

Attachment A

PUC EIP Proposed Findings of Fact – Boswell Solar Project

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**STATE OF MINNESOTA
COURT OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION**

**In the Matter of the Joint Application of
Minnesota Power for a Site and Route
Permit for the 85-megawatt Boswell
Solar Project and Associated 2.45 mile
230-kilovolt Transmission Line in Itasca
County, Minnesota**

CAH Docket No. 24-2500-40659
MPUC Docket Nos. E015/GS-24-425;
E015/TL-24-426

**MINNESOTA POWER'S
PROPOSED FINDING OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATIONS**

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This matter was assigned to Administrative Law Judge ("ALJ") Kristien R.E. Butler to conduct a public hearing on the Site and Route permit (MPUC Docket Nos. E015/GS-24-425 and E015/TL-24-426; CAH Docket No. 24-2500-40659) for the 85-megawatt ("MW") Boswell Solar Project ("Solar Facility") and Associated 2.45-mile 230-kilovolt ("kV") Transmission Line (the "Gen-Tie Line") (collectively, the "Project") in Itasca County, Minnesota.

Public hearings for the Project were held on September 10, 2025 (in-person) and September 11, 2025 (virtual). The factual record remained open until September 25, 2025, for the receipt of written public comments. The following appearances were made:

Kodi Verhalen, Taft Stettinius & Hollister LLP, 2200 IDS Center, 80 South Eighth Street, Minneapolis, MN 55402-2210, appeared on behalf of ALLETE, Inc. d/b/a Minnesota Power ("Minnesota Power" or the "Applicant"), along with Applicant employees Drew Janke and Sarah Whiting.

Jessica Livingston, Environmental Review Project Manager, appeared on behalf of the Minnesota Public Utilities Commission ("Commission"), Energy Infrastructure Permitting ("PUC-EIP") unit, previously known as the Department of Commerce – Energy Environmental Review and Analysis.

Scott Ek, Planning Director, 121 Seventh Place East, Suite 350, St. Paul, MN 55101, appeared on behalf of the Commission staff.

STATEMENT OF ISSUES

Has Minnesota Power satisfied the factors set forth in Minn. Stat. § 216E.03 and Minn. R. 7850.4100 for a Site and Route Permit for the Project?¹

¹ As the Application for this Project was filed prior to July 1, 2025, the Application is being reviewed under Minn. Stat. 216E and Minn. R. Ch. 7850 rather than Minn. Stat. Ch. 216I. See Notice of Legislative Changes (July 9, 2025) (eDocket No. [20257-220799-01](#)).

SUMMARY OF RECOMMENDATIONS

The Administrative Law Judge concludes that Minnesota Power has satisfied the applicable legal requirements and, accordingly, recommends that the Commission **GRANT** a Site and Route Permit for the Project, subject to the conditions discussed below.

Based on the evidence in the application for a Site and Route permit (“Application”), Environmental Assessment (“EA”), testimony at the public hearings, written comments, exhibits received in this proceeding, and other evidence in the record, the Judge makes the following:

FINDINGS OF FACT

I. APPLICANT

1. Minnesota Power is an investor-owned public utility headquartered in Duluth, Minnesota. Minnesota Power supplies electric service to 145,000 retail customers and wholesale electric service to 14 municipalities in a 26,000-square-mile electric service territory located in central and northeastern Minnesota. In 2023, 63 percent of Minnesota Power’s total kilowatt-hour (“kWh”) sales served retail industrial customers in the taconite mining, paper/pulp, and pipeline industries.²

II. PROCEDURAL HISTORY

2. On December 18, 2024, Minnesota Power notified the Commission that they intended to submit an application for the Project.³

3. On December 30, 2024, Minnesota Power filed its Application with the Commission.⁴

4. On January 6, 2025, Minnesota Power filed an affidavit of mailing.⁵

5. On January 7, 2025, the Commission issued a Notice of Comment period on Application Completeness.⁶

² Ex. MP-2 at 1 (Boswell Solar Site and Route Permit Application, Filing Letter, Certificate of Service, and Appendices) (Public) (eDocket No. [202412-213417-03](#)).

³ Ex. MP-1 at 1 (Notice of Intent) (eDocket No. [202412-123178-01](#)).

⁴ Ex. MP-2 (Boswell Solar Site and Route Permit Application, Filing Letter, Certificate of Service, and Appendices) (Public) (eDocket Nos. [202412-213417-01](#), [202412-213417-02](#), [202412-213417-03](#), [202412-213417-04](#), [202412-213417-05](#), [202412-213417-06](#), [202412-213417-07](#), [202412-213417-08](#), [202412-213417-09](#), [202412-213417-10](#), [202412-213417-11](#), [202412-213417-12](#), [202412-213417-13](#), [202412-213417-14](#), and [202412-213417-15](#)) (“Application”) and Ex. MP-3 (Boswell Solar Site and Route Permit Application and Appendix I) (Trade Secret) (eDocket Nos. 202412-213417-16, 202412-213417-17, 202412-213417-18).

⁵ Ex. MP-4 at 1-2 (Affidavit of Mailing) (eDocket No. [20251-213570-01](#)).

⁶ Ex. PUC-1 at 1 (Notice of Comment Period on Application Completeness) (eDocket No. [20251-213606-01](#)).

6. On January 21, 2025, the PUC-EIP filed comments on Application Completeness.⁷ On January 28, 2025, Minnesota Power filed reply comments on Application Completeness.⁸

7. On January 30, 2025, the PUC-EIP filed supplemental comments on Application Completeness.⁹ The next day, Minnesota Power filed supplemental comments on Application Completeness.¹⁰

8. On February 3, 2025, the Laborers' International Union of North America ("LiUNA") of Minnesota & North Dakota filed supplemental comments on Application Completeness.¹¹

9. On February 3, 2025, Minnesota Power filed a route and site permit notice compliance filing.¹²

10. On February 18, 2025, the Commission issued its consent order where it accepted Minnesota Power's Application as complete, declined to appoint an advisory task force, requested a full ALJ report with findings of fact, conclusions of law, and recommendations for the project's hearing, and authorized Minnesota Power to initiate consultation with the Minnesota State Historic Preservation Office ("SHPO").¹³

11. On February 25, 2025, the Commission issued a letter authorizing SHPO consultation.¹⁴ On the same day, the Commission filed a sample route permit¹⁵ and a sample site permit.¹⁶

12. On March 4, 2025, the ALJ issued an Order for Prehearing Conference.¹⁷

13. On March 19, 2025, the Commission provided notice of public information and EA scoping meetings.¹⁸

14. On April 1, 2025, the Environmental Quality Board provided notice of the public information and EA scoping meetings.¹⁹ On the same day, the Fond du Lac Band of Lake Superior Chippewa filed comments in response to the notice.²⁰

⁷ Ex. PUC-EIP-1 (Comments on Application Completeness) (eDocket No. [20251-214171-01](#)).

⁸ Ex. MP-6 (Reply Comments on Application Completeness) (eDocket No. [20251-214477-01](#)).

⁹ Ex. PUC-EIP-2 (Supplemental Comments on Application Completeness) (eDocket No. [20251-214669-01](#)).

¹⁰ Ex. MP-7 (Supplemental Comments on Application Completeness) (eDocket No. [20251-214825-01](#)).

¹¹ Ex. PUC-2 (LiUNA Minnesota/North Dakota Comments) (eDocket No. [20252-214882-01](#)).

¹² Ex. MP-8 (Route and Site Permit Notice Compliance Filing) (eDocket No. [20252-215360-01](#)).

¹³ Ex. PUC-3 (Order on Application Completeness) (eDocket No. [20252-215451-01](#)).

¹⁴ Ex. PUC-4 (Letter Regarding Authorization to Initiate Consultation Under Minn. Stat. § 138.665) (eDocket No. [20252-215763-01](#)).

¹⁵ Sample Route Permit (eDocket No. [20252-215753-01](#)) (this was filed in Docket No. E015/TL-24-426, but not assigned an exhibit number).

¹⁶ Ex. PUC-5 (Sample Site Permit) (eDocket No. [20252-215752-01](#)).

¹⁷ Letter (Order for Prehearing Conference) (March 4, 2025) (eDocket No. [20253-216010-01](#)).

¹⁸ Ex. PUC-6 (eDocket Nos. [20253-216584-01](#) & [20253-216565-01](#)).

¹⁹ Ex. PUC-7 (EQB Monitor Notice of Public Information and Environmental Assessment Scoping Meetings) (eDocket No. [20254-217118-01](#)).

²⁰ Ex. PUC-8 (Fond du Lac Band Public Comment) (eDocket No. [20254-217114-01](#)).

15. On April 2, 2025, the Commission issued a notice of public meeting cancellation.²¹ On April 9, 2025, the Commission issued a rescheduled notice of public information and EA scoping meetings.²²

16. On April 17, 2025, the Commission filed the Environmental Quality Board's notice on the rescheduled public information and EA scoping meetings.²³ On the same day, the Commission filed a notice of public information and EA scoping meeting in the Grand Rapids Herald Review.²⁴ On the same day, Minnesota Power filed its affidavit of publication of the scoping meeting notice.²⁵

17. On April 28, 2025, the Minnesota Department of Natural Resources ("MnDNR") filed comments regarding the potential environmental and wildlife impacts that should be considered in scoping for the EA and its formal natural heritage review.²⁶

18. On May 5, 2025, the Minnesota Department of Transportation ("MnDOT") filed comments in response to the notice of the EA scoping meeting.²⁷

19. On May 8, 2025, the PUC-EIP provided written and oral comments received on the scope of the EA.²⁸ On May 9, 2025, the PUC-EIP filed a letter noting none of the comments received suggested an alternative site or route for the Project. As a result, the PUC-EIP recommended the Project's proposed site and route be studied in the EA.²⁹

20. On May 20, 2025, the Commission authorized the PUC-EIP to conduct the EA solely on the site and route identified in Minnesota Power's Application.³⁰

21. On May 23, 2025, Minnesota Power filed concurrence letters from the Minnesota SHPO and the Leech Lake Band of Ojibwe Trail Historic Preservation Officer.³¹

22. On May 29, 2025, the ALJ issued an amended scheduling order.³²

23. On May 30, 2025, the PUC-EIP issued its scoping decision for the EA.³³

²¹ Ex. PUC-9 (Notice of Public Meeting Cancellation) (eDocket No. [20254-217159-01](#)).

²² Ex. PUC-10 (Rescheduled Notice of Public Information and Environmental Assessment Scoping Meeting) (eDocket No. [20254-217396-01](#)).

²³ Ex. PUC-12 (Rescheduled Notice of Public Information and Environmental Assessment Scoping Meeting (EQB Monitor)) (eDocket No. [20254-217817-01](#)).

²⁴ Ex. PUC-11 (Notice of Public Information and Environmental Assessment Scoping Meeting (Newspaper Affidavit)) (eDocket No. [20254-217840-01](#)).

²⁵ Ex. MP-9 (Affidavit of Publication – Scoping Meeting Notice) (eDocket No. [20254-217840-01](#)).

²⁶ Ex. PUC-13 (MNDNR Comments) (eDocket Nos. [20254-218237-01](#) & [20254-218237-02](#)).

²⁷ Ex. PUC-14 (MnDOT Comments) (eDocket No. [20255-218589-01](#)).

²⁸ Ex. PUC-EIP-3 (Oral and Written Comments on the Scope of the Environmental Assessment) (eDocket No. [20255-218719-01](#) and [20255-218719-02](#)).

²⁹ Ex. PUC-EIP-4 (Alternatives Identified During Scoping Comment Period) (eDocket No. [20255-218745-01](#)).

³⁰ Ex. PUC-15 (Order on EA Scoping) (eDocket No. [20255-219137-01](#)).

³¹ Ex. MP-10 (SHPO/THPO Concurrence Letters) (eDocket No. [20255-219222-01](#)).

³² Order (Amended Scheduling Order) (eDocket No. [20255-219332-01](#)).

³³ Ex. PUC-EIP-5 (Environmental Assessment Scoping Decision) (eDocket No. [20255-219406-01](#)).

24. On August 27, 2025, the PUC-EIP filed the Boswell Solar EA.³⁴ The Commission also issued its notice of public hearings scheduled for September 10, 2025 and September 11, 2025.³⁵

25. On September 2, 2025, the Commission filed the notice of public hearings and availability of EA in the environmental quality board.³⁶ The Commission also filed proof of notice of distribution of the EA to agencies and Tribal Historic Preservation Officers.³⁷

26. On September 3, 2025, Minnesota Power filed direct testimony from Drew Janke.³⁸

27. On September 4, 2025, the Commission filed an affidavit of publication that the notice of public hearings and availability of the EA was published in Grand Rapids Herald Review newspaper.³⁹

28. On September 10, 2025, the PUC-EIP filed its notice to the Grand Rapids Area Library that the EA is available for the public.⁴⁰

29. On September 10, 2025, the Commission held in-person public meetings with the PUC-EIP and the Applicant at the BENA Community Center and the Cohasset Community Center.⁴¹

30. On September 11, 2025, the Commission held a virtual public meeting with the PUC-EIP and the Applicant.⁴²

31. On September 24, 2025, the MnDNR filed comments in response to the EA and supported specific draft site and route permit special conditions.⁴³

32. On September 25, 2025, Minnesota Power filed comments in response to the EA and comments receiving from written comments and from public hearings.⁴⁴

³⁴ Ex. PUC-EIP-6 (Boswell Solar Environmental Assessment and Appendices) (eDocket Nos. [20258-222456-01](#), [20258-222456-02](#), [20258-222456-03](#), [20258-222456-04](#), [20258-222456-05](#), [20258-222456-06](#)) ("EA").

³⁵ Ex. PUC-17 (Notice of Public Hearings and Availability of Environmental Assessment) (eDocket No. [20258-222444-01](#)).

³⁶ Ex. PUC-18 (Notice of Public Hearings and Availability of Environmental Assessment (EQB Monitor)) (eDocket No. [20259-222639-01](#)).

³⁷ Ex. PUC-EIP-7 (Distribution of EA to Agencies and THPOs) (eDocket No. [20256-222644-01](#)).

³⁸ Ex. MP-11 (Filing Letter, Certificate of Service, and Direct Testimony of Drew Janke) (Docket Nos. [20259-222676-01](#), [20259-222676-02](#), [20259-222676-03](#)).

³⁹ Ex. PUC-19 (Notice of Public Hearings and Availability of Environmental Assessment (Newspaper Affidavit)) (eDocket No. [20259-222692-01](#)).

⁴⁰ Ex. PUC-EIP-8 (Distribution of EA to Local Libraries) (eDocket No. [20259-222875-01](#)).

⁴¹ Ex. PUC-18 (Notice of Public Hearings and Availability of Environmental Assessment in EQB Monitor) (eDocket No. [20259-222639-01](#)).

⁴² Ex. PUC-18 (Notice of Public Hearings and Availability of Environmental Assessment in EQB Monitor) (eDocket No. [20259-222639-01](#)).

⁴³ MnDNR Comments (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

⁴⁴ Minnesota Power Comments on EA (Sept. 25, 2025) (Docket No. [20259-223286-01](#)).

33. On September 25, 2025, the PUC-EIP filed hearing comments on the Applicant's decommissioning plan and offered an addition site permit modification.⁴⁵

34. On September 25, 2025, the PUC-EIP, on behalf of the interagency Vegetation Management Planning Working Group ("VMPWG"), filed comments to the Vegetation Management Plan proposed by the Applicant.⁴⁶

35. On October 9, 2025, the Minnesota Department of Agriculture filed a comment in support of the Applicant's Agricultural Impact Mitigation Plan.⁴⁷

III. DESCRIPTION OF THE PROJECT

36. The Project consists of a nameplate capacity of up to 85 MW photovoltaic ("PV") solar energy generating facility and a 230 kV Gen-Tie Line and associated infrastructure in Itasca County, Minnesota.⁴⁸

37. The Project will be constructed within an area of approximately 1,344.5 acres of privately owned land ("Site"), of which only 498.6 acres will be used for the operation of the Project.⁴⁹ The Gen-Tie Line route will be approximately 2.45 miles in length and will interconnect with the existing Minnesota Power Boswell Energy Center Substation.⁵⁰ Minnesota Power either owns or has obtained leases for each of the parcels necessary for the construction, ownership, and operation for the Project.⁵¹

IV. NEED OVERVIEW

38. In Minnesota Power's 2021 Integrated Resource Plan, the Commission approved a settlement that required Minnesota Power to procure up to 300 MW of regional/in-service territory or net-zero solar energy. The Project will generate carbon-free energy for customers, help Minnesota Power make progress on the Carbon Free and Renewable Energy Standards, boost the tax base of local economies, and create local union jobs. Minnesota Power conducted a Request for Proposal to meet this requirement with an emphasis on regional solar projects that are interconnected to Minnesota Power's system. The Project was selected through this Request for Proposal.⁵²

39. The Project will facilitate Minnesota Power's compliance with Minnesota's Renewable Energy and Carbon Free Standards under the Minn. Stat. § 216B.1691.⁵³

⁴⁵ Minnesota Public Utilities Commission Energy Infrastructure Permitting Unit Hearing Comments (Sept. 25, 2025) (eDocket No. [20259-223295-01](#)).

