OAH 71-2500-40396
MPUC IP-7132/GS-24-215

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Coneflower Energy, LLC for a Site Permit for the up to 235 MW Coneflower Solar Project in Lyon County, Minnesota

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FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION

This matter is pending before Administrative Law Judge Jessica A. Palmer-Denig in connection with a Site Permit Application (Application) of Coneflower Energy, LLC (Coneflower Solar or Applicant) to construct an up to 235 megawatt (MW) photovoltaic (PV) solar energy generating facility in Lyon County, Minnesota (Project). The Minnesota Public Utilities Commission (Commission) referred this matter to the Office of Administrative Hearings and requested that the Administrative Law Judge conduct public hearings and prepare findings of fact, conclusions of law, and a recommendation regarding conditions and provisions of the proposed site permit.

The Administrative Law Judge held public hearings on the Application on April 22, 2025 (in-person), and April 23, 2025 (remote-access). The record remained open for the receipt of public comments until May 5, 2025. Following final submissions from the parties, the record closed on May 27, 2025.

Christina K. Brusven and Ryan Cox, Fredrikson & Byron, P.A., and Garrick Valverde and Brie Anderson, Apex Clean Energy, appeared on behalf of Coneflower Solar.

Lauren Agnew, Environmental Review Manager, appeared on behalf of the Department of Commerce (DOC), Energy Environmental Review and Analysis (EERA) unit.

Scott Ek, Energy Facilities Planner, appeared on behalf of Commission Staff at the in-person and remote access hearings.

STATEMENT OF THE ISSUES

Has Coneflower Solar satisfied the criteria established in Minn. Stat. ch. 216E (2023)[1] and Minn. R. Ch. 7850 (2023) for issuance of a site permit for the Project? If so, what conditions should apply?

SUMMARY OF RECOMMENDATION

Coneflower Solar has satisfied the applicable legal requirements, and the Commission should **GRANT** a site permit for the Project, subject to the comments and recommendations discussed below.

Based on the entire record in this proceeding, the Administrative Law Judge makes the following:

FINDINGS OF FACT

I. THE APPLICANT

1. Coneflower Solar is an independent power producer (IPP) and an indirect wholly owned subsidiary of Apex Clean Energy Holdings, LLC (Apex).[2]

2. Coneflower Solar was founded in 2009 and is headquartered in Charlottesville, Virginia.[3]

3. Since its founding, Apex has commercialized more than 35 projects totaling over eight gigawatts (GW) of capacity and currently operates two GW of wind and solar assets.[4]

4. Coneflower Solar will construct, own, and operate the Project at issue in this matter.[5]

II. PROCEDURAL BACKGROUND

5. On June 6, 2024, Coneflower Solar filed a Notice of its Intent to Submit a Site Permit Application for the Project under the alternative permitting procedures of Minn. R. 7850.2800-.3900.[6]

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[1] In 2024, the legislature repealed and renumbered Minn. Stat. ch. 216E, and effective July 1, 2025, these matters will be governed by Minn. Stat. ch. 216I. *See* https://www.revisor.mn.gov/statutes/cite/216E (last visited June 16, 2025) (providing that the most recent published versions of the chapter are found in 2022 Minnesota Statutes and 2023 Minnesota Statutes Supplement, as applicable). As this recommendation is issued prior to that effective date, citations to Minn. Stat. ch. 216E throughout this Recommendation are to the last version of these statutes published prior to this change.

[2] Ex. CE-4 at 1 (Application). *See also* Coneflower Solar Exhibit List filed simultaneously herewith.

[3] *Id.* at 2.

[4] *Id.*

[5] *Id.* at 1.

[6] Ex. CE-1 (Notice of Intent to Submit a Site Permit Application Under Alternative Review).

6. On August 19, 2024, Coneflower Solar submitted the Application for the Project.[7] Applicant also submitted the Notice of Filing of Site Permit Application to persons interested in the Project, the Commission's Energy Facilities General List, local officials, tribes, and property owners consistent with Minn. R. 7850.2100.[8]

7. The Commission issued a Notice of Comment Period regarding the completeness of the Application on August 28, 2024. The Commission requested initial comments by September 11, 2024, reply comments by September 18, 2024, and supplemental comments by September 23, 2024. The notice requested comments on whether the Application was complete within the meaning of the Commission's rules; 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 the Commission should direct the Executive Secretary to issue an authorization to initiate a State Historic Preservation Office (SHPO) Consultation to the Applicant; and whether any other procedural requirements should be considered.[9]

8. On September 11, 2024, the Minnesota Department of Transportation (MnDOT) filed comments indicating that it had unsuccessfully attempted to engage Applicant in early coordination and project review. It noted that Applicant had responded to MnDOT's second attempt to initiate the process, and that it believed that Applicant's lack of response to its earlier efforts was an unintentional oversight. Nonetheless, MnDOT expressed concern that the Project has potential impacts on a large portion of US Highway (US HWY) 14, and that the lack of early communication could impact MnDOT's ability to properly review the proposal and provide timely scoping comments.[10]

9. On September 11, 2024, the International Union of Operating Engineers Local 49 (Local 49) and North Central States Regional Council of Carpenters (NCSRCC) filed comments on the completeness of the Application, indicating that they did not believe contested issues existed and that they appreciated Coneflower Solar's expression of a preference for using contractors that committed to using local, unionized workers to the greatest extent feasible.[11]

10. Also on September 11, 2024, EERA filed its comments regarding completeness and its recommendations. EERA recommended that the Commission: accept the Application as substantially complete; require Coneflower Solar to provide a Phase I Reconnaissance Survey for the Project; request that Coneflower Solar provide estimated project schedules for two contemplated scenarios for connecting the Project to transmission lines, the Midcontinent Independent System Operator (MISO) scenario and the Garvin Scenario, taking into account anticipated differences in these scenarios;

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[7] Ex. CE-4 (Application).
[8] Ex. CE-2 (Project Notice Under 7850.2100).
[9] Ex. PUC-1 (Notice of Comment Period on Application Completeness).
[10] MnDOT Comments (Sept. 11, 2024) (eDocket No. 20249-210149-01).
[11] Local 49 and NCSRCC Comments (Sept. 11, 2024) (eDocket No. 20249-210128-01).

not appoint an advisory task force at that time; and request a full report from an administrative law judge report with recommendations for the Project's public hearing.[12]

11. Coneflower Solar submitted the Confirmation of Notice Compliance Filing for the Application on September 16, 2024.[13]

12. On September 18, 2024, Coneflower Solar submitted reply comments concerning Application completeness along with attachments showing the: (1) nonpublic and public versions of the Phase I Reconnaissance Survey report and SHPO's concurrence letter; and (2) correspondence with MnDOT documenting Coneflower Solar's introductory call with the MnDOT and MnDOT's feedback on a number of topics including: the preliminary Project layout, access point verification, construction, permitting and engineering, and no net increase to MnDOT right-of-way (ROW) for water; and (3) Coneflower Solar's correspondence from the State Historic Preservation Office (SHPO) regarding archeological and architecture resources.[14]

13. On September 25, 2024, EERA filed supplemental comments concerning Application completeness, indicating that it found that Coneflower Solar's reply comments adequately addressed its request for the Phase I Reconnaissance Survey and estimated project schedules for individual scenarios, and recommending that the Commission find the Application to be complete.[15]

14. On October 15, 2024, the Commission issued an order finding the Application complete, declining to appoint an advisory task force, requesting that an administrative law judge prepare a full report with recommendations for the Project's public hearing, and delegating authority to the Executive Secretary to issue an authorization to the Applicant to initiate consultation with SHPO.[16] The Commission also issued minutes from its October 10, 2024 consent calendar subcommittee meeting.[17]

15. On October 24, 2024, the Commission filed a letter authorizing Coneflower Solar to initiate consultation with SHPO pursuant to Minn. Stat. § 138.665 (2024).[18] The Commission also issued a sample site permit.[19]

16. On October 29, 2024, the Commission published Notice of Public Information and Environmental Assessment (EA) Scoping Meetings scheduling meetings for November 12, 2024 (in-person) and November 13, 2024 (remote-access), opening a public comment period until December 4, 2024, and requesting responses to two questions regarding the Project: (1) What potential human and environmental

[12] Ex. EERA-1 (Comments and Recommendations Regarding Application Completeness).
[13] Ex. CE-6 (Confirmation of Notice).
[14] Exs. CE-7-CE-8 (Completeness Reply Comments and Attachments).
[15] Ex. EERA-2 (Supplemental Comments).
[16] Ex. PUC-2 (Completeness Order).
[17] Minutes –October 10, 2024 Consent (October 15, 2024) (eDocket No. 202410-2109562-01).
[18] SHPO Consultation (Oct. 24, 2024) (eDocket No. 202410-211305-01).
[19] Ex. PUC-3 (Sample Permit).

impacts or unique characteristics of the proposed project should be considered in the EA?; and (2) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA?[20]

17. The Commission filed an Affidavit of Publication of notice of the Public Information and Scoping meetings in the Marshall Independent newspaper on November 4, 2024.[21] The Commission also provided notice of the EA and upcoming public meetings via the Environmental Quality Board (EQB) Monitor.[22]

18. On November 8, 2024, the Bois Forte Band of Chippewa filed public comments for the Project.[23]

19. On November 12 and 13, 2024, the Commission and EERA conducted Public Information and Scoping meetings. Seven members of the public offered comments at the in-person meeting and one member of the public spoke at the virtual meeting. On December 16, 2024, EERA filed transcripts containing the public comments offered at the scoping meetings.[24]

20. On November 20, 2024, the Administrative Law Judge issued an order scheduling a prehearing conference for December 20, 2024.[25]

21. On December 4, 2024, the Minnesota Department of Natural Resources (DNR) filed scoping comments on the Project. The DNR recommended that the Project's fencing reach a minimum height of 10 feet, that the EA discuss appropriate setback requirements to protect wildlife and their travel corridors, that the Project use downward facing lighting that minimizes blue hue, that Applicant should not use chloride products to control dust, that biodegradable erosion control materials should be used, and that the Vegetation Management Plan (VMP) should continue to be refined.[26] On the same date, MnDOT also filed scoping comments on the Project. MnDOT provided comments noting its appreciation that Applicant agreed to combine or shift the access roads off US HWY 14, indicating that a MnDOT District Hydraulics Engineer might need to review the Project to determine if a drainage permit is needed to ensure any water basins do not change peak runoff rates to US HWY 14, and stating that Applicant must work with MnDOT to continue addressing concerns regarding blowing snow and associated hazards.[27]

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[20] Ex. PUC-5 (Notice of Public Information and EA Scoping Meetings).
[21] Ex. PUC-7 (Marshall Independent – Notice of Public Information and EA Scoping Meetings).
[22] PUC-6 (EQB Monitor – Notice of Public Information and EA Scoping Meetings).
[23] Ex. PUC-8 (Public Comment - Bois Forte Band of Chippewa).
[24] Ex. EERA-4 (Oral Comments on the Scope of EA).
[25] Order for Prehearing Conference (Nov. 20, 2024) (eDocket No. 202411-212216-01).
[26] DNR Scoping Comments (Dec. 4, 2024, 2024) (eDocket No. 202412-212709-01).
[27] MnDOT Scoping Comments (Dec. 4, 2024 (eDocket No. 202412-212709-01).

22. On December 5, 2024, Local 49 and NCSRCC filed scoping comments noting that they believed that the Project would create good paying jobs for local construction workers.[28]

23. On December 10, 2024, EERA filed written public comments it collected regarding the scope of the EA.[29]

24. The Administrative Law Judge held a prehearing conference on December 20, 2024.[30] On December 24, 2024, the Administrative Law Judge issued an order establishing the procedural schedule for this case.[31]

25. EERA filed the EA Scoping Decision for the Project on January 3, 2025.[32]

26. On March 26, 2025, EERA filed the EA for the Project.[33] On March 27, 2025, EERA filed its notification of the publication of the EA to the Tribal Historic Preservation Officers (THPOs) and Tribal Government Contacts.[34] EERA also filed the notification of the publication to the EA to state and federal agencies.[35] On March 28, 2025, EERA filed notice of the EA Scoping Decision in the EQB Monitor.[36] On April 1, 2025, EERA filed a notification that it mailed the EA to the Marshall-Lyon County Library.[37]

27. On April 8, 2025, the Commission issued its Notice of Public Hearings and Availability of EA. The Notice scheduled an in-person hearing on April 22, 2025, in Marshall, Minnesota and a remote hearing on April 23, 2025, via WebEx. The Commission indicated that written comments would be accepted through May 5, 2025, and it requested that comments from the public address: (1) whether the Commission should grant a site permit for the proposed solar generating system, and (2) if granted, what additional conditions or requirements should be included in the site permit.[38]

28. On April 11, 2025, Coneflower Solar filed Brie Anderson's written direct testimony including Schedules A–D.[39]

29. On April 15, 2025, EERA filed the Notice of Public Hearing and EA Availability in the EQB Monitor.[40] On the same date, the Commission also filed an

[28] Local 49 and NCSRC Scoping Comments (Dec. 5, 2024) (eDocket No. 202412-212729-01).
[29] Ex. EERA-3 (Written Comments on the Scope of EA).
[30] Coneflower Solar Prehearing Conference Transcript (May 19, 2025) (eDocket No. 20255-219047-01).
[31] Scheduling Order (Dec. 23, 2024) (eDocket No. 202412-213306-01).
[32] Ex. EERA-5 (EA Scoping Decision).
[33] Ex. EERA-6 (EA and Appendices A-F).
[34] Ex. EERA-8 (Notification of EA to THPOs and Tribal Government Contacts).
[35] Ex. EERA-7 (Notice of EA Mailed to Agencies).
[36] Ex. EERA-9 (Notice of EA Scoping Decision in EQB Monitor).
[37] Ex. EERA-10 (Notification of EA Mailed to Libraries).
[38] Ex. PUC-9 (Notice of Public Hearings and Availability of EA).
[39] Ex. CE-12 (Direct Testimony of Brie Anderson with Schedules A-D).
[40] Ex. EERA-11 (Notice of Public Hearing and EA Availability in EQB Monitor).

Affidavit of Publication of the notice of public hearings in the Marshall Independent newspaper.[41]

30. On April 16, 2025, the Minnesota Pollution Control Agency (MPCA) filed comments on the Project. MPCA's comments stated that a Clean Water Act (CWA) Section 404 permit may be necessary, and as such, it was necessary to obtain an MPCA Section 401 Water Quality Certification as part of the permitting process.[42] The MPCA also noted that surface water impacts could require mitigation.[43] The Commission also filed a copy of the MPCA comments.[44]

31. On May 2, 2025, the DNR filed comments on the EA for the Project and the Natural Heritage Review Letter for the Project. The DNR's comments addressed the presence of sites of biodiversity significance within the Project's area, areas of local conservation value, areas of plant diversity, and state listed species of special concern that have been documented within the Project's area.[45]

32. On May 5, 2025, EERA filed hearing comments containing its determinations and recommendations regarding Coneflower Solar's proposed decommissioning plan, responding to Brie Anderson's direct testimony, and indicating proposed changes to the draft site permit.[46] Local 49 and NCSRCC also filed hearing comments indicating that they support the Application.[47]

33. On May 6, 2024, Laborers' International Union of North America (LIUNA) filed public hearing comments regarding the Project along with an economic analysis prepared by Dr. Lucas Franco and a letter from the Mayor of the City of Cambridge, Massachusetts addressed to Mr. Ken Young, President and Chief Executive Officer (CEO) of Apex regarding the Bowman Wind project in North Dakota.[48] Shaddix and Associates – Stenographic Court Reporters (Court Reporter) filed the transcripts from the in-person public hearing[49] and the virtual public hearings.[50] The Court Reporter also filed the sign-in sheets for the in-person public hearing[51] and public hearing Exhibits A-D.[52] The EERA also submitted comments of the Minnesota Interagency

[41] Ex. PUC-10 (Marshall Independent - Notice of Public Hearings and Availability of EA).
[42] MPCA Public Comment (Apr. 16, 2025) (eDocket No. 20254-217740-01).
[43] MPCA Public Comment (Apr. 16, 2025) (eDocket No. 20254-217740-01).
[44] MPCA Public Comment (Apr. 16, 2025) (eDocket No. 20254-217740-01).
[45] DNR Comments (May 2, 2025) (eDocket No. 20255-218562-01 and 20255-218562-02).
[46] EERA Hearing Comments (May 5, 2025) (eDocket No. 20255-218595-01).
[47] Local 49 and NCSRCC Comments (May 5, 2025) (eDocket No. 20255-218593-01).
[48] LIUNA Comments (May 5, 2025) (eDocket Nos. 20255-218617-01, 20255-218617-02, and 20255-218617-03).
[49] Coneflower Solar In-person Public Hearing Transcript (May 6, 2025) (eDocket No. 20255-218618-02).
[50] Coneflower Solar Virtual Public Hearing Transcript (May 6, 2025) (eDocket No. 20255-218618-01).
[51] Sign-In Sheets for the Marshall Public Hearing held on 4-22-25 (May 6, 2025) (eDocket No. 20255-218618-03).
[52] Public Hearing Exhibits A-D (May 6, 2025) (eDocket Nos. 20255-218618-04, 20255-218618-05, 20255-218618-06, 20255-218618-07).

Vegetation Management Planning Working Group (VMPWG) regarding the VMP proposed by Coneflower Solar for the Project.[53]

34. On May 19, 2025, Coneflower Solar filed its response to the public hearing comments filed through May 5, 2025.[54] Also on May 19, 2025, the Commission filed a public comment it received on May 2, 2025.[55]

35. EERA filed reply comments on May 27, 2025.[56]

III. DESCRIPTION OF THE PROJECT

36. Coneflower Solar proposes to construct and operate the Project, which will be an up to 235 MW solar farm located in southern Lyon County, Minnesota.[57]

37. Coneflower Solar has identified two scenarios allowing the Project to connect to the electric transmission grid through. In the first option, the Project will connect to an existing 115 kilovolt (kV) transmission line running from Lyon County to Lake Yankton (MISO Scenario), via a switching station and short (less than or equal to 500 feet) transmission line. The second option will involve connecting to the proposed Garvin Substation (Garvin Scenario) via a short (less than or equal to one mile) 345 kV transmission line.[58]

38. The Project will consist of PV panels, trackers, inverters, transformers, approximately 15 miles of gravel access roads, security fencing, above-ground and below-ground electric collection lines, a project substation, a switching station, an up to one mile 345 kV transmission line, and associated facilities.[59] Coneflower Solar proposes to locate the solar facilities in blocks within the 2,299 acres of land that Applicant owns or has under lease. Based on preliminary design, Coneflower Solar anticipates approximately 1,723 acres within the 2,299-acre land control area[60] will be developed for the solar facilities.[61]

39. Coneflower Solar estimates the total capital costs for the Project, including construction, operation, and decommissioning will be approximately $550 million, with an increased cost of approximately $1.5 million if the Project connects to the transmission line as contemplated in the Garvin Scenario.[62] Coneflower Solar

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[53] VMPWG Hearing Comments (May 6, 2025) (eDocket No. 20255-218616-01).
[54] Coneflower Solar Response to Public Hearing Comments (May 15, 2025) (eDocket No. 20255-219084-01.
[55] Public Comment (May 19, 2025) (eDocket No. 20255-219062-01).
[56] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).
[57] Ex. CE-4 at 4 (Application).
[58] Ex. EERA-6 at 1 (EA).
[59] *Id.* at 2.
[60] Land control area means the 2,299.4-acre area for which Coneflower Solar is assumed to have site control through ownership or a lease agreement. *See* Ex. CE-4, Figures 1 and 2 (Application).
[61] Ex. CE-4 at 5 (Application).
[62] Ex. EERA-6 at 38 (EA).

acknowledges that actual total costs may vary up to 15 percent depending on factors such as timing of construction, final panel selection, labor costs, taxes, and tariffs.[63]

40. Coneflower Solar calculated the Project's decommissioning costs and the salvage or scrap value of solar components using 2024 dollars. Coneflower Solar estimates decommissioning costs of around $21 million, and component salvage value of approximately $42 million, with slight variations depending on whether the Project uses the Garvin Scenario or the MISO Scenario. The actual cost of decommissioning the Project will depend on labor costs and the market value of salvageable components at the time of decommissioning. Coneflower Solar considers the estimate accuracy range for the total decommissioning cost to be plus or minus 10 percent.[64]

