Comments

77. In direct testimony filed on February 26, 2025, Helen Roach, the Project Development Manager for the Project, explained that Primergy identified the Project location because the Project is close to existing transmission infrastructure. As a result, the length of the proposed Xcel Energy line tap connecting the Xcel Energy Switchyard to an existing transmission line will be less than 250 feet, all within the Project Area.[91]

78. In response to MnDOT's comments that MnDOT had not received a Utility ENM from the Applicant, Roach's testified that the Applicant provided MnDOT with an ENM on January 17, 2025, and that MnDOT confirmed receipt of the ENM.[92]

79. Roach provided a traffic study performed by a traffic engineer. The engineer completed a Trip Generation Analysis (TGA) to estimate vehicle trips per day and per hour. The TGA identified that current annual traffic along U.S. Highway 169 adjacent to

[86] WebEx 6:00 p.m. Public Hearing Tr.23-24 (Mar. 5, 2025).
[87] LIUNA Comments (Mar. 21, 2025) (eDocket No. 20253-216694-01).
[88] Makayla Nepp Comments (Mar. 5, 2025) (eDocket No. 20253-216129-01).
[89] Makayla Nepp Comments (Mar. 15, 2025) (eDocket No. 20253-216452-01).
[90] John Schavey Comments (Mar. 6, 2025) (eDocket No. 20253-216359-01).
[91] Ex. NCS-12 at 3:9-14.
[92] Ex. NCS-12 at 4:24-26.

the Project is 2,414 vehicles per day. During the 16- to 18-month long construction phase, the maximum peak hour traffic was estimated to be 11 vehicle trips per hour, for a total of 360 trips per day.[93] This is lower than the threshold for a Traffic Impact Study in the MnDOT Access Management Manual. Therefore, Roach opined that no further study or road adjustments are necessary to accommodate construction traffic for the Project.[94]

80. The Applicant filed its reply to the public comments on April 4, 2025. Northern Crescent Solar committed to develop specific visual screening determined in consultation with affected landowners or residents.[95]

81. The Applicant also described its Emergency Response Plan. The Applicant committed to providing system-specific training for local fire departments and emergency response teams. The Applicant will also work with local first responders to develop a site-specific Emergency Response Plan. In addition to training, the Project's Emergency Response Plan will require quarterly safety drills for the Project team and annual safety training with local first responders. The Emergency Response Plan for this Project will address a wide breadth of possible incidents at the site and will include emergency procedures to be followed in case of fire, medical emergencies, and other potential situations. The Applicant will initiate this process with a virtual meeting with local responders before the Project's construction begins.[96]

82. The Applicant did not object to EERA's proposed additional permit conditions.[97]

83. The Applicant asked for a modification to one of DNR's proposed conditions requiring use of "motion activated, down-lit, and shielded lighting that minimizes blue hue," The Applicant requested the addition of the language "Unless where compliance is required by code" to the proposed condition as follows:

> Unless where compliance is required by code, the permittee shall use motion activated, down-lit, and shielded lighting that minimizes blue hue. Downward facing lighting must be clearly visible on the site plan submitted for the project.[98]

84. The Applicant further noted that it did not object to DNR's proposed condition requiring the use of erosion control materials that do not contain plastic or

[93] There appears to be a mathematical inconsistency in the testimony. If maximum peak traffic is 11 vehicle trips per hour, there would be less than 360 trips per day even if the peak hourly traffic occurred in all 24 hours of the day. 24*11=264.
[94] Ex. NCS-12 at 4:30-5:27.
[95] Northern Crescent Solar Reply Comments (Applicant Reply Comments) at 1-2 (Apr. 4, 2025) (eDocket No. 20254-217277-01).
[96] Applicant Reply Comments at 2-3.
[97] Applicant Reply Comments at 3.
[98] Applicant Reply Comments at 4.

synthetic fibers or malachite green dye, or the condition restricting the use of non-chloride products for onsite dust control during construction.[99]

VI. Site Permit Criteria

85. Large electric power generating plants (LEPGP) are governed by Minn. Stat. §§ 216E.001 - .18 and Minn. R. 7850.1000 - .5600. 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."

86. The Project is subject to the Commission's siting authority under Minn. Stat. § 216E.02. Therefore, a site permit is required prior to construction of the Project.[100]

87. An LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04 (2022).[101] Norther Crescent Solar filed the Application under the process established by the Commission in Minn. R. 7850.2800 - .3900 (2023).[102]

88. For an LEPGP permitted under the alternative permitting process, the Department of Commerce is required to prepare an EA for the Commission containing information on the human and environmental impacts of the proposed project and addressing mitigating measures. The EA is the only state environmental review document required to be prepared on the Project.[103]

89. Minn. Stat. § 216E.03, subd. 7 requires that site permit determinations be "guided by the state's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure."

90. When making site permit determinations, the Commission must be guided by, but not limited to, the following considerations:

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

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[99] Applicant Reply Comments at 4.
[100] *See* Minn. Stat. § 216E.02, subd. 2.
[101] Minn. Stat. § 216E.04, subd. 2(8).
[102] Exs. NCS-1 and NCS-2.
[103] Minn. Stat. § 216E.04, subd. 5.

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

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

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

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

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

(7) evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;

(8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

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

(10) evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;

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

(12) when appropriate, consideration of problems raised by other state and federal agencies and local entities;

(13) evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;

(14) evaluation of the proposed facility's impact on socioeconomic factors; and

(15) evaluation of the proposed facility's employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility's local employment and economic impacts, and may reject or place conditions on a site or route permit based on the local employment and economic impacts.

91. When deciding whether to issue a site permit for an LEPGP, the Commission is required to consider the following:

A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;

B. effects on public health and safety;

C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;

D. effects on archaeological and historic resources;

E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;

F. effects on rare and unique natural resources;

G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;

H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;

I. use of existing large electric power generating plant sites;

J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;

K. electrical system reliability;

L. costs of constructing, operating, and maintain the facility which are dependent on design and route;

M. adverse human and natural environmental effects which cannot be avoided; and

N. irreversible and irretrievable commitments of resources[104].

92. The record contains sufficient information to permit an evaluation of the Project under the established criteria.

VII. Application of the Statutory Siting Criteria to the Proposed Project

a. Human Settlement

93. The Commission is required to consider the Project's effect on human settlement including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services.[105]

1. Displacement

94. There are no residences, businesses, or structures, such as barns or sheds, located withing the Preliminary Development Area, and none will be displaced by the Project. Thus, the Project will have no significant impact on displacement.[106]

2. Noise

95. Noise is defined as any undesired sound. It is measured in units of decibels on a logarithmic scale. The A-weighted scale (dBA) is used to duplicate the sensitivity of the human ear. A three dBA change in sound is barely detectable to average human hearing, whereas a five dBA change is clearly noticeable. A ten dBA change is perceived as a sound doubling in loudness.[107]

96. In Minnesota, noise standards are based on noise area classifications (NAC) corresponding to the location of the listener, referred to as a receptor. NACs are assigned to areas based on the type of land use activity occurring at that location.[108]

97. Noise standards are expressed as a range of permissible dBA over a one-hour period. L_{10} may be exceeded ten percent of the time, or six minutes per hour, while L_{50} may be exceeded 50 percent of the time, or 30 minutes per hour. Standards vary between daytime and nighttime hours.[109]

98. The Project is in a rural, agriculturally dominated area. The EA assumed ambient noise levels for rural residents of 45 dBA. The primary noise receptors within the vicinity of the site would be local residences. Noise receptors could also include individuals working outside in the vicinity of the Project.[110]

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[104] Minn. R. 7850.4100.
[105] Minn. R. 7850.4100(A).
[106] Ex. EERA-7 at § 4.10.1.
[107] Ex. EERA-7 at § 4.3.2.
[108] Ex. EERA-7 at § 4.3.2.
[109] Ex. EERA-7 at § 4.3.2 (internal citations omitted).
[110] Ex. EERA-7 at § 4.3.2.