⁴⁶ Minnesota Interagency Vegetation Management Planning Working Group, Vegetation Management Plan Letter (Sept. 25, 2025) (eDocket No. [20259-223315-01](#)).

⁴⁷ Minnesota Department of Agriculture Comments (Oct. 9, 2025) (eDocket No. [202510-223754-01](#)).

⁴⁸ Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#)).

⁴⁹ Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#)).

⁵⁰ Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#)).

⁵¹ Ex. MP-2 at 8 (Application) (eDocket No. [202412-213417-03](#)).

⁵² Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#)).

⁵³ Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#)).

40. The Project meets the definition of a large energy facility under Minn. Stat. § 216B.2421 but does not require a certificate of need per the exemption under Minn. Stat. § 216B.243, subd. 9.⁵⁴

41. The Commission approved the cost recover of the Project through Minnesota Power's Renewable Resources Rider on May 23, 2025.⁵⁵

V. SITES AND ROUTES EVALUATED FOR THE PROJECT

A. Site Selection Process

42. Minnesota Power selected the Project location based on the following factors:

- Availability of a Point of Interconnection
- Locations above a minimum threshold for solar irradiance
- Local landowner willingness to participate in the Project
- Proximity to existing Boswell Energy Center
- A developable area that is relatively flat with few sensitive resources.⁵⁶

43. Minnesota Power's process for identifying a substation location also included analyzing previous queue filings, proposed interconnection improvements, and current technical specification of existing interconnection infrastructure.⁵⁷ The Applicant also screened the area for development constraints and approached landowners to negotiate voluntary agreements.⁵⁸

44. Minnesota Power chose this Site location because of its proximity to the Boswell Energy Center and ability to submit a Surplus Interconnection Service request to the Midcontinent Independent System Operator, Inc. ("MISO").⁵⁹

⁵⁴ Ex. MP-2 at 4 (Application) (eDocket No. [202412-213417-03](#)): See also *In the Matter of Minnesota Power for Approval of Investments and Expenditures in the Boswell Solar Project for Recovery through Minnesota Power's Renewable Resources Rider under Minn. Stat. § 216B.1645*, Docket No. E-015/M-24-344, ORDER APPROVING INVESTMENT IN SOLAR PROJECT AND COST RECOVER VIA RIDER at Order Point 3 (May 13, 2025) (eDocket No. [20255-218871-01](#)).

⁵⁵ See *In the Matter of the Petition of Minnesota Power for Approval of Investments and Expenditures in the Boswell Solar Project for Recovery through Minnesota Power's Renewable Resources Rider under Minn. Stat. § 216B.1645*, Docket No. E015/M-24-344, ORDER APPROVING INVESTMENT IN SOLAR PROJECT AND COST RECOVERY VIA RIDER (May 23, 2025).

⁵⁶ Ex. MP-2 at 8 (Application) (eDocket No. [202412-213417-03](#)).

⁵⁷ Ex. MP-2 at 8-9 (Application) (eDocket No. [202412-213417-03](#)).

⁵⁸ Ex. MP-2 at 9 (Application) (eDocket No. [202412-213417-03](#)).

⁵⁹ Ex. MP-2 at 9 (Application) (eDocket No. [202412-213417-03](#)).

45. The Project qualified for the alternative review process which does not require the Applicant to include information regarding alternative sites in the Application.⁶⁰ However, Minnesota Power did analyze other areas in Minnesota to seek a location that would meet the limits in the Prime Farmland rule, but these areas were not determined to be feasible or prudent for siting the Project.⁶¹

B. Route Selection Process

46. Minnesota's high-voltage transmission line ("HVTL") laws direct that transmission lines greater than 200 kV and less than 30 miles in length qualify the alternative review process, which eliminates the obligation for an applicant to propose alternative routes within the application.⁶² Thereby, alternative Gen-Tie Line routes are not required under Minnesota law and was not included in the Application.⁶³

47. In selecting the proposed Gen-Tie Line route, the Applicant considered the same factors described in the Site selection process to select a route that minimized impacts to the environment and landowners while maximizing the efficiency of the Project.⁶⁴

48. The purpose of the Gen-Tie Line is to provide the Warburg Lake Substation ("Project Substation") interconnection to the grid at the Boswell Energy Center substation.⁶⁵ The selected route provides for the shortest route possible to accomplish this purpose.⁶⁶

49. The majority of the new Gen-Tie Line will be designed and constructed as double-circuit capable, but the new 230 kV single-circuit line will originate from the proposed Project Substation just south of the Minnesota Power road in Itasca County.⁶⁷ From the Project Substation, the double-circuit route travels east through agricultural fields and forest and then continues east past the existing Boswell Energy Center ash ponds and related infrastructure.⁶⁸ The Gen-Tie line will then transition back to single-circuit running south to the existing Boswell Energy Center 230 kV substation.⁶⁹

C. Route Width and Right-of-Way

50. Minnesota Power proposed a 130-foot right-of-way for the entire length of the Gen-Tie Line for the single and double-circuit segments.⁷⁰ Transmission line

⁶⁰ Ex. MP-2 at 10 (Application) (eDocket No. [202412-213417-03](#)).

⁶¹ Ex. MP-2 at 10 (Application) (eDocket No. [202412-213417-03](#)).

⁶² Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁶³ Ex. MP-2 at 10 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁴ Ex. MP-2 at 10 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁵ Ex. MP-2 at 10-11 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁶ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁷ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁸ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁶⁹ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁰ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

structures would be placed in the center of the right-of-way with 65 feet of right-of-way on each side of the centerline.⁷¹ The total proposed right-of-way is 37.8 acres.⁷²

51. Minnesota Power is requesting a route width of 400 feet for the Gen-Tie Line plus an expanded area around the substation interconnections.⁷³

D. Site and Route Structures and Design

52. The Project's primary components include PV panels mounted on a single-axis tracker racking system installed in linear arrays, centralized inverters, a Project Substation, and a Gen-Tie Line.⁷⁴

53. The PV panels will be on a single-axis tracker racking system in linear arrays oriented north-south with motors located on the racking system to rotate the panels on a single point to track the sun.⁷⁵ The racking system design consistent of horizontal steel support beams with a drive train system that divides the array into two sides.⁷⁶ The tracking system is supported by vertical steel piles that are embedded 13 to 22 feet into the ground.⁷⁷ The Applicant will design the tracker system and associated posts to withstand wind, snow, and seismic loads.⁷⁸

54. Minnesota Power has proposed to install a permanent seven-foot-tall security fence, with 1-foot-tall barbed wire, along the perimeter of the Project.⁷⁹ The Applicant has proposed to install deer ramps to allow these wildlife to exit the fenced area.⁸⁰

55. Associated facilities include electrical cables, conduit, switchgears, step-up transformers, SCADA systems, communications buildings, and metering equipment.⁸¹ The Project will also include temporary and permanent laydown yards, internal Project access roads, weather stations, a stormwater management system, and security fencing and gates.⁸²

56. Minnesota Power will install the electrical collection system and associated communication lines via trenching, plowing, and/or bore methods.⁸³ Suitable native soil will then be placed around the cable and compacted.⁸⁴ The system will include a combination of above ground and underground lines.⁸⁵

⁷¹ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁷² Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)).

⁷³ Ex. MP-2 at 10 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁴ Ex. MP-2 at 12 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁵ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁶ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁷ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁸ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁷⁹ Ex. MP-2 at 19 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁰ Ex. MP-11 at 4 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

⁸¹ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁸² Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)).

⁸³ Ex. MP-2 at 14 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁴ Ex. MP-2 at 14 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁵ Ex. MP-2 at 14 (Application) (eDocket No. [202412-213417-03](#)).

57. The Project Substation, will be enclosed by an 8-foot-tall chain link security fence with 3 strands of barbed wire.⁸⁶ The substation will be designed in accordance with standards from the Institute of Electrical and Electronics Engineers.⁸⁷ The substation will also consist of supporting structures for high voltage electrical structures, breakers, transformers, lightning protection, and control equipment in accordance with the interconnection agreement with MISO and Minnesota Power.⁸⁸

58. The Gen-Tie Line will connect the Project Substation to the existing Boswell Energy Center 230 kV substation.⁸⁹ The Gen-Tie Line will consist of a combination of steel monopole structure(s) and wood H-frames.⁹⁰

E. Project Schedule

59. Minnesota Power anticipates to begin construction in the first quarter of 2026 and an in-service date in the third quarter of 2027.⁹¹

F. Project Costs

60. The Applicant estimates the total Projects to be approximately \$163.5 million.⁹²

G. Permittee

61. Minnesota Power, a public utility operating division of ALLETE, Inc., is the permittee for the Project.

H. Sites and Routes Analyzed in the Environmental Assessment.

62. Consistent with the PUC-EIP's scoping decision, the EA did not analyze route segment alternatives because none were proposed during scoping.⁹³

VI. PUBLIC, FEDERAL AND STATE AGENCY, AND LOCAL GOVERNMENT PARTICIPATION

A. Applicant's Public Outreach

63. The Applicant made significant efforts to reach out to the public before filing the Application.⁹⁴

⁸⁶ Ex. MP-2 at 15 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁷ Ex. MP-2 at 15 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁸ Ex. MP-2 at 15 (Application) (eDocket No. [202412-213417-03](#)).

⁸⁹ Ex. MP-2 at 16 (Application) (eDocket No. [202412-213417-03](#)).

⁹⁰ Ex. MP-2 at 16 (Application) (eDocket No. [202412-213417-03](#)).

⁹¹ Ex. MP-2 at 3 (Application) (eDocket No. [202412-213417-03](#)).

⁹² Ex. PUC-EIP-6 at 28 (EA) (eDocket No. [20258-222456-01](#)).

⁹³ See PUC-EIP-5 (Environmental Assessment Scoping Decision) (eDocket No. [20255-219406-01](#)).

⁹⁴ Ex. MP-2 at 89 (Application) (eDocket No. [202412-213417-03](#)).

64. The Applicant mailed and emailed a letter with an attached visual overview of the Project to stakeholders in July 2024. The letter invited written comment submissions to the Commission and was distributed to federal, state, and local agencies, Tribal representatives, and non-governmental organizations.⁹⁵

65. On April 3, 2025, the Applicant, Commission, and PUC-EIP staff jointly held a remote access public meeting to provide the public an opportunity to learn and ask questions about the Project.⁹⁶

66. On April 21, 2025, the Applicant, Commission, and PUC-EIP staff held an in-person public meeting in Cohasset, Minnesota, to provide the general public an opportunity with a question and answer format to learn about the Project.⁹⁷

B. Public Comments

1. Comments at Scoping Meetings

67. At the April 3, 2025, virtual public meeting, approximately six individuals from the public attended this meeting, and there were no comments.⁹⁸

68. At the April 21, 2025, in-person public meeting, approximately 25 people were in attendance and several attendees provided support for the Project and the Applicant's dedication to using local union labor.⁹⁹

69. Joe Schaffer provided support for the Project and expressed appreciation for Minnesota Power's dedication to using local skilled union laborers on this Project.¹⁰⁰

70. Paul Colby supported the Project because it will be built with local union workers.¹⁰¹

71. Robin McKinstry supported the Project because it will provide union jobs and benefits to the local community.¹⁰²

72. Jeremiah Reid expressed support for the continued use of local union labor because of the benefits the Project provides to the community and employees.¹⁰³

73. Jeff Best asked whether vegetation would be planted around the Project so to improve the aesthetics of the Project from the perspective of the residential properties.

⁹⁵ Ex. MP-2 at Appendix H, 2-3 (Application) (eDocket No. [202412-213417-11](#)).

⁹⁶ Ex. PUC-EIP-5 at 3 (Environmental Assessment Scoping Decision) (eDocket No [20255-219406-01](#)).

⁹⁷ Ex. PUC-EIP-5 at 3 (Environmental Assessment Scoping Decision) (eDocket No. [20255-219406-01](#)).

⁹⁸ Ex. PUC-EIP-5 at 3 (Environmental Assessment Scoping Decision) (eDocket No [20255-219406-01](#)).

⁹⁹ Ex. PUC-EIP-5 at 3 (Environmental Assessment Scoping Decision) (eDocket No [20255-219406-01](#)).

¹⁰⁰ Cohasset Pub. Hrg. Tr. at 20:19-21:22 (April 21, 2025) (Schaffer).

¹⁰¹ Cohasset Pub. Hrg. Tr. at 22:9-23:10 (April 21, 2025) (Colby).

¹⁰² Cohasset Pub. Hrg. Tr. at 23:13-24:19 (April 21, 2025) (McKinstry).

¹⁰³ Cohasset Pub. Hrg. Tr. at 25:7-21 (April 21, 2025) (Reid).

He also questioned the operation of the Project and the resiliency of the Project against storm damage.¹⁰⁴

74. Keith Mann asked a question about the seven-foot fence around the Solar Facility, impacts to private property, and whether the Applicant and the Commission would consider public comments.¹⁰⁵

2. EA Scoping Comment Period – Written Comments

75. LiUNA submitted comments supporting the Project and stating that it believes the Application satisfies the requirements of applicable statutes and rules.¹⁰⁶

76. Wes Trout provided comments on the scope of the EA and expressed questions regarding impacts to wildlife, recreational hunting, and agriculture.¹⁰⁷

77. Jeffery Best submitted comments regarding the scope of the EA and expressed concern about the proximity of the Solar Facility to their residential property, the aesthetics of the Solar Facility, and impacts to wildlife.¹⁰⁸

78. The Applicant¹⁰⁹ and the PUC-EIP¹¹⁰ filed comments on the EA, responding to the information in the EA and recommended general and special conditions.

3. Comments at the Public Hearings

79. In-person public hearings were held on September 10, 2025, at the Bena Community Center and the Cohasset Community Center.

80. One individual, Nathan Runke, spoke at the public hearing at the Bena Community Center. Nathan Runke, with the International Union of Operating Engineers, Local 49, spoke in support of the Project and the Site and Route Permit.¹¹¹

81. Nine individuals spoke at the public hearing at the Cohasset Community Center.¹¹²

82. Emily Meyer expressed concern about the proximity of the Solar Facility and Gen-Tie Line to her parents' residential property, and its impact on vegetation.¹¹³

¹⁰⁴ Cohasset Pub. Hrg. Tr. at 25:25-31:14 (April 21, 2025) (Best).

¹⁰⁵ Cohasset Pub. Hrg. Tr. at 31:15-37:15 (April 21, 2025) (Mann).

¹⁰⁶ Ex. PUC-2 (LiUNA Minnesota/North Dakota Comments) (eDocket No. [20252-214882-01](#)).

¹⁰⁷ Ex. PUC-EIP-3 at 2 (Written Comments on the Scope of the Environmental Assessment) (eDocket No. [20255-218719-02](#)).

¹⁰⁸ Ex. PUC-EIP-3 at 3-4 (Written Comments on the Scope of the Environmental Assessment) (eDocket No. [20255-218719-02](#)).

¹⁰⁹ Minnesota Power Comments on EA (Sept. 25, 2025) (Docket No. [20259-223286-01](#)).

¹¹⁰ Minnesota Public Utilities Commission Energy Infrastructure Permitting Unit Hearing Comments (Sept. 25, 2025) (eDocket No. [20259-223295-01](#)).

¹¹¹ Bena Pub. Hrg. Tr. at 16:8-17:8 (Sept. 10, 2025) (Runke).