41. The Project operation and maintenance (O&M) costs include ground-based yearly inspections, lease payments, operational staff wages, taxes, and other inspection/maintenance. Coneflower Solar estimates the annual operation cost will be approximately $5 million.[65]

42. Applicant anticipates beginning construction on the Project in the second quarter of 2026.[66] Coneflower Solar expected to sign a Generator Interconnection Agreement (GIA) in summer 2025,[67] however, the current schedule provided by MISO (published April 1, 2025) estimates that a GIA for Coneflower Solar will be executed by Spring 2026. Despite this delay, Coneflower Solar anticipates it can still achieve an in-service date by the end of 2027.[68]

IV. SITE LOCATION AND CHARACTERISTICS

43. The Project will be located in Custer Township, adjacent to the northern boundary of the City of Garvin in Lyon County, Minnesota. US HWY 14 bisects the Project site.[69]

44. The Project site consists of 2,299.4 acres of flat and gently rolling land, of which 95 percent is currently used for cultivated agriculture, primarily corn and soybeans. Built features within the remaining five percent consist of residences, buildings, paved and gravel roads, and county drainage ditches.[70]

45. Coneflower Solar has site control of proximately 567 acres that it does not anticipate will be used for solar facilities. This acreage is generally found on the

[63] *Id.*
[64] *Id.* at 38-39.
[65] *Id.* at 39.
[66] Ex. CE-4 at 7 (Application); Ex. EERA-6 at 2 (EA).
[67] Ex. CE-4 at 22 (Application).
[68] *Id.* at 7; Ex. CE-12 at 4:6-8 (Direct Testimony of Brie Anderson with Schedules A-D); Ex. EERA-6 at 39-40 (EA).
[69] Ex. EERA-6 at 52 (EA).
[70] *Id.* at 53.

perimeter of the Project Area[71] as setbacks from adjacent parcels, residences, and road rights-of-way and avoidance of wetlands, a Reinvest in Minnesota (RIM) Reserve easement, and a pipeline right-of-way. These areas may be used for ongoing farming or will be planted with native vegetation.[72]

46. Two transmission lines are located within the Project Area. A 69 kV line connects to the existing substation and runs east-west along US HWY 14 and north-south along County Road (CR) 67 through the center of the Project Area, while the Lyon County to Lake Yankton line, owned by Xcel Energy, runs along the northern portion of the Project Area. There is also a natural gas pipeline, owned by Northern Border Pipeline Company, running through the land control area from northwest to southeast, with the existing substation bordering the southeastern portion of the Project powering the natural gas facility.[73]

47. There is an active rail line, owned by Rapid City, Pierre, & Eastern Railroad Inc., that runs east-west directly south of the Project.[74]

V. PROJECT SCHEDULE

48. Coneflower Solar plans to start construction in the second quarter of 2026, with completion and operation anticipated in the fourth quarter of 2027.[75] While selection of the Garvin Scenario depends on further action by the Commission related to approval of the Garvin Substation and the issuance of a route permit, Coneflower Solar does not anticipate that there will be any substantive difference in the anticipated Project schedule between the MISO and Garvin Scenarios.[76]

VI. SUMMARY OF PUBLIC COMMENTS

49. During the public information and environmental review scoping meeting (in-person) on November 12, 2024, seven members of the public provided comments regarding landowner and labor union support of the Project, potential impacts on wildlife, potential impacts to property values, community aesthetics, and Project setbacks.[77]

50. During the public information and environmental review scoping meeting (remote-access) on November 13, 2024, one member of the public provided comments regarding impacts to prime farmland.[78]

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[71] Project Area means one mile from the land control area and collection line corridor. *See* Ex. EERA-6 at ix (EA).
[72] Ex. CE-5 (Application).
[73] Ex. EERA-6 at 53 (EA); *see also* Ex. EERA-6 Fig. 18 (EA).
[74] Ex. EERA-6 at 53 (EA); *see also* Ex. EERA-6 Fig. 18 (EA).
[75] Ex. CE-4 at 7 (Application); Ex. CE-12 at 4:6-8 (Direct Testimony of Brie Anderson with Schedules A-D).
[76] Ex. CE-4 at 4, 6 (Application).
[77] Ex. EERA-4 (Oral Comments on the Scope of EA).
[78] *Id*.

51. During the scoping comment period ending December 4, 2024, written comments were filed by the Bois Forte Band of Chippewa,[79] the DNR,[80] MnDOT,[81] Local 49 and NCSRCC,[82] and members of the public.[83] No site, route, or system alternatives were recommended for study.

52. The Bois Forte Band of Chippewa's comments stated that it did not have comments on the Project itself, but that the Band would like to be informed if Coneflower Solar made an unanticipated discovery of human remains.[84]

53. The DNR requested that the EA include analysis of the following topics: security fencing; setbacks; lighting; dust control; wildlife friendly erosion control; and a VMP.[85]

54. MnDOT requested that the EA include analysis of Project access, water basins, and blowing snow control.[86]

55. Local 49 and NCSRCC filed comments in support of the jobs the Project could bring to the area.[87]

56. Members of the public submitted written comments, filed December 12, 2024, expressing concerns related to fencing, impacts on wildlife, land use, glare from the solar panels, noise, property values, decommissioning, drainage, emergency plans, long-term employment, outdoor recreation, agricultural businesses, and vegetative screening.[88]

57. On April 22 and 23, 2025, the Administrative Law Judge presided over two public hearings, one held in-person and the other by remote-access.[89] Thirteen members of the public offered comments at the in-person public hearing related to the Project's VMP, blowing snow control, solar panel setbacks from homes and ROW, glare from the solar panels, electromagnetic fields (EMF), use of local labor in constructing the Project, emergency plans, and the anticipated economic benefits of the Project.[90] Two members of the public offered comments at the remote-access public hearing related to using local union labor in the construction of the Project.[91]

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[79] Ex. PUC-8 (Public Comment – Bois Forte Band of Chippewa).
[80] DNR Scoping Comments (December 4, 2024, 2024) (eDocket No. 202412-212709-01).
[81] MnDOT Scoping Comments (December 4, 2024 (eDocket No. 202412-212709-01).
[82] Local 49 and NCSRCC Scoping Comments (December 5, 2024) (eDocket No. 202412-212729-01).
[83] Ex. EERA-3 (Written Comments on the Scope of EA).
[84] Ex. PUC-8 (Public Comment – Bois Forte Band of Chippewa).
[85] DNR Scoping Comments (December 4, 2024, 2024) (eDocket No. 202412-212709-01).
[86] MnDOT Scoping Comments (December 4, 2024 (eDocket No. 202412-212709-01).
[87] Local 49 and NCSRC Scoping Comments (December 5, 2024) (eDocket No. 202412-212729-01).
[88] Ex. EERA-3 (Written Comments on the Scope of EA).
[89] *See* Marshall 6:00 p.m. Public Hearing Transcript (Marshall 6:00 p.m. Tr.) (April 22, 2025) and WebEx 6:00 p.m. Public Hearing Transcript (WebEx 6:00 p.m. Tr.) (April 23, 2025).
[90] Marshall 6:00 p.m. Tr. at 26-52 (April 22, 2025).
[91] WebEx 6:00 p.m. Tr. at 24-30 (April 23, 2025).

58. The written public comment period remained open through May 5, 2025. The Commission received written comments from the Lyon County Soil and Water Conservation District (SWCD),[92] Dennis Christenson,[93] Marilyn Christenson,[94] Norma Raske,[95] MPCA,[96] DNR,[97] EERA,[98] Local 49 and NCSRCC,[99] LIUNA,[100] and the VMGWP.[101] An additional comment from Rick Anderson was submitted to the Commission on May 2, 2025, but filed into the docket by Commission staff on May 19, 2025.[102]

59. John Biren, the Lyon County Ditch Inspector, offered written comments into the record at the in-person public hearing on April 22, 2025, on behalf of the Lyon County SWCD. In those comments, the Lyon County SWCD stated that the County Ditch 29 drainage system needs repair especially in relation to drainage within the City of Garvin, but County Ditch 29 does not have enough funds to complete the repairs needed. As such, the Drainage Authority will likely order a redetermination of benefits this year and repairs will likely not be completed prior to the construction of the Project. The Lyon County SWCD states that in the likely event the repair is not completed before the installation of the solar panels, it is important for coordination to occur between the Coneflower Solar Project and County Ditch 29. Lyon County SWCD requests that, at a minimum, Coneflower Solar should conduct an onsite investigation to identify the exact location and depth on the county tile to ensure the placement of solar panels and ancillary equipment and or structures do not impact future repairs to County Ditch 29.[103]

60. Dennis Christenson,[104] Marilyn Christenson,[105] and Norma Raske[106] all offered written comments in support of the Project and urged the Commission to approve the Application. Rick Anderson asked about Coneflower Solar's responsibility to mitigate impacts to landowners resulting from damage to facility components, toxicity reports for solar panels, and financial assurances for emergency scenarios and Project decommissioning.[107]

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[92] Public Hearing Exhibit A (May 6, 2025) (eDocket No. 20255-218618-04).
[93] Public Hearing Exhibit B (May 6, 2025) (eDocket No. 20255-218618-05).
[94] Public Hearing Exhibit C (May 6, 2025) (eDocket No. 20255-218618-06).
[95] Public Hearing Exhibit D (May 6, 2025) (eDocket No. 20255-218618-07).
[96] MPCA Public Comment (Apr. 16, 2025) (eDocket No. 20254-217740-01).
[97] DNR Comments (May 2, 2025) (eDocket No. 20255-218562-01 and 20255-218562-02).
[98] EERA Hearing Comments (May 5, 2025) (eDocket No. 20255-218595-01).
[99] Local 49 and NCSRCC Comments (May 5, 2025) (eDocket No. 20255-218593-01).
[100] LIUNA Comments (May 5, 2025) (eDocket Nos. 20255-218617-01, 20255-218617-02, and 20255-218617-03).
[101] VMPWG Hearing Comments (May 6, 2025) (eDocket No. 20255-218616-01).
[102] Public Comment (May 19, 2025) (eDocket No. 20255-219062-01).
[103] *See* Public Hearing Exhibit A (May 6, 2025) (eDocket No. 20255-218618-04).
[104] Public Hearing Exhibit B (May 6, 2025) (eDocket No. 20255-218618-05).
[105] Public Hearing Exhibit C (May 6, 2025) (eDocket No. 20255-218618-06).
[106] Public Hearing Exhibit D (May 6, 2025) (eDocket No. 20255-218618-07).
[107] Public Comment (May 19, 2025) (eDocket No. 20255-219062-01).

61. The MPCA discussed the requirement of a Water Quality Certification as part of the permitting process, and noted that any surface water impact must be described in the application and may require mitigation.[108]

62. The DNR filed comments on the EA for the Project along with the Natural Heritage Review Letter for the Project.[109] The DNR recommends that the Project's security fence reach a minimum height of 10 feet to prevent large wildlife from entering the solar facility and noted that the agency would not issue a white-tailed deer removal permit for facilities with woven wire fences lower than 10 feet. The DNR supports section 4.3.32 of the Draft Site Permit (DSP) requiring the Permittee to design the final security fence in coordination with the DNR and the DOC. The DNR supports special condition 5.10 of the DSP which directs the Permittee to install motion-activated and down-lit lighting. The DNR supports special condition 5.11 of the DSP requiring the Permittee to use dust suppression agents that do not contain chloride. The DNR supports special condition 5.12 of the DSP which requires the Permittee to use wildlife-friendly erosion control materials that do not contain plastic, synthetic fibers, or malachite green dye. The DNR also requests that the inclusion of a special condition requiring the Applicant to complete coordination with the DNR regarding rare species, including following the stated avoidance measures and the Takings Permit process if needed, before Project activities begin. The DNR recommended continued coordination with the VMPWG to refine the Project's VMP. The DNR supports section 4.3.16 of the DSP encouraging the Applicant to meet the standards of the Minnesota Habitat Friendly Solar Program and requiring native perennial vegetation to create habitat and improve soil quality. The DNR expressed concern that Coneflower Solar's VMP would not satisfy the requirements established in section 4.3.16 of the DSP or DNR's technical guidance. DNR also suggested that Applicant should install modules that will be at a height greater than 18-inches above grade to ensure that native plant species can successfully establish. The DNR supports section 4.3.17 of the DSP, recommends continued coordination with the VMPWG, and notes that the final VMP should be developed in accordance with DNR's recently revised *Prairie Establishment & Maintenance Technical Guidance for Solar Projects*.[110]

63. EERA filed public hearing comments recommending modifications to the draft decommissioning plan, providing corrections to selected figures and references included in the EA for the Project, summarizing changes between the sample site permit filed by the Commission and the proposed DSP included as Appendix B of the EA, and responding to Coneflower Solar's direct testimony.[111]

64. Local 49 and NCSRCC jointly filed comments supporting the Project and stating that both unions look forward to working with Coneflower Solar to construct a successful Project that benefits local workers.[112]

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[108] MPCA Public Comment (Apr. 16, 2025) (eDocket No. 20254-217740-01).
[109] DNR Comments (May 2, 2025) (eDocket No. 20255-218562-01 and 20255-218562-02).
[110] DNR Comments at 2-3 (May 2, 2025) (eDocket No. 20255-218562-01 and 20255-218562-02).
[111] EERA Hearing Comments (May 5, 2025) (eDocket No. 20255-218595-01).
[112] Local 49 and NCSRCC Comments (May 5, 2025) (eDocket No. 20255-218593-01).

65. LIUNA filed comments expressing concern that Apex would not keep its commitments to work with labor unions to maximize the local socioeconomic benefits of the Project. LIUNA submitted an economic analysis prepared by Dr. Lucas Franco that describes and quantifies the economic benefits of the Project to the surrounding communities. LIUNA states that those benefits can amount to over $70,000 in direct pay and benefits per worker before considering local spending multipliers and the effect of career and skill development opportunities on future earnings. However, according to Dr. Franco, the potential of the Project to boost neighboring communities is largely lost when the developer relies heavily on an out-of-state workforce. LIUNA drew the Commission's attention to similarities between the commitments regarding labor for the Project and the language Apex used related to the Bowman Wind project in Western North Dakota. LIUNA contends that Apex's conduct to date on Bowman Wind has caused concern for one of the Project's customers, the City of Cambridge, Massachusetts, which had different expectations for the Project. LIUNA submitted a letter from the Mayor of the City of Cambridge, Massachusetts to Mr. Ken Young, President and CEO of Apex. LIUNA recommends that the Commission adopt permit conditions that ensure Apex maximizes local socioeconomic benefits.[113]

66. The VMPWG provided comments recommending that the Applicant continue to coordinate with the VMPWG as it finalizes the VMP, including the development of diverse, native seed mixes, refinement of the seeding and management plans, and a list of species substitutions for each seed mix.[114]

VII. PERMITTEE

67. The permittee for the Project is Coneflower Solar.[115]

VIII. CERTIFICATE OF NEED

68. A certificate of need (CN) is required for large energy facilities unless a statutory exemption applies.[116]

69. The Project is exempt from the CN requirements pursuant to Minn. Stat. § 216B.243, subd. 8(a)(8), because Coneflower Solar, an IPP, applied for a site permit to construct the Project.[117]

IX. SITE PERMIT CRITERIA

70. As relevant to this case, large electric power generating plants (LEPGP) are governed by Minn. Stat. ch. 216E and Minn. R. ch. 7850. Minn. Stat. § 216E.01,

[113] LIUNA Comments (May 5, 2025) (eDocket Nos. 20255-218617-01, 20255-218617-02, and 20255-218617-03).
[114] VMPWG Hearing Comments (May 6, 2025) (eDocket No. 20255-218616-01).
[115] Ex. CE-4 at 2 (Application).
[116] *See* Minn. Stat. § 216B.243 (2024).
[117] Ex. CE-4 at 10 (Application).

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.”

71. An LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04. Coneflower Solar filed the Application under the process established by the Commission in Minn. R. 7850.2800-7850.3900.[118]

X. APPLICATION OF SITING CRITERIA TO THE PROPOSED PROJECT

72. Minn. R. 7850.4100(A)-(N), establishes criteria for the Commission to consider in determining whether to issue a permit for a LEPGP:

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 maintaining the facility which are dependent on design and route;

[118] Ex. CE-1 (Notice of Intent to File Under Alternative Review); Ex. CE-4 at 1 (Application).

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

N. irreversible and irretrievable commitments of resources.

A. Human Settlement

73. This factor requires the Commission to consider the Project's effects on human settlement, including displacement of residences and businesses, noise created by construction and operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.[119]

1. Aesthetics.

74. The existing landscape in the Project Area is rural and agricultural consisting of flat to gently rolling agricultural crop fields of corn and soybeans. The surrounding area also contains a variety of wooded shelterbelts, natural areas, wetlands and lakes, and drainages.[120]

75. The built environment in the Project Area includes the City of Garvin south of the Project, several agricultural facilities and federal, township, and city roads. Existing infrastructure includes two transmission lines, a substation, and a pipeline. Residences and farmsteads are scattered around the nearby landscape, mostly surrounded by woodlands or shelterbelts. The Lake of the Hill and several outdoor recreational opportunities lie south of the Project.[121]

76. There are 108 residences within 0.6 miles of the Project site, 72 of which are within the City of Garvin. Only 20 of the 108 nearby residences are adjacent to or within the Project Area. Two of these residences, Residences #1 and #2, are surrounded by the area of land control, although only Residence #1 is occupied. Residence #1, located on the west side of CR 7 and south of US HWY 14, is the nearest home to the solar facility, approximately 324 feet from the nearest solar panel and 676.5 feet away from the nearest inverter. Built features common to the area include residences and buildings, paved and gravel roads, drainage ditches, community-scale solar facilities, and transmission lines.[122]

77. The visible elements of the solar facility will consist of new PV arrays, transformers and inverters, up to five permanent weather stations, an O&M building (if on site), a new substation, a short 115 kV transmission line (MISO Scenario) or a short 345 kV transmission line (Garvin Scenario), a switchyard, and security fencing surrounding the Project.[123]

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[119] Minn. R. 7850.4100(A).
[120] Ex. EERA-6 at 55 (EA).
[121] *Id.* at 56.
[122] *Id*. at 57; *see also* Ex. CE-4 at Appendix G (Application).
[123] Ex. EERA-6 at 57 (EA); Ex. CE-4 at 21 (Application).

78. The Project will be a noticeable change in the landscape, converting approximately 1,723.2 acres of agricultural fields into solar production. Although the change will be noticeable, there are other existing infrastructure features in the landscape including gravel roads, transmission and distribution lines, and a substation. The Project will be immediately adjacent to the existing substation that powers Northern Border Pipeline Company's natural gas facility. Each individual viewer's perception of the change from fields in agricultural production to a field of solar panels depends, in part, on how that individual person views solar panels.[124]

79. For residents outside the Project vicinity and for others with low viewer sensitivity, such as travelers on surrounding roads, aesthetic impacts will likely be minimal. For these viewers, the Project's solar panels could be relatively difficult to see due to fencing and vegetation, or the panels will only be visible briefly as they travel through the area. For residents traveling on local roads in the Project vicinity, such as CR 7 or 240th Avenue, and for others with high viewer sensitivity, such as residents using the recreational resources surrounding the Project, aesthetic impacts could be moderate to significant. The existing tree cover minimizes impacts to the viewshed when looking north towards the Project from City of Garvin, but some degree of visibility to that area will remain. The extent to which the Project can be seen from each residence will vary based on factors such as the viewer's location within the property, the time of day, and the degree of foliage on the vegetation. The Project's construction activities may require the removal of some trees within the land control area. For those with adjacent residences, existing trees within the land control area may be a valued part of the viewshed, and trees along the Project boundaries can provide additional vegetative screening for residential properties. Tree clearing within the Project could increase aesthetic impacts to adjacent residences by altering the viewshed they associate with their home and removing the vegetative screening bordering their property, increasing the visibility of the Project.[125]

80. The panels used for the Project will have a relatively low profile; when level to the ground they will be five to eight feet tall, with a maximum height of 12 feet off the ground at maximum tilt. Construction of the new five-acre project substation, the utility-owned switchyard, scenario-associated transmission lines, and the three-acre O&M building area will also present new visual impacts in the area. The O&M building will include the supervisory control and data acquisition (SCADA) system, an area for maintaining and storing equipment, and a parking lot. Coneflower Solar plans to construct the 345 kV overhead transmission line for the Garvin Scenario with steel monopole structures which are not anticipated to be greater than 165 feet in height, and the entire length of line will be less than one mile. In addition, an existing 115 kV transmission line and 69 kV transmission line are already located adjacent to and within the land control area.[126]

[124] Ex. EERA-6 at 58 (EA).
[125] *Id.* at 58-59.
[126] *Id.* at 59.

