

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

In the Matters of the Applications of Benton Solar, LLC for Site Permits for the 100 MW Solar Energy Generating System and 100 MW Battery Energy Storage System, and a Route Permit for the 115 kV High-Voltage Transmission Line Associated with the Benton Solar Project in Benton, County, Minnesota

MPUC Docket No. IP7115/GS-23-423;
IP7115/ESS-24-283;
IP7115/TL-23-425
OAH Docket No. 25-2500-40339

**BENTON SOLAR, LLC'S
PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND RECOMMENDATION**

September 26, 2025

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In the Matters of the Applications of Benton Solar, LLC for Site Permits for the 100 MW Solar Energy Generating System and 100 MW Battery Energy Storage System, and a Route Permit for the 115 kV High-Voltage Transmission Line Associated with the Benton Solar Project in Benton, County, Minnesota	MPUC Docket No. IP7115/GS-23-423; IP7115/ESS-24-283; IP7115/TL-23-425 OAH Docket No. 25-2500-40339
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**PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATION**

This matter was assigned to Administrative Law Judge Megan J. McKenzie (“ALJ”) with the Court of Administrative Hearings, to conduct a public hearing on the Joint Site Permit Application (MPUC Docket No. GS-23-423; ESS-24-283) and Route Permit Application (MPUC Docket No. TL-23-425) of Benton Solar, LLC (“Benton Solar” or “Applicant”) for a 100-MW alternating current (“AC”) nameplate capacity solar energy conversion facility (“Solar Facility”) and a 100-MW battery energy storage system (“BESS”), and associated 115 kV high-voltage transmission line (“Transmission Line”) in Minden Township, Benton County, Minnesota (altogether, the “Project”), and to prepare a full report, including findings and recommendations, on Benton Solar’s Joint Site Permit Application and Route Permit Application (“Applications”).

Duly noticed public hearings on the Applications were held on August 26 and 27, 2025. An evidentiary hearing was held on August 28, 2025. The period for written comments from the public remained open until September 12, 2025. Responses from the Applicant were due by September 26, 2025.

Micah Revell and Claire Williams, Stinson LLP, and Mark Johnson, Senior Attorney, NextEra Energy Resources, LLC, appeared on behalf of the Applicant.

Logan Hicks, Environmental Review Manager, appeared on behalf of the Public Utilities Commission, Energy Infrastructure Permitting unit (“EIP”).¹

Jacques Harvieux and Cezar Panait, P.E., Energy Facilities Permitting Staff, appeared on behalf of the Minnesota Public Utilities Commission (“Commission”).

¹ Ex. PUC-267 (Notice of Legislation Changes). On July 1, 2025, the Minnesota Energy Infrastructure Permitting Act, Minn. Stat. Ch. 216I, took effect and consolidated Department of Commerce, Energy Environmental Review and Analysis (“EERA”) staff and the Commission’s Energy Facilities Permitting staff into one unit, the Energy Infrastructure Permitting unit, under the oversight of the Commission. Given the continuity between EERA and EIP staff in this proceeding, and to avoid confusion, these Findings of Fact and Conclusions of Law utilize “EIP” to refer to both EERA and EIP.

STATEMENT OF ISSUES

1. Has Benton Solar met the criteria to receive a site permit under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850² to construct and operate a 100-MW AC nameplate capacity solar facility in Benton County, Minnesota?
2. Has Benton Solar met the criteria to receive a site permit under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 to construct and operate a 100-MW battery energy storage system in Benton County, Minnesota?³
3. Has Benton Solar satisfied the criteria to receive a route permit under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 to construct and operate a 0.5-mile, 115 kV transmission line in Benton County, Minnesota?⁴

SUMMARY OF RECOMMENDATION

The ALJ concludes that Benton Solar has satisfied the applicable legal requirements, and, accordingly, recommends that the Commission grant two site permits and a route permit for the Project, subject to the conditions discussed below.

Based on the Applications and other evidence in the record, the ALJ makes the following:

FINDINGS OF FACT

I. PARTIES AND PARTICIPANTS

1. Benton Solar is an indirect, wholly owned subsidiary of NextEra Energy Resources, LLC (“NEER”).⁵ NEER is the world’s largest operator of wind and solar projects, and is also a leader in battery storage. As of December 31, 2023, NEER affiliates own, operate, and maintain 37 gigawatts of total generating capacity with 8 gigawatts consisting of photovoltaic (“PV”) distributed generation, and solar thermal facilities, as well as approximately 1,023 substations and 87,929 miles of transmission and distribution lines.⁶

2. EIP is authorized by the Commission to hold public information meetings, to collect and analyze Benton Solar’s Applications, and to provide an environmental review.⁷

² Benton Solar’s application for a site permit for the Solar Facility will be reviewed under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 because it was filed prior to the effective date of the Minnesota Energy Infrastructure Permitting Act. Ex. PUC-267 (Notice of Legislation Change).