¹¹² Cohasset Pub. Hrg. Tr. at 3:12-20 (Sept. 10, 2025).

¹¹³ Cohasset Pub. Hrg. Tr. at 17:18-18:19 (Sept. 10, 2025) (Meyer).

83. Jeff Best expressed concern about the proximity of the Solar Facility and Gen-Tie Line to his residential property and asked about vegetative screening to mitigate aesthetic impacts of the Project.¹¹⁴

84. Nathan Runke, with the International Union of Operating Engineers, Local 49 and also speaking on behalf of the North Central States Regional Carpenters, spoke in support of the Project and the Site and Route Permit.¹¹⁵

85. Gordan Warran inquired about the height of the Solar Facility and vegetative screening to mitigate aesthetic impacts of the Project.¹¹⁶

86. Mike Overend inquired about agricultural impacts of the Project and whether this Project would benefit from the Inflation Reduction Act.¹¹⁷

87. Kieth Mann questioned whether the Project would negatively impact the value of his residential property and inquired about noise during construction.¹¹⁸

88. Lisa Warren inquired about the financing of the Project and the impact to residential ratepayer bills, as well as the proximity of the Project to the Mississippi River and potential aesthetic impacts of the Project on residential properties.¹¹⁹

89. Karen Noyce inquired about the Project's relationship to a different proceeding before the Commission.¹²⁰

90. Allison Ahcan inquired about the Project's proximity to local townships.¹²¹

4. Public Hearing Comment Period

91. The MnDNR filed comments on September 24, 2025 in response to the special conditions proposed in the EA and addressed the following topics: Fencing, High Value Biological Resources, Avian Flight Diverters, Vegetation Management Plan, Dewatering, Floodplain, Lighting, Dust, and Wildlife Friendly Erosion Control.¹²² The MnDNR also filed the Natural Heritage Review Letter dated August 6, 2024, which was previously filed by the MnDNR on April 28, 2025.¹²³ These comments are discussed in more detail in Section VI.C.2.a, below.

92. The Minnesota Interagency VMPWG filed comments on September 25, 2025, and found the Vegetation Management Plan was adequate to meet pre-

¹¹⁴ Cohasset Pub. Hrg. Tr. at 19:2-22:2 (Sept. 10, 2025) (Best).

¹¹⁵ Cohasset Pub. Hrg. Tr. at 22:8-23:12 (Sept. 10, 2025) (Runke).

¹¹⁶ Cohasset Pub. Hrg. Tr. at 23:19-25:1 (Sept. 10, 2025) (Warran).

¹¹⁷ Cohasset Pub. Hrg. Tr. at 25:5-26:10 (Sept. 10, 2025) (Overend).

¹¹⁸ Cohasset Pub. Hrg. Tr. at 26:14-34:25 (Sept. 10, 2025) (Mann).

¹¹⁹ Cohasset Pub. Hrg. Tr. at 34:11-39:4 (Sept. 10, 2025) (Warren).

¹²⁰ Cohasset Pub. Hrg. Tr. at 39:12-40:16 (Sept. 10, 2025) (Noyce).

¹²¹ Cohasset Pub. Hrg. Tr. at 40:21-41:10 (Sept. 10, 2025) (Ahcan).

¹²² MnDNR Comments (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹²³ MnDNR Comments Natural Heritage Review Letter (Sept. 24, 2025) (eDocket No. [20259-223253-02](#)).

construction compliance filing requirements.¹²⁴ The letter did recommend Minnesota Power address the following topics in its pre-construction Vegetation Management Plan: management areas, site preparation, seed installation, seed mixes, visual screening, mowing and haying, grazing, herbicide use and weed control, management strategies, monitoring and reporting, and updates to the Vegetation Management Plan.¹²⁵ The VMPWG also recommended that Minnesota Power be required to enroll in the state's Habitat Friendly Solar Program.¹²⁶

93. Minnesota Power responded to the VMPWG's public hearing comments on October 16, 2025.¹²⁷ As to the VMPWG's comments related to potential revisions to the Vegetation Management Plan, Minnesota Power stated it looked forward to continuing its work on the Vegetation Management Plan in coordination with the VMPWG before Minnesota Power files its Vegetation Management Plan prior to commencing construction of the Project.¹²⁸ No additional permit conditions are necessary at this time as general condition 4.3.17 already requires Minnesota Power to develop its Vegetation Management Plan in coordination with the PUC-EIP and the VMPWG and to file documentation of the coordination with the final Vegetation Management Plan at least 14 days prior to the pre-construction meeting.¹²⁹

94. As to the VMPWG's comments regarding the state's Habitat Friendly Solar Program, Minnesota Power clarified that enrollment in that program is not necessary to make the Project eligible for MRETs credits.¹³⁰ Further, while Minnesota Power offered no objection to permit condition 4.3.16, which "encourage[s]" Minnesota Power to meet the standards of the Habitat Friendly Solar Program, but does not require enrollment in the program. Minnesota Power has also stated its intent to incorporate pollinator species into the vegetation plan for the Project but that enrollment in the program would unnecessarily add costs to the Project and, thus, for Minnesota Power's customers.¹³¹ Therefore, no additional permit conditions related to the state's Habitat Friendly Solar Program are necessary at this time as general condition 4.3.16, encouraging Minnesota Power to meet the standards of the Habitat Friendly Solar Program but not requiring enrollment in the program, discusses this issue to the extent necessary for the Project.¹³²

¹²⁴ Minnesota Interagency Vegetation Management Planning Working Group, Vegetation Management Plan Letter at 1 (Sept. 25, 2025) (eDocket No. [20259-223315-01](#)).

¹²⁵ Minnesota Interagency Vegetation Management Planning Working Group, Vegetation Management Plan Letter (Sept. 25, 2025) (eDocket No. [20259-223315-01](#)).

¹²⁶ Minnesota Interagency Vegetation Management Planning Working Group, Vegetation Management Plan Letter at 6 (Sept. 25, 2025) (eDocket No. [20259-223315-01](#)).

¹²⁷ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹²⁸ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹²⁹ Ex. PUC-EIP-6 at Appendix C, 8-9 (EA) (eDocket No. [20258-222456-04](#)).

¹³⁰ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³¹ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³² Ex. PUC-EIP-6 at Appendix C, 8-9 (EA) (eDocket No. [20258-222456-04](#)).

95. The PUC-EIP also provided comments on September 25, 2025, and offered recommended modifications to the draft decommissioning plan, summarized the changes to the site permit, and recommended an additional site permit special condition regarding tree replacement.¹³³

96. Minnesota Power responded to the PUC-EIP comments on October 16, 2025.¹³⁴ Minnesota Power noted that the PUC-EIP's suggested decommissioning plan revisions can all be addressed through general condition 9.1, which requires Minnesota Power to file an updated decommissioning plan with the Commission at least 14 days prior to the pre-construction meeting. Minnesota Power also agreed with the changes to the draft site permit that PUC-EIP summarized in its public hearing comments, including the addition of special conditions 5.1 through 5.12.¹³⁵ Therefore, no additional permit conditions are necessary to address these comments from PUC-EIP.

97. Finally, Minnesota Power explained that the PUC-EIP's recommendation regarding tree replacement was unnecessary and would unnecessarily increase the cost of the Project for Minnesota Power's customers since Minnesota Power will already be participating in reforestation efforts in Itasca County.¹³⁶ As part of the Visual Screening Plan for the Project, Minnesota Power would already be required to plant trees in the vicinity of the Project in locations that would not negatively impact the performance of the solar facility.¹³⁷ Minnesota Power estimated that the Project would require the removal of approximately 140 acres of trees but, through an existing program, Minnesota Power would already be working with Itasca County and expects to donate approximately 150,000 seedlings to Itasca County over the next two years.¹³⁸ Minnesota Power estimated the cost of complying with this condition to be more than \$50,000.¹³⁹

98. However, Minnesota Power requested that, should special condition 5.13 be incorporated into the site permit for the Project, the requirement that replacement trees be planted "near the project area" be replaced with "in Itasca County" to ensure that the trees would be planted in locations least likely to be removed in the future.¹⁴⁰ Minnesota Power noted that much of the property located near the Project is associated with the

¹³³ Minnesota Public Utilities Commission Energy Infrastructure Permitting Unit Hearing Comments (Sept. 25, 2025) (eDocket No. [20259-223295-01](#)).

¹³⁴ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³⁵ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³⁶ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³⁷ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³⁸ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹³⁹ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹⁴⁰ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

Boswell Energy Center and Minnesota Power continues to evaluate whether additional generation or storage resources should be placed near the Project.¹⁴¹ Further, Minnesota Power noted that the cost of compliance with this condition was not contemplated in the Project cost estimates approved by the Commission for inclusion in the Applicant's renewable resources rider and, if this condition was included in the Project's site and route permit, Minnesota Power should be permitted to include those costs in any cost recovery filing.¹⁴²

99. The Applicant provided comments on the EA on September 25, 2025, and responded to comments on the EA, Mississippi River setback requirements, Tree Removal and vegetative screening, and other questions on future generating resources.¹⁴³

C. Federal and State Agencies, Tribal Government, and Local Government Outreach

100. The Application listed federal and state agencies and Tribal governments organizations that the Applicant contacted with the July 2024 letter prior to filing the Application.¹⁴⁴

1. Federal Agencies

a. U.S. Army Corps of Engineers

101. The Applicant coordinated with the U.S. Army Corps of Engineers after the agency responded to the Applicant's July 2024 letter on August 8, 2024. The U.S. Army Corp of Engineers responded over email and requested a pre-application meeting for the Project.¹⁴⁵

b. U.S. Fish and Wildlife Services

102. The U.S. Fish and Wildlife Service responded to the Applicant's letter on June 6, 2024, and requested information pertaining to the northern long-eared bat. The U.S. Fish and Wildlife Service did provide that the Project was not reasonably certain to cause incidental take of the northern long-eared bat.¹⁴⁶

¹⁴¹ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. ____ - ____ - ____).

¹⁴² See *In the Matter of the Petition of Minnesota Power for Approval of Investments and Expenditures in the Boswell Solar Project for Recovery through Minnesota Power's Renewable Resources Rider under Minn. Stat. § 216B.1645*, Docket No. E015/M-24-344, ORDER APPROVING INVESTMENT IN SOLAR PROJECT AND COST RECOVERY VIA RIDER (May 23, 2025).

¹⁴³ Minnesota Power Comments on EA (Sept. 25, 2025) (Docket No. [20259-223286-01](#)).

¹⁴⁴ Ex. MP-2 at Appendix H, 2 (Application) (eDocket No. [202412-213417-11](#)).

¹⁴⁵ Ex. MP-2 at Appendix H, 30 (Application) (eDocket No. [202412-213417-11](#)).

¹⁴⁶ Ex. MP-2 at 89 (Application) (eDocket No. [202412-213417-03](#)).

2. State Agencies

a. The Minnesota Department of Natural Resources

103. In August 2024, the MnDNR responded to the Applicant's July 2024 letter with a general review of the Project.¹⁴⁷ The MnDNR provided an initial review of water resources, vegetation and soil management, wildlife habitat and rare species, and state lands and minerals.¹⁴⁸

104. In April 2025, the MnDNR offered comments regarding the potential environmental and wildlife impacts that should be considered within the scope of the EA.¹⁴⁹ Specifically, the MnDNR recommended the following be considered in the EA:

- Fencing of a minimum height of 10 feet to prevent wildlife from entering the Project's fenced area;
- Use of downward facing lighting with a color temperature not to exceed 4,000 kelvin;
- Dust control that does not contain calcium or magnesium chloride;
- Use of wildlife-friendly erosion control, including bio-netting or natural-netting;
- Identification that a water appropriations permit is necessary if the Project intends to dewater at a rate exceeding 10,000 gallons per day;
- Discussion of any water crossing permits necessary for the Project;
- Discussion of the presence of Native Plant Communities and measures to avoid or mitigate impacts to these resources;
- Development of a vegetation management plan; and
- Identification of certain parcels bordering the western portion of the Project's solar facility that have private surface and state mineral ownership of School Trust Lands.¹⁵⁰

105. The MnDNR also submitted a natural heritage review through the Minnesota Conservation Explorer for the Project that was dated August 6, 2024.¹⁵¹ The formal natural heritage review examined the Project for potential effects to ecologically significant areas, state-listed endangered or threatened species, and federally listed species.¹⁵²

¹⁴⁷ Ex. MP-2 at Appendix H, 7 (Application) (eDocket No. [202412-213417-11](#)).

¹⁴⁸ Ex. MP-2 at Appendix H, 6-11 (Application) (eDocket No. [202412-213417-11](#)).

¹⁴⁹ Ex. PUC-14 (MNDNR Comments) (Docket No. [20254-218237-01](#)).

¹⁵⁰ Ex. PUC-13 at 1-3 (MNDNR Comments) (Docket No. [20254-218237-01](#)).

¹⁵¹ Ex. PUC-13 (MNDNR Comments) (eDocket No. [20254-218237-02](#)).

¹⁵² Ex. PUC-13 (MNDNR Comments) (eDocket No. [20254-218237-02](#)); MnDNR Comments Natural Heritage Review Letter (Sept. 24, 2025) (eDocket No. [20259-223253-02](#)).

106. On September 5, 2025, in the Direct Testimony of Drew Janke, the Applicant agreed to incorporate the following into the Project:

- Use of downward facing lighting with a color temperature not to exceed 4,000 kelvin;
- Dust control that does not contain calcium or magnesium chloride; and
- Use of wildlife-friendly erosion control, including bio-netting or natural-netting.¹⁵³

107. Separately, Minnesota Power confirmed that it will obtain a water appropriate permit if dewatering at a rate of 10,000 gallons per day is necessary for the construction of the Project.¹⁵⁴ Minnesota Power also believed that Section 4.7.4 and 4.7.8. of the EA cover the following recommendations from the MnDNR:

- Discussion of any water crossing permits necessary for the Project;
- Discussion of the presence of Native Plant Communities and measures to avoid or mitigate impacts to these resources; and
- Development of a vegetation management plan.¹⁵⁵

108. In response to the MnDNR's comments, the Applicant met with the MnDNR and committed to install deer ramps to allow wildlife to exit the fenced area with a security fence of seven feet in height, which were approved by the MnDNR as recently as March 2025 for another solar project under development by the Applicant. However, the Applicant and the MnDNR continued discussions about the appropriate fencing for the Project.¹⁵⁶

109. On September 24, 2025, the MnDNR filed comments in response to the EA to offer recommendations and support for specific site and route permit conditions.¹⁵⁷ The MnDNR made the following comments:

- Appreciated the Applicant's agreement not to install barbed wire on top of the security fence, but continued to advocate for the security fence height to be a 10-feet tall instead of eight feet tall. The MnDNR reasoned that increasing the height of the security fence would prevent wildlife, specifically deer, from entering the Project area.¹⁵⁸ The MnDNR supported permit condition 4.3.32 of the draft site permit requesting the Applicant to design the security fence in coordination with the MnDNR.¹⁵⁹

¹⁵³ Ex. MP-11 at 5 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

¹⁵⁴ Ex. MP-11 at 5 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

¹⁵⁵ Ex. MP-11 at 5 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

¹⁵⁶ Ex. MP-11 at 4 (Filing Letter, Certificate of Service, and Direct Testimony of Drew Janke) (Docket Nos. [20259-222676-01](#)).

¹⁵⁷ On this date, the MnDNR also filed a copy of the Natural Heritage Review Letter that it filed on April 28, 2025. Ex. PUC-14 (MNDNR Comments) (Docket No. [20254-218237-01](#)).