81. PV panels are designed to absorb light to convert the light to electricity. The Project is not anticipated to create aesthetic impacts resulting from glare from the panels. To combat optical loss of electrical power, modern-day solar modules have an anti-reflective coating that results in a 99 percent reduction in glare. As a result, residents who live in the area adjacent to the Project or who use the recreational resources surrounding the Project will not experience glare from the solar panels.[127]

82. Coneflower Solar will install down-lit security lighting at the gates to the facility as well as outside the Project substation, around each inverter, and along the perimeter fence as necessary for safety and security. Using switch-activated and down-lit lighting should minimize impacts and effects.[128] The Project is not anticipated to have impacts to light-sensitive land uses given the Project's rural location and the minimal lighting required for operations. [129]

83. Aesthetic impacts from solar generating facilities can be minimized primarily by locating the facilities so that they are not immediately adjacent to homes, limiting damage to natural landscapes during construction, and by shielding the facilities from view by terrain features or vegetation. Impacts from facility lighting can be minimized by using shielded and downward facing light fixtures and using lights that minimize blue hue.[130]

84. Standard or special permit conditions can further mitigate aesthetic impacts. Section 4.3.8 of the DSP is a standard condition requiring the permittee to consider landowner input with respect to visual impacts and to use care to preserve the natural landscape. Coneflower Solar has designed the Project to minimize tree clearing and maintain existing views to the extent practicable. Coneflower Solar anticipates minimal, if any, tree clearing will be required for the Project and such clearing would primarily occur along windbreaks between agricultural fields.[131]

85. Visual impacts to adjacent land uses and homes may also be mitigated through site-specific landscaping plans such as vegetation screening, berms, or fencing. Coneflower Solar indicates that although the 20 residences that are nearby the Project have some natural vegetation screening, it is engaging in further discussion with affected landowners. Coneflower Solar will continue working with adjacent landowners to determine the need for additional vegetation screening and landscaping to minimize aesthetic impacts of the Project.[132]

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[127] *Id.*
[128] Ex. CE-4 at 47 (Application); Ex. EERA-6 at 34 (EA); Ex. CE-12 at 16:1-10 (Direct Testimony of Brie Anderson with Schedules A-D).
[129] Ex. EERA-6 at 60 (EA).
[130] *Id.*
[131] *Id.*
[132] *Id.*

86. Coneflower Solar has taken steps to avoid and minimize visual impacts.[133] Additionally, special condition 5.1 of the DSP requires the permittee to supplement existing vegetative screening to minimize the views of project infrastructure from adjacent residences.[134] Coneflower Solar agrees with EERA's proposed special condition 5.1 of the DSP.[135]

2. Noise.

87. The MPCA has created public health standards regulating noise levels. The most restrictive noise limits established by the MPCA are 60 to 65 A-weighted decibels (dBA) during the daytime and 50 to 55 dBA during the nighttime.[136]

88. 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. Household units, designated camping and picnicking areas, resorts and group camps are assigned to NAC 1; recreational activities (except designated camping and picnicking areas) and parks are assigned to NAC 2; agricultural and related activities are assigned to NAC 3.[137]

89. The Project vicinity (1,600 feet) is the region of influence for noise, and primary noise receptors will be the local residences. Coneflower Solar identified a total of 108 noise receptors (residences) within 0.6 miles of the Project. One receptor is within the land control area (Residence #1), and 17 receptors are immediately adjacent to the Project.[138]

90. The Project is in a rural area dominated by agricultural land uses. Rural noise levels typically range from 30 to 55 dBA depending on the activity, time-of-day, weather, and season. The Project vicinity's existing sound character also includes audible traffic sounds from roadways such as US HWY 14, which bisects the Project, and operational sounds from the existing substation owned by Northern Border Pipeline Company, which is adjacent to the southeastern portion of the Project. Residences in the Project's vicinity are in NAC 1. The recreational resources surrounding the Project are in NAC 2. Noise receptors include individuals within their residences or working outside in the Project vicinity, and those who are using the surrounding recreational resources.[139]

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[133] *Id.*
[134] *Id.*
[135] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 15, 2025) (eDocket No. 20255-219084-01.
[136] Ex. EERA-6 at 62 (EA). This scale is used to duplicate the sensitivity of the human ear. A three-dBA change in sound can barely be detected by average human hearing, while a five-dBA change is clearly noticeable, and a 10-dBA change is perceived as doubling in loudness. *Id.* at 61.
[137] Ex. EERA-6 at 61 (EA).
[138] *Id.* at 62.
[139] *Id.* at 63.

91. There are potential noise impacts from the Project in connection with both construction noise and operational noise.[140]

92. Noise levels during construction will be temporary, intermittent, limited to daytime hours, and localized to the area. Major noise producing activities related to installation of the solar arrays will be clearing and grading, material delivery, and driving foundation posts. Construction noise will likely exceed Minnesota's noise standards at select times and locations if the noise continues for at least six minutes, though these exceedances will be short-term and only within daytime hours. Noise related to grading activities is anticipated to last approximately four weeks, and noise related to pile driving could last up to six weeks.[141]

93. Noise levels during operation of the Project will likely be negligible.[142] Operational noise modeling demonstrates that the Project will meet the NAC-1 nighttime L50 dBA noise standard. The nearest residence to the Project is approximately 324 feet from the nearest solar array, which is 295 feet further than the distance at which tracker noise meets the nighttime L50 standard, and 677 feet from the nearest inverter, which is 536 feet further than the distance at which inverter noise meets the nighttime L50 standard. Factoring in sound dissipation over distance, calculated as a six decibel decrease for every doubling in distance, the nearest residence would experience operational noise from tracker rotation between 27 to 33 dBA and operational noise from inverters and transformers between 35 to 41 dBA. The operational sound levels anticipated at the nearest residence will be similar to the sound levels of a quiet room, and comparable to background noise levels in the area.[143]

94. Noise from routine maintenance activities is anticipated to be negligible to minimal. It is unlikely that noise from the electrical collection system will be perceptible.[144]

95. Common ways to mitigate noise impacts include sound control devices on vehicles and equipment (e.g., mufflers) conducting construction activities during daylight hours, and running vehicles and equipment only when necessary.[145]

96. Coneflower Solar has taken steps to avoid and minimize noise impacts. Additionally, sections 4.3.7 and 5.2 of the DSP address noise related impacts. Section 4.3.7 of the DSP is a standard condition that requires the permittee to comply with noise standards established under Minnesota noise standards as defined under Minn. R. 7030.010-.0080 (2023), and to limit construction and maintenance activities to daytime hours to the extent practicable. EERA proposed special condition 5.2 of the DSP, which requires the permittee to provide notice to adjacent residences detailing

[140] *Id.*
[141] *Id.* at 63-64.
[142] *Id*. at 64.
[143] *Id.* 63-65.
[144] *Id.* at 65.
[145] *Id.* at 64.

when major noise-producing construction activities are planned to occur.[146] Coneflower Solar agrees with EERA's proposed special condition 5.2 of the DSP.[147]

3. Cultural Values.

97. The Project will change the character of the area, converting approximately 1,723 acres of farmland into an energy-generating facility. The value residents put on the character of the landscape is subjective, meaning its relative value depends upon the perception and philosophical or psychological responses unique to individuals. Because of this, construction of the Project might—for some residents—change their perception of the area's character and potentially erode their sense of place. Even at a small-scale, solar projects can have a major impact on a resident's attachment to place. Larger solar installations are found to evoke stronger emotions in individuals, and residents may feel that a project of this size does not fit the area.[148]

98. The EA notes that the proposed Project is immediately adjacent to the City of Garvin. The Project's proximity to Garvin may heighten its visibility, and some residents may see the conversion of the gently rolling agricultural fields north of Garvin to solar arrays as an encroachment on the small farm-town atmosphere of the area.[149]

99. The EA also notes that the Project is designed to serve the state, but that the Project's immediate impacts will be felt at the local level.[150] The record shows that public sentiment in the area of the Project is mixed. Some local members of the public expressed concerns about the size of the Project and proposed that it should be broken up into smaller pieces or sited closer to areas in which the electricity will be used.[151] Some were concerned about the impact of the Project on their property values.[152] Other commenters from the local area offered support for the Project, pointing to the benefits of renewable energy and the economic opportunities that the Project will bring to the area. A 30-year member of the Custer Township Board noted that increased tax dollars would help the town secure its finances.[153] Another commenter, a tax preparer who has spent most of her life on farms in Lyon County, stated that farmers need multiple income streams to help them keep farms in the family, and she characterized solar energy as a "drought-proof crop."[154] One local landowner who supports the Project indicated that the landscape has changed over the years, offered his belief that the

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[146] *Id.* at 65.
[147] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[148] Ex. EERA-6 at 66-67 (EA).
[149] *Id.* at 67.
[150] *Id.*
[151] *See* Ex. EERA-3 (Written Comments on the Scope of the EA); Ex. EERA-4 (Oral Comments on the Scope of the EA).
[152] *See* Ex. EERA-3 (Written Comments on the Scope of the EA); Ex. EERA-4 (Oral Comments on the Scope of the EA).
[153] Marshall 6:00 p.m. Tr. at 36 (April 22, 2025).
[154] *Id.* at 37.

community should look to the future, and stated that using his property to have a long-term impact was important to him.[155]

100. Coneflower Solar does not anticipate that the Project will change or alter the work and leisure pursuits of residents in such a way as to impact the underlying culture of the area. Construction and operation of the Project would not impact public participation in regional community events, as the Project Area is located outside of municipal areas and no cultural or historic sites are impacted by the Project. Therefore, Coneflower Solar anticipates that the Project will have no impacts on cultural values.[156]

101. The EERA contends that the Project will have minimal to moderate impacts on cultural values that are long-term and unavoidable.[157] It also notes that the development of additional energy projects proposed for the Garvin area could result in significant cumulative impacts to cultural values for some local residents.[158]

102. The EA identifies the development of a benefits agreement as a strategy to mitigate the cultural impacts of large-scale renewable energy projects. These agreements, formed between the project owner and host community, can be tailored to support priorities unique to the host community. The EA identifies community investment funds, scholarships, and training programs as examples of collective benefits that can be included in benefits agreements as means to mitigate the impacts of renewable energy projects.[159]

103. The EERA proposed the inclusion of special permit condition 5.16 (Community Impact Mitigation Agreement) in the DSP requiring Coneflower Solar to enter into a Community Impact Mitigation Agreement with the City of Garvin and Custer Township to mitigate impacts to the host communities.[160]

104. Coneflower Solar objects to the inclusion of special condition 5.16 of the DSP. Coneflower Solar does not believe that a Community Impact Mitigation Agreement is necessary for the Project or supported by the record, as Coneflower Solar does not anticipate negative impacts to the City of Garvin, its residents, or cultural values.[161] Coneflower Solar points to the positive comments offered by members of the community. It also notes that Garvin is not an area of environmental justice concern;[162] the Project will not create disproportionate or adverse impacts to low-income or minority populations because the percentage of low-income and minority residents in the Project Area is not meaningfully greater than Lyon County, the region of comparison;[163] the

[155] *Id.* at 37-38.
[156] Ex. CE-4 at 47 (Application).
[157] Ex. EERA-6 at 65-67 (EA).
[158] *Id.* at 166.
[159] *Id.* at 67.
[160] EERA Hearing Comments at 8 (May 5, 2025) (eDocket No. 20255-218595-01).
[161] Ex. CE-12 at 16:14-17 (Direct Testimony of Brie Anderson with Schedules A-D).
[162] *See* Ex. EERA-6 at 89-90 (EA).
[163] *Id.* at 90.

Project will not disrupt local communities or businesses;[164] the Project abides by Lyon County Zoning Ordinance setbacks and other required setbacks,[165] there is a raised railroad ROW[166] and existing vegetation[167] between the Project and the City of Garvin, and the economic benefits of the Project are anticipated to be positive.[168]

105. Coneflower Solar is concerned that that EERA's recommendations are based on the cumulative impact of the Project together with other energy projects: Minnesota Energy Connection (MNEC) and the Lyon County Station (LCS). Coneflower Solar contends that it should not bear the impact of an additional permit requirement when no similar requirement was made for the MNEC project, and the LCS project has not yet been permitted by the Commission.[169] The EERA maintains that its proposal is not intended to mitigate cumulative impacts of these energy projects, but to address the impact of the Project alone.[170] While acknowledging the positive comments received, the EERA points out concerns raised regarding wildlife and nature, hunting culture, agricultural production, and community aesthetics, and notes the size of the Project, which is one of the largest in the state in terms of contiguous acreage.[171]

106. It is very common for public sentiment to be mixed in matters involving large energy generation facilities, and the record here contains comments that both support and oppose the Project. The EERA proposes that Coneflower Solar should be required to enter into a Community Impact Mitigation Agreement in response to negative sentiments expressed by some members of the community, noting that such an agreement could cover community investment funds, scholarships, and training programs.[172] At the same time, the EERA recognizes that the Project's impacts could be minimal. Further, some of the issues identified by community members are addressed in other permit conditions (such as impacts on wildlife, vegetation management, or coordinating with adjacent landowners on tree cover to minimize aesthetic impacts). Additionally, the EERA proposes that Coneflower Solar should enter into the proposed agreement with the City of Garvin and Custer Township, and it notes that an agreement can allow for specific mitigation of impacts that an individual community values the most, whether that is conservation of outdoor recreational resources or the preservation of farm life for future generations.[173] But the record does not contain evidence that these governmental entities have raised concerns or have requested the creation of any additional agreement to address community issues.[174]

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[164] *Id.* at 84.
[165] *Id.* at 73-74.
[166] Id. at 53, 79.
[167] Id. at 134 (EA).
[168] Ex. EERA-6 at 84.
[169] Ex. CE-12 at 16-17 (Direct Testimony of Brie Anderson with Schedules A-D).
[170] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).
[171] *Id.*
[172] Ex. EERA-6 at 67 (EA).
[173] *Id.* at 167.
[174] The Administrative Law Judge notes that a permit condition requiring Coneflower Solar to make an agreement with local units of government necessarily also requires those local units of government to contract with Coneflower Solar. The City of Garvin and Custer Township are not parties in this proceeding, and the record in this case does not allow for a determination regarding any positions that the

The Administrative Law Judge is mindful of the size of the Project and that there could be cumulative impacts of this Project along with others in the area. Yet, it is not clear how a permit condition generally requiring a Community Impact Mitigation Agreement will address any specific, cumulative issues. A permit condition is a legal provision requiring compliance by a permittee and creating potential consequences for non-compliance. As proposed in this case, special permit condition 5.16 is not sufficiently specific to clearly establish the requirements for an agreement or the standards to which Coneflower Solar would be held in its permit compliance.

107. A Community Impact Mitigation Agreement could be a valuable tool to promote alignment between an energy generation facility and the community in which such a facility is built.[175] Based on a review of this case's record as a whole, however, the evidence does not support adopting a permit condition requiring a Community Impact Mitigation Agreement.

4. Land Use and Zoning.

108. While a site permit issued by the Commission supersedes local zoning, building, or land use controls, the Commission's site permit decision must be guided by consideration of pacts to local zoning and land use consistent with the legislative direction to minimize human settlement and other land use conflicts.[176]

109. The Project's land control area is located within Custer Township in Lyon County. The solar facility is zoned as Agricultural according to Lyon County zoning data, and future land use within the land control area has been designated as an Agricultural Preservation Area. There are no urban growth boundaries or orderly annexation areas associated with Garvin.[177]

110. Development of a solar farm in this area will change the land use from predominantly agricultural uses to energy generation for the life of the Project, which will be at least 30 years. The change of land use will have a minimal to moderate impact on the rural character of the surrounding area, and a minimal impact on the character of Lyon County as a whole. Although the land is being converted from primarily agricultural to be used for energy production, the land use is consistent with other infrastructure in the area such as existing transmission lines and the adjacent substation.[178]

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city or township may take regarding such a requirement, or for identification of specific issues that such an agreement should cover.

[175] If the Commission is inclined to consider requiring such agreements in large energy facility permitting matters, it may wish to identify this issue as a matter for public comment in future proceedings to promote record development.

[176] Minn. Stat. §§ 216E.03, subd. 7, .10, subd. 1.

[177] Ex. EERA-6 at 70 (EA).

[178] *Id.* at 71.

111. The Project is expected to be compatible with county planning goals and zoning ordinances. Coneflower Solar states that it will apply the structure setback to its facilities in a manner consistent with Lyon County's setback requirements.[179]

112. The Project will convert approximately 1,723 acres of cultivated cropland to solar energy production. Although the Project is subject to oversight by the State of Minnesota under the Minnesota Power Plant Siting Act, Coneflower Solar will continue to coordinate with Lyon County on other potential permits for the Project.[180]

113. After the Project's useful life, the land control area could be restored to agricultural or other planned land uses by implementing appropriate restoration measures. Coneflower Solar has indicated that the Project will be decommissioned such that agricultural activities can resume once decommissioning has been completed. Thus, once decommissioned, any land temporarily leased from participating landowners for the Project will be available to further Lyon County's goals of preserving the viability of agricultural land,[181] and to comply with ordinances relating to that purpose.[182]

114. Coneflower Solar has taken steps to avoid and minimize land use and zoning impacts. Furthermore, the DSP has several permit conditions related to the preservation and restoration of agricultural land, including Sections 4.3.17, 4.3.18, 9.0, and 9.2.[183] These permit conditions require Coneflower Solar to take steps to prevent erosion and promote soil health, to have a decommissioning plan, and to remove all Project-rated infrastructure.[184]

5. Property Values.

115. It is difficult to determine whether the Project will create impacts to the value of specific properties within the Project vicinity, but impacts could occur. Because of the uncertainty related to this issue, it is estimated that impacts to specific properties could be minimal to moderate, but are expected to be greater within 0.5 miles of the Project and to decrease with distance from the Project and with time. The study-specific analysis of the area determined that eleven residences lacking extensive vegetative screening are most likely to experience higher potential impacts on property values.[185]

116. Based on analysis of other utility-scale solar projects, it is not anticipated that the Project will cause significant negative impacts to property values in the Project vicinity. Aesthetic impacts to property values would be limited to residences and parcels in the Project vicinity where the solar panels are easily visible.[186]

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[179] *Id.*
[180] *Id.*
[181] *Id.*
[182] *Id.*
[183] *Id.* at 72.
[184] *Id.*
[185] *Id.* at 74.
[186] *Id.*

117. Some community members who own property in proximity to the proposed Project voiced concerns regarding the Project's effect on their property resale values, noting that impacts to wildlife, outdoor recreation opportunities, and the potential loss of screening trees located within the Project and adjacent to residential properties.[187]

118. Coneflower Solar will minimize impacts to property values by reducing aesthetic impacts based on preferences of adjacent landowners; implementing best management practices (BMPs) during construction and restoration; implementing the VMP and monitoring vegetation up to 10 years to assess the vegetative cover; and through individual agreements with neighboring landowners.[188]

119. Coneflower Solar has taken steps to avoid and minimize impacts to property values. Additionally, special condition 5.1 of the DSP requires the permittee to supplement existing vegetative screening to minimize the views of project infrastructure at adjacent residences.[189] Coneflower Solar has agreed with EERA's proposed special condition 5.1 of the DSP.[190]

6. Tourism and Recreation.

120. In 2023, the leisure and hospitality industry in Lyon County accounted for approximately $71,638,323 in gross sales and supported 1,072 private sector jobs.[191] Recreation and tourism in the Project Area largely relate to outdoor activities including hunting, fishing, wildlife viewing, and snowmobiling. Activities in the Project Area are associated with Wildlife Management Areas (WMAs), Waterfowl Production Areas (WPAs), Walk-In Access Areas (WIAs) for hunting, snowmobile trails, and the Lake of the Hill. The Garvin Park and Balaton Golf Courses are approximately one mile northeast and west of the Project, respectively.[192]

121. The Garvin WMA and Bendix I & II WPAs surrounding the Lake of the Hill are directly adjacent to the south-central Project boundary, and the Sherman WPA is directly adjacent to the western Project boundary. The Lyon WIA #350 is within the southwestern section of the Project. The Dayland Marsh and Deer Lane WMAs surround the northwest corner of the Project. One state snowmobile trail runs north-south parallel to US HWY 59, east of the Project. The trail is maintained by the Southwest Ridge Runners Snowmobile Club.[193]

122. Impacts to tourism and recreation are anticipated to be minimal to moderate. The Project's construction phase will result in short-term increases in traffic

[187] *Id.* at 74-75 (EA).
[188] Ex. CE-4 at 72 (Application).
[189] Ex. EERA-6 at 75 (EA).
[190] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[191] Ex. EERA-6 at 75 (EA).
[192] *Id.*
[193] *Id.*

and noise that could potentially impact recreational activities in close proximity to the Project Area. However, these impacts will be temporary.[194]

123. Long-term impacts to recreational activities include the removal of the 135-acre Lyon WIA #350 from use as a recreational hunting resource. Lyon WIA #350 is the fifth largest WIA in Lyon County. The contract for Lyon WIA #350 expires in June 2025. The decision to reenroll land in the WIA program is at the discretion of the landowner, and it is possible that Lyon WIA #350 would cease to be a recreational resource once the contract expires, regardless of whether the Project is permitted.[195]

124. The Project will not disturb or impede residents from engaging in the surrounding recreational opportunities. The lands surrounding the Project are an important recreational resource for the community, and residents have been hunting and fishing in the area for generations. While the change in the viewshed surrounding these recreational resources will not prevent residents from utilizing them, some residents may feel that the presence of the Project diminishes the recreational value of these resources.[196] The EERA notes that it has proposed a mitigation measure for cumulative impacts, the Community Mitigation Impact Agreement,[197] but the Administrative Law Judge does not recommend imposing this requirement for the same reasons discussed above, and as further discussed in Section XI below.