99. Distinct noises are associated with the different phases of Project construction. The impact intensity level during construction will range from negligible to significant depending on the activity. Potential impacts are anticipated to be intermittent and short-term.[111]

100. Noise from construction will be temporary in duration, limited to daytime hours, and potentially moderate to significant depending on location. Sound levels from grading equipment are not dissimilar from the typical tractors and larger trucks used in agricultural communities during harvest. Pile driving of the rack supports will be the most significant source of construction noise. Construction noise would likely exceed state noise standards at select times and locations. Exceedances would be short-term and confined to daytime hours.[112]

101. Even without an exceedance, construction noise impacts will occur. For example, rhythmic pounding of foundation posts would be disruptive even if the noise associated with that activity is within state standards.[113]

102. Noise levels during operation of the Project have the potential to be moderate and long term. The primary source of noise from the Solar Facility will be from inverters and transformers, although some minor noise may be generated from the short transmission line. Noise levels are expected to be constant throughout the day and, although still constant, lower during non-daylight hours. For residential areas, there is an expected average level of 55.2 dBA during the day and 54.4 dBA at the nearest home to the BESS. As modeled in the Application, this is under the daytime L_{50} dBA noise standard of 60 dBA but exceeds the nighttime standard of 50 dBA. Noise from the electrical collection system is not expected to be perceptible.[114]

103. Northern Crescent Solar will implement, in its design of the Project, attenuation/silencer kits on each battery inverter and will construct a noise barrier wall at the south end of the BESS to help mitigate noise levels for the closest residence. Northern Crescent Solar will conduct modeling and a comprehensive noise study to ensure that operations of the BESS do not exceed noise standards once the design is completed.[115]

104. Proposed standard permit conditions 4.3.7 for the Solar Facility and the BESS will require Northern Crescent Solar to comply with Minnesota noise standards, as defined under Minn. R. 7030.0010 - .0080 (2023), and to limit construction and maintenance activities to daytime working hours to the extent practicable.[116]

105. Section 5.1 of the Draft Site Permits includes a special condition requiring Northern Crescent Solar to complete noise studies of the surrounding residential areas

[111] Ex. EERA-7 at § 4.3.2.
[112] Ex. EERA-7 at § 4.3.2.
[113] Ex. EERA-7 at § 4.3.2.
[114] Ex. EERA-7 at § 4.3.2.
[115] Ex. EERA-7 at § 4.3.2.
[116] Ex. EERA-7 at Appendix C-D, §§ 4.3.7.

to ensure noise levels are below state standards, and to file documentation of the noise studies with the Commission as a compliance obligation.[117]

3. Aesthetic Impacts

106. Aesthetics refers to the visual quality of an area as perceived by the viewer and forms the impression a viewer has of an area. Aesthetics are subjective, meaning their relative value depends upon the perception and philosophical or psychological responses unique to individuals. Impacts to aesthetics are equally subjective and depend upon the sensitivity and exposure of an individual. How an individual values aesthetics, as well as perceived impacts to a viewshed, can vary greatly.[118]

107. Multiple local residents expressed concern about the aesthetic impact of the Project, especially to the extent that it disrupts the rural character of the area.[119]

108. The existing landscape in the Project Area is rural and agricultural, consisting of generally flat terrain, dominated by agricultural fields of corn, soybeans, and vegetables, with the surrounding area also supporting a variety of woodlands, wetlands, and drainages.[120]

109. There are 23 residences and three conservation easements within one mile of the Project Area. Three of the residences are located within the Project Area along 170th Street and varying in distance from 47 to 409 feet from the nearest solar array.[121]

110. The Project will create a noticeable change in the landscape in the Project Area, converting approximately 1,137.6 acres of agricultural fields into solar production. Aesthetic impacts will vary. Aesthetic impacts are expected to be minimal for travelers along U.S. Highway 169 due to existing or Project-related visual screening. Travelers or residents along local roads, such as those along 170th Street, are expected to experience moderate to significant visual impacts.[122]

111. Solar panels will have a relatively low profile, with a maximum height of 15 feet off the ground at maximum tilt. Construction of the new 1.3-acre Project Substation, the 1.3-acre Xcel Switchyard, the associated transmission line, the 0.4-acre O&M facility, and the 3.2-acre BESS will also present new visual impacts. The collector pole and dead-end structure will support above-ground conductors within the substation and are expected to be approximately 70-75 feet tall, depending on final design. The Project's 161 kV transmission line will be a short line, less than 250 feet in length. The nearest residence is approximately 1,000 feet from the Project transmission line. In

[117] Ex. EERA-7 at Appendices C and D, §§ 5.1.
[118] Ex. EERA-7 at § 4.3.1.
[119] *Supra* Section V.b.
[120] Ex. EERA-7 at § 4.3.1.
[121] Ex. EERA-7 at § 4.3.2.
[122] Ex. EERA-7 at § 4.3.1.1.

addition, an existing 161 kV transmission line is presently located through and adjacent to the Project Area.[123]

112. While the change in landscape will be noticeable, there are other existing transmission lines already in the area. The Project will be immediately adjacent to an existing transmission line. How an individual viewer perceives the change from a field of corn to a field of solar panels depends, in part, on how a viewer perceives solar panels.[124]

113. Down-lit security lighting will be installed at the locked entrance to the Solar Facility, as well as outside the O&M facility and Project Substation. 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 Project location coupled with minimal required lighting for operations.[125]

114. Minimizing aesthetic impacts from solar generating facilities is primarily accomplished by locating the facilities so that they are not immediately adjacent to homes, ensuring that damage to natural landscapes during construction is minimized, and shielding the facilities from view by terrain or vegetation. Impacts from facility lighting can be minimized by using shielded and downward facing light fixtures and using lights that minimizes blue hue.[126]

115. Site-specific landscaping plans can minimize visual impacts to adjacent land uses and homes through vegetation screening, berms, or fencing.[127]

116. Aesthetic impacts can also be mitigated through individual agreements with neighboring landowners.[128] Northern Crescent Solar has committed to work with landowners that express concerns about visual impacts to develop a site-specific landscaping plan to minimize visual impacts to their residence.[129]

117. Draft Site Permit Section 4.3.8 (Aesthetics) requires the consideration of visual impacts from landowners and the local unit of government having zoning authority over the Project Area. Section 4.3.8 also requires the Applicant to use care to preserve the natural landscape, minimize tree removal, and prevent any unnecessary destruction of the natural surroundings in the vicinity of the Project during construction and operation.[130]

4. Public Service and Infrastructure

118. Impacts to public services and infrastructure in the Project Area are expected to be minimal. There is only one domestic well located within the Project Area,

[123] Ex. EERA-7 at § 4.3.1.1.
[124] Ex. EERA-7 at § 4.3.1.1.
[125] Ex. EERA-7 at § 4.3.1.1.
[126] Ex. EERA-7 at § 4.3.1.1.
[127] Ex. EERA-7 at § 4.3.1.1.
[128] Ex. EERA-7 at § 4.3.1.1
[129] Applicant Reply Comments at 1-2.
[130] Ex. EERA-7 at Appendices C and D, §§ 4.3.8.

and the Applicant does not anticipate impacts to water and wastewater. The O&M facility will require construction of a new well, which will require a permit from the Minnesota Department of Health.[131]

119. Traffic during construction is expected to be approximately 130–200 pickup trucks, cars, and other types of employee vehicles, and approximately 10–20 semi-trucks per day. The Applicant will obtain any necessary permits for overweight or oversized loads of vehicles using local roads. Slow-moving construction vehicles may cause delays on smaller roads, similar to the impact of farm equipment during planting or harvest season. Although the increase in vehicles during the construction period may be noticeable to local residents, delays are expected to be minimal and short-lived. No long-term impacts to roads are expected.[132]

120. The EA recommends several practices to mitigate potential impacts to roads. These include: (1) use of pilot vehicles to accompany heavy equipment; (2) timing deliveries to avoid traffic congestion or dangerous conditions; (3) use of traffic control barriers and warning devices as necessary; and (4) taking photographs prior to construction to document existing conditions and facilitate restoration after construction is completed.[133]

121. The Project will not have long-term impacts to local utilities. There may be limited impacts to electrical service during interconnection, but they are expected to be short-term. The Applicant will coordinate with Xcel Energy and any potentially impacted local utilities and residents prior to shutdowns. Section 4.3.5 of the Draft Site Permits includes a condition requiring the Applicant to minimize disruptions to public utilities.[134]