¹⁵⁸ MnDNR Comments at 1 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁵⁹ MnDNR Comments at 2 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

- Supported special condition 5.9 of the draft site permit regarding high value biological resources. The MnDNR also recommended a similar special condition be included in the final route permit.¹⁶⁰
- Supported general condition 5.3.15 of the draft route permit regarding avian flight diverters.¹⁶¹
- Supported general condition 4.3.16 of the draft site permit regarding the vegetation management plan, but requested that Minnesota Power provide additional information on the seed mixes and vegetation management practices for the Gen-Tie right-of-way and the storm water basins.¹⁶²
- Supported special condition 5.12 of the draft site permit regarding floodplains, but requested the route permit include a similar special condition because the Gen-Tie Line will cross Blackwater Lake.¹⁶³
- Supported special condition 5.6 of the draft site permit regarding the installation of shielded and downward facing lighting.¹⁶⁴
- Supported special condition 5.7 of the draft site permit regarding dust control. The MnDNR did request that a similar special condition be included in the final route permit as well.¹⁶⁵
- Supported special condition 5.8 of the draft route permit requiring the use of wildlife-friendly erosion control.¹⁶⁶

110. In its response to public hearing comments, Minnesota Power confirmed that it did not object to any of the general or special conditions discussed by the MnDNR in its September 24, 2025 filing.¹⁶⁷

b. Minnesota Department of Transportation

111. The MnDOT responded to the Applicant's July 2024 letter in August 2024 and shared the Project may impact State Truck Highway 6.¹⁶⁸ However, MnDOT invited the Applicant to a consultation meeting to discuss the Project in greater detail.¹⁶⁹

112. On May 5, 2025, MnDOT provided comments in response to the notice of EA scoping and recommended the following be addressed in EA:

¹⁶⁰ MnDNR Comments at 2 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶¹ MnDNR Comments at 2 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶² MnDNR Comments at 3 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶³ MnDNR Comments at 3 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶⁴ MnDNR Comments at 3 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶⁵ MnDNR Comments at 3 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶⁶ MnDNR Comments at 3 (Sept. 24, 2025) (eDocket No. [20259-223253-01](#)).

¹⁶⁷ Minnesota Power Response to Public Hearing Comments (Oct. 16, 2025) (eDocket No. _____ - _____ - _____).

¹⁶⁸ Ex. MP-2 at Appendix H, 21 (Application) (eDocket No. [202412-213417-11](#)).

¹⁶⁹ Ex. MP-2 at Appendix H, 21 (Application) (eDocket No. [202412-213417-11](#)).

- Additional analysis to ensure that the Project will not negatively impact highway water basins located near the proposed Project transmission line right-of-way;
- Changes to the Project's proposed access road layout; and
- Ensuring that the Project boundary does not overlap with any highway rights-of-way.¹⁷⁰

113. In a June 4, 2025 meeting between the Applicant and MnDOT, the Applicant confirmed the ability to accommodate the shift MnDOT suggested to the southern access road location. The Applicant will coordinate with MnDOT on the final design of the Project's stormwater basin locations to assess whether a modeling review and/or drainage permit(s) will be required.¹⁷¹

c. Minnesota Department of Agriculture

114. On October 9, 2025, the Minnesota Department of Agriculture filed a comment regarding Applicant's Agricultural Impact Mitigation Plan.¹⁷² The Minnesota Department of Agriculture concluded that no new concerns needed to be addressed in the final Agricultural Impact Mitigation Plan and found the plan submitted for review by Minnesota Power to be satisfactory.¹⁷³

3. *Tribal Governments*

a. Leech Lake Band of Ojibwe

115. Prior to the Applicant's initial outreach letter sent in July 2024, the Applicant introduced the proposed Project to the Leech Lake Band of Ojibwe on December 20, 2023. This meeting included a discussion on potential impacts to wetlands and cultural resources. To mitigate concerns raised by the Leech Lake Band of Ojibwe, the Applicant offered to conduct field-level surveys for both wetland and cultural resources and avoid resources as practicable.¹⁷⁴

116. After the Applicant's initial outreach letter was sent in July 2024, the Leech Lake Band of Ojibwe sought a Project status update, including a discussion on the timeline of both the proposed Project permitting and archaeological field survey results. In response, the Applicant shared environmental survey results, including the Phase I Archaeological survey results.¹⁷⁵

¹⁷⁰ Ex. PUC-14 (MNDOT Comments) (eDocket No. [20255-218589-01](#)).

¹⁷¹ Ex. MP-11 at 6 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

¹⁷² Minnesota Department of Agriculture Comments (Oct. 9, 2025) (eDocket No. [202510-223754-01](#)).

¹⁷³ Minnesota Department of Agriculture Comments (Oct. 9, 2025) (eDocket No. [202510-223754-01](#)).

¹⁷⁴ Ex. MP-2 at 89 (Application) (eDocket No. [202412-213417-03](#)).

¹⁷⁵ Ex. MP-2 at 89 (Application) (eDocket No. [202412-213417-03](#)).

117. The Leech Lake Band of Ojibwe also provided a written letter response on September 25, 2024.¹⁷⁶ The letter recommended that an archaeological Phase I survey be required prior to any activities at each bore location and requested the Applicant share environment survey results with the Leech Lake Band of Ojibwe.¹⁷⁷

b. Mille Lacs Band of Ojibwe

118. The Mille Lacs Band of Ojibwe responded to the Applicant's July 2024 letter and requested to be in consultation with the Applicant on the Project as it develops.¹⁷⁸

c. Fond du Lac Band of Lake Superior Chippewa

119. The Fond du Lac Band of Lake Superior Chippewa submitted comments to the Commission on March 19, 2025, and offered feedback of the Project's proximity to the Mississippi River. Specifically, the Fond du Lac Band of Lake Superior Chippewa sought additional information on the potential increased run-off from the solar panels that may reach the Mississippi River in the Project area.¹⁷⁹

120. The Applicant regularly meets with representatives from the Fond du Lac Tribal Nation and has addressed this concern. The Project is designing stormwater retention basins that will be included in the Project's Construction Stormwater Pollution Prevention Plan to manage stormwater runoff.¹⁸⁰

VII. FACTORS FOR A SITE AND ROUTE PERMIT

121. The Power Plant Siting Act ("PPSA"), Minn. Stat. Ch. 216E, requires that site and route permit determinations "be guided by the state's goal to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure."¹⁸¹

122. Under the PPSA, the Commission must be guided by the following responsibilities, procedures, and considerations:

- (1) Evaluation of research and investigation relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation

¹⁷⁶ Ex. MP-2 at Appendix H, 24 (Application) (eDocket No. [202412-213417-11](#)).

¹⁷⁷ Ex. MP-2 at Appendix H, 24 (Application) (eDocket No. [202412-213417-11](#)); and Ex. MP-2 at 89 (Application) (eDocket No. [202412-213417-03](#)).

¹⁷⁸ Ex. MP-2 at Appendix H, 28 (Application) (eDocket No. [202412-213417-11](#)).

¹⁷⁹ Ex. PUC-8 (Fond du Lac Band Comment) (eDocket No. [20254-217114-01](#)).

¹⁸⁰ Ex. MP-11 at 6 (Direct Testimony of Drew Janke) (Docket No. [20259-222676-03](#)).

¹⁸¹ Minn. Stat. § 216E.03, subd. 7.

of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

- (2) Environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
- (3) Evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
- (4) Evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;
- (5) Analysis of the direct and indirect economic impact of proposed site and routes including, but not limited to, productive agricultural land lost or impaired;
- (6) Evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
- (7) Evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivision 1 and 2;
- (8) Evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;
- (9) Evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
- (10) Evaluation of future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;
- (11) Evaluation of irreversible and irretrievable commitments or resources should the proposed site or route be approved;

- (12) When appropriate, consideration of problems raised by other state and federal agencies and local entities;
- (13) Evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;
- (14) Evaluation of the proposed facility's impact on socioeconomic factors; and
- (15) Evaluation of the proposed facility's employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility's local employment and economic impacts, and may reject or place conditions on a site or route permit based on the local employment and economic impacts.

123. In addition, Minn. Stat. § 216E.03, subd. 7(e), provides that the Commission "must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission line route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the [C]ommission must state the reasons."

124. In addition to the PPSA, the Commission is governed by Minn. R. 7850.4100, which mandates consideration of the following factors when determining whether to issue a site and route permit:

- 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 construction, operating, and maintaining the facility which are dependent on design and route;
- M. Adverse human and natural environmental effects which cannot be avoided; and
- N. Irreversible and irretrievable commitments of resources.

125. There is sufficient evidence in this record to assess the Project using the criteria and factors set forth above.

VIII. APPLICATION FOR SITE AND ROUTING FACTORS TO THE PROPOSED PROJECT

A. Effects on Human Settlement.

126. Minnesota site and route permit siting factors requires consideration of the Project's effects on human settlement, including displacement of residences and business, noise created by construction and operation of the Project, and impacts to aesthetics, cultural values, recreation and public services.¹⁸²

¹⁸² Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

1. Displacement.

127. Displacement is the need to remove structures, such as residential or commercial buildings, to construct and operate the Project.¹⁸³ Displacement can occur when structures are within a proposed Site or right-of-way.¹⁸⁴

128. No residential homes, structures, or businesses are anticipated to be permanently displaced as a result of the Project as no structures are within the Project.¹⁸⁵ There are eight residences within 500 feet of the Site boundary, but there are no residences within 0.25 miles of the Gen-Tie Line.¹⁸⁶

2. Noise.

129. Noise is generally considered to be an unwanted sound that may be an annoyance, loud or disruptive to hearing.¹⁸⁷

130. The Minnesota Pollution Control Agency (“MPCA”) has established standards for the regulation of noise levels.¹⁸⁸ The most restrictive MPCA noise limits are 60-65 A-weighted decibels (“dBA”) during the daytime and 50-55 dBA during the nighttime as established in Minn. R. 7030.0040.

131. Potential noise impacts due to the Project can be grouped into three categories: (1) noise from construction, and (2) noise from operation, and (3) noise from operation of the Gen-Tie Line.¹⁸⁹

132. During the construction of the Project, intermittent noise will be emitted by the construction vehicles and equipment.¹⁹⁰ These noise impacts will be temporary, and the amount of noise will vary based on what type of construction is occurring at the Project on a given day, and the distance from the receptor to the noise source.¹⁹¹

133. The Applicant anticipates the most significant source of construction noise is the pile driving equipment associated with installation of the foundations for the Solar

¹⁸³ Ex. MP-2 at 32 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁴ Ex. MP-2 at 32 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁵ Ex. MP-2 at 32 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁶ Ex. MP-2 at 32 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁷ Ex. PUC-EIP-6 at 50 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁸ Ex. MP-2 at 33 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 51 (EA) (eDocket No. [20258-222456-01](#)).

¹⁸⁹ Ex. MP-2 at 34-36 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 51 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁰ Ex. MP-2 at 34 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹¹ Ex. MP-2 at 34 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

Facility.¹⁹² It is anticipated power hammer noise levels can reach approximately 90 dBA at 50 feet.¹⁹³ During construction, the Applicant may limit the duration of foundation installations within 800 feet of a particular residence in any given hour or may elect to erect temporary mobile noise barriers to reduce noise impacts.¹⁹⁴

134. During operation, the main sources of noise from the Solar Facility will come from the panel rotation, transformers, and inverters.¹⁹⁵ Modeled noise impacts from the Solar Facility are expected to be below state noise standards.¹⁹⁶

135. The Gen-Tie Lie may generate some minor noise in the form of corona or from wind blowing through the conductors and structures.¹⁹⁷ Noise impacts are anticipated to comply with applicable noise limits.¹⁹⁸

3. Aesthetics.

136. The Solar Facility is located adjacent to the existing Minnesota Power Boswell Energy Center.¹⁹⁹ The Solar Facility is primarily agricultural, with wetlands and forested lands with adjacent farmsteads, and townships and county roads.²⁰⁰

137. There are 13 residences within a 0.25-mile radius of the Solar Facility, excluding those in the City of Cohasset, with those 13 residences generally located within forests or surrounded by trees. There are over 50 residences within one mile of the Project.²⁰¹

138. The Solar Facility will alter the current view by converting the agricultural use of the lands, but the Applicant will avoid tree clearing, when possible, to help screen the arrays in some areas.²⁰²

¹⁹² Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹³ Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁴ Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁵ Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁶ Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁷ Ex. MP-2 at 35 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁸ Ex. MP-2 at 36 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 52 (EA) (eDocket No. [20258-222456-01](#)).

¹⁹⁹ Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 46 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁰ Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 46 (EA) (eDocket No. [20258-222456-01](#)).

²⁰¹ Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 46 (EA) (eDocket No. [20258-222456-01](#)).

²⁰² Ex. MP-2 at 38 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 47 (EA) (eDocket No. [20258-222456-01](#)).

139. For residents in the Project vicinity and for others with high viewer sensitivity, traveling on local roads in the Project vicinity, such as State Highway 6, County Road 87, or County Road 254, aesthetic impacts are anticipated to be moderate to significant.²⁰³

140. The Proposed Route and right-of-way of the Gen-Tie Line anticipates a 130 right-of-way for the entire length of the line and is located entirely on Minnesota Power property.²⁰⁴ The height of the Gen-Tie Line steel structures will be up to 140 feet tall.²⁰⁵

141. The Gen-Tie Line may impact aesthetics by altering or clearing some of the forested land, but it is unlikely to significantly impact visuals due to mostly industrial land uses of the Gen-Tie Line and surrounding areas.²⁰⁶

4. Socioeconomic and Environmental Justice.

142. The Project Study Area is in Itasca County, Minnesota²⁰⁷ The socioeconomic setting of the Project area was focused heavily on the county as whole, with some comparisons to the municipalities and reservation within the Project, including the City of Cohasset, Deer Lake Unorganized Territory, and the Leech Lake Bank of Ojibwe.²⁰⁸

143. The Project will support up to 125 jobs during the construction and installation phases, and around two to three permanent fulltime jobs during operations.²⁰⁹ Temporary construction workers may need to travel to nearby hotels and restaurants, resulting in an increased local economic benefit.²¹⁰

144. The Applicant anticipates paying construction workers in accordance with the prevailing wage and apprenticeship rules under the Inflation Reduction Act.²¹¹

145. The Project is anticipated to generate an estimated \$319,000 average annual solar energy production and property tax revenue over the life of the Project.²¹²

²⁰³ Ex. PUC-EIP-6 at 47 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁴ Ex. MP-2 at 46 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 48 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁵ Ex. MP-2 at 46 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 48 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁶ Ex. MP-2 at 46 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 48 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁷ Ex. MP-2 at 46 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 71 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁸ Ex. MP-2 at 46 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 72 (EA) (eDocket No. [20258-222456-01](#)).

²⁰⁹ Ex. MP-2 at 48 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 72 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁰ Ex. MP-2 at 48 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 73 (EA) (eDocket No. [20258-222456-01](#)).

²¹¹ Ex. MP-2 at 49 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 73 (EA) (eDocket No. [20258-222456-01](#)).

²¹² Ex. MP-2 at 49 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 74 (EA) (eDocket No. [20258-222456-01](#)).

146. The Project could remove approximately 652.4 acres of agricultural land from production that is currently used to produce corn, soybeans, spring wheat, and alfalfa. The removal of cultivated land is likely to result in an incremental decrease to agricultural-related businesses, but it is not anticipated to have a significant impact because it will remove approximately 0.68 percent of farmland in Itasca County.²¹³

147. An environmental justice area means an area in Minnesota that, based on the most recent data published by the United States Census Bureau, meets one or more of the following criteria: (1) 40 percent or more nonwhite populations; (2) 35 percent or more households with income below 200 percent of the poverty level; (3) 40 percent or more residents with limited English proficiency; or (4) Indian country.²¹⁴

148. The data pulled for the Project area indicates the Project meets the statutory criteria and the Project area is within an environmental justice area.²¹⁵

149. Census tract 9400 reaches the 35 percent threshold and is considered an environmental justice community within low-income considerations.²¹⁶ Census tract 4807 also has low-income considerations, but only when the margin of error is included in the MPCA's standards.²¹⁷

150. The Applicant does not anticipate adverse, disproportionate impacts to environmental justice communities resulting from the Project.²¹⁸ Instead, the Project will have a positive socioeconomic impact due to increased economic activity during construction of the Project.²¹⁹

5. Zoning and Land Use

151. The Project is located within both the Itasca County and the City of Cohasset zoning ordinance and comprehensive plans.²²⁰ Only the Gen-Tie Line is located within the City of Cohasset.²²¹ The Leech Lake Band of Ojibwe reservation does not currently have a formal adopted comprehensive plan or zoning ordinance.²²²

²¹³ Ex. PUC-EIP-6 at 74 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁴ Ex. MP-2 at 49 (Application) (eDocket No. [202412-213417-03](#)); Minn. Stat. § 216B.1691, subd. 1(e).