125. Coneflower Solar will construct the Project facilities within the limits of the Project Area. Annual events hosted by the cities of Balaton and Marshall occur within the municipal limits and do not occur within the Project Area. The Lyon County Fairgrounds are within Marshall and are not within the Project Area. No impacts to public access to these events are anticipated during construction or operation of the Project.[198] Coneflower Solar does not propose any additional mitigation measures.[199]

7. Transportation and Public Services.

126. Most residents in the rural area surrounding the Project have private septic systems and/or drain fields and water supply wells. The Minnesota Well Index identified no wells within the land control area.[200]

127. The primary electric provider in the Project Area is Xcel Energy, which provides electricity in Lyon County. Xcel Energy owns the existing 115 kV transmission line running east-west adjacent to and bisecting the northern section of the Project. In

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[194] *Id.*
[195] *Id.* at 76-77.
[196] *Id.* at 77.
[197] *Id.*
[198] Ex. CE-4 at 75 (Application).
[199] *Id.*
[200] Ex. EERA-6 at 77 (EA).

addition to the high voltage transmission lines, there are lower voltage electric distribution lines throughout the Project Area.[201]

128. There is one natural gas transmission pipeline within the land control area, the Northern Border Pipeline. The pipeline travels southeast-northwest through the Project. There are two other natural gas transmission pipelines within one mile of the Project, located to the northwest.[202]

129. The are two major roadways adjacent to or bisecting the Project: US HWY 14, which runs east-west through the middle of the Project, and US HWY 59, which runs north-south along the southeastern edge of the Project. Additionally, there are three county roads adjacent to or bisecting the Project. CR 67 runs north-south through the center of the Project, CR 7 runs north-south through the middle of the western section of the Project, and CR 63 runs adjacent to the western edge of the Project.[203]

130. The four remaining roads adjacent to or bisecting the Project are all township roads, two running east-west and two running north-south. The east-west township roads adjacent to and bisecting the Project are 140th Street, in the northern section of the Project, and 120th Street, in the southern section of the Project. The north-south township roads adjacent to or bisecting the Project are 265th Avenue, in the southeastern section of the Project, and 260th Avenue, in the middle of the eastern section of the Project. Coneflower Solar plans to access the Project from US HWY 14, CR 7, CR 63, and 140th Street, with the possibility of minor field access.[204]

131. There are no railroads located within the land control area, however, a Rapid City, Pierre, & Eastern Railroad Inc. owned line runs east-west adjacent to the southern boundary of the Project, near the City of Garvin.[205] Because there are no active railroads are within the Project Area, no mitigation is required.[206]

132. There are no Federal Aviation Administration (FAA) registered airports located in the Project Area, or within five miles of the Project. The nearest FAA-registered airport is the Tracy Municipal Airport, located 7.5 miles east of the Project. There are no private airstrips located in the Project Area, or within five miles of the Project. The closest private airstrip is located in the City of Westbrook, Minnesota, approximately 27 miles southeast of the Project.[207] The current Project plan generated a "no notice required" from the FAA's Notice Criteria Tool for all components of the Project, so no mitigation is required.[208]

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[201] *Id.* at 78.
[202] *Id.*
[203] *Id.*
[204] *Id.*
[205] *Id.* at 79.
[206] *Id.* at 83.
[207] *Id.* at 79.
[208] *Id.* at 83.

133. Section 4.3.5 of the DSP is a standard condition that requires the permittee to minimize disruptions to public utilities.[209]

134. Coneflower Solar indicates that final project design will avoid impacts to underground and overhead utilities, and underground utilities will be marked prior to construction start. A well construction permit from the Minnesota Department of Health (MDH) would be required if a well is installed at the O&M building.[210] Impacts to electrical infrastructure that cross the Project can be mitigated by appropriate coordination with the owners of the existing infrastructure and by following industry best practices.[211]

135. The location of underground utilities can be identified using the Gopher State One Call system during engineering surveys and by marking underground utility locations prior to construction. Additionally, Coneflower Solar indicates that it will conduct an American Land Title Association Survey to identify the locations of any underground utilities within the Project. If a utility is identified, the Project component or the utility itself might need to be relocated if it cannot be successfully crossed. Relocation, as well as any necessary crossing, would need to be coordinated with the appropriate utility.[212]

136. Changes or additions to driveways from county roads will require coordination with local authorities and permits from Lyon County. Section 4.3.22 of the DSP requires the permittee to inform road authorities of roads that will be used during construction and acquire necessary permits and approvals for oversize and overweight loads.[213]

137. Review and modeling of stormwater pond placement can determine the potential drainage effects of locating stormwater ponds in proximity to the US HWY 14 ROW. EERA proposes Section 5.3 of the DSP as a special condition requiring the permittee to coordinate with a MnDOT District Hydraulics Engineer for a review of the Project to determine if a drainage permit is required.[214] Coneflower Solar agrees with EERA's proposed special condition 5.3 of the DSP.[215]

138. In addition to permit requirements for driveway access and the conditions of the DSP, the following practices can mitigate potential impacts:

- Pilot vehicles can accompany movement of heavy equipment.

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[209] *Id.* at 82.
[210] *Id.* at 81-82.
[211] *Id.* at 82.
[212] *Id.*
[213] *Id.*
[214] *Id.*
[215] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).

- Coneflower Solar can time deliveries to avoid traffic congestion and dangerous situations on the roadway.

- Traffic control barriers and warning devices should be used as necessary.

- Photographs should be taken prior to construction to identify pre-existing conditions. Permittees are required to repair any damaged roads to preconstruction conditions.[216]

139. Section 5.4 of the DSP is a special condition proposed by EERA which requires the permittee to coordinate with Northern Border Pipeline Company to determine the location of Northern Border's existing pipeline within the Project Area and to avoid potential impacts to this pipeline.[217] Coneflower Solar agrees with EERA's proposed special condition 5.4 of the DSP.[218]

8. Socioeconomics.

140. Lyon County is growing more slowly than Minnesota as a whole, and the populations of Lyon County, the City of Garvin, and Custer Township declined between 2010 and 2020. In 2023, the industries with the largest employment in Lyon County were educational services, healthcare, and social assistance, along with manufacturing and retail trade. [219]

141. The Project is expected to have positive socioeconomic impacts. For example, the impacts of the Project's construction will be positive, though minimal and short-term. Significant positive effects could occur for some individuals. For example, construction will result in increased expenditures for lodging, food and fuel, transportation, and general supplies at local businesses, and will generate increased state and local taxes. Impacts from operation will be long-term, positive, and moderate. The Project will not disrupt local communities or businesses and does not disproportionately impact low-income or minority populations. The Project is not expected to cause adverse economic impacts.[220]

142. Coneflower Solar anticipates the Project will generate up to 300 temporary construction and installation jobs following prevailing wage and apprenticeship rules. The Project will require approximately 200 laborers during the construction and installation phases, and two to three long-term personnel during the operations phase. Coneflower Solar indicates they will prioritize construction contractor and supplier bids

[216] Ex. EERA-6 at 82 (EA).
[217] *Id.* at 83.
[218] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[219] Ex. EERA-6 at 83-84 (EA).
[220] *Id.* at 84.

that utilize local,[221] union construction employees to the greatest extent feasible, and expects the selected contractor to work with unions and stakeholders to create a workforce and hiring plan that will maximize local economic benefits. Coneflower Solar notes that it may be necessary to import specialized labor from non-local areas in Minnesota or other states, as the short duration of the construction phase precludes special training of local labor.[222]

143. There are around 1,000 vacant housing units in Lyon County, but available housing nearby the Project is much more limited. The City of Garvin, which is the closest location to the proposed Project, has only one available housing unit, and Custer Township has only 10 available housing units.[223]

144. Due to limited housing availability in the Project Area, temporary construction workers working on the Project will likely be housed in nearby hotels and vacant housing in the City of Marshall, rather than in local vacant housing units.[224] This housing plan will maintain availability of units for other individuals who may relocate to the area. No impacts to local housing availability are anticipated, therefore no mitigation is required.[225]

145. Once the Project is operational, Coneflower Solar will pay property tax and production taxes on the land and energy production to local governments. Property taxes are calculated based on the land underlying the facility. Because the land for the solar generating facility is used primarily for solar generation, the land is classified as Class 3a (commercial/industrial/public utility) which is taxed at a higher rate than land used primarily for homestead or agriculture.[226]

146. Coneflower Solar estimates it will pay average annual solar energy production and property taxes of approximately $477,225 for Lyon County and approximately $119,306 for Custer Township.[227] The total estimated tax revenue over the life of the Project is projected to be approximately $19 million.[228]

147. If the Project is constructed, approximately 1,723.2 acres that currently produce corn and soybeans will be removed from agricultural production. Lease payments to landowners will mitigate adverse impacts associated with the loss of agricultural land and production.[229] Lease and easement payments paid to participating

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[221] In this context, "local" workers are those who are employed to construct and maintain energy infrastructure and who reside within 150 miles of a proposed energy facility. Minn. Stat. § 216B.2422, subd. 1(h) (2024).
[222] EERA-6 at 85 (EA).
[223] *Id.* at 79.
[224] Ex. CE-4 at 70 (Application).
[225] Ex. EERA-6 at 83 (EA).
[226] *Id.* at 86.
[227] *Id.* at 87.
[228] Ex. CE-4 at 71 (Application); WebEx 6:00 p.m. Tr. at 20 (April 23, 2025).
[229] Ex. EERA-6 at 87 (EA).

landowners are anticipated to total approximately $3.4 million per year and $100.9 million over 30 years.[230]

148. It is difficult to determine whether or the extent to which agricultural sales or demand for agricultural services will decrease as a result of the Project's construction and operation. However, the conversion of approximately 1,723 acres of farmland, representing 0.9 and 1.0 percent of the county acreage dedicated to growing corn and soybeans, respectively, would ultimately constitute a removal of approximately 0.4 percent of the 424,591 acres of farmland in Lyon County. Additionally, only 79 individuals, approximately 0.3 percent of Lyon County's population, currently hold active Minnesota Department of Agriculture licenses or permits relevant to soybean or corn production. The removal of this small proportion of the county's agricultural production is unlikely to have a significant impact on the small number of licensed or permitted individuals in the county.[231]

149. Coneflower Solar anticipates providing financial assurance for decommissioning in the form of an escrow account or surety bond that equals the costs to ensure the Project is properly decommissioned. The financial assurance will be posted no earlier than the 10th anniversary from the Project's commercial operation date. From that point, a revised decommissioning estimate will be submitted every five years or upon change of ownership.[232]

150. During the public hearings and hearing comment period, LIUNA representatives offered comments expressing concern about Coneflower Solar's commitment to using local labor to construct the Project.[233] LIUNA asserts that Apex has not complied with its commitment regarding the use of local labor in connection with the ongoing Bowman Wind project in North Dakota.[234] LIUNA provided data regarding the economic benefits that flow to members of local labor unions and communities around an energy generation project, noting that those benefits are lost when construction jobs are outsourced to non-local workers.[235] LIUNA recommends that the Commission adopt permit conditions "that ensure Apex keeps its word with respect to both efforts and results that maximize local socioeconomic benefits."[236]

151. Coneflower Solar witness Brie Anderson responded to LIUNA at the in-person public hearing stating that Coneflower Solar has made a commitment in its Application to "include a strong preference for bids that utilize local union construction craft employees."[237]

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[230] Ex. CE-12 at 6:1-4 (Direct Testimony of Brie Anderson with Schedules A-D); Ex. CE-4 at 71 (Application).
[231] Ex. EERA-6 at 87-88 (EA).
[232] *Id.* at 88.
[233] Marshall 6:00 p.m. at 33:8-10 (April 22, 2025).
[234] LIUNA Comments (May 5, 2025) (eDocket Nos. 20255-218617-01, 20255-218617-02, and 20255-218617-03).
[235] *Id.*
[236] *Id.*
[237] Marshall 6:00 p.m. Tr. at 28:16-24 and 29:6-7 (April 22, 2025).

152. In its response to public hearing comments, Coneflower Solar provided information about its contracting practices, including use of union and local labor, on renewable projects currently under construction in other states. Coneflower Solar described the difference between workforce commitments by Apex for the Bowman Project and for Coneflower Solar. For Bowman Wind, Apex committed to "encourage its balance of plant contractor [BOP] to source construction workforce from within the state of North Dakota and/or areas surrounding the project."[238] Bowman Wind hired Wanzek Construction, based in Fargo, North Dakota, as its BOP contractor.[239] In addition, Bowman has employed several other local and union subcontractors for that project, and contracting is still underway for some aspects of project construction and restoration. Coneflower Solar notes that requests for proposals have been sent to LIUNA contractors who are based outside of North Dakota. Coneflower Solar asserts that Bowman Wind has met its commitments to utilize workers from within North Dakota; and Coneflower Solar reiterates its pledge to meet its commitment to give a preference to union and local workers for the Project. [240]

153. Coneflower Solar has taken steps to avoid and minimize impacts to socioeconomics. Socioeconomic impacts are generally anticipated to be positive.[241] Section 8.5 of the DSP requires that Coneflower Solar file quarterly reports concerning efforts to hire Minnesota workers.[242] Section 8.6 of the DSP requires the permittee, as well as its construction contractors and subcontractors, to pay no less than the prevailing wage rate. LIUNA has not offered specific language for inclusion in the site permit to address its concerns. The EERA evaluated the socioeconomic impacts of the Project and did not recommend further permit conditions regarding the utilization of local labor for the Project.[243] Based on this record, the Administrative Law Judge does not recommend inclusion of an additional special condition on this issue in the site permit.

9. Environmental Justice.

154. Environmental justice ensures that all people, regardless of race, color, national origin, or income, experience equal benefits from environmental protections, and receive equal opportunities to participate in the decisions related to the development, implementation, and enforcement of environmental regulations and policies that may impact their environment or health. The goal of environmental justice is not to shift risks among populations, but to identify populations that have experienced

[238] WebEx 6:00 p.m. Tr. at 27:16-20 (April 23, 2025).
[239] *Id.* at 27:21-24.
[240] *See* Coneflower Solar Response to Public Hearing Comments at 10-11 (May 19, 2025) (eDocket No. 20255-219084-01).
[241] Ex. EERA-6 at 88 (EA).
[242] This permit condition contains language proposed by LIUNA in an earlier case and adopted by the Commission. *See In the Matter of the Application of Nobles 2 Power Partners, LLC for a Suite Permit for the up to 260 MW Nobles 2 Wind Project and Associated Facilities in Nobles County*, Order Issuing Site Permit for Large Wind Energy Conversion System at 7 (Jan. 31, 2019) (eDocket No. 20191-14838-01).
[243] Ex. EERA-6 at 88 (EA).

disproportionately high exposure to, and adverse effects from, environmental hazards, and determine how these impacts can be mitigated.[244]

155. There are two areas of environmental justice concern in Lyon County, the City of Marshall located twelve miles north of the Project, and the City of Tracy, which is six miles east of the Project. The Project is not within the boundaries of a federally recognized tribal reservation or community.[245] According to demographic assessment included in the EA, the project does not meet the threshold of significance for environmental justice impacts.[246]

156. The Project will not create disproportionate or adverse impacts to low-income or minority populations because the percentage of low-income and minority residents in the Project Area is not meaningfully greater than Lyon County, the region of comparison. Additional mitigation is not proposed.[247]

B. Public Health and Safety.

157. Minnesota law requires consideration of the Project's potential effect on health and safety.[248]

1. Electric and Magnetic Fields.

158. Electric and magnetic fields (EMFs) are invisible forces that result from the presence of electricity. They occur naturally and are caused by weather or the geomagnetic field. They are also caused by all electrical devices and found wherever people use electricity. EMFs are characterized and distinguished by their frequency, that is, the rate at which the field changes direction each second. Electrical lines in the United States have a frequency of 60 cycles per second or 60 hertz, which is extremely low frequency EMF (ELF-EMF). The strength of an electric field decreases rapidly as it travels from the conductor and is easily shielded or weakened by most objects and materials.[249]

159. Currently, there are no federal regulations regarding allowable ELF-EMF produced by power lines in the United States; however, state governments have developed state-specific regulations.[250] The Commission limits the maximum electric field under high voltage transmission lines in Minnesota to 8.0 kV/meter (m). The Commission has not adopted a standard for magnetic fields.[251]

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[244] Ex. EERA-6 at 89 (EA).
[245] *Id.* at 89-90.
[246] *Id.* at 90.
[247] *Id.*
[248] Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. B.
[249] Ex. EERA-6 at 91 (EA).
[250] *Id.* at 93-94.
[251] *Id.* at 94.