122. The Project will not impact railroads, pipelines or airports.[135]

5. Recreational Resources

123. There are no recreational resources located within the Project Area. The nearest waterfowl protection area is located 0.2 miles east of the Project Area and the nearest snowmobile track is located one mile east of the Project Area.[136]

124. There are potential indirect impacts to outdoor recreational activities due to noise and traffic associated with construction, but these impacts are expected to be limited and short-term. No significant long-term impacts to recreational activities are anticipated.[137]

125. The Applicant evaluated traffic impacts and determined that when the existing maximum peak traffic on U.S. Highway 169 near the Project Area was combined

[131] Ex. EERA-7 at § 4.3.7.
[132] Ex. EERA-7 at § 4.3.7.
[133] Ex. EERA-7 at § 4.3.7.
[134] Exs. EERA-7 at § 4.3.7, Appendices C-D, §§ 4.3.5; NCS-4 at § 5.2.8.1.
[135] Ex. EERA-7 at § 4.3.7.
[136] Ex. EERA-7 at § 4.3.6.
[137] Ex. EERA-7 at § 4.3.6.

with estimated additional traffic from Project construction activities, the amount of traffic remained below the required threshold for a Traffic Impact Study.[138]

126. The Applicant also completed an ENM, as recommended by MnDOT.[139]

127. Because the impacts to recreational activities are anticipated to be minimal and temporary, no additional mitigation measures were proposed in the EA.[140]

6. Zoning and Land Use

128. The Project Area is zoned as General Agricultural Zoning District (A-2) in Faribault County. The Project Area consists mainly of cultivated land. Large energy solar systems are conditionally permitted in Zone A-2 in Faribault County.[141]

129. The Project, as designed, currently meets or exceeds the setback requirements included in the Faribault County zoning ordinances. Additionally, the Project—including the BESS—is in compliance with the County's Renewable Energy Ordinance. The Project also meets all buffer requirements enforced by DNR under Minn. Stat. § 103F.48.[142]

130. The Project would convert approximately 1,138 acres of cultivated cropland to a solar energy facility. Development of the Project will have a minimal to moderate impact on the rural character of the surrounding area, and a minimal impact on the county character as a whole. The conversion to energy production is consistent with other infrastructure in the area, including existing transmission lines.[143]

131. There are three conservation easements in the Project Area. The Applicant plans to develop around these easements. Northern Crescent Solar also plans to follow best management practices (BMPs) to avoid and minimize indirect impacts.[144]

132. The Draft Site Permits includes several permit conditions to address preservation and restoration of agricultural land. These include: (1) the preparation of a VMP and vegetation management practices (Section 4.3.17-Solar Facility; Section 4.3.15-BESS); (2) preparation of an agricultural impact management plan (Section 4.3.18-Solar Facility); (3) preparation of a decommissioning plan (Section 9); and (4) removal of all Project-related infrastructure at the end of the Project's lifespan (Section 9.2).[145]

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[138] Ex. NCS-12 at 4-5.
[139] Ex. NCS-12 at 4.
[140] Ex. EERA-7 at § 4.3.6.
[141] Ex. NCS-4 at § 4.2.1,
[142] Ex. NCS-4 at § 4.2.1.
[143] Ex. EERA-7 at § 4.3.4.
[144] Ex. EERA-7 at § 4.3.4. *See also*, Ex. NCS-4 at Appendices C, D, G.
[145] Ex. EERA.7 at § 4.3.2, Appendices C, D.

7. Property Values

133. Because each landowner has a unique relationship and sense of value associated with their property, a landowner's assessment of potential impacts to their property's value is often a deeply personal comparison of the property "before" and "after" a proposed project is constructed. The landowner's judgments, however, do not necessarily influence the market value of a property.[146]

134. There is limited sales information related to properties near large solar facilities in Minnesota. A study conducted by the Lawrence Berkeley National Laboratory found that, in Minnesota, homes within one-half mile of large solar energy facilities had a four percent reduction in home sales prices compared to homes two to four miles from such a facility. This finding was considered statistically significant. The study only found such an effect for large solar facilities. The study did not consider site design, local landscape features or setbacks, or the broader economic impacts of solar facilities.[147]

135. Market studies involving smaller sample sizes, including one conducted by Chisago County Environmental Services and Zoning, did not find a consistent negative impact of solar facilities to nearby real estate values.[148]

136. Minimal to moderate property value impacts could occur, but significant negative impacts to property values are not anticipated.[149]

137. Impacts can be mitigated by reducing the aesthetic impacts of the Project, such as through vegetation screening agreements with individual landowners.[150]

138. Section 4.3.8 of the Draft Site Permits requires the consideration of input on visual impacts from landowners and local governments.[151] The Applicant will work with landowners that express concerns about visual impacts on their residences to develop a site-specific landscaping plan to minimize visual impacts to their residence.[152]

b. Public Health and Safety

139. The Commission is required to consider the Project's effect on public health and safety.[153]

[146] Ex. EERA-7 at § 4.3.5.
[147] Ex. EERA-7 at § 4.3.5 (internal citations omitted).
[148] Ex. EERA-7 at § 4.3.5 (internal citations omitted).
[149] Ex. EERA-7 at § 4.3.5.
[150] Ex. EERA-7 at § 4.3.5.
[151] Ex. EERA-7 at Appendices C and D, §§ 4.3.8.
[152] Applicant Reply Comments at 1-2.
[153] Minn. R. 7850.4100(B).

140. Construction and operation of the Solar Facility and BESS may impact human health or safety, but overall negative impacts on public health or safety are expected to be negligible or minimal.[154]

141. The Project is not expected to produce health impacts from electric and magnetic fields (EMF). The nearest solar array will be approximately 50 feet from the nearest residence, the nearest underground collection line will be approximately 300 feet from the nearest residence, and the nearest inverter will be located approximately 350 feet from the nearest residence. At these distances, any EMF fields produced by Project facilities will dissipate to background levels. Therefore, no mitigation is necessary.[155]

142. There are safety risks associated with any construction project, such as injuries from falls, equipment and vehicle use, and electrical accidents. Public safety concerns are most likely to be associated with unauthorized entry into the Project Area. To mitigate safety risks, electrical and construction work will follow established procedures and comply with local, state, and federal regulations.[156]

143. The Project will be fenced and locked to prevent unauthorized access during and after construction of the Project, and the Applicant will post signs to warn unauthorized persons not to enter the fenced area due to the presence of electrical equipment.[157]

144. The Draft Site Permits include several requirements to ensure adequate public safety protections, including requiring Northern Crescent Solar to: (1) provide landowner educational materials and appropriate signage (Section 4.3.30-Solar Facility; Section 4.3.27-BESS); (2) prepare an Emergency Response Plan in consultation with the emergency responders having jurisdiction over the Project, which will be filed with the Commission before construction (Section 8.12-Solar Facility; Section 8.11-BESS); (3) disclose any extraordinary events, such as fires, within 24 hours of discovery (Section 8.13-Solar Facility and Section 8.12-BESS); and (4) require a decommissioning plan to be updated every five years (Section 9.1).[158]

145. The BESS will incorporate a variety of safety features, including continuous monitoring, fire suppression technology, and exterior-only access to ensure that persons cannot be stuck inside a building in the event of a fire.[159]

146. Short-term increases in dust and noise associated with construction are expected to be comparable to levels produced by farming activity.[160] In the long-term, the

[154] Ex. EERA-7 at §§ 4.4.1 – 4.4.2.
[155] Ex. EERA-7 at §§ 4.4.1 and 5.2.6.
[156] Ex. EERA-7 at § 4.4.2.
[157] Ex. EERA-7 at § 4.4.2.
[158] Ex. EERA-7 at § 4.4.2, Appendices C and D.
[159] Ex. NCS-4 at §§ 4.1.5.2 and 4.1.5.3.
[160] Ex. NCS-4 at §§ 5.2.7 and 5.4.1.