²¹⁵ Ex. MP-2 at 50 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 77 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁶ Ex. MP-2 at 50 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 77 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁷ Ex. MP-2 at 50 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 77 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁸ Ex. MP-2 at 50 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 77 (EA) (eDocket No. [20258-222456-01](#)).

²¹⁹ Ex. MP-2 at 50 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 77-78 (EA) (eDocket No. [20258-222456-01](#)).

²²⁰ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 58 (EA) (eDocket No. [20258-222456-01](#)).

²²¹ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 60 (EA) (eDocket No. [20258-222456-01](#)).

²²² Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 58-59 (EA) (eDocket No. [20258-222456-01](#)).

152. The proposed Site for the Solar Facility and the proposed route for the Gen-Tie Line are in an area zoned as farm residential and transmission lines are considered a permitted use in all zoning districts.²²³

153. Construction and operation of the Project will not require a zoning change as the issuance of a permit by the Commission supersedes or preempts all county and local zoning authority.²²⁴

154. The Solar Facility is consistent with both the Itasca County and City of Cohasset zoning ordinances and comprehensive plan. The location of the Solar Facility will not limit the existing land uses of the surrounding parcels or areas.²²⁵

155. The Gen-Tie Line is defined as a “minor utility structure” in the City of Cohasset Zoning Ordinance and is a permitted use in the Heavy Industrial zoning district.²²⁶ The Gen-Tie Line does traverse across a Public Waters Basin and the 100-year floodplain close to the existing Boswell Substation.²²⁷ However, the Site and Route Permit supersedes local zoning and permitting requirements, therefore, no mitigative measures are necessary.²²⁸

156. Minnesota Power does not anticipate impacts to zoning or land use for either the Solar Facility or the Gen-Tie Line.²²⁹

6. Cultural Values.

157. Cultural values include those perceived community attitudes or beliefs that provide a framework for community unity.²³⁰ There are an abundance of lakes, rivers, forests, and farms within the Project area, including wild rice farms.²³¹

²²³ Ex. MP-2 at 55 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 58-59 (EA) (eDocket No. [20258-222456-01](#)).

²²⁴ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 57 (EA) (eDocket No. [20258-222456-01](#)).

²²⁵ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 58 (EA) (eDocket No. [20258-222456-01](#)).

²²⁶ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 58-59 (EA) (eDocket No. [20258-222456-01](#)).

²²⁷ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 60 (EA) (eDocket No. [20258-222456-01](#)).

²²⁸ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 60 (EA) (eDocket No. [20258-222456-01](#)).

²²⁹ Ex. MP-2 at 56 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 60 (EA) (eDocket No. [20258-222456-01](#)).

²³⁰ Ex. MP-2 at 51 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 53 (EA) (eDocket No. [20258-222456-01](#)).

²³¹ Ex. MP-2 at 51 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 53 (EA) (eDocket No. [20258-222456-01](#)).

158. The Project is not expected to conflict with the cultural values of the Project area.²³² The area is rural in nature and the Project is not anticipated to cause adverse impacts to cultural values in the area.²³³

7. Recreation

159. The Project Study Area is in a rural setting with recreational opportunities such as hiking, fishing, hunting, camping, snowmobiling, cross-country skiing, and nature viewing.²³⁴ The Solar Facility and the Gen-Tie Line do not enter into public lands, but there are public opportunities for recreational activities surrounding the Project.²³⁵

160. Construction and operation of the Project is not likely to impact public access to, or enjoyment of, nearby recreational opportunities.²³⁶ Construction may cause temporary noise in the area but affects will be minimal and temporary.²³⁷

8. Public Service and Infrastructure.

161. Public services and infrastructure are those typically provided by a government entity to its citizens to benefit public health and safety.²³⁸ In Itasca County, most rural residences have water supply wells and Minnesota Power and Lake Country Power are the main electric service providers within the Project Site and surrounding areas.²³⁹

162. Minnesota Power will use water and sewer at their existing Boswell Energy Center and will not require any additional utilities during Project operations.²⁴⁰ If sheep are used for vegetation management, a new water well may be required.²⁴¹

163. The Applicant will coordinate with Gopher State One Call before and during construction to confirm buried utility locations.²⁴² Final Project design will avoid impacts

²³² Ex. MP-2 at 52 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 53 (EA) (eDocket No. [20258-222456-01](#)).

²³³ Ex. MP-2 at 52 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 55 (EA) (eDocket No. [20258-222456-01](#)).

²³⁴ Ex. MP-2 at 52 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 63-64 (EA) (eDocket No. [20258-222456-01](#)).

²³⁵ Ex. MP-2 at 52-53 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 64 (EA) (eDocket No. [20258-222456-01](#)).

²³⁶ Ex. MP-2 at 53 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 65 (EA) (eDocket No. [20258-222456-01](#)).

²³⁷ Ex. MP-2 at 53 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 65 (EA) (eDocket No. [20258-222456-01](#)).

²³⁸ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 66 (EA) (eDocket No. [20258-222456-01](#)).

²³⁹ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 66 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁰ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 68 (EA) (eDocket No. [20258-222456-01](#)).

²⁴¹ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 68 (EA) (eDocket No. [20258-222456-01](#)).

²⁴² Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 69 (EA) (eDocket No. [20258-222456-01](#)).

to overhead utilities, but temporary impacts to electrical service may be unavoidable during interconnection.²⁴³ Minnesota Power will coordinate with local individuals and utilities prior to any temporary shutdowns.²⁴⁴

164. The Applicant will secure appropriate local permits for road access and other aspects of the Project, as well as coordination with the appropriate road authority for planned work within the road rights-of-way to support the Project. The increase in traffic due to construction of the Project is not expected to affect traffic function, but slow-moving construction vehicles may also cause delays on smaller roads.²⁴⁵

9. Telecommunications Interference.

165. Electromagnetic interference (“EMI”) refers to the disturbance of electrical circuits or equipment caused by electromagnetic radiation emitted from high-voltage transmission lines.²⁴⁶ EMI can interfere with radio broadcasting stations, microwaves, and other broadcast transmission towers.²⁴⁷

166. The Solar Facility is not anticipated to cause interference with nearby structures due to the low-profile nature of the solar arrays.²⁴⁸

167. The Applicant does not anticipate or expect the Gen-Tie Line to cause any adverse impacts to communication, radio, or television interference.²⁴⁹

168. Transmission lines generally do not cause interference with radio and television, but transmission lines may impact electric communications via corona noise, shadowing effect, and gap discharge²⁵⁰ Corona from transmission line conductors can generate electromagnetic “noise” at the same frequencies that communication signals are transmitted. This noise is not sound, but rather electromagnetic signals that can cause interference with the reception of communications depending on the frequency and strength of the signal. Transmission structures can also physically block communication signals through a “shadowing” effect. GPS is typically not affected by transmission lines.²⁵¹ Lastly, gap discharges are caused by hardware defects or abnormalities on a

²⁴³ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 69-70 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁴ Ex. MP-2 at 54 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 69-70 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁵ Ex. MP-2 at 57 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 68 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁶ Ex. MP-2 at 36 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁷ Ex. MP-2 at 36 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁸ Ex. MP-2 at 36 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁴⁹ Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁰ Ex. MP-2 at 36 (Application) (eDocket No. [202412-213417-03](#)).

²⁵¹ Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

transmission or distribution line where there are small electrical gaps between metal parts.²⁵²

B. Effects on Public Health and Safety.

169. Minnesota's site and route permit siting factors require consideration of the Project's potential effect on health and safety.²⁵³

170. Impacts to human health and safety are assessed by looking at construction and operation of the Project, electric and magnetic fields, interference with implantable medical devices, and to stray voltage.²⁵⁴

1. Construction and Operation of the Project

171. Construction and operation of the Project will have minimal impacts on the security and safety of the local population.²⁵⁵ The Applicant will coordinate with emergency and non-emergency response teams for the Project, including law enforcement, fire departments, and ambulance services.²⁵⁶ The Project is designed to meet applicable federal, state, and local standards, including during construction, such as those from National Electrical Safety Code.²⁵⁷ Electrical inspections are required to meet state electrical codes, and will ensure proper installation of all components, and the Project will undergo routine inspection.²⁵⁸ Minnesota Power stated that it will ensure that safety requirements are met during construction and operation of the Project.²⁵⁹

172. Minnesota Power will develop a Solar Project Safety Plan and Emergency Action Plans that outline local contacts and emergency procedures for evacuation, fire response, extreme weather, injury, and criminal behavior.²⁶⁰

2. Electric and Magnetic Fields.

173. Electric and magnetic fields ("EMFs") are invisible electric and magnetic fields present around electrical devices.²⁶¹

²⁵² Ex. MP-2 at 37 (Application) (eDocket No. [202412-213417-03](#)).

²⁵³ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

²⁵⁴ Ex. PUC-EIP-6 at 78 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁵ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁶ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁷ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁸ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁵⁹ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁰ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 84 (EA) (eDocket No. [20258-222456-01](#)).

²⁶¹ Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 78 (EA) (eDocket No. [20258-222456-01](#)).

174. EMFs generated from solar arrays are an extremely low frequency and are similar to that of electrical appliances and wirings in residential homes.²⁶²

175. There are no federal standards for transmission line electric fields, but the Commission has imposed a maximum electric field limit of 8 kV per meter.²⁶³ Over a decade of research on EMF impacts to human health has found that exposure to EMF does not cause or contribute to adverse health effects.²⁶⁴

176. Minnesota Power has calculated the approximate magnetic field levels for the Solar Facility and the Gen-Tie Line and has determined that the magnetic field levels from this transmission line are not unusual and are within the range of magnetic field levels found in various residential and commercial buildings.²⁶⁵

3. Implantable Medical Devices

177. EMFs might interfere with implantable electromechanical medical devices, such as pacemakers, defibrillators, neurostimulators, and insulin pumps.²⁶⁶ Impacts to implantable medical devices and persons using these devices are not expected to occur.²⁶⁷ Interference with implanted cardia devices can occur if the electric field intensity is high enough to induce sufficient body currents to cause interaction.²⁶⁸ In the unlikely event a pacemaker is impacted, the effect is typically a temporary asynchronous pacing.²⁶⁹ The pacemaker would return to its normal operation when the person moves away from the source of the interference.²⁷⁰

4. Stray Voltage.

178. Impacts from stray voltage are anticipated to be negligible to minimal and able to be mitigated during construction and operation of the Project.²⁷¹

²⁶² Ex. MP-2 at 30 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 81 (EA) (eDocket No. [20258-222456-01](#)).

²⁶³ Ex. MP-2 at 31 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 80 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁴ Ex. MP-2 at 31 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 79 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁵ Ex. MP-2 at 32 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 81-82 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁶ Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁷ Ex. MP-2 at 31 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁸ Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁶⁹ Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁰ Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁷¹ Ex. PUC-EIP-6 at 12 (EA) (eDocket No. [20258-222456-01](#)).

C. Effects on Land-Based Economics.

179. Minnesota's site and route permit siting factors require consideration of the Project's impacts to land-based economies—specifically, agriculture, forestry, tourism, and mining.²⁷²

1. Agriculture.

180. Less than five percent of Itasca County contains farmland, totaling 71,710 acres of farmland.²⁷³ The Solar Facility will temporarily impact up to 652.4 acres of agricultural land during construction and operations that is currently used to produce corn, soybeans, spring wheat, and alfalfa.²⁷⁴

181. The Gen-Tie Line will temporarily impact up to 34.0 acres of agricultural land within the route during construction and operations.²⁷⁵ The Applicant owns this agricultural land as it only constitutes 0.05 percent of the agricultural land in Itasca County.²⁷⁶

182. The Project will cause removal of approximately 0.68 percent of farmland in Itasca County, which is not anticipated to have a significant impact.²⁷⁷ Additionally, the Gen-Tie Line will temporarily impact up to 34 acres of agricultural land, comprising of approximately 0.04 percent of the farmland in Itasca County.²⁷⁸

183. The Applicant indicates that best management practices would be implemented during construction and operation to minimize and mitigate short- and long-term impacts to agricultural lands, such as soil compaction, topsoil mixing, soil erosion, invasive and noxious weed species, and rutting.²⁷⁹

2. Forestry.

184. There are no commercial forestry operations within the Solar Facility Site or the proposed route of the Gen-Tie Line, therefore no impact to commercial forestry is anticipated and no mitigation is proposed.²⁸⁰

²⁷² Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

²⁷³ Ex. MP-2 at 58 (Application) (eDocket No. [202412-213417-03](#)).

²⁷⁴ Ex. MP-2 at 58 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 85 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁵ Ex. MP-2 at 59 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 85 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁶ Ex. MP-2 at 59 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 85 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁷ Ex. PUC-EIP-6 at 86 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁸ Ex. PUC-EIP-6 at 86 (EA) (eDocket No. [20258-222456-01](#)).

²⁷⁹ Ex. PUC-EIP-6 at 87 (EA) (eDocket No. [20258-222456-01](#)).

²⁸⁰ Ex. MP-2 at 59 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 88 (EA) (eDocket No. [20258-222456-01](#)).

3. Tourism.

185. Tourism activities within a five-mile radius of the Project include Blueberry Hills Golf Course, Sunset Reins Equine Center, Schoolcraft State Park, While Oak Casino, several lake resorts, and walking and mountain bike trails.²⁸¹

186. The Applicant does not anticipate any impacts to tourism opportunities due to construction or operation of the Project.²⁸²

4. Mining.

187. Itasca County contains multiple mining operations, however, there are no mining operations within the Project.²⁸³ Thereby, no mitigation measures are necessary.²⁸⁴

D. Effects on Archaeological and Historic Resources.

188. Minnesota Rule 7850.4100(D) requires consideration of the effects of the Project on historic and archaeological resources.

189. A cultural resource literature review of the Project and a one-mile buffer was conducted online through cultural resources site (archaeological sites and historic structures) and survey files from the SHPO, archaeological site files on the Office on the Office of State Archaeologist (“OSA”) online portal, as well as the General Land Office maps and available historical aerial photography accessed online through the OSA Portal.²⁸⁵

190. Within the one-mile buffer, 15 previously recorded archaeological sites were identified, and three previously recorded historic architectural resources have been document, including one archaeological site, Site 21C0472, and one historic architectural resource, numbered XX-ROD-00052, within the Project site.²⁸⁶

191. After the literature review, a Phase I Archaeological Reconnaissance Survey for the Project was completed and identified six archaeological sites within the Project boundaries. However, the study recommended that all sites be considered Not Eligible for listing on the National Register of Historic Places.²⁸⁷

²⁸¹ Ex. MP-2 at 59 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 88 (EA) (eDocket No. [20258-222456-01](#)).

²⁸² Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 88 (EA) (eDocket No. [20258-222456-01](#)).

²⁸³ Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137 (EA) (eDocket No. [20258-222456-01](#)).

²⁸⁴ Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 137-138 (EA) (eDocket No. [20258-222456-01](#)).

²⁸⁵ Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 88-89 (EA) (eDocket No. [20258-222456-01](#)).

²⁸⁶ Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 89 (EA) (eDocket No. [20258-222456-01](#)).

²⁸⁷ Ex. MP-2 at 60 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 89 (EA) (eDocket No. [20258-222456-01](#)).

192. According to survey files from the SHPO, the concurrence letter confirmed there are no properties listed in the National or State Registers of Historic Places, or within the Historic Sites Network, which will be affected by the Project.²⁸⁸

193. The concurrence letter from the Leech Lake Band of Ojibwe Tribal Historic Preservation Office confirmed there are no historic properties affected by the Project and no further archaeological investigations are recommended for this Project.²⁸⁹

E. Effects on Natural Environment.

194. Minnesota's site and route permit siting factors require consideration of the Project's effect on the natural environment, including effects on air and water quality resources and flora and fauna.²⁹⁰

1. Air Quality.

195. Impacts on air quality from construction and operation of the Project would be low and primarily limited to the period of construction.²⁹¹ During construction, air emissions would occur from the operation of construction equipment, vehicular traffic, and soil disturbance.²⁹² Construction activities would be performed with standard heavy equipment such as cranes, boom trucks, and assorted small vehicles. Exhaust emissions from construction vehicles will be minimized by keeping construction equipment in good working order.²⁹³ When necessary, dust from construction traffic will be controlled using standard construction practices such as watering of exposed surfaces, covering of disturbed areas, and reducing vehicle speeds.²⁹⁴ Overall, dust emissions currently experienced annually in the area through farming activities will be reduced for the life of the Project through the establishment of perennial vegetative cover.²⁹⁵

196. During operation of the proposed Project air emissions would be minimal. The emission of ozone from the operation of a transmission line of the voltage proposed for the Project would be minimal and is not anticipated to have a significant impact on the air quality.²⁹⁶

²⁸⁸ Ex. MP-10 at Exhibit A, Page 1 (SHPO/THPO Concurrence Letters) (eDocket No. [20255-21922-01](#)).