160. The primary sources of EMF from the generating facility will be from the solar arrays, buried electrical collection lines, and the transformers installed at each inverter. If Coneflower Solar decides to proceed with the Garvin Scenario, the EMF specific to the 345 kV gen-tie line connecting the Project to the proposed Garvin Substation will be analyzed in the environment review for that route permit.[252]

161. The EMF generated by solar arrays is at the level generally experienced near common household appliances. Measured magnetic fields at utility-scale PV projects drop to very low levels of 0.5 milliGauss (mG) or less at distances of 150 feet from inverters. For electrical collection lines, a study found that at 27.5 kV magnetic fields are within background levels at one meter above ground.[253]

162. The Project's MISO Scenario includes a 115 kV overhead gen-tie line; underneath a 115 kV overhead transmission line, the typical electric field levels are 1.0 kV/m, which dissipates to 0.5 kV/m at 50 feet, and the typical magnetic field levels are 29.7 mG, before dissipating to 6.5 mG at 50 feet.[254]

163. Coneflower Solar states that the underground power cables that make up the collection system will be shielded. Shielded cables have the energizing conductor located in the center of the power cable and surrounded by a grounded metallic shield. The shielding design confines the electric field to the interior of the power cable and neither the cables nor any other collection system components produce a detectable electric field. Additionally, the transformers will be shielded via enclosure in a grounded metal case.[255]

164. EMF diminishes with distance from a conductor or inverter. The nearest solar array is located approximately 323 feet from the nearest residence and 677 feet from the nearest collection line and inverter/transformer.[256] At this distance both electric and magnetic fields will dissipate to background levels.[257]

165. Potential impacts associated with EMFs are anticipated to be negligible and are not expected to negatively affect human health. The impacts will be long-term and localized and can be minimized. No additional mitigation is proposed related to this issue.[258]

2. Public Safety and Emergency Services.

166. Local law enforcement and emergency response agencies located in nearby communities provide emergency services in the Project Area. The Lyon County

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[252] *Id*.
[253] *Id.* at 94-95.
[254] *Id.* at 95.
[255] Ex. CE-4 at 53 (Application); Ex. EERA-6 at 95 (EA).
[256] Ex. CE-4 at 53 (Application); Ex. EERA-6 at 95 (EA).
[257] Ex. EERA-6 at 95 (EA).
[258] *Id.*

Sheriff and the cities of Tracy and Tyler police departments provide law enforcement services. Fire service is provided by city, community, and volunteer fire departments within 15 miles of the Project located in Garvin, Lynd, Tyler, and Walnut Grove. Regional and local ambulance services provide ambulance response, including the Balaton Fire Department Ambulance Service for Lyon County and the cities of Tracy and Tyler. The nearest hospitals to the Project are Avera Marshall Regional Medical Center (Lyon County) and the Murray County Medical Center in Slayton (Murray County). The Sanford Health Medical Center in Tracy and Avera Medical Group in Tyler are smaller medical centers within the area.[259]

167. Coneflower Solar initially planned to install five project access points on US HWY 14 for the central portion of the site.[260] In response to issues raised during a Project introduction meeting Coneflower Solar had with MnDOT on September 4, 2024, Coneflower Solar committed to combining or shifting all five proposed access roads to instead utilize existing access points/field entrances, eliminating new access proposals off US HWY 14.[261] In comments, MnDOT stated that it "thoroughly appreciates the Applicant's commitment to this issue."[262]

168. MnDOT also expressed concern about an issue with blowing snow. Specifically, MnDOT commented that the "proposed Project boundary is located on a high severity ranked snow trap which may trigger a specific set of human and environmental impacts if removal or alterations occur."[263] Additionally, MnDOT pointed out that there is a "snow fence installation planned within the Project Area."[264] MnDOT requested that Coneflower Solar clarify whether the proposed Project would adversely impact these resources. MnDOT also stated that Coneflower Solar "must work with MnDOT to find a blowing snow control solution if impacts occur, and coordinate timing of the respective Projects."[265]

169. Section 4.4.2 of the EA also recognizes that "[t]he Project's proposed boundary is located on a high severity ranked snow trap that runs along US HWY 14 through the center of the Project. The proximity of the Project solar panels to the snow trap could result in a dangerous buildup of snow drifts close to the road. Snow drifts could create a significant blowing snow concern, leading to reductions in visibility and increased potential for collisions or accidents. In addition, snow buildup adjacent to the road would require MnDOT to increase their mechanical snow removal operation efforts during winter."[266]

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[259] *Id.* at 96.
[260] Ex. EERA-6 at 97 (EA).
[261] Coneflower Reply Comments at 5 (Sept. 18, 2024) (eDocket No. 20249-210296-01).
[262] MNDOT Scoping Comments at 1 (Dec. 4, 2024) eDockets No. 202412-212702-01).
[263] *Id.* at 2.
[264] *Id.*
[265] *Id.*
[266] Ex. EERA-6 at 97 (EA).

170. Coneflower Solar met with representatives from MnDOT multiple times to understand and coordinate on this issue. As a result of this coordination, MnDOT sent Coneflower Solar proposed solar panel setbacks to prevent snow drifts from blocking US HWY 14 adjacent to the proposed Project. These setback distances varied based on topography, road profile, and road ditch cross sections. MnDOT stated that these proposed panel setbacks will help reduce MnDOT's mechanical snow removal operation efforts while also improving the winter driving safety/mobility during blowing snow events, which last on average between 415 to 519 hours per year. Coneflower Solar reviewed and accepted MnDOT's Blowing Snow Control panel setbacks on both the north and south sides of US HWY 14.[267]

171. With panel setbacks proposed by MnDOT and accepted by Coneflower Solar, the Project's configuration will help reduce MnDOT's mechanical snow removal operation efforts while also improving improve the winter driving safety/mobility during blowing snow events.[268] No further mitigation related to blowing snow is proposed.[269]

172. As solar facilities are increasingly installed in the landscape, concerns have arisen that panels create a heat island effect that may impact human health. Although dark solar panels can result in solar fields exhibiting temperatures a few degrees above the ambient temperature and both the modules and wires can radiate some heat from electrical current, any heat generated by the solar facility would be at inconsequential levels to the surrounding environment.[270] Impacts to human health from heat emitted by the Project are not anticipated.[271]

173. Several members of the public expressed concerns regarding the Project's potential to increase fire risk and add an additional burden for local emergency responders.[272] Appropriate PV system installation can reduce fire risk resulting from inaccurate construction methods, and proactive maintenance and monitoring of electrical equipment can identify risky system components before a fire occurs. The Project will be designed and constructed in compliance with applicable electric codes. Electrical inspections will ensure proper installation of all components, and the Project will undergo routine inspection. Licensed electricians will complete electrical work. Data streams from the SCADA equipment will be remotely monitored twenty-four hours a day, seven days a week, allowing for constant monitoring of, and communication with, the Project so that alarms and communication errors are relayed. Compliant system installation along with continual monitoring and a proactive approach to maintenance tasks will also reduce fire risks.[273]

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[267] Ex. CE-12 at 8:7-24, Schedules B and C (Direct Testimony of Brie Anderson with Schedules A-D).
[268] *Id.* at 8:17-20.
[269] Ex. EERA-6 at 99 (EA).
[270] *Id.* at 97-98.
[271] *Id.* a 98.
[272] Marshall 6:00 p.m. Tr. at 28:18-25 (April 22, 2025); Ex. EERA-3 at 8 (Written Comments on the Scope of EA).
[273] Ex. EERA-6 at 98 (EA); Ex. CE-4 at 70 (Application).

174. Coneflower Solar's VMP provides additional fire risk mitigation. Coneflower Solar will control site vegetation via mowing and/or grazing, preventing the accumulation of biomass and reducing fire hazard. The use of rotating PV arrays alongside vegetation removal techniques such as grazing can reduce fire hazards.[274]

175. Coneflower Solar has taken steps to avoid and minimize impacts to public safety and emergency services. The DSP addresses public safety considerations in Sections 4.3.30, 5.5, 5.6, 8.12, 8.13, and 9.1. Section 5.5 of the DSP is a special condition that requires the permittee to develop and incorporate a Project Fire Risk Assessment into the Emergency Response Plan required under Section 8.12 of the permit. Section 5.6 of the DSP is a special condition that requires the permittee to incorporate the MnDOT Blowing Snow Control Team's recommended solar panel offsets into their final design to prevent snow drifts from blocking US HWY 14 adjacent to the Project.[275] Coneflower Solar agrees with EERA's proposed special conditions 5.5 and 5.6 of the DSP.[276]

C. Land-Based Economies.

176. Solar facilities impact land-based economies by precluding or limiting land use for other purposes.[277] Minnesota law requires consideration of the Project's potential effect on land-based economies – specifically, agriculture, forestry,[278] tourism, and mining.[279]

1. Agriculture.

177. Agriculture is the predominant land use in the land control area, with 95 percent (2,299.4 acres) of the area used for agricultural purposes, mostly growing corn and soybeans.[280]

178. The Project will result in up to 1,723.2 acres of productive farmland being removed from agricultural production for the life of the Project. This acreage represents approximately 0.4 percent of existing agricultural land in Lyon County. Applicant indicates that the land could be returned to agricultural use after the Project is decommissioned and after site restoration. The remaining 576 acres that are within the land control area, but outside the preliminary development area, will not host any components of the solar facility. Agricultural production can continue on these 576 acres during the construction and operation of the Project.[281]

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[274] Ex. EERA-6 at 99 (EA).
[275] *Id.*
[276] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[277] Ex. EERA-6 at 99 (EA).
[278] As 95 percent of the area around the Project is used for agricultural purposes, mostly for corn and soybean crops, *see* Ex. EERA-6 at 100 (EA), impacts on forestry are not a consideration in this matter.
[279] Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. C.
[280] Ex. EERA-6 at 100 (EA).
[281] *Id.* at 101-102.

179. Prime farmland is "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses." Approximately 82.7 percent of the land within Lyon County is considered prime farmland.[282]

180. In Minnesota, no LEPGP may be permitted where the developed portion of the plant site includes more than 0.5 acres of prime farmland per MW of net generating capacity, unless there is no feasible and prudent alternative.[283] If a reasonable and prudent alternative exists, given the Project's generating capacity of up to 235 MW, it should impact no more than 117.5 acres of prime farmland. By a conservative estimate, the Project will include approximately 1,469.8 acres of prime farmland.[284]

181. Rural areas, with large parcels of relatively flat, open land, are ideal for solar development, which requires six to eight acres of land to generate one MW of electricity.[285] Coneflower Solar conducted a site selection analysis to inform its project location choice. Coneflower Solar determined that southwestern Minnesota has high levels of horizontal solar irradiance. Coneflower Solar analyzed this region of the state to identify existing and future transmission lines and substations with available capacity equal to the project, at least 235 MW. Coneflower Solar identified two points of interconnection (POIs) that had the available capacity and relatively low interconnection costs, the existing Lyon County to Lake Yankton 115 kV transmission line (MISO Scenario) and the proposed Garvin Substation associated with the MNEC project (Garvin Scenario). Coneflower Solar then screened available land within a five-mile radius of the identified POIs to identify suitable sites. Coneflower Solar determined land within the five-mile radius of each POI to be potentially suitable if it was cleared and undeveloped, not hindered by other easements, and contained minimal obstacles, such as water bodies and infrastructure, that would limit the amount of available land or require irregularly shaped development areas. Additionally, Coneflower Solar screened potential land for geotechnical risks, endangered species habitat, culturally sensitive areas, and potential environmental risks including pollutants, flood zones, and land use conflict. The proposed location was ultimately chosen as it is in close proximity to each POI, passes the screening constraints, has supportive landowners, and is not participating in other renewable energy projects.[286] Coneflower Solar maintains, and the record supports determining, that there is no feasible and prudent alternative for the Project. As a result, the Project is not subject to the limitation related to prime farmland.

182. Prime farmland within the Project Footprint will be placed in a permanent cover of perennial vegetation (grasses, sedges, and forbes) according to seeding and

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[282] *Id.* at 100.
[283] Minn. R. 7850.4440.
[284] Ex. EERA-6 at 103 (EA).
[285] *Id.* at 101.
[286] *Id.* at 103-104.

management specifications in the VMP to the benefit of wildlife and the soil, regardless of which vegetation management strategy is implemented. Removing the land from agricultural production may be beneficial for limiting nitrogen infiltration (from manure and fertilizer applications) into groundwater supply, thereby improving groundwater quality. Upon decommissioning, the land can be restored to its pre-construction agricultural use, and Coneflower Solar anticipates that will occur.[287]

183. Private drain tile is located throughout the land control area, along with one Lyon County public ditch.[288] Lyon County maintains and operates County Ditch 29, located in the southeastern portion of the Project. Together with private drain tile, this ditch provides important drainage functions for the surround farmland, roads, the railroad, and the City of Garvin.[289]

184. In its public hearing comments, the Lyon County SWCD stated that the County Ditch 29 drainage system needs repair especially in relation to drainage within the City of Garvin, but County Ditch 29 does not have enough funds to complete the repairs needed. As such, the Drainage Authority will likely order a redetermination of benefits this year and repairs are unlikely to be completed prior to the construction of the Project. The Lyon County SWCD states that if the repair is not completed before the installation of the solar panels it is important to have coordination between the Project and County Ditch 29. Lyon County SWCD requests that at a minimum, Coneflower Solar should conduct an onsite investigation to identify the exact location and depth on the county tile to ensure the placement of solar panels and ancillary equipment and or structures do not impact future repairs to County Ditch 29.[290]

185. Coneflower Solar indicates that it appreciates Lyon County SWCD's review of the Project and its comments. Coneflower Solar has been coordinating with Mr. John Biren, the Lyon County Ditch Inspector, and has scheduled a field visit with the Lyon SWCD to conduct an onsite investigation in June 2025. [291]

186. Coneflower Solar has designed the Project in consideration of the 16.5-foot vegetated buffer that surrounds sections of County Ditch 29. The Project fence line will be placed at the edge of the cropland adjacent to the vegetated buffer,[292] preventing damage to the filtration system that protects the surrounding water ways. Additionally, the DSP proposes a special condition related to mitigating impacts to County Ditch 29 resulting from the construction or operation of the Project: Section 5.7 requires the permittee to inform the Lyon County Drainage Authority of construction timelines and access plans in relation to County Ditch 29. The permittee is required to provide the Lyon County Drainage Authority with the contact information of the field

[287] Ex. CE-4 at 92 (Application).
[288] Ex. EERA-6 at 103 (EA).
[289] *Id.* at 104.
[290] *See* Public Hearing Exhibit A (May 6, 2025) (eDocket No. 20255-218618-04).
[291] *See* Coneflower Solar Response to Public Hearing Comments at 8 (May 19, 2025) (eDocket No. 20255-219084-01).
[292] *See* Ex. EERA-6 at 106 and Appendix C - Question 16 (EA).

representative.[293] Coneflower Solar agrees to this special condition and will continue coordinating with the Lyon County SWCD.[294]

187. Coneflower Solar indicates that it will implement BMPs during construction in order to minimize and mitigate long-term impacts to agricultural lands, including performing regular inspections during any earthmoving phases, preventing soil profile mixing, monitoring compaction, limiting vehicle traffic within the site, halting construction during wet weather conditions, ensuring proper site drainage and erosion control, and limiting the spread of noxious weeds and invasive species by cleaning construction equipment. Following construction, Coneflower Solar indicates that disturbed areas would be repaired and restored to pre-construction contours and characteristics to the extent possible.[295]

188. Coneflower Solar has taken steps to avoid and minimize impacts to agriculture. Furthermore, sections 4.3.9, 4.3.10, 4.3.11, 4.3.16, 4.3.17, 4.3.18, 4.3.20, 4.3.21, 4.3.25, and 4.3.29 of the DSP address agricultural mitigation and soil-related impacts.[296]

2. Tourism.

189. Tourism in the area around the Project is primarily oriented around outdoor recreational activities, including snowmobile trails and public lands, along with local community events. The City of Balaton, approximately seven miles northwest of Garvin, is home to the Balaton Bay Golf Course, as well as various sports facilities for frisbee golf, baseball, and softball. Additionally, Balaton hosts a yearly Fun Fest the first weekend in July with a parade, street dance, bags and golf tournaments, and firework shows. The City of Marshall, approximately 17 miles north of Garvin, hosts the annual Lyon County Fair every August. Events at the Lyon County Fair include a rodeo and demolition derby, alongside carnivals rides, livestock shows, exhibits, events, and contests.[297]

190. All Project facilities will be located on privately-owned land and, as a result, impacts to tourism and recreation are anticipated to be minimal. Minimal impacts to outdoor recreational activities could occur during construction due to noise and increased traffic, however these impacts will be temporary and short-term. Attendees of Balaton's Fun Fest traveling along US HWY 14 may experience minor travel impacts if the event coincides with construction phases characterized by increased traffic.[298]

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[293] Ex. EERA-6 at 106 (EA).
[294] *See* Coneflower Solar Response to Public Hearing Comments at 8-9 (May 19, 2025) (eDocket No. 20255-219084-01).
[295] Ex. EERA-6 at 106 (EA); Ex. CE-4 at Appendix D and Appendix E (Application).
[296] Ex. EERA-6 at 105-106 (EA).
[297] *Id.* at 106-107.
[298] *Id.* at 107.

191. Because significant impacts are not anticipated, no additional mitigation measures have been proposed.[299]

3. Mining.

192. Coneflower Solar identified one sand/gravel mining operation within the land control area, mapped as a gravel pit on U.S. Geological Survey Topographic Maps. The mining operation is located south of US HWY 14 and north of Lake of the Hill on a participating parcel.[300]

193. Coneflower Solar has coordinated with the landowner to ensure Project construction and operation will not impact the mining operation. Solar panel siting on the parcel containing the sand/gravel pit is limited to the cultivated cropland and the underground collection lines are located immediately adjacent to the road ROW to prevent interference with mining operations. Coneflower Solar has entered into an Accommodation Agreement with the parcel's landowner that acknowledges Coneflower Solar has sited solar facilities to avoid the landowner's mining operation and that the mining operation will not extend into the preliminary development area.[301]

194. The Accommodation Agreement developed with the landowner avoids any potential impacts to mining operations that could result from the construction or operation of the Project. No additional mitigation measures are proposed.[302]

D. Archaeological and Historic Resources.

195. Minnesota law requires consideration of the Project's potential effects on historic and archaeological resources.[303] 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.[304]

196. Coneflower Solar contacted the eleven federally recognized Tribal Nations in Minnesota, including Minnesota Tribal Nations' THPOs and the Minnesota Indian Affairs Council (MIAC) for additional information or comment on the Project.[305]

197. The Bois Forte Band of Chippewa requested that they be informed if an unanticipated discovery of human remains was made.[306]

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[299] *Id.*
[300] *Id.* at 107-108.
[301] Ex. EERA-6 at 108 (EA).
[302] Ex. EERA-6 at 108 (EA).
[303] Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. D.
[304] Ex. EERA-6 at 108 (EA).
[305] Ex. EERA-6 at 109 (EA); Ex. CE-4 at Appendix C - Agency Correspondence (Application).
[306] Ex. PUC-8 (Public Comment – Bois Forte Band of Chippewa).

198. MIAC noted that the proposed Project intersects with, and is near, several state archeological sites, and is located within an area that is likely to contain cultural resources. MIAC recommended that Coneflower Solar conduct additional research and cultural management fieldwork with monitoring alongside tribal consultation to regional THPOs.[307]

199. Two Traditional Cultural Specialists (TCS) with the Upper Sioux Community THPOs were present during the Phase I Reconnaissance Survey. Four Traditional Cultural Properties were documented in two discrete areas within the land control area by the TCS staff. These areas were mapped for avoidance.[308]

200. Coneflower Solar provided the draft Phase I Reconnaissance Survey report to the SHPO for concurrence and received concurrence on September 5, 2024. SHPO agreed that the Project will not adversely impact cultural and historic resources but also deferred to the Upper Sioux Community TCSs and the THPO to determine the appropriate treatment of the two locations, designated TS 1 and TS 2. The Phase I Reconnaissance Survey report and SHPO's concurrence letter were included as Attachment A to Coneflower Solar's reply comments on the completeness of the Application.[309]

201. The preferred mitigation strategy to avoid impacts to archaeological and historic resources is prudent siting.[310]

202. No impacts to architectural resources are anticipated as a result of the Project. Out of the 17 previously recorded and 50 newly recorded architectural resources, only two of the newly recorded resources were recommended as eligible for the National Register of Historic Places (NRHP). These two resources are located outside the land control area and will not be affected by the Project.[311]

203. No impacts to the archaeological resources are anticipated as a result of the Project. The archaeological resource identified during the literature review was investigated in the field and the boundary determined; this was reviewed by the SHPO and the Project received notification of the SHPO's concurrence on the updated resource boundary and that the resource remain categorized as unevaluated. Two other resources identified during the survey are recommended not eligible for the NRHP; the SHPO concurred with the recommendation.[312]

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[307] Ex. EERA-6 at 109 (EA).
[308] *Id.* at 110.
[309] *Id.*; Coneflower Reply Comments (Sept. 18, 2024) (eDocket Nos. 20249-210296-01, 20249-210296-02, 20249-210296-03, and 20249-210296-04).
[310] Ex. EERA-6 at 110 (EA).
[311] *Id.*
[312] *Id.*; Coneflower Reply Comments at 3-4 and Attachment A (Sept. 18, 2024) (eDocket Nos. 20249-210296-01, 20249-210296-02, 20249-210296-03, and 20249-210296-04).