Project will contribute to reductions in air pollutants due to displacement of energy produced through fossil fuel combustion.[161]

147. Short- and long-term impacts to public health are anticipated to be minimal.[162]

148. The Draft Site Permits contain conditions to address public health and safety. Section 4.3.30 of the Draft Site Permit for the Solar Facility, and Section 4.3.27 of the BESS Draft Site Permit, address public safety, including landowner educational materials, appropriate signs, fencing, and gates. Moreover, both Draft Site Permits require the Applicant to file an Emergency Response Plan with the Commission prior to operation (Section 8.12-Solar Facility; Section 8.11-BESS). Both Draft Site Permits also require disclosure of extraordinary events, such as fires (Section 8.13-Solar Facility; Section 8.12-BESS).[163]

c. Land-Based Economies

149. The Commission is required to consider the Project's effect on land-based economies, including agriculture, forestry, tourism, and mining.[164]

150. Forestry and mining do not occur in or around the Project Area and will not be impacted by the Project.[165]

1. Agriculture and Prime Farmland

151. The Project will remove approximately 1,138 acres of farmland from crop production, which will affect local agricultural-related businesses. This acreage constitutes approximately 0.3 percent of cropland in Faribault County. Lost farming revenue will be offset by lease or easement agreements. The Project is expected to have minimal to moderate impacts to agricultural producers. The impacts are localized and unavoidable but can be minimized.[166]

152. Nearly all of the Solar Facility is located on prime farmland or prime farmland if drained (925 acres), and all of the BESS acreage is located on prime farmland (3.2 acres). Approximately one acre of the Solar Facility would be located on farmland of statewide importance.[167] The Applicant conducted a prime farmland assessment to review the feasibility of the Project Area and alternative sites under Minn. R. 7850.4400, subp. 4. The assessment identified no other feasible or prudent sites for the Project.[168]

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[161] Ex. NCS-4 at § 5.4.1
[162] Ex. EERA-7 at §§ 4.4.1 and 4.4.2.
[163] Ex. EERA-7 at Appendices C-D.
[164] Minn. R. 7850.4100(C).
[165] Ex. EERA-7 at §§ 4.10.4 and 4.10.5.
[166] Ex. EERA-7 at § 4.5.1.
[167] Ex. NCS-4 at § 5.3.3.
[168] Ex. NCS-4 at Appendix D.

153. The Draft Site Permits include a number of measures to mitigate agricultural and soil impacts. These conditions include: the protection of topsoil (Section 4.3.9), minimization of soil compaction (Section 4.3.10); implementation of a VMP (Section 4.3.17-Solar Facility; Section 4.3.15-BESS); Agricultural Impact Mitigation Plan (AIMP) (Section 4.3.18-Solar Facility); development of an Invasive Species Management Plan (ISMP) (Section 4.3.20-Solar Facility; Section 4.3.17-BESS); and restoration or compensation for damages to crops and agricultural infrastructure (Section 4.3.29-Solar Facility; Section 4.3.26-BESS).[169]

2. Tourism and Recreation

154. In 2022, the leisure and hospitality industry in Faribault County accounted for about $12,233,614 in gross sales, and 297 private sector jobs. Tourism in the region is largely related to festivals, fairs, markets, celebrations, and outdoor recreational activities, including camping, fishing, bicycling, and hiking.[170]

155. There are no recreational resources located within the Project Area. The nearest waterfowl protection area is located 0.2 miles east of the Project Area and the nearest snowmobile trail is located one mile east of the Project Area.[171]

156. Impacts to tourism and recreation are anticipated to be minimal and temporary. Due to construction, there will be short-term increases in traffic and noise that could potentially impact recreational activities in close proximity to the Project Area, however, impacts will be temporary. No significant long-term impacts to recreational activities are anticipated.[172]

3. Local Economy

157. Faribault County is growing more slowly than the state as a whole, and decreased in population by 4.5 percent between 2010 and 2020. By comparison, the statewide population increased by 7.6 percent. The largest employment sectors in Faribault County in 2024 were educational services, healthcare, and social assistance (22.6 percent), followed by manufacturing (14.8 percent) and agriculture, natural resources, and mining (11.2 percent). In 2023, the county had a slightly higher unemployment rate (3.1 percent) than the statewide average (2.8 percent).[173]

158. The potential impact of the Project on the local economy is expected to be positive. Project construction is expected to produce minimal short-term positive impacts through construction-related jobs, and to increase local revenue for lodging, fuel, food, and other industries. Some individuals are likely to experience significant positive effects.

[169] Ex. EERA-7 at § 4.5.1, Appendices C and D.
[170] Ex. EERA-7 at § 4.3.6 (internal citations omitted).
[171] Ex. EERA-7 at § 4.3.6.
[172] Ex. EERA-7 at § 4.3.6.
[173] Ex. EERA-7 at § 4.3.8.

The Project is not expected to disrupt local communities or businesses and does not disproportionately impact low-income or minority populations.[174]

159. Impacts from operation of the Project will be long-term, positive, and moderate.[175]

160. The Applicant has committed to give preference to local, union construction craft employees during construction, and anticipates supporting 130 union temporary construction and installation jobs for the Project.[176]

161. Northern Crescent Solar anticipates that, in total, the Project will require an estimated 200 jobs during the construction and installation phases, and up to three long-term personnel during the operations phase.[177]

162. The Applicant estimates a local annual tax benefit from the Project of approximately $420,000 to Faribault County, $49,000 for Prescott Township, and $46,000 for Verona Township. During operations, the Applicant expects the Project to annually generate approximately $2.5 million in economic output by distributing nearly $1.5 million in direct earnings.[178]

163. Members and representatives from trade unions spoke in favor of the Project's potential impact on the local economy.[179]

d. Archaeological and Historic Resources

164. The Commission is required to consider the Project's effect on archaeological and historic resources.[180]

165. Archeological resources are locations where objects or other evidence of archaeological interest exist, and can include aboriginal mounds and earthworks, ancient burial grounds, prehistoric ruins, or historical remains. Historic resources are sites, buildings, structures, or other antiquities of state or national significance.[181]

166. Northern Crescent Solar conducted a desktop review and field surveys of the Project Area for archaeological and historic resources and engaged in consultation with agencies and stakeholders.[182]

167. Northern Crescent Solar also contacted 11 federally recognized Tribal Nations in Minnesota and the Minnesota Indian Affairs Council regarding the Project.

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[174] Ex. EERA-7 at § 4.3.8.
[175] Ex. EERA-7 at § 4.3.8.
[176] Ex. EERA-7 at § 4.3.8.
[177] Ex. EERA-7 at § 4.3.8.
[178] Ex. EERA-7 at § 4.3.8.
[179] *Supra* V.b.
[180] Minn. R. 7850.4100(D).
[181] Ex. EERA-7 at § 4.6 (internal citations omitted).
[182] Ex. NCS-4 at § 5.3.7 and Appendices B, I.

Three tribes— the Shakopee Mdewakanton Sioux Community, White Earth Nation, and Mille Lacs Band of Ojibwe—have requested ongoing Project updates. The White Earth Nation provided feedback and concerns regarding wild rice watersheds and cultural artifacts.[183]

168. Prudent siting to avoid archaeological and historic resources is the preferred mitigation.[184]

169. Northern Crescent Solar's reviews found no previously recorded archaeological sites or historic resources in the Project Area. 13 archaeological sites and four architectural resources were recorded within one mile of the Project Area.[185]

170. The Draft Site Permits (Section 4.3.23-Solar Facility; Section 4.3.20-BESS) address archaeological resources and require the Applicant to avoid impacts to archaeological and historic resources when possible and to mitigate impacts when avoidance is not possible. If previously unidentified archaeological sites are found during construction, the permit requires the Applicant to stop construction and contact the SHPO to determine how best to proceed. Ground disturbing activity will stop, and local law enforcement will be notified should human remains be discovered.[186]

171. Consistent with Section 5.2 of the Draft Site Permits, the Applicant will develop an Unanticipated Discoveries Plan that will be followed in the event human remains or other historic or cultural artifacts are located during construction. In the event of a discovery, work will stop and the find will be examined by an archaeologist. The SHPO and State Archaeologist will be notified if necessary.[187]