²⁸⁹ Ex. MP-10 at Exhibit B, Page 1 (SHPO/THPO Concurrence Letters) (eDocket No. [20255-21922-01](#)).

²⁹⁰ Minn. Stat. § 216E.03, subd. 7(b)(1)-(2); Minn. R. 7850.4100(E).

²⁹¹ Ex. MP-2 at 63-64 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 92 (EA) (eDocket No. [20258-222456-01](#)).

²⁹² Ex. MP-2 at 63-64 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 92 (EA) (eDocket No. [20258-222456-01](#)).

²⁹³ Ex. MP-2 at 63-64 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 92-93 (EA) (eDocket No. [20258-222456-01](#)).

²⁹⁴ Ex. MP-2 at 64-64 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 92-93 (EA) (eDocket No. [20258-222456-01](#)).

²⁹⁵ Ex. MP-2 at 64-65 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 92-93 (EA) (eDocket No. [20258-222456-01](#)).

²⁹⁶ Ex. MP-2 at 64-65 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 93 (EA) (eDocket No. [20258-222456-01](#)).

2. *Greenhouse Gas Emissions (“GHG”) and Climate Change.*

197. Construction of the Project would result in GHG emissions from the combustion of diesel and gasoline in heavy construction equipment, delivery vehicles, and worker passenger vehicles. However, operation of the Project will provide additional transmission capacity to support interconnection with, and transmission of, additional renewable energy generation from renewable resources.²⁹⁷

198. Construction activities are expected to produce a total of 3,464 tons carbon dioxide equivalent.²⁹⁸

199. During the operational stage, the Project would be regularly inspected, maintained, and possibly undergo emergency repair. These activities would generate a minor amount of GHG emissions.²⁹⁹

200. The Project would have minimal effect to GHG emissions in Minnesota, and as such, no mitigation is proposed.³⁰⁰

3. *Corona: Air Impacts.*

201. During the operation of the Gen-Tie Line, small amounts of nitrogen dioxide and Ozone trioxygen are created due to corona from the operation of transmission lines. However, Minnesota Power will minimize corona effects by implementing good engineering practices.³⁰¹

4. *Water Quality and Resources.*

a. Groundwater

202. Impacts to groundwater resources for the Solar Facility are not anticipated due to the shallow nature of construction activities.³⁰² There are no designated sole source aquifers, Wellhead Protection Areas, or Drinking Water Supply Management Areas within the Solar Facility Site.³⁰³ Minnesota Power will restore the Project area disturbed during construction with perennial vegetation as described in the Vegetation

²⁹⁷ Ex. MP-2 at 85 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 132 (EA) (eDocket No. [20258-222456-01](#)).

²⁹⁸ Ex. MP-2 at 86 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 132 (EA) (eDocket No. [20258-222456-01](#)).

²⁹⁹ Ex. MP-2 at 86 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 132 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁰ Ex. MP-2 at 86 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 135 (EA) (eDocket No. [20258-222456-01](#)).

³⁰¹ Ex. MP-2 at 65 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 93 (EA) (eDocket No. [20258-222456-01](#)).

³⁰² Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 96 (EA) (eDocket No. [20258-222456-01](#)).

³⁰³ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 96 (EA) (eDocket No. [20258-222456-01](#)).

Management Plan, which allows for water to filter into the soil for treatment.³⁰⁴ The Applicant will also manage surface water that flows or falls onto impervious surfaces in accordance with conditions of the National Pollutant Discharge Elimination System stormwater permits.³⁰⁵

203. There are three documented water wells within the Solar Facility Site.³⁰⁶ Minnesota Power will assess any wells identified prior to and during construction to determine if they are open, and seal them, if necessary.³⁰⁷

204. According to Minnesota Department of Health Minnesota Well Index records, shallow groundwater was encountered at 11 feet below ground surface in monitoring well 455353. Groundwater was encountered in several geotechnical soil borings completed within the Project at depths ranging from 4 to 19 feet below ground surface. Minnesota Power will obtain a Water Appropriation/Dewatering Permit from the MnDNR for dewatering if necessary, during construction of the Solar Facility.³⁰⁸

205. Minnesota Power will also prepare and implement a Spill Prevention, Countermeasures and Control plan for the main transformer at the Project Substation to prevent spills or leaks in accordance with U.S. Environmental Protection Agency regulations.³⁰⁹

206. Impacts to groundwater resources for the Gen-Tie Line are anticipated to be minimal. Structure foundations for the Gen-Tie Line will generally range from 20 feet to 60 feet in depth. All foundation materials will be non-hazardous materials and in areas where shallow depths to bedrock or groundwater resources are encountered, excavation for foundations may be used.³¹⁰

207. There are no designated sole source aquifers, Wellhead Protection Areas, Drinking Water Supply Management Areas within the Gen-Tie line, or documented water wells within the Gen-Tie Line.³¹¹ There is one Wellhead Protection Areas and associated Drinking Water Supply Management Area adjacent to the Gen-Tie Line at the point of

³⁰⁴ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 102 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁵ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 97 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁶ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 97 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁷ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 97 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁸ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 97 (EA) (eDocket No. [20258-222456-01](#)).

³⁰⁹ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 99 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁰ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 98 (EA) (eDocket No. [20258-222456-01](#)).

³¹¹ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 96 (EA) (eDocket No. [20258-222456-01](#)).

interconnection. Minnesota Power will restore disturbed areas with perennial vegetation and manage surface water that flows or falls onto impervious surfaces.³¹²

208. There are no documented water wells within the Gen-Tie Line. Minnesota Power will assess any wells identified during construction to determine if they are open, and seal them, if necessary, in accordance with Minnesota Department of Health requirements.³¹³

b. Surface Waters

209. Surface waters may experience permanent and temporary impacts as a result of the Project. Construction of the Project creates a potential for indirect impacts if sediment or fugitive dust created by excavation, grading, vegetation removal, and construction traffic reaches nearby surface waters. Overall, and due to the establishment of native perennials and other vegetation at the solar facility, the Project is expected to have a long-term positive impact on water quality.³¹⁴

210. The Gen-Tie Line will cross a portion of Blackwater Lake and connect into the existing Boswell Substation. The Applicant notes that the public water crossing will be less than 500 feet and does not require structures within the water.³¹⁵

c. Floodplains

211. The Project Site is within a floodplain that has been designated as an areas at risk for flooding. The Solar Facility site includes areas classified as Zones A or AE by the Federal Emergency Management Agency, which are considered special hazard areas.³¹⁶ The Solar Facility includes unmodernized floodplains in A flood zones. A flood zones are areas of flood hazards and do not have a detailed flood study to determine impacted elevations. Solar panels along Blackwater Lake and low-lying areas connecting to Warburg Lake could experience flooding, but the Applicant will limit grading in these areas to not create fill in the floodplain.³¹⁷

212. The Gen-Tie Line route is also planned to cross a Zone A floodplain. The Project site has increased risks for 100-year storm events and 100-year flood events under significant storm conditions. Therefore, areas of the Project site along Blackwater Lake, the Mississippi River, and low-lying areas connecting to Warburg Lake could experience flooding.³¹⁸

³¹² Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 96 (EA) (eDocket No. [20258-222456-01](#)).

³¹³ Ex. MP-2 at 67 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 96 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁴ Ex. PUC-EIP-6 at 107 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁵ Ex. MP-2 at 72-73 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 107 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁶ Ex. PUC-EIP-6 at 107 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁷ Ex. MP-2 at 74 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 108 (EA) (eDocket No. [20258-222456-01](#)).

³¹⁸ Ex. PUC-EIP-6 at 107-108 (EA) (eDocket No. [20258-222456-01](#)).

213. Most of the Project infrastructure is designed to be placed outside of the class-A flood zone into areas that are at a lower risk of flooding. The Applicant will limit grading in these areas to reduce the risk of flooding events.³¹⁹

d. Wetlands

214. The National Wetland Inventory for Minnesota identified approximately 233 acres of Freshwater Emergent, Freshwater Forested/Shrub, Freshwater Pond, Lake and Riverine wetland within the Project site.³²⁰ Minnesota Power's wetland delineation report identified approximately 293 acres of wetland within the Project site, as well as approximately 46 acres of lakes and 5 acres of stream as delineated waters for the Project.³²¹

215. The site layout for the Solar Facility avoids locating solar arrays and associated equipment within wetland areas. There is potential for temporary, short-term impacts to wetlands to occur during construction, including disturbances in wetlands adjacent to Blackwater Creek, Blackwater Lake, and the Mississippi River. However, direct impacts to wetlands are not anticipated.³²²

216. There are two wetlands within one mile of the Solar Facility, Blackwater Lake, and Guile Lake. There are no streams or wetlands within the Project boundary or within one mile of the Project.³²³

217. The Gen-Tie Line will cross a portion of Blackwater Lake and connect into the existing Boswell Substation. The public water crossing will be less than 500 feet and does not require structures within the water. Minnesota Power will submit a utility crossing license to the MnDNR prior to construction activities.³²⁴

5. *Flora.*

218. During construction of the Solar Facility and the Gen-Tie Line, impacts are anticipated to be minimal to moderate and able to be mitigated in part or less consistent with factor, but nonetheless consistent.³²⁵

219. During operation of the Solar Facility and the Gen-Tie Line, impacts are anticipated to be negligible to minimal and able to be mitigated or consistent with factor.³²⁶

³¹⁹ Ex. PUC-EIP-6 at 108 (EA) (eDocket No. [20258-222456-01](#)).

³²⁰ Ex. PUC-EIP-6 at 112 (EA) (eDocket No. [20258-222456-01](#)).

³²¹ Ex. MP-2 at 73 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 112 (EA) (eDocket No. [20258-222456-01](#)).

³²² Ex. PUC-EIP-6 at 112 (EA).

³²³ Ex. MP-2 at 74 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 105 (EA) (eDocket No. [20258-222456-01](#)).

³²⁴ Ex. MP-2 at 74 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 108 (EA) (eDocket No. [20258-222456-01](#)).

³²⁵ Ex. PUC-EIP-6 at 12 (EA) (eDocket No. [20258-222456-01](#)).

³²⁶ Ex. PUC-EIP-6 at 12 (EA) (eDocket No. [20258-222456-01](#)).

6. *Fauna.*

220. During construction of the Solar Facility and the Gen-Tie Line, impacts are anticipated to be minimal to moderate and able to be mitigated in part or less consistent with factor, but nonetheless consistent.³²⁷

221. During operation of the Solar Facility and the Gen-Tie Line, impacts are anticipated to be negligible to minimal and able to be mitigated or consistent with factor.³²⁸

7. *Geology and Topography.*

222. The Solar Facility will have limited or no potential impacts to geologic resources because the bedrock appears deeper than 50 feet and was not encountered during a geotechnical investigation. Due to the thickness of the unconsolidated materials, excavation or blasting of bedrock is unlikely to occur during construction.³²⁹

223. The Gen-Tie line is expected to have limited or no impacts to geologic resources. The bedrock appears deeper than 50 feet and was not encountered during the geotechnical investigations.³³⁰

8. *Soils.*

224. The Solar Facility has the potential to impact soils during construction and decommissioning. During construction, grading activities are required to provide a level surface for safe operation of construction equipment and will impact soils. Soil erosion, compaction, and topsoil and subsoil mixing are possible within temporary work areas.³³¹

225. Most soils within the Solar Facility Site are susceptible to moderate or severe rutting. Over one third of the site contains soils with poor drainage and less than a quarter of the site contains soils that are susceptible to compaction.³³²

226. Most soils within the Gen-Tie Line corridor are susceptible to moderate or severe rutting. Only 8 percent of the Gen-Tie Line corridor contains soils with poor drainage and only 5 percent of the Gen-Tie Line corridor contains soils that are susceptible to compaction.³³³

³²⁷ Ex. PUC-EIP-6 at 12 (EA) (eDocket No. [20258-222456-01](#)).

³²⁸ Ex. PUC-EIP-6 at 12 (EA) (eDocket No. [20258-222456-01](#)).

³²⁹ Ex. MP-2 at 65 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 94 (EA) (eDocket No. [20258-222456-01](#)).

³³⁰ Ex. MP-2 at 65 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 94 (EA) (eDocket No. [20258-222456-01](#)).

³³¹ Ex. MP-2 at 71 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 101-102 (EA) (eDocket No. [20258-222456-01](#)).

³³² Ex. MP-2 at 71 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 102 (EA) (eDocket No. [20258-222456-01](#)).

³³³ Ex. MP-2 at 72 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 102 (EA) (eDocket No. [20258-222456-01](#)).

227. Minnesota Power will implement the agricultural impact mitigation plan and the vegetation management plan to minimize impacts to soils and designated prime farmland during construction of the solar facility and the Gen-Tie Line.³³⁴

9. Vegetation

228. Most of the current land use within the Project area is in cultivated, agricultural land or forest land, with some areas of forested wetlands, developed land, and open water.³³⁵

229. Construction of the Solar Facility will eliminate vegetative cover, including temporary vegetation removal and permanent tree removal.³³⁶ Tree removal will occur within the solar arrays and substation area. Construction of the Project will also create some additional impermeable surfaces, which could affect water runoff.³³⁷ Removal of vegetative cover exposes soils and could result in soil erosion.³³⁸

230. The Gen-Tie Line will require the removal of woody vegetation in order to clear for the right-of-way.³³⁹ Permanent loss of vegetation will occur in areas where transmission line structures are installed.³⁴⁰ The Applicant noted that the Project was designed to avoid tree clearing to the greatest extent practicable.³⁴¹

231. Minnesota Power will seed the non-impervious portions of the Project with low-growing native vegetation seed mix in accordance with the Vegetation Management Plan.³⁴² The seed mix will promote pollinator habitat, establish stable ground cover, reduce erosion and runoff, and improve infiltration.³⁴³ Control of invasive and noxious weeds will be ongoing during the construction and operation of the Project.³⁴⁴

F. Rare and Unique Natural Resources.

232. Minnesota's site and route permit siting factors require consideration of the Project's effect on rare and unique natural resources.³⁴⁵

³³⁴ Ex. MP-2 at 72 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 102-103 (EA) (eDocket No. [20258-222456-01](#)).

³³⁵ Ex. MP-2 at 74 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³³⁶ Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³³⁷ Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³³⁸ Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³³⁹ Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁰ Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³⁴¹ Ex. MP-2 at 75 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 114 (EA) (eDocket No. [20258-222456-01](#)).

³⁴² Ex. MP-2 at 75 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 115 (EA) (eDocket No. [20258-222456-01](#)).

³⁴³ Ex. MP-2 at 75 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 115 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁴ Ex. MP-2 at 75 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 115 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁵ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

1. *Endangered Species.*

a. Federally Listed Species.

233. Federally recognized list of species includes Canada lynx, Gray wolf, Northern long-eared bat, Monarch butterfly, and the Bald eagle. No designated critical habitat is present within the vicinity of the Project.³⁴⁶

234. Canada lynx and gray wolves could be present within the vicinity of the Solar Facility Site, however it is unlikely because the habitat quality is relatively low and fragmented with development and agricultural land. Canada lynxes reported in Minnesota are primarily in St. Louis and Lake counties, but Canada lynxes have been documented in Itasca County. The forested areas within and adjacent to the Project could provide suitable habitat for Canada lynx.³⁴⁷ Gray wolves have a current density of approximately one per 10 square miles and the Solar Facility Site vicinity could provide suitable habitat for gray wolves.³⁴⁸

235. Suitable active-season habitat for northern long-eared bats is present in the forested areas within and adjacent to the Project. According to the MnDNR Natural Heritage Information System ("NHIS") database does not indicate the presence of northern long-eared bat hibernacula in Itasca County. However, it is possible that northern long-eared bats would use the forested areas within the Solar Facility Site as habitat.³⁴⁹

236. In 2020, the U.S. Fish and Wildlife Services assigned the monarch butterfly as a candidate for listing under the Endangered Species Act. While candidate species are not protected by the Endangered Species Act, they could be added in the Fiscal Year 2024 which would allow Minnesota Power 12 months prior to the rule becoming effective to respond accordingly. Monarch butterflies forage on flowering plants and rely on the presence of milkweed to complete the caterpillar life stage. Milkweed plants were not identified during the field surveys, however, they could be present within the Project. Minnesota Power will seed the non-impervious areas with native vegetation to provide habitat for monarch butterflies.³⁵⁰

237. The Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act provide protection for bald eagles and prohibit disturbance that may lead to biologically significant impacts. Bald eagles typically nest in mature trees near large lakes or streams. Surveys conducted in April 2023 identified two bald eagle nests within the

³⁴⁶ Ex. MP-2 at 77 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 117 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁷ Ex. MP-2 at 77 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 125-126 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁸ Ex. MP-2 at 77 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 126 (EA) (eDocket No. [20258-222456-01](#)).