204. Coneflower Solar has placed a 100-foot buffer around the two discrete areas containing the four Traditional Cultural Properties to prevent impacts from Project activities. Impacts to previously unrecorded cultural resources or human remains encountered during Project construction can be mitigated by preparing an Unanticipated Discoveries Plan that outlines the steps to be taken should this occur.[313]

205. The record demonstrates that Coneflower Solar has taken steps to avoid and minimize impacts to archaeological and historic resources. Furthermore, sections 4.3.23 and 5.8 of the DSP address archaeological and historic resource mitigation measures. Section 4.3.23 requires the permittee to avoid impacts to archaeological and historic resources where possible and to mitigate impacts where avoidance is not possible.[314] Section 5.8 is a special condition proposed by EERA requiring the permittee to develop an Unanticipated Discoveries Plan to identify guidelines to be used in the event previously unrecorded archeological or historic properties, or human remains, are encountered during construction, or if unanticipated effects to previously identified archaeological or historic properties occur during construction. No additional mitigation is proposed.[315] Coneflower Solar agrees with EERA's proposed special condition 5.8 of the DSP.[316]

E. Natural Environment.

206. Minnesota law requires consideration of the Project's potential effects on the natural environment, including effects on air and water quality resources and flora and fauna.[317]

1. Air Quality.

207. Air quality is a measure of how pollution-free the ambient air is and how healthy it is for humans, other animals, and plants. Emissions of air pollutants will occur during construction and operation of new infrastructure for the Project.[318]

208. Construction of the Project is expected to cause minimal, localized, short-term, and intermittent air emissions. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring. For example, traveling to a construction site on a dry gravel road will result in more fugitive dust than traveling the same road when wet. Once operational, neither the generating facility nor the overhead gen-tie line will generate criteria pollutants or carbon dioxide (CO2).[319]

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[313] Ex. EERA-6 at 111 (EA).
[314] *Id.* at 110.
[315] *Id.* at 111.
[316] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[317] Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. E.
[318] Ex. EERA-6 at 111 (EA).
[319] *Id*. at 113.

209. Air emissions from Project construction activities would likely primarily include CO2, nitrogen oxides, and other particulate matter. Motorized equipment, including construction equipment and vehicles travelling to and from the Project, will emit exhaust. Exhaust emissions, primarily from diesel equipment, will vary according to the phase of construction.[320]

210. The majority of the soils in the land control area are low to moderately susceptible to wind erosion, with a small amount considered highly susceptible. Dry conditions can enhance soil erodibility. The Project will generate fugitive dust from travel on unpaved roads, grading, and excavation. Dust emissions would be greater during dry periods and in areas where fine-textured soils are subject to surface activity. The land control area is bordered by several unpaved roads and increased vehicular traffic anticipated during the construction phase could intensify dust emissions for area residents.[321]

211. Emissions associated with maintenance will depend upon weather conditions and the specific activity occurring. Vehicle exhaust will be emitted during maintenance visits to the generating facility. Coneflower Solar indicates that, over the life of the Project, fugitive dust emissions will be reduced by the elimination of farming and establishment of permanent vegetative cover. Applicant also indicates that the Project will have a positive effect on air quality by replacing electrical generation produced by burning fossil fuels, reducing associated greenhouse gas (GHG) emissions.[322]

212. Coneflower Solar will use BMP's during construction and operation of the Project to minimize dust and emissions. Exhaust emissions can be minimized by using modern equipment with lower emissions ratings and properly functioning exhaust systems, not running the equipment unless necessary, and minimizing the number of driving trips. Watering exposed surfaces, covering open-bodied haul trucks, reducing speed limits on unpaved roads, containing excavated materials and treating stockpiles, and protecting and stabilizing soils are all standard construction practices.[323]

213. As a component of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater (CSW) General Permit that will be obtained for the Project, a Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented prior to construction in order to minimize the potential for fugitive dust emissions from untreated stockpiles.[324]

214. The Agricultural Impact Mitigation Plan (AIMP) identifies construction BMPs related to soils and vegetation that will help to mitigate against fugitive dust emissions. Several sections of the draft plan indirectly mitigate impacts to air quality,

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[320] *Id*.
[321] *Id.* at 113-114.
[322] *Id.* at 114.
[323] *Id.*; Ex. CE-4 at 78 (Application).
[324] Ex. EERA-6 at 114 (EA).

including sections related to construction and vegetation removal, soils, erosion and sediment control, and restoration of the site to pre-construction conditions.[325]

2. Geology and Groundwater.

215. Potential impacts to geology and groundwater can occur directly or indirectly. Direct impacts to groundwater are generally associated with construction, for example, structure foundations that could penetrate shallow water tables or groundwater usage.[326]

216. Indirect impacts could occur through spills or leaks of petroleum fluids or other contaminants that contaminate surface waters which could ultimately contaminate groundwater. The disturbance of soil and vegetative cover could affect water quality in groundwater resources. Coneflower Solar acknowledges that the construction of the 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.[327]

217. If the Project facilities include aboveground oil storage of more than 1,320 gallons, a Spill Prevention, Control, and Countermeasure (SPCC) Plan would be required. Coneflower Solar will prepare an SPCC Plan prior to construction for construction-related fuel storage and prior to operation for operation-related fuel storage, should said storage exceed applicability thresholds.[328] Coneflower Solar will prepare and implement an SPCC Plan for the main transformer at the Project substation in accordance with Environmental Protection Agency requirements.[329]

218. The water supply needs of the Project will be limited, and Coneflower Solar does not anticipate impacts to resources such as aquifers and water wells. However, because of the shallow depth to groundwater in some areas of the Project, dewatering may be required during construction. Dewatering will be discharged to the surface to allow it to infiltrate back into the ground, minimizing impacts. If dewatering exceeds 10,000 gallons of water per day, a DNR water appropriation permit will be required. There are no MDH mapped water wells within the land control area; the closest domestic well is 118.6 feet away from the Project, and the Project is 240.2 feet from the nearest residence, minimizing the risk of impacts on unmapped public wells.[330]

219. Impacts to geological resources are likely to be minimal, due to the presence of fractured bedrock, limited use of aquifers, and the absence of karst

[325] *Id.*; Ex. CE-4 at Appendix D – AIMP (Application).
[326] Ex. EERA-6 at 116 (EA).
[327] *Id.* at 117; Ex. CE-4 at 84 (Application).
[328] Ex. EERA-6 at 117 (EA); Ex. CE-4 at 7-9 (Application).
[329] Ex. EERA-6 at 117 (EA); Ex. CE-4 at 52 (Application).
[330] Ex. EERA-6 at 117 (EA).

features. Construction of the Project is not likely to require subsurface blasting, and newly fractured bedrock causing disturbances to groundwater flow is not anticipated.[331]

220. Any new wells require notification to MDH and would be constructed by a well borer licensed by MDH. If any previously unmapped wells are discovered, Coneflower Solar should cap and abandon the well in place in accordance with MDH requirements.[332]

221. Because the Project will disturb more than one acre of land, Coneflower Solar must obtain a NPDES/SDS CSW General Permit from the MPCA. The NPDES/SDS CSW General Permit will identify BMPs for erosion prevention and sediment control. As part of the NPDES/SDS CSW General Permit, Coneflower Solar will also develop a SWPPP that describes construction activity, temporary and permanent erosion and sediment controls, BMPs, permanent stormwater management that will be implemented during construction and through the life of the Project. Implementation of the protocols outlined in the SWPPP will minimize the potential for soil erosion and detail stormwater management methods during construction and operation of the facility.[333]

222. Coneflower Solar will acquire an NPDES permit application from the MPCA to discharge stormwater from construction facilities. Coneflower Solar will use during construction and operation of the Project to protect topsoil and adjacent resources and to minimize soil erosion, whether the erosion is caused by water or wind. Practices may include containment of excavated material, protection of exposed soil, stabilization of restored material, and treating stockpiles to control fugitive dust.[334]

3. Soils.

223. Construction of the Project will disturb approximately 2,299 acres within the land control area. Of this acreage, approximately 1,723 acres will be graded, which requires cutting and filling earth in targeted areas to provide a level and stable base for the Project substation and access roads, and spot grading at select solar array and inverter skid locations when the arrays cannot follow existing grades. The location is relatively level, with the majority of soils in the zero to five percent slope range, and Coneflower Solar will minimize grading to the extent practicable.[335]

224. Topsoil depth varies throughout the land control area, but most of the land is characterized by topsoil depths between 12 and 18 inches. Grading and excavating will separate the first 12 inches of topsoil, which will be stored on-site and replaced when construction is completed. Approximately 27.6 miles (MISO Scenario) or 35.0 miles (Garvin Scenario) of underground collector and communication lines will be

[331] *Id.*; Ex. CE-4 at 84 (Application).
[332] Ex. EERA-6 at 118 (EA).
[333] *Id*.
[334] *Id.*
[335] *Id.* at 120.

installed in one- to two-feet wide trenches or conduits at least four feet below the surface. Coneflower Solar's use of a hanging harness system to mount the direct current (DC) cables underneath panels minimizes additional soil disturbances, as the DC cables will not require trenching.[336]

225. As with any ground disturbance, the potential for soil compaction and erosion exists. Heavy rainfall events during construction or prior to establishment of permanent vegetation increase the risk that significant sedimentation and erosion could occur. Inadvertent disturbance of drain tile from construction activities could disrupt existing drainage. Coneflower Solar will maintain, repair, relocate, or replace existing drain tile (if damaged by Project construction or operation) as needed.[337]

226. Once Project construction is complete, Coneflower Solar will restore any disturbed areas to pre-construction conditions to the extent possible. BMPs to prevent soil erosion will be implemented, including temporary and permanent seeding, mulching, filter strips, erosion blankets, and sod stabilization.[338]

227. Coneflower Solar has taken steps to avoid and minimize impacts to soils. Additionally, sections 4.3.9, 4.3.11, 4.3.16, 4.3.17, and 4.3.18 of the DSP address soil-related impacts.[339]

4. Surface Water and Floodplains.

228. The Project is located in two major watersheds, the Des Moines River – Headwater Watershed, and the Cottonwood River Watershed. The National Hydrography Dataset identified five unnamed waterbodies and three unnamed, intermittent tributaries (flowlines) to the Cottonwood River within the land control area.[340]

229. The DNR's Public Waters Inventory (PWI) identified no watercourses or basins within the land control area. Public waters include wetlands, water basins, and watercourses of significant recreational or natural resource value in Minnesota. A public waters designation means that DNR has regulatory jurisdiction over the water. There are no PWI waterbodies within the area of land control. The nearest PWI body of water is Lake of the Hill, approximately 0.3 miles south of the central portion of the Project, and Hanson Slough, approximately 0.3 miles northeast of the northwestern portion of the Project.[341]

230. The surface waters within the land control area are limited to county drainage ditches and wetlands. County Ditch 29 is an open and tiled ditch system that

[336] *Id.* at 120-121.
[337] *Id.* at 121.
[338] *Id.*
[339] *Id.* at 122.
[340] *Id.* at 122-123.
[341] *Id.* at 123.

crosses the southeastern portion of the Project. County Ditch 14 intersects the northwestern portion of the Project. The Lyon County Drainage Department manages both ditches and their associated drain tiles within the land control area.[342]

231. There are no waters listed by the MPCA as impaired waters within the land control area.[343]

232. There are no Federal Emergency Management Agency (FEMA) 100-year floodplains within the vicinity of the Project. The nearest FEMA 100-year floodplains are associated with portions of the Des Moines and Cottonwood Rivers, south and north of the Project.[344]

233. The Project is designed to alleviate direct impacts to surface waters by avoiding placement of project components such as access roads, solar arrays, inverters, or transmission structures in surface waters.[345]

234. The Project will likely have a long-term positive impact on water quality due to the establishment of perennial vegetation at the facility. Perennial, deep-rooted native species have the greatest positive impact on water quality. The current array seed mix in Coneflower Solar's draft VMP is composed of a large amount of low-grow fescue, which, unlike native species, does not develop an extensive root system. This makes fescue systems more susceptible to soil erosion, increasing sedimentation into surrounding water systems.[346]

235. Coneflower Solar will manage stormwater by installing a series of stormwater ponds throughout the Project. The stormwater ponds will be designed to meet storage volumes and provide the necessary treatment, in compliance with the NPDES/SDS CSW General Permit. The stormwater pond areas will be seeded with a wet seed mix intended to help with soil stabilization after rain events.[347]

236. Coneflower Solar has designed the Project to avoid impacts to surface waters by siting facility components to avoid surface waters to the extent practicable. Coneflower Solar notes that there is one proposed collection line crossing under County Ditch 29 in the southeastern portion of the Project. Coneflower Solar will avoid impacts by boring the collection line crossing beneath the watercourse.[348]

237. The collection lines will be bored at a distance no closer than three feet from the base of County Ditch 29.[349] Due to the location of the Project substation, more

[342] *Id.*
[343] *Id.*
[344] *Id.* at 125.
[345] *Id.*
[346] *Id.* at 125-126.
[347] *Id.* at 126.
[348] *Id.*
[349] *Id.* at Appendix C – Question 17.

collection lines will need to be bored under County Ditch 29 in the Garvin Scenario compared to the MISO Scenario.[350]

238. Coneflower Solar is working with Lyon County and private landowners to identify and locate drain tile within the land control area. If the Project design requires county or private drain lines and judicial ditches to be crossed, Coneflower Solar will use directional boring methods to avoid impacting tiles and ditches. Coneflower Solar plans to maintain drainage system integrity during construction, including rerouting, repair, or other methods outlined in the AIMP filed with the Site Permit Application.[351]

239. As noted previously, Lyon County SWCD has indicated that the County Ditch 29 drainage system needs repair and that the repair is not likely to be completed before the installation of the Project's solar panels for the Project. Coneflower Solar has been coordinating with Lyon County SWCD regarding this issue[352] and a field visit with the Lyon SWCD to conduct an onsite investigation is scheduled in June 2025.[353] Additionally, the DSP proposes a special condition 5.7 related to mitigating impacts to County Ditch 29 resulting from the construction or operation of the Project.[354] Coneflower Solar does not object to Section 5.7 of the DSP and will continue its coordination with SWCD during this permitting process and during Project construction activities.[355]

240. Coneflower Solar has taken steps to avoid and minimize impacts to surface water and floodplains. Additionally, sections 4.3.11, 4.3.16, and 5.7 of the DSP address potential impacts to surface water.[356]

5. Wetlands.

241. Coneflower Solar completed an onsite wetland delineation in July and November of 2023, delineating wetlands totaling approximately 112.5 acres within the land control area, approximately 4.9 percent of the Project. The 112.5 acres make up a total of 60 wetlands, most of which are within row crop agricultural fields that contained functional drain tile.[357]

242. Although 112.5 acres of wetlands have been identified within the land control area, the preliminary layout for the Project avoids locating solar arrays and associated facilities in wetlands except for two collection lines crossings under two delineated wetlands, one in the south-central portion of the Project, and one located in

[350] Ex. EERA-6 at 126 (EA).
[351] Ex. EERA-6 at 126 (EA); Ex. CE-4 at Appendix D – AIMP (Application).
[352] *See* Public Hearing Exhibit A (May 6, 2025) (eDocket No. 20255-218618-04).
[353] *See* Coneflower Solar Response to Public Hearing Comments (May 19, 2025) (eDocket No. 20255-219084-01).
[354] Ex. EERA-6 at 106 (EA).
[355] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[356] Ex. EERA-6 at 128 (EA).
[357] *Id.* at 128-29 (EA); Ex. CE-4 at 93 (Application).

the north-eastern portion of the Project. There is no difference in wetland boring between the Garvin Scenario and the MISO Scenario. Both scenarios have the same two wetlands identified for boring in the preliminary layout.[358]

243. Coneflower Solar will bore these collection lines beneath the two wetlands to avoid impacts, in accordance with the U.S. Army Corps of Engineers (USACE) St. Paul District Utility Regional General Permit conditions.[359]

244. If wetland impacts are required for the final layout, Coneflower Solar will obtain any necessary permits and coordinate with the appropriate agency, such as the USACE under Section 404 and 401 of the Federal CWA and the Lyon County SWCD under the Minnesota Wetland Conservation Act (WCA), prior to construction.[360]

245. If a permit is required, any proposed wetland impact would require full sequencing under the WCA to address wetland avoidance, impact minimization, rectification, and replacement. Additionally, under Section 404, discharge of dredged and fill material into waters of the U.S. would be regulated, most likely under the USACE Regional General Permit (Minnesota RGP-003). If the Project needs approval under this general permit, Section 401 Water Quality Certification would be automatically granted as well.[361]

246. Coneflower Solar has taken steps to avoid and minimize impacts to wetlands. Additionally, section 4.3.13 of the DSP generally prohibits placement of the solar energy generating system or associated facilities in public waters and public waters wetlands.[362]

6. Vegetation.

247. The Project is located in the North Central Glaciated Plains, Coteau Moraines Subsection (251Bb) of the Prairie Parkland Province. This subsection consists of the middle Coteau, a landscape of rolling moraine ridges, and the outer Coteau, a series of gently undulating to steeply rolling terminal and end moraines separated by ground moraines.[363]

248. There are two conservation easement lands within the land control area. The first easement type is a large, state funded, Reinvest in Minnesota (RIM) easement centrally located within the Project. This RIM easement is classified as Wetland Restoration, and Coneflower Solar's American Land Title Association survey estimated the easement acreage to be 59.73 acres. The second easement type is a

[358] Ex. EERA-6 at 130 (EA).
[359] *Id.*
[360] *Id.* at 131.
[361] *Id.*
[362] *Id.* at 132.
[363] *Id.*

county-proposed flowage easement in the northwestern portion of the Project. Coneflower Solar has designed the Project to avoid impacts to both easements.[364]

249. Approximately 1,693 acres (Garvin Scenario or MISO Scenario) of cropland is within the Project Footprint (e.g., the area within the fence line of the solar facility) that will be converted from an agricultural use to solar energy use for the life of the Project. Additional acreages of cultivated crops would be temporarily impacted during the use of the two laydown areas outside the fence line (9.4 acres) of the solar facility, but after construction these 9.4 acres will continue to be used for row crop production or planted into a perennial vegetation.[365]

250. Cultivated cropland within the fence line of the solar facility will be converted to open, perennial vegetative cover except for the access roads, inverters, Project Substation, switchyard, and O&M Building under the MISO Scenario. Under the Garvin Scenario cultivated cropland will be converted to open perennial vegetation except for the access roads, inverters, Project Substation, and O&M Building.[366]

251. Developed and deciduous forest land cover totals about 0.5 percent of the Project Footprint. Coneflower Solar has designed the solar facility to minimize tree clearing. Tree clearing is proposed primarily along windbreaks between agricultural field. Coneflower Solar is committed to completing this activity during the inactive season for bats from November 1 through March 30.[367]

252. Coneflower Solar has designed the Project to avoid impacts on developed land and wetlands. Within the Project Footprint, impacts to developed land will be avoided by setting solar facilities back 25 feet from the road ROW and no residences or farm buildings will be removed. The electrical collection lines between the solar facilities and the Project Substation will be directionally bored under county roads and the Garvin WMA access road under the MISO or Garvin Scenarios.[368]

253. Coneflower Solar has developed a VMP (found at Appendix E of the Site Permit Application) detailing the planned restoration and revegetation activities for the land control area. The land control area has been divided into seven different Vegetation Management Units.[369]

254. Coneflower Solar has identified four potential seed mixes for the Project that are designed to achieve its goals for operating the solar facility, including the use of native plants, establishing stable ground cover successfully, reducing erosion and runoff, and improving infiltration. The seed mixes include: (1) an array mix that includes low-growing species to accommodate 18-inch solar panel clearance; (2) a short native

[364] *Id*.
[365] Ex. CE-4 at 97 (Application).
[366] *Id.* at 97-98.
[367] *Id.* at 98; Ex. EERA-6 at 150, fn. 346, and fn. 347 (EA).
[368] Ex. CE-4 at 98 (Application).
[369] Ex. EERA-6 at 134 (EA).

mix to be used on the perimeter of the Project Footprint 15 feet inside the fence; (3) a mixed height native mix to be used outside the Project Footprint and fence in areas that are within setbacks and/or unsuitable for agricultural use (less than 20 acres); and (4) a wet mix for stormwater basins and areas susceptible to holding water. Additionally, there are approximately 300 acres of non-row cropped vegetation outside the Project Footprint that will not be disturbed by construction activities and, therefore, the existing vegetation will remain.[370]

255. The VMPWG provided comments recommending that Coneflower Solar continue to coordinate with it as Coneflower Solar finalizes the VMP, including the development of diverse, native seed mixes, refinement of the seeding and management plans, and a list of species substitutions for each seed mix.[371] The VMPWG noted that the Project seed mix design does not meet the DNR's solar technical guidance or Board of Water & Soil Resources' Habitat Friendly Solar Standard. Additionally, the VMPWG raised concerns that a panel height of 18 inches could make establishing and managing native vegetation challenging and that a minimum height of 18 inches is too short to properly account for snow buildup in Minnesota's climate.[372]

256. Coneflower Solar pledges to work with the VMPWG to select a seed mix compatible with the design of the Project's solar arrays, but Coneflower Solar does not plan to change the design of the Project to adjust the height of the panels. Coneflower Solar maintains that it is reasonable to adjust the seed mix, as needed, to fit the design of the Project, but that it would not be reasonable to adjust the design of the Project to accommodate a vegetative preference. For example, increasing the height of the panels, as recommended by the VMPWG would increase the length both above and below ground and cross-section of the mounting piles, significantly increasing the amount of steel required for the Project. Higher panels would also increase torque on the posts from wind loads on the racking system therefore requiring non-standard engineering and tooling, and would add complexity and additional safety risks during construction and operation due to higher working heights. Further, higher panels would require more grading because the pile height tolerance will be narrower, meaning the ground would need to be more level to accommodate the racking. Coneflower Solar will address the remaining comments in pre-construction filings and remains committed to working with the VMPWG regarding the Project's VMP.[373]

257. The EERA recognizes that the array seed mix does not meet the high-diversity threshold and states that if this seed mix is used, the vegetation community will have relatively low diversity and will provide limited habitat benefits. The EERA notes that sections 4.3.15, 4.3.17, and 4.3.18 of the DSP address vegetation management, and it does not propose any further mitigation.[374]

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[370] Ex. CE-4 at 98 (Application).
[371] VMPWG Hearing Comments (May 6, 2025) (eDocket No. 20255-218616-01).
[372] *Id.*
[373] Coneflower Solar Response to Public Hearing Comments at 7-8 (May 19, 2025) (eDocket No. 20255-219084-01).
[374] Ex. EERA-6 at 135, 136-37 (EA); Ex. CE-4 at 98 (Application).