172. Impacts to archaeological and historic resources are anticipated to be minimal, localized, and able to be mitigated. The relevant provisions in the Draft Site Permit will effectively mitigate potential impacts.

e. Natural Environment

173. The Commission is required to consider the Project's effect on natural environment, including effects on air and water quality resources and flora and fauna.[188]

1. Wildlife

174. The Project is expected to have minimal impacts to wildlife, with both positive and negative impacts, depending on the species, with significant negative impacts occurring to some individual animals during construction and operation of the Project. The Project Area is predominantly agricultural. Fencerows, woodlots, and small

[183] Ex. EERA-7 at § 4.6.
[184] Ex. EERA-7 at § 4.6
[185] Ex. NCS-4 at § 5.3.7
[186] Ex. EERA-7 at § 4.6 and Appendices C and D.
[187] Ex. EERA-7 at § 4.6 and Appendices C and D.
[188] Minn. R. 7850.4100(E).

areas of grassland and wetlands provide habitat for terrestrial and avian wildlife. Wildlife species occurring in the area are associated with disturbed habitats and are accustomed to human activities. These includes species such as raccoons, coyotes, red fox, white-tailed deer, common garter snake, striped skink, and the northern leopard frog. Avian species such as killdeer, red-winged blackbird, ring-necked pheasants, red-tailed hawk, and various small perching birds can also be found in the area.[189]

175. Non-avian species will be displaced and some may be killed during construction. Population-level impacts are not anticipated. The greatest impact to wildlife will be from the fencing, which can injure deer or trap prey species allowing them to be cornered by predators. Erosion control netting used during construction may lead to entanglement and death of wildlife.[190]

176. Birds may be injured or killed by colliding with fencing, wires, or other structures. Limited data indicate some waterbirds may attempt to land on solar panels, causing trauma and predation.[191]

177. Reduced pesticide use, as compared to agricultural production, has the potential to benefit insects, including pollinators, and smaller wildlife such as rodents, birds, insects, and reptiles.[192]

178. The Draft Site Permits include measures to minimize and mitigate impacts to wildlife, including: site restoration with native perennial vegetation (Section 4.3.16-Solar Facility); coordination with DNR to minimize impacts from fencing (Section 4.3.32-Solar Facility); and quarterly reporting of any wildlife injuries or fatalities (Section 8.14-Solar Facility; Section 8.13-BESS). Additional mitigation measures include siting facilities away from wildlife corridors, removing wildlife caught in open trenches before backfilling, restricting mowing of established vegetation to avoid impacts to ground-nesting birds, reducing glare on panels, and using biodegradable erosion control materials.[193]

179. The proposed mitigation and Draft Site Permit provisions will effectively mitigate impacts to wildlife.

2. Vegetation

180. Pre-settlement vegetation in the Project Area primarily consisted of tallgrass and wetland prairie, with floodplain forests of silver maple, elm, cottonwood, and willow along waterways. Agriculture has replaced the historic vegetation on the landscape.[194]

181. The Project will eliminate some vegetative cover and create impermeable surfaces at access roads and inverter skids. There is also the potential to spread invasive and noxious weeds. Most of the land in the Project Area will be converted to perennial,

[189] Ex. EERA-7 at § 4.7.7.
[190] Ex. EERA-7 at § 4.7.7 (internal citations omitted).
[191] Ex. EERA-7 at § 4.7.7 (internal citations omitted).
[192] Ex. EERA-7 at § 4.7.7.
[193] Ex. EERA-7 at § 4.7.7.1, Appendices C and D.
[194] Ex. EERA-7 at § 4.7.6.

low-growing native cover, resulting in a net increase in vegetative cover for the life of the Project. Once established, the vegetation will be maintained through periodic mowing and herbicide application.[195]

182. The Draft Site Permits (Section 4.3.17-Solar Facility; Section 4.3.15-BESS) require the Applicant to develop and file a VMP in coordination with the appropriate state agencies. The VMP will include descriptions of management objectives, as well as planned restoration, management, and monitoring activities, including timing, techniques, and frequency of management and maintenance.[196]

183. The proposed mitigation and Draft Site Permit provisions will effectively mitigate impacts to vegetation.

3. Soils, Geologic, and Groundwater Resources

184. The Project Area is located in a geologic region characterized by fine-grained glacial sediment and sedimentary bedrock aquifers. The near surface materials are considered low for pollution sensitivity.[197]

185. There is one documented well within the Project Area and 25 wells within one mile of the Project Area. The Project will install a well to supply water to the O&M building, which will require a permit from the Minnesota Department of Health. The Applicant will conduct geotechnical soil borings as engineering advances and will use that information to assess potential impacts to geologic resources. Because the Project will use limited water resources, impacts to groundwater resources are not anticipated.[198]

186. Construction of a solar project will create an increase in impervious and semi-impervious surfaces within the area of land control. This could lead to an increase of stormwater runoff and, in turn, reduce groundwater recharge.[199]

187. The Project is also not expected to use or store large quantities of hazardous materials. A Spill Prevention Control and Countermeasure Plan, compliant with U.S. EPA requirements, will be developed for the substation.[200]

188. The Project will require a construction stormwater permit and may also require a National Pollution Discharge Elimination System from the MPCA, which will include development of a stormwater pollution prevention plan (SWPPP). The SWPPP will include BMPs to limit erosion and sediment discharge during construction and describe permanent stormwater management controls during Project operation.[201]

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[195] Ex. EERA-7 at § 4.7.6.
[196] Exs. EERA-7 at § 4.7.6, Appendices C and D; NCS-4 at Appendix F.
[197] Ex. EERA-7 at § 4.7.2.
[198] Ex. EERA-7 at § 4.7.2.
[199] Ex. EERA-7 at § 4.7.2.
[200] Ex. EERA-7 at § 4.7.2.
[201] Exs. EERA-7 at § 4.7.2; NCS-4 at Appendices E and F.

189. The Project will impact soils by compaction during construction, soil profile mixing during grading and auguring, rutting from tire traffic, and soil erosion. The greatest impacts will likely be associated with installation of the below-ground electrical collection system. Removed topsoil will be stored and re-spread after decommissioning.[202]

190. The Project will replace cultivated cropland with perennial native groundcover planting and some semi-impervious surface area. Once established, areas planted with native vegetation might improve long-term soil health.[203]

191. To minimize and mitigate soil-related impacts, the Draft Site Permits will require protection and segregation of topsoil (Section 4.3.9); use of BMPs to prevent erosion and runoff (Section 4.3.11; Section 4.3.16-Solar Facility); development of a VMP (Section 4.3.17-Solar Facility; Section 4.3.15-BESS); and development of an AIMP (Section 4.3.18-Solar Facility).[204]

4. Surface Water and Wetlands

192. The Project Area is located in the Blue Earth River and Le Sueur River Watersheds. The Project is not located in a 100-year floodplain.[205]

193. The National Wetland Inventory mapping identified approximately 34.65 acres of freshwater emergent wetlands in or near the Project Area. The Applicant identified four delineated wetlands totaling 0.351 acre in the Project Area and 1.97 acres of wetland in the nearby area outside of the project.[206]

194. The Project site layout has been designed to avoid all delineated wetlands. There are potential indirect impacts to surface waters from sediment or fugitive dust created during excavation, grading, vegetation removal, and construction traffic. To minimize potential impacts to surface waters, the Applicant will follow BMPs included in the SWPP, including sediment control, revegetation plans, and management of exposed soils. If any wetland impacts are anticipated, the Applicant will coordinate with the appropriate state and federal agencies.[207]

195. In the Solar and BESS Draft Site Permits, permit condition 4.3.13 prohibits the Applicant from placing Project infrastructure in public waters and public waters wetlands.[208]

5. Air Emissions

196. The nearest air quality monitor to the Project Area is located in Rochester, Minnesota, approximately 139 miles northeast of the Project Area. Air quality in the area

[202] Ex. EERA-7 at § 4.7.3.
[203] Exs. EERA-7 at § 4.7.3; NCS-4 at Appendices D, E, F.
[204] Ex. EERA-7 at § 4.7.3 and Appendices C and D.
[205] Ex. EERA-7 at § 4.7.4.
[206] Ex. EERA-7 at § 4.7.5.
[207] Ex. EERA-7 at §§ 4.7.4 and 4.7.5.
[208] Ex. EERA-7 at Appendices C and D.