³⁴⁹ Ex. MP-2 at 78 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 126 (EA) (eDocket No. [20258-222456-01](#)).

³⁵⁰ Ex. MP-2 at 78 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 126-127 (EA) (eDocket No. [20258-222456-01](#)).

Solar Facility Site and one within the Gen-Tie Line; an additional nest was also observed in the Solar Facility Site, but it was determined to not be bald eagles.³⁵¹

238. The U.S. Wildlife and Fish Services guides that construction-related activities near bald eagle nests and recommends a minimum buffer of 660 feet around bald eagle nests during the nesting season of mid-January through July. Additionally, no tree clearing can occur within 330 feet of a bald eagle nest at any time of the year or within 660 feet during the nesting season. Minnesota Power will consult with the U.S. Fish and Wildlife Services if the Project cannot maintain minimum buffers for bald eagles or if a bald eagle nest removal is necessary.³⁵²

239. For the Gen-Tie Line, potential impacts to federally protected species from the Gen-Tie Line of the construction will be similar to impacts from Solar Facility. Once the Gen-Tie Line becomes operational, Minnesota Power does not anticipate any impacts to federally protected species.³⁵³

b. State Listed Species

240. The MnDNR's NHIS database provides information on documented occurrences of Minnesota's rare species throughout the state. According to the database, there are no known occurrences of state threatened or endangered species within one mile of the Project. Construction and operation of the Solar Facility are not likely to impact state-threatened, endangered, or special concern species. Minnesota Power submitted a Natural Heritage Review request through the MnDNR on August 6, 2024.³⁵⁴ The review found that no state-listed endangered or threatened species have been documented in the vicinity of the Project.³⁵⁵

241. However, the review did identify the small green wood orchid and peregrine falcon as State-Listed Species of Special concern.³⁵⁶ Based on the wetland delineations conducted for the Project and review of aerial photographs, habitat suitable for small green wood orchid is not present.³⁵⁷ Peregrine falcons were located within the footprint of the Boswell Energy Center and a nesting box and a nesting pair was located on a stack at the Boswell Energy Center.³⁵⁸ The MnDNR recommended modifying the location of Project activities to avoid suitable habitats or modifying the timing of Project activities to avoid the presence of these species.³⁵⁹

242. Construction of the Gen-Tie Line is not likely to impact state threatened, endangered, or special concern species. Once the Gen-Tie Line is operational, there is

³⁵¹ Ex. MP-2 at 78 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 127 (EA) (eDocket No. [20258-222456-01](#)).

³⁵² Ex. MP-2 at 79 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 127 (EA) (eDocket No. [20258-222456-01](#)).

³⁵³ Ex. MP-2 at 79 (Application) (eDocket No. [202412-213417-03](#)).

³⁵⁴ Ex. MP-2 at 80 (Application) (eDocket No. [202412-213417-03](#)).

³⁵⁵ Ex. MP-2 at Appendix H, 16 (Application) (eDocket No. [202412-213417-11](#)).

³⁵⁶ Ex. MP-2 at Appendix H, 16 (Application) (eDocket No. [202412-213417-11](#)).

³⁵⁷ Ex. PUC-EIP-6 at 128 (EA) (eDocket No. [20258-222456-01](#)).

³⁵⁸ Ex. PUC-EIP-6 at 128 (EA) (eDocket No. [20258-222456-01](#)).

³⁵⁹ Ex. MP-2 at Appendix H, 16 (Application) (eDocket No. [202412-213417-11](#)).

potential for peregrine falcons nesting or passing through the area to collide with the transmission line. Minnesota Power will minimize impacts to avian species by incorporating recommendations from the Avian Power Line Interaction Committee.³⁶⁰

G. Application of Various Design Considerations.

243. Minnesota's site and route permit siting factors require consideration of the Project's applied design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of the transmission system in the area.³⁶¹

244. The Project only contained one design option and did not consider alternative site or route options as alternatives are not required under the alternative process.³⁶²

245. The Project's primary components include PV panels mounted on a single-axis tracker racking system installed in linear arrays, centralized inverters, a Project substation, and a Gen-Tie Line. Associated facilities include electrical cables, conduit, switchgears, step-up transformers, SCADA systems, communications building, and metering equipment. The Project will include temporary and permanent laydown yards, internal Project access roads, weather stations, a stormwater management system, and security fencing and gates.³⁶³

246. The Solar Facility panels will be on a single-axis tracker racking system in linear arrays oriented north-south. The racking system design consists of horizontal steel support beams with a drive train system that divides the array into two sides and is usually located in the center of the rows. The racking system is supported by vertical steel piles that are typically driven into the ground with an embedment depth of 13 to 22 feet.³⁶⁴

247. The Gen-Tie Line route was designed to minimize impacts to the environment and landowners while maximizing the efficiency of the Project. The Purpose of the Gen-Tie Line is to provide the Boswell Energy Center 230 kV substation interconnection to the grid at the existing substation at the Boswell Energy Center. The selected route provides the shortest route possible to accomplish this purpose.³⁶⁵

248. The proposed transmission structures for the Gen-Tie Line will consist of a combination of steel monopole structure(s) and wood H-frames.³⁶⁶

³⁶⁰ Ex. MP-2 at 80 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 129 (EA) (eDocket No. [20258-222456-01](#)).

³⁶¹ Minn. Stat. § 216E.03, subd. 7(b)(2); Minn. R. 7850.4100(G).

³⁶² Ex. PUC-EIP-6 at 11 (EA) (eDocket No. [20258-222456-01](#)); Minn. Stat. § 216E.04, subd. 2 and 3.

³⁶³ Ex. MP-2 at 12-13 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 17 (EA) (eDocket No. [20258-222456-01](#)).

³⁶⁴ Ex. MP-2 at 13 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 18 (EA) (eDocket No. [20258-222456-01](#)).

³⁶⁵ Ex. MP-2 at 10-11 (Application) (eDocket No. [202412-213417-03](#)).

³⁶⁶ Ex. MP-2 at 16 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 20 (EA) (eDocket No. [20258-222456-01](#)).

249. The Gen-Tie Line single-circuit steel structures will be approximately 65 to 110 feet tall with spans of approximately 110 feet.³⁶⁷

250. The Gen-Tie Line double-circuit steel structures will be approximately 100 to 140 feet tall with spans of approximately 110 feet.³⁶⁸

251. The Gen-Tie Line wood H-frames will be approximately 60 to 110 feet tall.³⁶⁹

252. The Project Substation will be in the center of the Project site. The collector system voltage transmitted from the inverters will be stepped up from 34.5 kV to 230 kV at the Project Substation and transmitted to the existing Boswell Energy Substation. The Project Substation will consist of supporting structures for high voltage electrical structures, breakers, transformers, lighting protection, and contract equipment.³⁷⁰

H. Use of or Paralleling of Existing Rights-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries.

253. Minnesota's site and route permit siting factors require consideration of the Project's use of or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.³⁷¹

254. The proposed Route for the Gen-Tie Line and right-of-way is located entirely on Minnesota Power property and is designed to avoid or minimize impacts on residences, the environment, and other sensitive resources. Minnesota Power anticipates using a 130-foot right-of-way for the entire length of the Gen-Tie Line for both the single and double-circuit segments.³⁷²

I. Use of Existing Large Electric Power Generating Plant Sites.

255. Minnesota site and route permit siting factors require consideration of the Project's use of existing large electric power generating plant sites.³⁷³

256. Minnesota Power selected the Project Site based on, among other reasons, its availability to a point of interconnection, which provides the Applicant with the ability to submit a Surplus Interconnection Service request to MISO, and the proximity of the Site to the existing Boswell Energy Center.³⁷⁴

³⁶⁷ Ex. MP-2 at 16 (Application) (eDocket No. [202412-213417-03](#)).

³⁶⁸ Ex. MP-2 at 17 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 48 (EA) (eDocket No. [20258-222456-01](#)).

³⁶⁹ Ex. MP-2 at 18 (Application) (eDocket No. [202412-213417-03](#)).

³⁷⁰ Ex. MP-2 at 16 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 21 (EA) (eDocket No. [20258-222456-01](#)).

³⁷¹ Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100(H).

³⁷² Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 20 (EA) (eDocket No. [20258-222456-01](#)).

³⁷³ Minn. R. 7850.4100(I).

³⁷⁴ Ex. MP-2 at 8-9 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 17 (EA) (eDocket No. [20258-222456-01](#)).

J. Use of Existing Transportation, Pipeline, and Electrical Transmission System Rights-of-Way.

257. Minnesota's route permit siting factors require consideration of the Project's use of existing transportation, pipeline, and electrical transmission system rights-of-way.³⁷⁵

258. The Project is located entirely on Minnesota Power property and is designed to avoid or minimize impacts on residences, the environment, and other sensitive resources.³⁷⁶

K. Electrical System Reliability.

259. Minnesota's site and route permit siting factors require consideration of the Project's impact on electrical system reliability.³⁷⁷

260. The North American Electric Reliability Corporation ("NERC") has established mandatory reliability standards for American utilities, requiring an evaluation of whether the grid can continue to operate adequately under various contingencies for new transmission lines.³⁷⁸

261. The purpose of the Project is to deliver safe, reliable, and affordable energy to customers across a smarter grid that is increasingly resilient.³⁷⁹

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

262. Minnesota's site and route permit siting factors require consideration of the Project's cost of construction, operation, and maintenance.³⁸⁰

263. This factor does not apply to the Project because there was not multiple design options for the Project.³⁸¹

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

264. Minnesota's site and route permit siting factors require consideration of the adverse human and natural environmental effects that cannot be avoided.³⁸²

265. Unavoidable impacts related to the Project that will last only as long as the construction period include: noise associated with vehicles and equipment during

³⁷⁵ Minn. Stat. § 216E.03, subd. 7(b)(8); Minn. R. 7850.4100(J).

³⁷⁶ Ex. MP-2 at 11 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 17 (EA) (eDocket No. [20258-222456-01](#)).

³⁷⁷ Minn. Stat. § 216E.03, subd. 7(b)(5)-(6); Minn. R. 7850.4100(K).

³⁷⁸ Ex. PUC-EIP-6 at 20 (EA) (eDocket No. [20258-222456-01](#)).

³⁷⁹ Ex. MP-2 at 1 (Application) (eDocket No. [202412-213417-03](#));

³⁸⁰ Minn. R. 7850.4100(L).

³⁸¹ Ex. PUC-EIP-6 at 11 (EA) (eDocket No. [20258-222456-01](#)).

³⁸² Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100(M).

construction; increased traffic on roads that bisect the Site; minor air quality impacts due to fugitive dust; exposed soils from grading activities and potential for soil erosion and sedimentation; disturbance to and displacement of some species of wildlife; and minor greenhouse gas emissions from construction equipment and workers commuting.³⁸³

266. Unavoidable impacts during the life of the Project include changes to existing landscape, from agricultural land to a solar facility; changes in land use and vegetation from forested land and agricultural land of predominately wheat and soybeans to a solar facility; and infrequent vehicle trips from maintenance activities.³⁸⁴

N. Irreversible and Irretrievable Commitments of Resources.

267. Minnesota's site and route permit siting factors require consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.³⁸⁵

268. The Project will require only minimal commitments of resources that are irreversible and irretrievable. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the use of these resources have on future generations.³⁸⁶

269. Those commitments that do exist are primarily related to construction. Construction resources include the use of water, aggregate, hydrocarbons, steel, concrete, wood, and other consumable resources. Surplus raw materials will be reused or recycled to the extent practicable.³⁸⁷

IX. ROUTE AND SITE PERMIT SPECIAL CONDITIONS

270. In its Draft Site and Route Permit, the PUC-EIP recommended certain special conditions. The Conditions apply to aesthetics, vegetation management, cultural resources, tribal engagement, archaeological findings, lighting, dust, erosion control, and wildlife. The record supports inclusion of the conditions discussed below.

271. To address comments received during the scoping meeting, the PUC-EIP recommended the following special condition to address concerns about visual impacts of the Solar Facility. The Applicant agreed that this special condition would be appropriate for the Project.³⁸⁸

5.1. Visual Screening Plan:

³⁸³ Ex. MP-2 at 87 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 135-136 (EA) (eDocket No. [20258-222456-01](#)).

³⁸⁴ Ex. MP-2 at 87-88 (Application) (eDocket No. [202412-213417-03](#)); Ex. PUC-EIP-6 at 136 (EA) (eDocket No. [20258-222456-01](#)).

³⁸⁵ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

³⁸⁶ Ex. PUC-EIP-6 at 136 (EA) (eDocket No. [20258-222456-01](#)).

³⁸⁷ Ex. PUC-EIP-6 at 136 (EA) (eDocket No. [20258-222456-01](#)).

³⁸⁸ Ex. MP-11 at 9 (Filing Letter, Certificate of Service, and Direct Testimony of Drew Janke) (Docket Nos. [20259-222676-03](#)).

The Applicant shall develop a site-specific Visual Screening Plan. The Visual Screening Plan shall be designed and managed to mitigate visual impacts to adjacent residences and roadsides. The Visual Screening Plan shall at a minimum include:

(a) objectives for screening of nearby residences and roadsides; and (b) a description of the types of trees and shrub species to be used, the location of plantings, and plans for installation, establishment, and maintenance.

The location of the trees and shrubs located in the Visual Screening Plan that are located within the Applicant's site control shall be located in the Site Plan filed with the Commission under Section 8.3 of the Site Permit. The Applicant is required to maintain and ensure the successful growth, health, and maintenance of the vegetation for 3 years.

At least 14 days prior the pre-construction meeting, the Applicant shall file:

(a) the Visual Screening Plan; (b) documentation of coordination between landowners within 500 feet of the site boundary; and (c) an affidavit of its distribution of the Visual Screening Plan to landowners withing 500 feet of the site boundary.³⁸⁹

272. PUC-EIP proposed special condition 5.2 to address MnDOT concern related to the Project's proximity to State Highway 6 and potential impacts on water basins and access roads near State Highway 6.

5.2. Roadside Vegetation Management:

The Applicant shall consult with MnDOT regarding vegetation design and management between the Project are and State Highway 6. The Applicant shall retain or plant vegetation, as requested by MnDOT, necessary for safety requirements. The Applicant shall coordinate with MnDOT, necessary for safety requirements. The Applicant shall coordinate with MnDOT regarding vegetative designs and management necessary to ensure the safe operation of State Highway 6. The Applicant shall provide documentation of its coordination with MnDOT to the Commission in its Site Plan filed under Section 8.3 of the Stie Permit.³⁹⁰

273. The PUC-EIP recommended special conditions 5.3 to address requests from the Leech Lake Band of Ojibwe and Mille Lacs Band of Ojibwe for further consultation related to the Project.

5.3. Cultural Resource Consultation:

The Applicant shall consult with the Leech Lake Band of Ojibwe and MnDOT on cultural resource matters, including any cultural discoveries encountered

³⁸⁹ Ex. PUC-EIP-6 at Appendix C, 14-15 (EA) (eDocket No. [20258-222456-04](#)).

³⁹⁰ Ex. PUC-EIP-6 at Appendix C, 15 (EA) (eDocket No. [20258-222456-04](#)).

during construction, and/or anticipated impacts to culturally relevant resources.³⁹¹

274. The PUC-EIP recommended special condition 5.4 to address requests for tribal engagement throughout Project development with tribal governments.