258. Coneflower Solar has taken steps to avoid and minimize impacts to vegetation, and changes to the Project's design to accommodate concerns about vegetation are not warranted. Additionally, sections 4.3.15, 4.3.17, and 4.3.18 of the DSP adequately address impacts to vegetation.

7. Wildlife and Habitat.

259. The Project landscape is dominated by agriculture and developed areas (including roads, homes, and farmsteads). Landscape types and vegetation communities vary throughout the local vicinity. Fencerows and ditches, as well as small pockets of wetlands and trees, provide habitat for terrestrial wildlife. Directly south of the Project, the Garvin WMA, Bendix I & II WPAs, and Lake of the Hill provide habitat for terrestrial and aquatic wildlife. Additional wildlife habitat is located directly west of the Project in the Sherman WPA, northwest of the Project in the Dayland Marsh and Deer Lane WMAs, and in the center of the Project in the large RIM Wetland Restoration.[375]

260. There are no Important Bird Areas (IBA) designated by the National Audubon Society within the land control area; the Prairie Coteau Complex IBA is located approximately 20 miles southwest of the Project and encompasses six separate areas within the Prairie Pothole and Eastern Tallgrass Prairie Bird Conservation Regions. There are no WMAs or WPAs within the Project Area, although there are several adjacent to the Project, and there is one RIM easement within the Project.[376]

261. The VMP anticipates that mowing will occur one to three times during the growing season over the first few years of the Project. For long term maintenance, Coneflower Solar will use mowing or sheep grazing to maintain vegetative health and prevent weed spread.[377]

262. Utility scale solar habitats with pollinator vegetation can increase native bee abundance, resulting in increased pollination visits to bordering agricultural fields. Solar habitat can also enhance bird species richness and diversity in agricultural landscapes, likely because these sites provide beneficial foraging and nesting habitat in a resource-limited landscape. The magnitude of these benefits is determined by the extent of habitat restoration within the solar facility. The conversion of the land control area from annual agricultural production to perennial vegetation will positively impact terrestrial wildlife within the land control area, as well as aquatic wildlife in the Lake of the Hill, surrounding wetlands, and Cottonwood and Des Moines Rivers, by reducing pesticide use.[378]

[375] Ex. EERA-6 at 138 (EA).
[376] *Id.* at 145-46.
[377] *Id.* at 146.
[378] *Id.*

263. Overall, the Project does not contribute to significant habitat loss or degradation.[379]

264. The largest impact to wildlife associated with solar facilities is fencing. Fencing can cause direct wildlife impacts, such as through a physical interaction with the fence, or may indirectly impact wildlife by leading to a behavioral change. Coneflower Solar plans to install seven-foot-high woven wire fences topped with one-foot of three to four strands of smooth wire. This fencing would be shorter than that recommended by the DNR. Shorter fencing could increase the risk that larger wildlife, such as deer, will become stuck within the facility, and the presence of project components may hinder wildlife from reaching the speed necessary to clear the fence from the inside. Additionally, although deer can jump many fences, they can become tangled in both smooth and barbed-wire fences, especially if the wires are loose or installed too closely together. Wildlife that collides with fencing can be killed or injured, while those that become entangled may die from starvation or incur greater injuries in attempts to free themselves. Predators can also use fences to corner and kill prey species, and young animals that cannot cross fences can be separated from their mothers and die. Fences can act as barriers that block wildlife movement, interrupt behavior patterns, and prevent them from accessing resources. This can be particularly impactful if fences remove or reduce wildlife travel corridors in fragmented landscapes where wildlife must increase movement between habitat patches to obtain adequate resources.[380]

265. As stated in its Application, Coneflower Solar plans to construct a six-foot chain link fence, topped with one foot of barbed wire, around the Project substation to comply with the National Electric Code.[381] Fencing around the perimeter of the Project facilities will consist of an agricultural woven wire fence and will extend approximately seven feet above grade. Barbed wire will not be used around the perimeter of the Project, and instead one-foot of three to four strands of smooth wire will be used for a total height of eight feet.[382] Coneflower Solar does not agree to DNR's recommended 10-foot fence height, but it will continue to work with EERA and DNR on a final fence plan for this site. Coneflower Solar is concerned that additional fence height would negatively impact the Project's aesthetics by making the fence a more prominent feature on the landscape and would increase project costs, while making it only marginally more likely to keep white-tail deer away from the Project facilities.[383] Section 4.3.32 requires the Permittee to develop a final fence plan for the specific site in coordination with the DOC and the DNR.[384] The DNR has stated that it will not issue a white-tailed deer removal permit for facilities with woven wire fences lower than

[379] *Id.*
[380] *Id.* at 139-40.
[381] Ex. CE-4 at 19-20 (Application).
[382] Id. at 20.
[383] Ex. CE-12 at 10-11 (Direct Testimony of Brie Anderson with Schedules A-D).
[384] Ex. EERA-6 at 147 (EA).

10 feet.[385] The final fence plan must be submitted to the Commission as part of the Site Plan pursuant to Section 8.3 of the DSP.

266. A considerable amount of wildlife habitat is located adjacent to and within the Project's area in the form of public lands and conservation easements. Wildlife in the area move between these habitat patches to meet their resource needs. US HWY 14 bisects the Project, and wildlife must cross this road to move between the habitats in the north and south of the Project Area. Once project fencing is installed, the travel corridors of medium- and large-sized animals moving between the north and south habitat patches will be limited to the passages between fence lines. According to current project design, the minimum setback between the road ROW and the Project fence line is 38 feet, which is narrower than DNR recommendations to minimize disruptions to wildlife travel corridors. DNR instead recommended a setback of 50 feet from the perimeter fencing to the road ROW.[386]

267. Consistent with the DNR's recommendation, EERA proposed special condition 5.9, which states:

> **5.9 Fencing ROW setbacks**
>
> The Permittee shall apply a minimum setback of 50 feet from the perimeter fence to all road ROWs to reduce the risk of vehicle collisions with wildlife."[387]

268. Coneflower Solar objects to special condition 5.9 as proposed in the DSP. Coneflower Solar asserts that application of a minimum setback distance of 50 feet between the perimeter (i.e., fence) of the Project and a road ROW is overbroad to achieve the stated goal of protecting wildlife and would negatively impact efficient energy production. As noted above, Coneflower Solar has agreed to set back Project facilities along US HWY 14 in accordance with MnDOT's Blowing Snow Control recommendations. This will have the dual benefit of also resulting in increased wildlife corridors along the most heavily travelled roadway in the Project Area. Coneflower Solar offered testimony that many roadways in the area of the Project are gravel and lightly traveled, making the risks to wildlife and the traveling public small, especially given the existing fence lines and farmsteads that border these roads today. Moreover, in many parts of the Project Area, solar facilities are only located on one side of the road, leaving expansive areas for wildlife travel. Coneflower Solar proposes to limit the application of DNR's minimum 50-foot road setback to paved roads within the Project Area where Project facilities are located on both sides of the road. Coneflower Solar maintains this will continue to allow efficient siting of the Project and accommodate DNR's proposal in areas where Project facilities are on both sides of paved roadways.[388]

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[385] DNR Comments (May 2, 2025) (eDocket No. 20255-218562-01 and 20255-218562-02).
[386] Ex. EERA-6 at 141 (EA); DNR Scoping Comments (Dec. 4, 2024) (eDockets No: 202412-212709-01).
[387] Ex. EERA-6 at Appendix B (EA).
[388] Ex. CE-12 at 10-11 (Direct Testimony of Brie Anderson with Schedules A-D).

269. As revised by Coneflower Solar, Section 5.9 would read:

5.9 Fencing ROW setbacks

The Permittee shall apply a minimum setback of 50 feet from the perimeter fence to paved ~~all~~ road ROWs on US Highway 14 and County Road 7 where Project Facilities are sited on both sides of the road to reduce the risk of vehicle collisions with wildlife.[389]

270. EERA does not support to Coneflower Solar's proposed revision to special condition 5.9. EERA notes ongoing concerns about a high rate of wildlife movement and maintains that its original proposal is consistent with the DNR's recommendation.[390]

271. The Administrative Law Judge determines that Coneflower Solar's proposed modification to Section 5.9 is reasonable. Coneflower Solar's proposed setbacks recognize the presence of less-traveled roads in the Project area and instances in which Project facilities are located on only one side of the road. While the setback will be less than recommended by the DNR in some areas, the proposal is reasonable because it mitigates the risk of vehicle collisions with wildlife on more heavily traveled roads, while balancing the impact an increased setback would have on the available Project Footprint and efficient design of the Project.

272. Coneflower Solar has taken steps to avoid and minimize impacts to wildlife and habitat. Sections 4.3.16, 4.3.32, and 8.14 of the DSP specify measures that will minimize impacts to wildlife.[391] EERA also proposes other special conditions related to mitigating impacts to wildlife resulting from the Project's adjacency to various roads, proximity to designated wildlife habitat, and connection to the Des Moines and Cottonwood Rivers via site drainage systems. These include:

- Section 5.10 requires the permittee to use motion activated, down-lit, shielded lighting around and within the Project.
- Section 5.11 requires the permittee to use dust suppression agents that do not contain chloride.
- Section 5.12 requires the permittee to use erosion control materials that do not contain plastic or synthetic fibers or malachite green dye.
- Section 5.13 requires the permittee to coordinate with the DNR on the design and use of small- to medium-sized animal permeable fencing around the Project.

[389] *Id.* at 15:9-20; *see* Coneflower Solar Response to Public Hearing Comments (May 19, 2025) (eDocket No. 20255-219084-01).
[390] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).
[391] Ex. EERA-6 at 146-147 (EA).

- Section 5.14 requires the permittee to coordinate with the DNR on the installation of fence visibility markers in locations determined to pose a collision risk for low-flying birds.[392]

273. Coneflower Solar agrees to sections 5.11, 5.12, 5.13, and 5.14.[393]

274. Coneflower Solar proposed revising section 5.10 of the DSP to require the use of switch-controlled down-lit lighting, as mentioned in the Application,[394] instead of motion-activated down-lit lighting for the Project. Coneflower Solar's operations and maintenance team will switch the lights on when needed at the site, rather than rely on motion-activated lighting, which can turn on needlessly due to passing animals. Accordingly, Coneflower Solar proposes the following revisions:

5.10 Wildlife Friendly Lighting

The Permittee shall use ~~motion activated,~~switch-controlled, down-lit lighting around and within the Project.[395]

275. EERA agreed with Coneflower Solar's proposed modification.[396] However, EERA notes that there is a discrepancy between the language provided for section 5.10 in the DSP and in the EA. The version included in the DSP did not include the word "shielded."[397] EERA proposes a final revision to section 5.10 to read:

5.10 Wildlife Friendly Lighting

The Permittee shall use ~~motion activated,~~switch-controlled, down-lit, shielded lighting around and within the Project

276. The final version of section 5.10 of the DSP, as modified by both Coneflower Solar and the EERA, is reasonable.

8. Climate Change.

277. The Project will help to shift energy production in Minnesota and the upper Midwest toward carbon-free sources. Construction emissions will have a short-term negligible increase in GHGs that contribute to climate change. Overall, the Project will generate energy that can be used to displace energy otherwise generated by carbon-fueled sources. The total GHG emissions produced by construction and operation of the Project will be minimal when compared to the reduction in GHG emissions long-term. The Project's design incorporates design elements that

[392] *Id.* at 147.
[393] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[394] *See* Ex. CE-4 at 20 (Application); *see also* Ex. EERA-6 at 60 (EA).
[395] Ex. CE-12 at 16:1-10 (Direct Testimony of Brie Anderson with Schedules A-D).
[396] EERA Hearing Comments at 9 (May 5, 2025) (eDocket No. 20255-218595-01).
[397] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).

minimize impacts from the increase in extreme weather events such as increased flooding, storms, and heat wave events that are expected to accompany a warming climate.[398]

F. Rare and Unique Natural Resources.

278. Minnesota law requires consideration of the Project's potential effects on rare and unique natural resources.[399]

279. The DNR classifies rare plant or animal communities across the state. These include Scientific and Natural Areas, High Conservation Value Forest, Minnesota Biological Survey (MBS) Native Plant Communities, and MBS Sites of Biodiversity Significance.[400]

280. There are no MBS sites of moderate, high, or outstanding biodiversity significance within the land control area. There are several MBS sites of moderate biodiversity significance adjacent to the Project, one is an upland prairie system and prairie wetland complex within the Garvin WMA, and the other is an upland prairie system within the Bendix II WPA.[401]

281. In its public hearing comments, DNR requested that a special permit condition be included requiring the permittee to comply with Minnesota state-listed endangered and threatened species laws, as follows:

> Prior to the start of construction, the Permittee shall resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittee will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134). The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff. [402]

282. Coneflower Solar agrees that this condition is reasonable, though it notes that, based on the Natural Heritage Information System review of the Project,[403] it does not anticipate a Takings Permit will be required.[404]

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[398] Ex. EERA-6 at 153-154 (EA).
[399] Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. F.
[400] Ex. EERA-6 at 148 (EA).
[401] *Id.* at 149.
[402] Comment by DNR (April 10, 2025) (eDocket Nos. 20254-217490-01 and 20254-217490-02).
[403] *See* Natural Heritage Review Letter (May 2, 2025) (eDocket No. 20255-218562-02).
[404] *See* Coneflower Solar Response to Public Hearing Comments at 6 (May 19, 2025) (eDocket No. 20255-219084-01).

283. The northern long-eared bat (NLEB) is a federally listed species and state listed species of concern.[405]

284. While the land control area is primarily agricultural lands with little forested habitat, the NLEB is limited to shelterbelts or windbreaks. According to the DNR and U.S. Fish and Wildlife Service (USFWS), there are no known hibernacula in Lyon County or Murray County, which is the adjacent southern county.[345] The preferred mitigation strategy to avoid impacts to the NLEB is avoidance of tree-clearing to the extent possible. When tree clearing is necessary, it should be done outside the pup rearing season from June 1 to July 31 and outside the active NLEB season from April 1 to October 31.[406]

285. The tricolored bat (TCB) is a proposed federally listed species and state listed species of concern. According to the DNR it has only been found in small numbers in the state and a maternity colony has yet to be found in Minnesota. The preferred mitigation strategy to avoid impacts to the TCB is avoidance of tree-clearing to the extent possible. When tree clearing is necessary, it should be done outside the active TCB season from April 1 to October 31.[407]

286. The monarch butterfly is a federal candidate species (proposed threatened). Due to the agricultural landscape, suitable monarch butterfly habitat is generally limited in the land control area. The three non-array native seed mixes designed for the Project include at least one milkweed species; once vegetation has been established the Project will provide limited foraging habitat for monarchs.[408]

287. Bald eagles typically nest in mature trees near large lakes or streams. Nesting habitat suitable for bald eagles is not present within the land control area and the closest suitable nesting habitat is associated with the Cottonwood and Des Moines Rivers, approximately one mile northeast and 0.5 miles southwest of the Project. The USFWS will coordinate appropriate mitigation measures for bald eagles for the Project, if necessary. Mitigation measures may include setbacks from nests, timing restriction for construction activities, and possibly seeking a USFWS permit for removal of a nest.[409]

288. Coneflower Solar refreshed the Project's Information for Planning and Consulting (IPaC) resource list in response to several species status changes that occurred after it filed the Application. Two new federal candidate species are now listed on the project's IPaC report, Suckley's Cuckoo Bumble Bee and the Western Regal Fritillary. The Western Regal Fritillary is a federal candidate species (proposed threatened). Suckley's Cuckoo Bumble Bee is a federal candidate species (proposed endangered). Once vegetation has been established, the Project area will provide some foraging habitat for adult Regal Fritillaries and for bumble bees, including the Suckley's

[405] Ex. EERA-6 at 149 (EA).
[406] *Id.* at 149-150.
[407] *Id.* at 150.
[408] *Id.*
[409] *Id.* at 151.

Cuckoo Bumble Bee. In addition, neither the NLEB nor TCB are included on the recent IPaC list. Coneflower Solar still plans to limit any tree clearing (if necessary) to avoid the active season for both the NLEB and TCB as a best management practice for bats. The project's updated IPaC report is included in Appendix F to the EA.[410]

289. Techniques for minimizing impacts to wildlife and vegetation also minimize impacts to rare species. Avoiding identified areas of species occurrence or preferred habitat is the preferred mitigation measure.[411]

290. Coneflower Solar has taken steps to avoid and minimize impacts to rare and unique natural resources. Additionally, section 5.15 of the DSP requires the permittee to comply with the USFWS guidance in effect regarding NLEB, including tree clearing restrictions if applicable. The EERA does not propose any additional mitigation.[412] Coneflower Solar agrees with EERA's proposed special condition 5.15 of the DSP.[413]

G. Application of Various Design Considerations.

291. Under Minn. R. 7850.3100, Coneflower Solar is not required to analyze alternative sites for the Project unless it rejected alternative sites. Coneflower Solar selected the proposed Project site based on its proximity to each point of interest, supportive landowners, and no competition with other potential renewable energy projects (i.e., available land not currently participating in other renewable energy projects). The proposed Project site was identified based on these factors, and no specific alternative sites for the Project were considered.[414]

H. Use of Existing Large Electric Power Generating Plants.

292. Minnesota law requires consideration of the use of existing LEPGP.[415]

293. There are no existing LEPGP sites in the region.[416]

I. Use of Existing Rights-of-Way.

294. Minnesota law requires consideration of the use of existing ROWs.[417]

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[410] *Id.* at 152-53.
[411] *Id.* at 153.
[412] *Id.*
[413] *See* Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[414] Ex. EERA-6 at 11 (EA) (noting that this factor does not apply as the proposed Project is the only design under consideration); Ex. CE-4 at 5, 16 (Application).
[415] Minn. R. 7850.4100(I).
[416] Ex. EERA-6 at 161-165 (EA).
[417] Minn. R. 7850.4100(H) and (J).