was classified as “good” between 190 and 292 days per year between 2017 and 2023. During the same period, the number of days classified as “moderate” varied between 73 and 160. Air quality was considered unhealthy for sensitive groups on one day in 2020 and 2022, two days in 2021, and 14 days in 2023. The large number of unhealthy days in 2023 was attributable to wildfire smoke.[209]

197. The Project is expected to have minimal intermittent air emissions during construction. Air emissions would likely include carbon dioxide, nitrogen oxides, and other particulate matter. Motorized equipment will emit exhaust. Exhaust emissions, primarily from diesel equipment, would vary according to the phase of construction. There will also be fugitive dust emissions from travel on unpaved roads, grading, and excavation. Dust emissions will be greater during dry periods and in areas where fine-textured soils are subject to surface activity. Once operational, the Project will not generate criteria pollutants or carbon dioxide.[210]

198. To minimize air emissions, the Applicant will follow BMPs, such as running vehicles and equipment only when necessary, watering exposed surfaces, and reducing on-site speed limits. The Applicant will also follow BMPs included in the SWPPP and AIMP to minimize fugitive dust emissions.[211]

6. Solid and Hazardous Waste

199. If certain metals are present in high enough quantities, solar module waste could be a hazardous waste under the Resource Conservation and Recovery Act. Manufacturers being considered by the Applicant must complete testing to confirm that no hazardous substances are leached from the tested products in leachate concentrations that exceed regulatory standards.[212]

200. If a module is broken at the Project, the broken pieces and the remainder of the module will be recycled or disposed of and replaced, reducing the risk that hazardous materials contained in modules will leach into the environment.[213]

201. The Applicant anticipates that, by the end of the useful life of the modules used for the Project, module recycling will be sufficiently established in Minnesota or surround states to recycle the solar modules and associated equipment for the Project.[214]

f. Rare and Unique Resources

202. The Commission is required to consider the Project’s effect on natural rare and unique natural resources.[215]

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[209] Ex. EERA-7 at § 4.7.1 (internal citations omitted).
[210] Ex. EERA-7 at § 4.7.1.
[211] Ex. EERA-7 at § 4.7.1.
[212] Ex. NCS-4 at § 4.5.1.
[213] Ex. NCS-4 at § 4.5.1.
[214] Ex. NCS-4 at § 4.5.1..
[215] Minn. R. 7850.4100(F).

203. The Minnesota Biological Survey, a branch of DNR, has not identified any areas of moderate, high, or outstanding biodiversity, or any native plant communities in the Project Area.[216] MnDOT commented that there was a protected vegetation community and wildlife area in the Project vicinity and along a MnDOT ROW.[217]

204. Several rare animal species may occur in the Project Area, including the Northern long-eared bat, tricolored bat, monarch butterfly, and bald eagle. The Northern long-eared bat is federally listed, and the tricolored bat is proposed for listing under the Endangered Species Act. Although there are no documented roosts or in the Project Area, they may occur in the Project Area in the future. Monarch butterflies are found in areas with native plants and milkweed. There is currently limited suitable habitat for the monarch in the Project Area. Bald eagles roost and nest in large trees near relatively large bodies of water, such as rivers and lakes. No suitable nesting habitat for bald eagles is present in the Project Area.[218]

205. Avoiding identified areas of species occurrence or preferred habitat is the preferred mitigation measure.[219] Depending on circumstances, the Project may require permits from one or more federal or state natural resource agencies.[220]

206. Section 5.3 of the Draft Site Permit would require Northern Crescent Solar to comply with U.S. Fish and Wildlife Service guidance and requirements with respect to the northern long-eared bat and the tricolored bat, including restrictions on tree clearing, if applicable.[221]

207. Section 5.4 of the Draft Site Permit would require Northern Crescent Solar to file documentation noting if any bald eagle nest removal has been authorized, as required by law, before removal.[222] Northern Crescent Solar does not oppose this permit condition, which will adequately protect this rare and unique species should it be found in the Project Area.[223]

208. The Draft Site Permit and Project development plans will effectively mitigate the effects of the Project on rare and unique natural resources.

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[216] Ex. EERA-7 at § 4.7.8.
[217] MnDOT Comments (Oct. 24, 2024) (eDocket No. 202410-211284-01).
[218] Ex. EERA-7 at § 4.7.8.
[219] Ex. EERA-7 at § 4.7.8.
[220] Ex. EERA-7 at § 3.4.1.
[221] Ex. EERA-7 at § 4.7.8, Appendices C and D.
[222] Ex. EERA-7 at § 4.7.8, Appendices C and D.
[223] Applicant Reply Comments at 3-4.

g. Energy Efficiency

209. The Commission is required to consider the application of design options that maximize energy efficiencies, mitigate adverse environmental effects,[224] and could accommodate expansion of transmission or generating capacity.[225]

210. Northern Crescent Solar maintains flexibility in the individual supplier and technology choices to ensure that it could potentially reduce the overall footprint of the Project.[226]

211. The Project's final layout is designed to optimize electrical generation, storage, and efficiency, while avoiding and minimizing impacts to human settlement, environmental and cultural resources, and infrastructure.[227]

212. Northern Crescent Solar acknowledged that some components may lose efficiency over the Project's life cycle. It will plan for and maintain the facility as needed to maintain efficient operations.[228]

213. The Applicant's selection of design options will maximize energy efficiency while mitigating adverse environmental effects.

h. Use or Paralleling of Existing ROW, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries

214. The Commission is required to consider use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.[229]

215. Landowners involved in the Project have voluntarily agreed to lease or sell their land to Northern Crescent Solar for the Project.[230]

216. The Project generally follows existing agricultural field boundaries and roadway boundaries.[231]

i. Use of Existing Large Electric Power Generating Plant Sites

217. The Commission is required to consider use of existing large electric power generating plant sites.[232]

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[224] The extent that the Project's design mitigates adverse environmental effects is discussed in section VIII.E of this report.
[225] Minn. R. 7850.4100(G).
[226] Ex. NCS-4 at § 4.1.1.
[227] Ex. NCS-4 at § 4.2.
[228] Ex. NCS-4 at § 4.3.6.
[229] Minn. R. 7850.4100(H).
[230] Ex. NCS-4 at § 5.2.13.4.
[231] Ex. NCS-4 at § 4.2, Figure 9.
[232] Minn. R. 7850.4100(I).

218. The Project is not being constructed at an existing LEPGP site.[233]

j. Public Service and Infrastructure

219. The Commission is required to consider use of existing transportation, pipeline, and electrical transmission systems or rights-of-way.[234]

220. The Project is immediately adjacent to U.S. Highway 169, which runs north-south to the west of the Project area and will use existing transportation infrastructure to transport Project materials.[235]

221. The Project location is close to existing transmission infrastructure, and an Xcel Switchyard will be constructed simultaneously with the Project. Because of the proximity to existing transmission infrastructure, the length of the proposed Xcel line tap connecting the Xcel Switchyard to the existing Huntley-Blue Earth 161 kV transmission line will be less than 250 feet, all within the Project Area. This will minimize impacts outside the Project Area.[236]

222. There are several existing transmission lines within the Project Area.[237]

223. The Project will make effective use of existing electrical transmission systems.

k. Electrical System Reliability

224. The Commission is required to consider electrical system reliability.[238]

225. Under Minnesota's Clean Energy Law, climate legislation establishes a carbon-free energy standard and a renewable energy standard. The carbon-free energy standard requires electrical utilities to achieve 80 percent carbon-free energy by 2030, 90 percent by 2035, and 100 percent by 2040.[239]

226. The Project will help meet Minnesota's 100 percent carbon-free energy standard by 2040 and will contribute to meeting the Minnesota Renewable Energy Objectives and other clean energy requirements in Minnesota, neighboring states, and the country at large.[240]

[233] Ex. EERA-7 at § 1.10.
[234] Minn. R. 7850.4100(J).
[235] Ex. EERA-7 at § 4.3.7.
[236] NCS-12 at 3.
[237] Ex. EERA-7 at § 4.2, Figure 9.
[238] Minn. R. 7850.4100(K).
[239] Minn. Stat. § 216B.1691, subd. 2g (2024).
[240] Ex. NCS-4 at § 1.1.