5.4. Tribal Engagement:

The Applicant shall consult with local Native American tribes, including the Leech Lake Band of Ojibwe in order to provide meaningful Tribal involvement and economic and workforce development opportunities in the Project. The Applicant must document engagement with Tribal members, including any hiring of Tribal members and the utilization of Tribal businesses for the Project in its labor statistics reporting required under Section 8.5 of its Site Permit during the construction phase of the Project.³⁹²

275. The PUC-EIP recommended special condition 5.5 to address requests from the tribal governments in the event of unanticipated discoveries during construction of the Project.

5.5. Unanticipated Discoveries Plan:

The Applicant shall create an Unanticipated Discoveries Plan (“UDP”) 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. The UDP shall describe how previously unrecorded, non-human burial, archeological sites found during construction shall be marked and all construction work must stop at the discovery location. The UDP shall include that if any archaeological materials or features are encountered during construction of the Project, all work must cease and the Leech Lake Tribal Historic Preservation Officer (THPO) and the Heritage Sites Program Director must be contacted immediately to assess and execute mitigation procedures. Should human remains be encountered, all work must cease and the Cass County Sheriff, the Leech Lake THPO, and the Office of the State Archaeologist must be contacted immediately. The Applicant is required to file the UDP with the Commission at least 14 days prior to the preconstruction meeting.³⁹³

276. To minimize aesthetic impacts of the Project area during construction, the MnDNR recommended downlight and LED lighting to minimize blue hue lighting on wildlife.³⁹⁴

5.6. Facility Lighting:

³⁹¹ Ex. PUC-EIP-6 at Appendix C, 15 (EA) (eDocket No. [20258-222456-04](#)).

³⁹² Ex. PUC-EIP-6 at Appendix C, 5 (EA) (eDocket No. [20258-222456-04](#)).

³⁹³ Ex. PUC-EIP-6 at Appendix C, 15-16 (EA) (eDocket No. [20258-222456-04](#)).

³⁹⁴ Ex. PUC-14 at 2 (MNDNR Comments) (eDocket No. [20254-218237-01](#)).

The Applicant shall use shielded and downward facing lighting and LED lighting that minimizes blue hue at the project substation and maintenance facility. Downward facing lighting must be clearly visible on the site plan submitted for the project.³⁹⁵

277. To minimize impacts to wildlife near the Project area during construction, the MnDNR recommended non-chloride products to suppress fugitive dust.³⁹⁶

5.7. Dust Control:

The Applicant shall utilize non-chloride products for onsite dust control during construction.³⁹⁷

278. The MnDNR recommended that erosion control blankets be limited to “bio-netting” or “natural netting” types to minimize products containing plastic entering nearby waterways.³⁹⁸ To accommodate this recommendation, the PUC-EIP suggested special condition 5.8.

5.8. Wildlife Friendly Erosion Control:

The Applicant shall use only “bio-netting” or “natural netting” types of erosion control materials and mulch products without synthetic fiber additives or malachite green dye.³⁹⁹

279. The MnDNR identified that one or more sites of biodiversity significance may exist within or adjacent to the Project boundary.⁴⁰⁰ To mitigate potential impacts during construction and operation of the Project, the PUC-EIP recommended special condition 5.9.

5.9. High Value Biological Resources:

The Applicant shall comply with MnDNR recommendations provided in the Natural Heritage Review Letter to avoid or minimize impacts to high-value biological resources including native plant communities and sites of biodiversity significance. If impacts to resources occur, the Applicant must document the impact and consult with the MnDNR or the appropriate local government unit under the Wetland Conservation Act to determine mitigate strategies.⁴⁰¹

280. The MnDNR identified that Northern Long Eared Bats are included in the federally endangered species list and can be found throughout Minnesota. Tree removal can negatively impact bats and the MnDNR recommended that tree removal be avoided

³⁹⁵ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

³⁹⁶ Ex. PUC-13 at 2 (MNDNR Comments) (eDocket No. [20254-218237-01](#)).

³⁹⁷ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

³⁹⁸ Ex. PUC-13 at 2 (MNDNR Comments) (eDocket No. [20254-218237-01](#)).

³⁹⁹ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

⁴⁰⁰ Ex. PUC-13 at 3-4 (MNDNR Natural Heritage Review Letter) (eDocket No. [20254-218237-02](#)).

⁴⁰¹ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

through June 1 through August 15.⁴⁰² To address this recommendation, the PUC-EIP offered special condition 5.10.

5.10. Northern Long Eared Bat:

The Applicant shall comply with the U.S. Fish and Wildlife Services and the MnDNR guidance and requirements in effect regarding the Northern Long Eared Bat, including the avoidance of tree removal from June 1 through August 15.⁴⁰³

281. The EA identified that if the Applicant has encounters with bald eagles, then consultation with the U.S. Fish and Wildlife Services will be necessary.⁴⁰⁴ To accommodate this consultation, the PUC-EIP recommended special condition 5.11.

5.11. Bald Eagles:

The Applicant, if in consultation with the U.S. Fish and Wildlife Service, determines a bald eagle nest must be removed for construction of the Project, the Applicant must file with the Commission the documentation authorizing any such nest removal at least 14 days prior to the pre-construction meeting.⁴⁰⁵

282. The MnDNR identified that a stretch of sensitive shoreland is along the south end of the Project adjacent to and along the shorelines of the Mississippi River.⁴⁰⁶ To mitigate any impacts to the Mississippi River and erosion of the shoreline, the PUC-EIP recommended special condition 5.12. The Applicant agreed to this special condition in its September 25, 2025 comments.⁴⁰⁷

5.12. Mississippi River:

The Applicant must consult with the MnDNR and the Mississippi Headwaters Board regarding potential impacts to the Mississippi River due to construction activities, including tree removal and erosion on the shoreline. The Applicant shall provide documentation of its coordination with the MnDNR and the Mississippi Headwaters Board to the Commission in its Site Plan filed under Section 8.3 of the Site Permit.⁴⁰⁸

283. In response to comments made at public meetings, scoping meetings, and in written public comments about the removal of trees, the PUC-EIP recommended a new tree replacement condition it referred to as special condition 5.13.⁴⁰⁹ This special

⁴⁰² Ex. PUC-14 at 3 (MNDNR Natural Heritage Review Letter) (eDocket No. [20254-218237-02](#)).

⁴⁰³ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

⁴⁰⁴ Ex. PUC-EIP-6 at 127 (EA) (eDocket No. [20258-222456-01](#)).

⁴⁰⁵ Ex. PUC-EIP-6 at Appendix C, 16 (EA) (eDocket No. [20258-222456-04](#)).

⁴⁰⁶ Ex. MP-2 at Appendix H, 8 (Application) (eDocket No. [202412-213417-11](#)).

⁴⁰⁷ Minnesota Power Comments on EA at 2 (Sept. 25, 2025) (Docket No. [20259-223286-01](#)).

⁴⁰⁸ Ex. PUC-EIP-6 at Appendix C, 16-17 (EA) (eDocket No. [20258-222456-04](#)).

⁴⁰⁹ Minnesota Public Utilities Commission Energy Infrastructure Permitting Unit Hearing Comments (Sept. 25, 2025) (eDocket No. [20259-223295-01](#)).

condition is not necessary for the Project given Special Condition 5.1, which already requires Minnesota Power to develop a Visual Screening Plan “for screening of nearby residences.” Further, Minnesota Power’s existing plan to donate approximately 150,000 tree seedlings to Itasca County over the next two years will already provide significant new trees in Itasca County. Finally, Minnesota Power identified concerns with additional tree planting “near” the Project because of potential future uses of the Boswell Energy Center property. However, should special condition 5.13 be incorporated into the Site and Route Permit for the Project, it should be revised as follows and Minnesota Power should be allowed to include the cost of compliance with this condition in its cost recovery filing for the Project.⁴¹⁰

5.13 Tree Replacement

The permittee in coordination with the DNR, the Itasca County Soil and Water Conservation District, and the Mississippi Headwaters Board, shall develop a plan to replace any trees that are removed for construction of the project by planting new trees in Itasca County and file the plan with the Commission at least 14 days before the pre-construction meeting.

284. The Applicant did not object to any of the special conditions proposed by the PUC-EIP in the EA (special conditions 5.1 through 5.12).

285. In its hearing comments, The MnDNR proposed the inclusion of several special conditions to be included in the Draft Route Permit. These special conditions are similar to the proposed special conditions included in the Draft Site Permit.⁴¹¹

286. In response to DNR’s hearing comments, EIP staff proposed the following special conditions to be added to the Route Permit for the Boswell Solar Project.⁴¹²

6.1 High Value Biological Resources

The Permittee shall comply with Minnesota Department of Natural Resources (DNR) recommendations provided in their Natural Heritage Review Letter to avoid or minimize impacts to high-value biological resources including native plant communities and sites of biodiversity significance. If impacts to resources occur, the permittee shall document the impact and consult with the DNR or the appropriate local governmental unit under Wetland Conservation Act to determine mitigation strategies.

6.2 Blackwater Lake

The Permittee shall consult with the Minnesota Department of Natural Resources (DNR) regarding potential impacts to Blackwater Lake due to

⁴¹⁰ *In the Matter of the Petition of Minnesota Power for Approval of Investments and Expenditures in the Boswell Solar Project for Recovery through Minnesota Power’s Renewable Resources Rider under Minn. Stat. § 216B.1645, Docket No. E015/M-24-344, ORDER APPROVING INVESTMENT IN SOLAR PROJECT AND COST RECOVERY VIA RIDER (May 23, 2025).*

⁴¹¹ MNDNR, Hearing Comments, September 24, 2025. (eDocket No. 20259-223253-01).

⁴¹² PUC EIP, Reply Comments, October 30, 2025.

construction activities, including tree removal and erosion on the shoreline. The Permittee shall provide documentation of its coordination with DNR to the Commission in its Site Plan filed under Section 8.3.

6.3 Dust Control

The Permittee shall utilize non-chloride products for onsite dust control during construction.

6.4 Wildlife Friendly Erosion Control

The Permittee shall use only “bio-netting” or “natural netting” types of erosion control materials and mulch products without synthetic (plastic) fiber additives or malachite green dye.

284.

287. The special conditions proposed by the PUC-EIP in the Draft Site and Route Permit in the EA (special conditions 5.1 through 5.12) are appropriate to mitigate environmental and human settlement impacts that may be associated with the Project. ~~No additional special conditions are necessary for the Project.~~

285-288. ~~The special conditions requested by DNR and recommended by PUC-EIP (special conditions 6.1 through 6.4) are appropriate to mitigate impacts to mitigate environmental and human settlement impacts that may be associated with the Project.~~

X. NOTICE

286-289. Minnesota statutes and rules require an Applicant to provide certain notice to the public and local governments before and during the Application for a Site and Route Permit process.⁴¹³

287-290. The Applicant provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.⁴¹⁴

⁴¹³ Minn. Stat. § 216E.03, subd. 4 (2023); Minn. R. 7850.2100, subps. 2 and 4.

⁴¹⁴ Ex. MP-2 at Appendix H, 2 (Application) (eDocket No. [202412-213417-11](#)); MP-4 (Affidavit of Mailing – Boswell Solar) (eDocket No. [20251-213570-01](#)); MP-9 (Affidavit of Publication – Scoping Meeting Notice) (eDocket No. [20254-217817-01](#)).

288.291. PUC-EIP and the Commission likewise provided notices in satisfaction of Minnesota statutes and rules.⁴¹⁵

XI. COMPLETENESS OF THE EA

289.292. The Commission is required to determine the completeness of the EA.⁴¹⁶ An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.⁴¹⁷

290.293. 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 topics identified during the scoping comment period.

⁴¹⁵ PUC-1 (Notice of Comment Period on Application Completeness) (eDocket No. [20251-213606-01](#)); PUC-6 (Notice of Public Information and Environmental Assessment Scoping Meeting) (eDocket Nos. [20253-216584-01](#) and [20253-216565-01](#)); PUC-7 (Notice of Public Information and Environmental Assessment Scoping Meeting) (EQB Monitor) (eDocket No. [20254-217118-01](#)); PUC-9 (Notice of Public Meeting Cancellation) (eDocket No. [20254-217159-01](#)); PUC-10 (Rescheduled Notice of Public Information and Environmental Assessment Scoping Meeting) (eDocket No. [20254-217396-01](#)); Notice of Public Information and Environmental Assessment Scoping Meeting (Newspaper Affidavit) (eDocket No. [20254-217840-01](#)); PUC-12 (Rescheduled Notice of Public Information and Environmental Assessment Scoping Meeting) (EQB Monitor) (eDocket No. [20254-217817-01](#)); PUC-17 (Notice of Public Hearings and Availability of Environmental Assessment) (eDocket No. [20258-222444-01](#)); PUC-18 (Notice of Public Hearings and Availability of Environmental Assessment) (EQB Monitor) (eDocket No. [20259-222639-01](#)); PUC-19 (Notice of Public Hearings and Availability of Environmental Assessment) (Newspaper Affidavit) (eDocket No. [20259-222692-01](#)); PUC-EIP-7 (Distribution of EA Agencies and THPOs) (eDocket No. [20259-222644-01](#)); Ex. PUC-EIP-8 (Distribution of EA to Local Libraries) (eDocket No. [20259-222875-01](#)).

⁴¹⁶ Minn. R. 7850.3900, subp. 2.

⁴¹⁷ *Id.*

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

CONCLUSIONS OF LAW

1. The Commission and the Administrative Law Judge have jurisdiction to consider the Applicant's Application.

2. The Commission determined that the Application was substantially complete and accepted the Application on February 18, 2025.

3. PUC-EIP has prepared an appropriate EA of the Project for purposes of this proceeding, and which satisfies Minn. R. 7850.3700 and Minn. R. 7850.3900. Specifically, the EA and the record address the issues identified in the Scoping Decision to a reasonable extent considering the availability of information, and the EA includes the items required by Minn. R. 7850.3700, Subp. 4, and was prepared in compliance with the procedures in Minn. R. 7850.3700.

4. The Applicant provided notice as required by Minn. Stat. § 216E.04; Minn. R. 7850.2100, Subp. 2; and Minn. R. 7850.2100, Subp. 4.

5. The Commission and the PUC-EIP provided notice as required by Minn. Stat. § 216E.03, subd. 6, Minn. R. 7850.2300, Subp. 2, and Minn. R. 7850.2500, Subps. 2 and 7-9.

6. A public hearing was conducted near the Proposed Site and Route. Proper notice of the public hearing was provided, as required by Minn. Stat. § 216E.04, subd. 6, and the public was given the opportunity to speak at the hearing and to submit written comments. All procedural requirements for the Site and Route Permit were met.

7. The evidence in the record demonstrates that the Project satisfied the Site and Route Permit factors set forth in Minn. Stat. § 216E.04, subd. 8 (referencing Minn. Stat. § 216E03, subd. 7) and Minn. R. 7850.4100.

8. There is no feasible and prudent alternative to the construction of the Project, and the Project is consistent with and reasonably required for the promotion of public health and welfare in light of the state's concern for the protection of its air, water, land, and other natural resources as expressed in the Minnesota Environmental Rights Act.

9. The evidence in the record demonstrates that the Proposed Route for the Gen-Tie Line is the best route for the Project and no alternative routes were proposed during the scoping comment period.

10. The evidence in the record demonstrates that the proposed site for the Solar Facility is the best option for the Project and no alternative sites were proposed during the scoping comment period.

11. The evidence in the record demonstrates that special conditions 5.1 through 5.12, and 6.1 through 6.4, identified in Section IX, above, are appropriate for the Project.

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

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

RECOMMENDATIONS

Based upon these Conclusions, the Administrative Law Judge recommends that the Commission issue a Site and Route Permit for the Applicant's proposed route to Minnesota Power to construct and operate the Project and associated facilities in Itasca County and that the permit include the draft permit conditions amended as set forth in the Conclusions above.

THIS REPORT IS NOT AN ORDER AND NO AUTHORITY IS GRANTED HEREIN. THE MINNESOTA PUBLIC UTILITIES COMMISSION WILL ISSUE THE ORDER THAT MAY ADOPT OR DIFFER FROM THE PRECEDING RECOMMENDATION.

Dated: _____

Kristien R. E. Butler
Administrative Law Judge