295. Existing infrastructure includes two transmission lines, a substation, and a pipeline.[418] The two transmission lines are as follows: (1) one 69 kV line that is connected to the existing substation and runs east-west along US HWY 14 and north-south along CR 67 through the center of the site, and (2) one 115 kV line, the Lyon County to Lake Yankton line owned by Xcel Energy, which runs along the northern portion of the site, parallel to 140th Street. A Northern Border Pipeline Company owned natural gas pipeline runs through the land control area from the northwest to the southeast, and the existing substation bordering the southeastern portion of the Project, also owned by Northern Border Pipeline Company, powers their natural gas facility.[419]

J. Electrical System Reliability.

296. Minnesota law requires consideration of electrical system reliability.[420]

297. The Project has been designed to minimize outages or interruptions to electrical service: SCADA equipment will be used to monitor facility operations twenty-four hours a day, seven days per week, identify problems, and create preventative maintenance schedules to reduce the chance of equipment failure that results in service outages. The local operations and maintenance team will be supported by the remote monitoring team. Project components are designed to withstand extreme weather events, and the tracking system allows the panels to follow the sun throughout the day, maximizing energy generation.[421]

298. The proposed Project location is ideal for solar energy generation. The region receives a high degree of solar irradiance, and the flat terrain and lack of trees or tall structures means there is little potential for panel shading that impacts generation. The proximity of the proposed solar facility to the Lyon County to Lake Yankton 115 kV transmission line and the proposed 345 kV Garvin Substation minimizes power loss over long transmission distances, as only a short gen-tie line will be needed to interconnect to the grid in either scenario.[422]

299. Solar panels can generate electricity from both direct and diffuse, or indirect, solar radiation. Diffuse solar radiation is sunlight that is absorbed, scattered, or reflected by atmospheric components such clouds. Even on cloudy days, the proposed Project will generate electricity to supply to the grid. The rotational tracking system allows panels to track the sun's position during winter, when the sun is at a lower angle in the sky, and panels can be rotated to prevent snow from building up on the panel surface.[423]

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[418] Ex. EERA-6 at 56 (EA).
[419] *Id.* at 53.
[420] Minn. R. 7850.4100(K).
[421] Ex. EERA-6 at 157 (EA).
[422] *Id.* at 157-58.
[423] *Id.* at 158.

300. The proposed Project has been planned, sited, and designed to allow for reliable energy generation.[424]

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

301. Minnesota law requires consideration of the costs of constructing, operating, and maintaining a facility which are dependent on design and route.[425]

302. This factor does not apply in this matter because the design of the proposed Project is the only design under consideration.[426]

L. Adverse Human and Natural Environmental Effects that Cannot be Avoided.

303. Minnesota law requires consideration of the adverse human and natural environmental effects that cannot be avoided.[427]

304. Unavoidable adverse effects associated with construction of the Project (in some instances a specific phase of construction) would last through construction and include:

- Fugitive dust.
- Noise disturbance to nearby residents and recreationalists.
- Visual disturbance to nearby residents and recreationalists.
- Soil compaction and erosion.
- 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.
- Minor GHG emissions from construction equipment and workers commuting.[428]

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[424] *Id*.
[425] Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100(L).
[426] Ex. EERA-6 at 11 (EA).
[427] Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100(M).
[428] Ex. EERA-6 at 158-59 (EA).

305. Unavoidable adverse impacts associated with the operation would last as long as the life of the Project, and 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 PV panels.
- Injury or death of wildlife from fencing.
- Potential decrease to property values.[429]

M. Irreversible and Irretrievable Commitments of Resources.

306. Minnesota law requires consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.[430] 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.[431]

307. 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, for example, 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.[432]

XI. SITE PERMIT CONDITIONS

308. The Commission's Site Permit includes a number of proposed permit conditions, many of which have been discussed above. The conditions apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

309. The EA and DSP included various recommendations and potential site permit conditions related to the Project,[433] to which the Applicant responded in its direct

[429] *Id.* at 59.
[430] Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).
[431] Ex. EERA-6 at 159 (EA).
[432] Ex. EERA-6 at 159 (EA).
[433] *See* Ex. EERA-6 (EA); Ex. EERA-6 at Appendix B – DSP (EA).

testimony and response to public hearing comments.[434] Coneflower Solar agreed with EERA's recommended DSP special conditions 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.11, 5.12, 5.13, 5.14, and 5.15.[435]

310. DNR requested the inclusion of the following special permit condition requiring compliance with Minnesota state-listed endangered and threatened species laws:

> Prior to the start of construction, the Permittee shall resubmit a Natural Heritage Review and continue to consult with the MDNR regarding implementation of avoidance measures for state-protected threatened and endangered species. The Permittee will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134). The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff. [436]

311. In its response to public hearing comments, Coneflower Solar found DNR's recommended permit condition regarding state-listed endangered and threatened species laws to be reasonable and supported its inclusion in the DSP.[437]

312. The record supports the inclusion of DNR's proposed special condition in the DSP.

313. Coneflower Solar requests that Section 2 of the DSP be corrected to refer to Lyon County instead of Renville County as follows:

County	Township Name	Township	Range	Section
~~Renville~~Lyon	Custer	109N	41W	7, 16-22, 27

314. In its hearing comments, EERA stated "[t]he draft site permit currently lists Renville County as the host county, and should be updated to list Lyon County as the host county."[438]

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[434] *See* Ex. CE-12 (Direct Testimony of Brie Anderson with Schedules A-D) and Coneflower Solar Response to Public Hearing Comments (May 19, 2025) (eDocket No. 20255-219084-01).
[435] Coneflower Solar Response to Public Hearing Comments at 2 (May 19, 2025) (eDocket No. 20255-219084-01).
[436] DNR Comments at 2 (May 2, 2025) (eDocket No. 20255-218562-01).
[437] *See* Coneflower Solar Response to Public Hearing Comments at 6 (May 19, 2025) (eDocket No. 20255-219084-01).
[438] EERA Hearing Comments at 8 (May 5, 2025) (eDocket No. 20255-218595-01).

315. The record supports the inclusion of the Applicant's revisions to Section 2.0 of the DSP.

316. Special permit condition 5.9 relates to setbacks. In its hearing comments, EERA stated that special permit condition 5.9 reflects the suggestion made by DNR regarding setbacks, and EERA supports its inclusion in the DSP.[439]

317. Coneflower Solar does not support special condition 5.9 as proposed. Coneflower Solar maintains that the condition is overbroad and is not necessary to achieve the stated purpose of reducing vehicle collisions with wildlife. Coneflower Solar proposes revising special permit condition 5.9 of the DSP to account for the Blowing Snow Control plan that it developed with MnDOT and to apply the recommended 50-foot fencing setback to the paved roads in the Project Area with fencing on both sides of the road. In support of its proposal, Coneflower Solar notes that gravel roads in the Project Area have inherently less risk of wildlife/vehicle collisions because of reduced traffic levels, and that implementing the 50-foot setback from all public ROWs would remove additional acreage from the Project Footprint, resulting in a less efficient design, which Coneflower Solar believes to be without a clear benefit to wildlife or the traveling public. Coneflower Solar offered a compromise position incorporating the road setback on paved roads where project facilities occupy both sides of the ROW. Coneflower Solar continues to support its proposed modification to special condition 5.9 with the inclusion of a minimum setback of 50 feet from US Highway 14 ROW (where DNR's Blowing Snow Control plan will also be in effect).[440]

318. As revised by Coneflower Solar, Section 5.9 would read:

> **5.9 Fencing ROW setbacks**
>
> The Permittee shall apply a minimum setback of 50 feet from the perimeter fence to paved ~~all~~ road ROWs on US Highway 14 and County Road 7 where Project Facilities are sited on both sides of the road to reduce the risk of vehicle collisions with wildlife.[441]

319. EERA does not support to Coneflower Solar's proposed revision to special condition 5.9.[442]

320. The Administrative Law Judge determines that Coneflower Solar's proposed modification to Section 5.9 is reasonable. As explained above, this compromise position recognizes the presence of less-traveled roads in the Project area and instances in which Project facilities are located on only one side of the road. While the setback will be less than recommended by the DNR in some areas, the proposal is

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[439] *Id.* at 9.
[440] Ex. CE-12 at 10-11 (Direct Testimony of Brie Anderson with Schedules A-D).
[441] *Id.* at 15:9-20; *see* Coneflower Solar Response to Public Hearing Comments (May 19, 2025) (eDocket No. 20255-219084-01).
[442] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).

reasonable because it mitigates the risk of vehicle collisions with wildlife on more heavily traveled roads, while balancing the impact an increased setback would have on the available Project Footprint and efficient design of the Project. The record supports the inclusion of the Applicant's revisions to Section 5.9 of the DSP.

321. Coneflower Solar proposes revising section 5.10 of the DSP to require the use of switch-controlled down-lit lighting, as mentioned in the Application,[443] instead of motion-activated down-lit lighting for the Project. Coneflower Solar's operations and maintenance team will switch the lights on when needed at the site, rather than rely on motion-activated lighting, which can turn on needlessly due to passing animals. Accordingly, Coneflower Solar proposes the following revisions:

> **5.10 Wildlife Friendly Lighting**
>
> The Permittee shall use ~~motion activated,~~switch-controlled, down-lit lighting around and within the Project.[444]

322. EERA agreed with Coneflower Solar's proposed modification.[445] However, EERA subsequently noted a discrepancy between the language provided for section 5.10 in the DSP and in the EA. The version included in the DSP did not include the word "shielded."[446] EERA proposes a final revision to section 5.10 to read:

> **5.10 Wildlife Friendly Lighting**
>
> The Permittee shall use ~~motion activated,~~switch-controlled, down-lit, shielded lighting around and within the Project

323. The final version of section 5.10 of the DSP, as modified by both Coneflower Solar and the EERA, is reasonable and supported by the record.

324. EERA proposed special condition 5.16 of the DSP requiring the permittee to enter into a Community Impact Mitigation Agreement with the City of Garvin and Custer Township to mitigate impacts to the community of Garvin.[447] In its hearing comments, EERA stated that the permit condition is supported by the analysis in the EA particularly with respect to cultural values and cumulative potential effects.[448] EERA notes that the development of the Project will have unavoidable impacts to the character of the area, resulting in negative impacts to cultural values. EERA assesses these negative impacts to cultural values as minimal to moderate in the context of the Project by itself, but notes the cumulative effects of the Project, MNEC, and LCS will result in significant negative impacts to cultural values for some residents. EERA maintains that larger solar projects incite stronger emotions in local residents, and the Project is one of

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[443] *See* Ex. CE-4 at 20 (Application); *see also* Ex. EERA-6 at 60 (EA).
[444] Ex. CE-12 at 16:1-10 (Direct Testimony of Brie Anderson with Schedules A-D).
[445] EERA Hearing Comments at 9 (May 5, 2025) (eDocket No. 20255-218595-01).
[446] EERA Reply Comments (May 27, 2025) (eDocket No. 20255-219274-01).
[447] *See* Ex. EERA-6 at 168 (EA) and Ex. EERA-6 at Appendix B – DSP (EA).
[448] EERA Hearing Comments at 9 (May 5, 2025) (eDocket No. 20255-218595-01).

the largest contiguous solar projects proposed in the state of Minnesota thus far.[449] EERA further notes that local residents submitted comments during scoping raising concerns related to area characteristics such as local wildlife, hunting culture, agricultural production, and community aesthetics.[450]

325. Coneflower Solar proposes removing section 5.16 of the DSP in its entirety. Coneflower Solar argues that a Community Impact Mitigation Agreement is not necessary for the Project, and contends that the record does not demonstrate negative impacts to the City of Garvin, its residents, or cultural values. Coneflower Solar notes that Garvin is not an area of environmental justice concern;[451] the Project will not create disproportionate or adverse impacts to low-income or minority populations because the percentage of low-income and minority residents in the Project Area is not meaningfully greater than Lyon County, the region of comparison;[452] the Project will not disrupt local communities or businesses;[453] the Project abides by Lyon County Zoning Ordinance setbacks and other required setbacks,[454] there is a raised railroad ROW[455] and existing vegetation[456] between the Project and the City of Garvin, and the economic benefits of the Project are anticipated to be positive.[457] Coneflower Solar relies on positive comments from the public hearing process, in which members of the public from Garvin and Custer Township offered comments in support of the Project and socioeconomic benefits that the Project will bring to the community, including the support of area churches, schools, and 4-H clubs.[458]

326. The Administrative Law Judge recognizes that a Community Impact Mitigation Agreement could be a valuable and important tool to address community concerns. The Commission may wish to explore the use of these agreements in matters involving siting and routing to mitigate negative impacts on local host communities. However, the Administrative Law Judge finds that the record in this case does not support imposing a permit condition requiring such an agreement.

327. As explained in detail in the Findings of Fact above, the EERA assesses the negative impacts to cultural values as minimal to moderate, and comments from the public were mixed, with some supporting and some opposing the Project. The record does not contain a clear indication of community sentiment coalescing around an issue of significant impact, and some of the issues raised by community members are addressed in other permit conditions. The proposed permit condition would require

[449] Ex, EERA-6 at 65 and 166 (EA).
[450] Ex. EERA-3 (Written Comments on the Scope of the EA); Ex. EERA-4 (Oral Comments on the Scope of the EA).
[451] *See* Ex. EERA-6 at 89-90 (EA).
[452] *Id.* at 90.
[453] *Id.* at 84.
[454] *Id*. at 73-74.
[455] *See id*. at 53, 79.
[456] *See id*. at 134.
[457] *Id.* at 84.
[458] *See* Marshall 6:00 p.m. Tr.at 27:3-20, 28:5-12, 30:12-25, 31:14-22, 37:4-22, 38:7-25, 39:1-13, 45:10-17, 46:1-25; 47:6-25, and 48:2-20 (April 22, 2025).

Coneflower Solar to enter into an agreement with the City of Garvin and Custer Township. These governmental entities are not parties in this case, and they have not participated to raise issues of concern, so the record does not contain specific evidence relating to the issues that should be addressed in an agreement. The lack of specificity about what an agreement might cover creates uncertainty about Coneflower Solar's obligations under the proposed permit condition and how non-compliance would be determined, particularly given that the Commission essentially would be requiring independent local units of government to enter into this agreement as well.[459] The EERA has expressed concerns about the size of the Project and the cumulative impact of the Project together with other planned energy facilities in the area. The Administrative Law Judge does not discount these concerns. But on this record, it is not clear how a permit condition generally requiring a Community Impact Mitigation Agreement will address any specific issues related to potential cumulative impacts.

328. For these reasons, the Administrative Law Judge determines that proposed Section 5.16 is not supported by the record in this case, and she respectfully recommends against inclusion of this provision in the DSP.

XII. NOTICE

329. Minnesota statutes and rules require an applicant to provide certain notice to the public and local governments before and during the site permit and route permit application process.[460] Coneflower Solar provided notices to the public and local governments in satisfaction of Minnesota statutory and rule requirements.[461]

330. Minnesota statutes and rules also require the EERA and the Commission to provide certain notice to the public throughout the site and route permit application processes.[462] The EERA and the Commission provided the notices in satisfaction of Minnesota statutes and rules.[463]

XIII. COMPLETENESS OF EA

331. The EA process is the alternative environmental review approved by the EQB for LEPGPs. The Commission is required to determine the completeness of the

[459] While some permit conditions require Coneflower Solar to work with and obtain approvals of other governmental entities such as the DNR. MPCA, or USFWS, the record contains information about the specific issues that would be addressed in those instances. That is not the case with the proposed agreement.
[460] Minn. Stat. § 216E.03, subps. 3a, 4; Minn. R. 7850.3300; Minn. R. 7850.2100, subps. 2, 4.
[461] Exs. CE-1 (Notice of Intent to File Under Alternative Review); CE-2 (Project Notice Under 7850.2100); and CE-6 (Confirmation of Notice).
[462] Minn. Stat. § 216E.03, subps. 3a, 4; Minn. R. 7850.3300; Minn. R. 7850.2100, subps. 2, 4.
[463] Exs. PUC-1 (Notice of Comment Period on Application Completeness); PUC-5 (notice of Public Information and EA Scoping Meetings); PUC-9 (Notice of Public Hearings and Availability of EA); EERA-7 (Notice of EA mailed to Agencies); EERA-8 (Notice of EA to Tribal Historic Preservation Officers and Tribal Government Contacts); EERA-10 (Notification of EA Mailed to Libraries); and EERA-11 (Notice of Public Hearing and EA Availability on EQB Monitor).

EA. An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.[464]

332. Coneflower Solar and EERA proposed clarifications to numerous sections of the EA and those clarifications are supported by the record.[465]

333. 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.[466]

XIV. INCORPORATION

334. Any Conclusion of Law that is more properly considered to be a Finding of Fact is adopted herein.

Based upon the foregoing 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 235 MW proposed Project pursuant to Minn. Stat. §§ 216E.02 and 216E.03.

2. The Commission accepted the Application as substantially complete on October 15, 2024.[467]

3. Coneflower Solar has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.

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

5. EERA has conducted an appropriate EA of the Project for purposes of the Site Permit proceeding pursuant to Minn. R. 7850.3700.

6. Public hearings were held on April 22, 2025 (in-person) and April 23, 2025 (remote-access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.

7. The EA prepared for the Project and the record created at the public hearing address the issues identified in the EA scoping decision.

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[464] Minn. R. 4410.4400, subp. 3; Minn. R. 7850.3900, subp. 2 (2023).
[465] *See* Ex. CE-12 (Direct Testimony of Brie Anderson with Schedules A-D); Coneflower Solar Response to Public Hearing Comments (May 19, 2025) (eDocket No. No. 20255-219084-01); and EERA Hearing Comments at 5-9 (May 5, 2025) (eDocket No. 20255-218595-01).
[466] Ex. EERA-5 (EA Scoping Decision).
[467] Ex. PUC-2 (Application Completeness Order).

8. The Commission has the authority under Minn. Stat. § 216E.03 to place conditions in a LEPGP Site Permit.

9. The DSP, as revised by EERA staff and Coneflower, contains a number of important mitigation measures and other reasonable conditions.

10. It is reasonable to amend the DSP to include the changes proposed by the EERA and Coneflower Solar as detailed above.

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

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

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

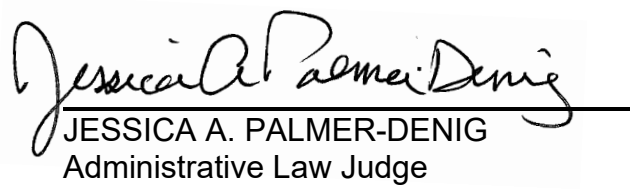
14. Any Finding of Fact that is more properly considered to be a Conclusion of Law is adopted herein.

Based upon these Conclusions of Law, the Administrative Law Judge makes the following:

RECOMMENDATION

The Administrative Law Judge respectfully recommends that the Commission issue a Site Permit to Coneflower Solar to construct and operate the Project and associated facilities in Lyon County, Minnesota, and that the permit include the draft permit conditions amended as set forth above.

Dated: June 26, 2025



JESSICA A. PALMER-DENIG
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

June 26, 2025

See Attached Service List

Re: ***In the Matter of the Application of Coneflower Energy, LLC for a Site Permit for the up to 235 MW Coneflower Solar Project in Lyon County, Minnesota***

OAH 71-2500-40396
MPUC IP-7132/GS-24-215

To All Persons on the Attached Service List:

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

If you have any questions, please contact me at (651) 361-7857, nichole.sletten@state.mn.us, or via facsimile at (651) 539-0310.

Sincerely,

NICHOLE SLETTEN
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 Application of Coneflower Energy, LLC for a Site Permit for the up to 235 MW Coneflower Solar Project in Lyon County, Minnesota	OAH Docket No.: 71-2500-40396 MPUC IP-7132/GS-24-215

On June 26, 2025, a true and correct copy of the **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION** was served by eService, and United States mail, (in the manner indicated below) to the following individuals:

First Name	Last Name	Email	Organization
Brie	Anderson	brie.anderson@apexcleanenergy.com	Apex Clean Energy, Inc.
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron
Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General - Department of Commerce
Ryan	Cox	rcox@fredlaw.com	Fredrikson & Byron, P.A.
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce
Richard	Kolodziejski	rkolodziejski@ncsrcc.org	North Central States Regional Council of Carpenters
Stacy	Kotch Egstad	stacy.kotch@state.mn.us	MINNESOTA DEPARTMENT OF TRANSPORTATION

First Name	Last Name	Email	Organization
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General - Residential Utilities Division
Nathaniel	Runke	nrunke@local49.org	
Will	Seuffert	will.seuffert@state.mn.us	Public Utilities Commission
Sean	Stocker	sean.stocker@apexcleanenergy.com	Apex Clean Energy, Inc.
Garrick	Valverde	garrick.valverde@apexcleanenergy.com	Apex Clean Energy