227. The Project will improve the reliability of the electrical system by providing additional cost-effective solar energy consistent with state energy goals.[241]

l. Costs of Constructing, Operating, and Maintaining the Facility

228. The Commission is required to consider costs of constructing, operating, and maintaining the facility which are dependent on design.[242]

229. The estimated cost to develop, design, construct, and connect the Solar Facility is $267,200,000.[243]

230. The estimated cost to develop, design, and construct the BESS is $70,000,000.[244]

231. The estimated total installed capital costs for the Project are $337,200,000.[245]

232. The estimated operating and maintenance costs for the Project are $4 million ($3 million for the Solar Facility and $1 million for the BESS).[246]

233. The estimated decommissioning costs for the Project are approximately $11 million.[247]

234. The Project design and construction decisions described in the record, including the site selection, result in costs that are reasonable for a Project of this scope and nature.

m. Adverse Human and Natural Environmental Effects Which Cannot be Avoided

235. The Commission is required to consider adverse human and natural environmental effects which cannot be avoided.[248]

236. Resource impacts are considered “unavoidable” when an impact cannot be avoided even with mitigation strategies.[249]

237. The primary unavoidable impacts that will last through construction but that will resolve after construction, include the following: fugitive dust from construction traffic; noise and visual disturbance to nearby residents and recreationalists; soil compaction

[241] Ex. NCS-4 at § 1.1.
[242] Minn. R. 7850.4100(L).
[243] Ex. NCS-4 at § 2.5, Table 3.
[244] Ex. NCS-4 at § 2.5, Table 3.
[245] Ex. NCS-4 at § 2.5, Table 3.
[246] Ex. NCS-4 at § 2.5.
[247] Ex. EERA-7 at § 2.2, Table 4.
[248] Minn. R. 7850.4100(M).
[249] Ex. EERA-7 at § 4.8.

and erosion from grading activities; vegetative clearing (loss of shelter belts); disturbance and temporary displacement of wildlife (as well as direct impacts to wildlife inadvertently struck or crushed); minor amounts of marginal habitat loss; possible traffic delays; and minor greenhouse gas emissions from construction equipment and workers commuting.[250]

238. Unavoidable adverse impacts associated with the operation would last as long as the life of the Project, and would include: visual impacts of the Project; cultural impacts due to a change in the sense of place for local residents; loss of land for agricultural purposes; injury or death of birds that collide with photovoltaic (PV) panels; and injury or death of birds and mammals from fencing.[251]

239. Avoidable impacts are reasonably mitigated through the recommended permit conditions and other mitigation measures. The remaining unavoidable impacts are reasonable in light of the nature, scope, and benefits of the Project.

n. Irreversible and Irretrievable Commitments of Resources

240. The Commission is required to consider irreversible and irretrievable commitments of resources.[252]

241. Resource commitments are "irreversible" when it is impossible or very difficult to redirect that resource to a different future use. An "irretrievable commitment of resources" means the resource is not recoverable for later use by future generations.[253]

242. Irreversible and irretrievable resource commitments are primarily related to Project construction, including the use of water, aggregate, hydrocarbons, steel, concrete, wood, and other consumable resources. Some, like fossil fuel use, are irretrievable. Others, like water use, are irreversible. Still others might be recyclable in part, such as the raw materials used to construct PV panels would be an irretrievable commitment of resources, excluding those materials that may be recycled at the end of the panels' useful life. The commitment of labor and fiscal resources to develop, construct, and operate the Project is considered irretrievable.[254]

243. The 929 acres of land within the Project development area will be developed for Project infrastructure. This land would be unavailable for other uses. However, after the Project reaches the end of its operational life and the decision is made to decommission it and restore the site, the land would again be available for other uses.[255]

[250] Exs. NCS-4 at § 5.7; EERA-7 at § 4.8.
[251] Exs. NCS-4 at § 5.7; EERA-7 at § 4.8.
[252] Minn. R. 7850.4100(N).
[253] Ex. EERA-7 at § 4.9.
[254] Ex. EERA-7 at § 4.9.
[255] Ex. NCS-4 at § 5.7

244. The record demonstrates that the Applicant will mitigate or bear the costs of irreversible or irretrievable commitments of resources. The irreversible or irretrievable commitment of resources is reasonable given the Project's nature and scope.

VIII. Site Permit Conditions

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

246. Many of the conditions contained in the 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 permit conditions for this Project.

247. EERA proposed five special conditions: (1) a condition requiring a noise study of surrounding residential processes, and submission of those findings to the Commission; (2) an Unanticipated Discoveries Plan outlining steps to be taken if previously unrecorded cultural resources or human remains are encountered during construction; (3) a condition requiring compliance with USFWS guidance to minimize impacts to the northern longeared bat, and the tricolored bat; (4) a special condition that, if a bald eagle nest is found and must be removed for construction, the Applicant must work in consultation with the USFWS and file documentation authorizing nest removal at least 14 days prior to a preconstruction meeting; and (5) a condition requiring the development and filing of a visual screening plan for the Project.[256] The Applicant did not oppose the first four conditions.[257]

248. EERA's five proposed special conditions are reasonable, and the record supports their inclusion in the Site Permits. Specifically, EERA's proposed condition requiring development and filing of a visual screening plan is reasonable because it provides a mechanism for the Commission to monitor whether the Applicant meets commitments it made in this proceeding regarding visual screening and aesthetic impacts, as these were the primary concerns raised by public commenters.

249. DNR proposed three additional permit conditions to protect wildlife: (1) requiring use of motion activated, down-it, and shielded lighting that minimizes blue hue and downward facing lighting to be clearly visible on the site plan submitted for the Project; (2) requiring use of erosion control materials that do not contain plastic or synthetic fibers or malachite green dye; and (3) requiring non-chloride products for onsite dust control during construction. [258]

[256] EERA Comments (Mar. 21, 2025) (eDocket No. 20253-216679-01); EERA Reply Comments (Apr. 14, 2025) (eDocket No. 20254-217570-01).
[257] Applicant Reply Comments at 3. The Applicant's last filing was made before the fifth condition was proposed, so the record does not contain a response to that condition by the Applicant.
[258] DNR Comments (Mar. 21, 2025) (eDocket No. 20253-216-689-01).

250. The Applicant requested a modification to one of the DNR's proposed conditions to ensure flexibility to comply with code requirements, as follows:

> Unless where compliance is required by code, the permittee shall use motion activated, down-lit, and shielded lighting that minimizes blue hue. Downward facing lighting must be clearly visible on the site plan submitted for the project.[259]

251. The Applicant's suggested edit to DNR's proposed special condition is reasonable in substance, but for clarity, the final permit condition should read as follows:

> Unless required to do otherwise by code, the permittee shall use motion activated, down-lit, and shielded lighting that minimizes blue hue. Downward facing lighting must be clearly visible on the site plan submitted for the project.

252. DNR's proposed site permit conditions, modified as recommended above, are reasonable and the record supports their inclusion in the Site Permits.

IX. Notice

253. The Applicant is required to provide certain notice to the public and local governments before and during an application for a site permit process.[260]

254. The Applicant provided the required notice to public and local governments in satisfaction of Minnesota statutory and rule requirements.[261]

255. EERA and the Commission provided required notices in satisfaction of Minnesota statutory and rule requirements.[262]

X. Completeness of EA

256. The EA process is the appropriate review process for LEPGPs. The Commission is required to determine the completeness of the EA. An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.[263]

257. The evidence in the record demonstrates that the EA is complete because the EA and the record created at the public hearing and during the subsequent comment period address the issues and alternatives raised in the Scoping Decision.[264]

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[259] Applicant Reply Comments at 4.
[260] Minn. Stat. § 216E.03, subd. 4; Minn. R. 7850.2100, subps. 2 and 4.
[261] Exs. NCS-1; NCS-2; and NCS-9.
[262] Exs. EERA-2; EERA-6; EERA-8; and EERA-9.
[263] Minn. R. 4410.4400, subp. 3; Minn. R. 7850.3900, subp. 2.
[264] Ex. EERA-5.

258. Any Conclusion of Law more properly considered to be a Finding of Fact is incorporated herein.

Based on these Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS OF LAW

1. The Commission and the Administrative Law Judge have jurisdiction over the application for a site permit for the up to 130 MW proposed Project pursuant to Minn. Stat. §§ 216B.243, 216E.02, and 216E.03.

2. The Applicant has substantially complied with the procedural requirements of Minn. Stat. §§ 216E.001 - .18 and Minn. R. 7850.1000 - .5600.

3. The Commission has substantially complied with all procedural requirements imposed by Minn. Stat. §§ 216E.001 - .18 and Minn. R. 7850.1000 - .5600.

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

5. Public hearings were conducted virtually and in a community near the Project. Proper notice of the public hearings was provided, and members of the public had the opportunity to speak at the hearing and to submit written comments.

6. The EA and the record created at the public hearings address the issues identified in the Scoping Decision.

7. The Commission has the authority under Minn. Stat. § 216E.03, subd. 10(a), to place conditions in a LEPGP site permit.

8. The Draft Site Permit contains important mitigation measures and other reasonable conditions.

9. It is reasonable to amend the Draft Site Permit as described in the Findings of Fact.

10. The Project, with the permit conditions revised as set forth above in Conclusion 10, satisfies the site permit criteria for an LEPGP stated in Minn. Stat. § 216E.03 and meets all other applicable legal requirements.

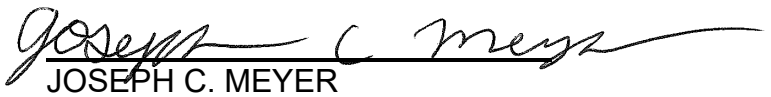
11. The Project, with the permit conditions discussed above, does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act and the Minnesota Environmental Policy Act.

12. Any Finding of Fact more properly considered to be a Conclusion of Law is incorporated herein.

RECOMMENDATION

Based upon these Conclusions, the Commission should issue Site Permits to Northern Crescent Solar to construct and operate the Solar Facility and the BESS in Faribault County, Minnesota, and the Site Permits should include the draft permit conditions as and set forth in the Findings of Fact and Conclusions of Law above.

Dated: May 6, 2025



JOSEPH C. MEYER
Administrative Law Judge

NOTICE

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

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

MINNESOTA
OFFICE OF
ADMINISTRATIVE
HEARINGS

PO Box 64620
Saint Paul, MN 55164-0620
mn.gov/oah

PH (651) 361-7900

May 6, 2025

See Attached Service List

Re: ***In the Matter of the Joint Application of Northern Crescent Solar LLC for a Site Permit for the 50 MW and a Site Permit for the 150 MW Solar Generation Facility in Faribault County, Minnesota***

OAH 28-2500-40383
MPUC IP-7135/ESS-24-238; IP-7135/GS-22-57

To All Persons on the Attached Service List:

Enclosed and served upon you is the Administrative Law Judge's **SUMMARY OF PUBLIC TESTIMONY, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION** in the above-entitled matter.

If you have any questions, please contact me at (651) 361-7845, samantha.cosgriff@state.mn.us, or via facsimile at (651) 539-0310.

Sincerely,

Samantha Cosgriff

SAMANTHA COSGRIFF
Legal Assistant

Enclosure
cc: Docket Coordinator

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
PO BOX 64620
600 NORTH ROBERT STREET
ST. PAUL, MINNESOTA 55164

CERTIFICATE OF SERVICE

In the Matter of the Joint Application of Northern Crescent Solar LLC for a Site Permit for the 50 MW and a Site Permit for the 150 MW Solar Generation Facility in Faribault County, Minnesota	OAH Docket No.: 28-2500-40383 MPUC IP-7135/ESS-24-238; IP-7135/GS-22-57

On May 6, 2025, a true and correct copy of the **SUMMARY OF PUBLIC TESTIMONY, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION** was served by eService, and United States mail, (in the manner indicated on the attached service list) to the following individuals:

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	22-57Official CC Service List
2	Martin	Donovan	martin.donovan@state.mn.us		Department of Natural Resources	500 Lafayette Road St Paul MN, 55155 United States	Electronic Service		No	22-57Official CC Service List
3	Jeremy	Duehr	jduehr@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	22-57Official CC Service List
4	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	22-57Official CC Service List
5	Shannon	Hansen	shannon.hansen@westwoodps.com	Westwood Professional Services		12701 Whitewater Dr Ste 300 Minnetonka MN, 55343 United States	Electronic Service		No	22-57Official CC Service List
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7	Evan	Hughard	ehughard@primergysolar.com	Northern Crescent Solar LLC			Electronic Service		No	22-57Official CC Service List
8	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		Yes	22-57Official CC Service List
9	Stacy	Kotch Egstad	stacy.kotch@state.mn.us		MINNESOTA DEPARTMENT OF TRANSPORTATION	395 John Ireland Blvd. St. Paul MN, 55155 United States	Electronic Service		No	22-57Official CC Service List
10	Joseph	Meyer	joseph.c.meyer@state.mn.us		Office of Administrative Hearings	PO Box 64620 St. Paul MN, 55164 United States	Electronic Service		Yes	22-57Official CC Service List
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#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
12	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	22-57Official CC Service List
13	Helen	Roach	hroach@primergysolar.com	Northern Crescent Solar LLC			Electronic Service		No	22-57Official CC Service List
14	Annabel	Sammons	annabel.sammons@westwoodps.com	Westwood		12701 Whitewater Dr Ste 300 Minnetonka MN, 55343 United States	Electronic Service		Yes	22-57Official CC Service List
15	Zachary	Schoenfeld	zschoenfeld@primergysolar.com	Primergy		1901 Harrison St., Suite 1600 Oakland CA, 94612 United States	Electronic Service		No	22-57Official CC Service List
16	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		Yes	22-57Official CC Service List
17	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		Yes	22-57Official CC Service List
18	David	Weetman	david.weetman@westwoodps.com	Westwood Professional Services		12701 Whitewater Dr Ste 300 Minnetonka MN, 55343 United States	Electronic Service		No	22-57Official CC Service List

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1	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	24-238Official CC Service List
2	Jeremy	Duehr	jduehr@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	24-238Official CC Service List
3	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	24-238Official CC Service List
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6	Evan	Hughard	ehughard@primergysolar.com	Northern Crescent Solar LLC			Electronic Service		No	24-238Official CC Service List
7	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		Yes	24-238Official CC Service List
8	Richard	Kolodziejski	rkolodziejski@ncsrcc.org	North Central States Regional Council of Carpenters		700 Olive St St. Paul MN, 55130 United States	Electronic Service		No	24-238Official CC Service List
9	Joseph	Meyer	joseph.c.meyer@state.mn.us		Office of Administrative Hearings	PO Box 64620 St. Paul MN, 55164 United States	Electronic Service		Yes	24-238Official CC Service List
10	Shantal	Pai	spai@fredlaw.com	Fredrikson and Byron, P.A.		60 South Sixth Street Suite 1500 Minneapolis MN, 55402 United States	Electronic Service		No	24-238Official CC Service List
11	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	24-238Official CC Service List
12	Helen	Roach	hroach@primergysolar.com	Northern Crescent Solar LLC			Electronic Service		No	24-238Official CC Service List
13	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	24-238Official CC Service List

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14	Annabel	Sammons	annabel.sammons@westwoodps.com	Westwood		12701 Whitewater Dr Ste 300 Minnetonka MN, 55343 United States	Electronic Service		Yes	24-238Official CC Service List
15	Zachary	Schoenfeld	zschoenfeld@primergysolar.com	Primergy		1901 Harrison St., Suite 1600 Oakland CA, 94612 United States	Electronic Service		No	24-238Official CC Service List
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18	David	Weetman	david.weetman@westwoodps.com	Westwood Professional Services		12701 Whitewater Dr Ste 300 Minnetonka MN, 55343 United States	Electronic Service		No	24-238Official CC Service List