³ Benton Solar’s application for a site permit for the BESS will be reviewed under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 because it was filed prior to the effective date of the Minnesota Energy Infrastructure Permitting Act. *Id.*

⁴ Benton Solar’s application for a route permit for the Transmission Line will be reviewed under Minn. Stat. Ch. 216E and Minn. R. Ch. 7850 because it was filed prior to the effective date of the Minnesota Energy Infrastructure Permitting Act. *Id.*

⁵ Ex. 102 at 1 (Joint Site Permit Application (“SPA”)); Ex. 114 at 1 (Application for a Route Permit (“RPA”)).

⁶ Ex. 102 at 5 (SPA); Ex. 114 at 3 (RPA).

⁷ Minn. Stat. § 216E.04, subd. 5.

3. Laborers’ International Union of North America Minnesota and North Dakota (“LIUNA”) petitioned for intervention as a party in the Commission’s consideration of Benton Solar’s Applications.⁸

4. The International Union of Operating Engineers Local 49 (“Local 49”) and the North Central States Regional Council of Carpenters (“Carpenters”) jointly petitioned for intervention as parties in the Commission’s consideration of Benton Solar’s Applications.⁹

II. PROCEDURAL BACKGROUND

A. Procedural Background Before the Commission

5. On August 20, 2024, Benton Solar filed a Notice of Intent to Submit a Joint Site Permit Application and Route Permit Application under the Alternative Permitting Process.¹⁰ The notice was filed in accordance with Minn. R. 7850.2800, subp. 2.

6. On September 24, 2024, Benton Solar, LLC submitted a Joint Site Permit Application, to construct and operate the Solar Facility and the BESS, with all applicable exhibits and a Route Permit Application, to construct and operate the 0.5-mile, 115 kV Transmission Line, with all applicable exhibits, pursuant to Minn. Stat. Ch. 216E and the alternative permitting procedures of Minn. R. 7850.2800 to 7850.3900.¹¹

7. On October 4, 2024, the Commission issued a Notice of Comment Period on Application Completeness (“October 2024 Notice”),¹² requesting comment on the following topics:

- (i) Does the site permit application contain the information required under Minn. R. 7850.3100, subp. 1?
- (ii) Does the route permit application contain the information required under Minn. R. 7850.3100, subp. 2?
- (iii) Are there any contested issues of fact with respect to the representations made in the applications?
- (iv) Should an advisory task force be appointed?
- (v) Are there any additional procedural requirements that should be considered (e.g., public hearing process)?

⁸ Ex. 406 (LIUNA Intervention Petition).

⁹ Petition for Intervention from Local 49 and Carpenters, Dec. 2, 2024, eDockets ID No. [202412-212585-01](#).

¹⁰ Ex. 100 (Notice of Intent to Submit a Site Permit Application and Route Permit Application under the Alternative Process).

¹¹ Ex. 102 (SPA); Ex. 114 (RPA).

¹² Ex. PUC-250 (Notice of Comment Period on Application Completeness).

(vi) Should the Commission direct the Executive Secretary to issue an authorization to the applicant to initiate consultation with the Minnesota State Historic Preservation Office (“SHPO”)?

(vii) Are there other issues or concerns related to this matter?

8. The Commission set the following schedule: initial comments by October 18, 2024, reply comments by October 25, 2024, and supplemental comments by October 31, 2024.¹³

9. On October 9, 2025, Benton Solar submitted its notice of filing the Applications.¹⁴

10. On October 16, 2024, EIP submitted comments recommending that the Commission: (i) accept the Applications as substantially complete; (ii) the Commission not appoint an advisory task force at this time; (iii) process Benton Solar’s Joint Site Permit Application concurrently with the Route Permit Application, including joint environmental review; and (iv) request a full ALJ report with recommendations for the Project’s public hearing.¹⁵

11. On October 18, 2024, LIUNA filed comments indicating that the Project has the potential to provide significant socioeconomic benefits to the regional economy by creating high-quality construction and maintenance jobs.¹⁶ LIUNA also: (i) stated that they do not see a need for a Citizens Advisory Committee; (ii) requested that the Commission inquire into Benton Solar’s commitments and plans for construction of the Project based on their experience with NEER affiliates in North Dakota; and (iii) requested that the Commission consider whether additional permit conditions are needed to require firm commitments that provide meaningful assurance for local workers and communities in and around Benton County.¹⁷

12. On October 18, 2024, Local 49 and the Carpenters submitted comments appreciating the Applications’ discussion of benefits to construction workers and expressing a desire to better understand how Benton Solar intends to work with prospective contractors to develop a staffing model that maximizes local benefits for workers.¹⁸

13. On October 25, 2024, Benton Solar submitted reply comments stating that it agreed with LIUNA that the examination of local labor use as it relates to Commission-permitted projects is within the Commission’s statutory charge, disagreed that the completeness stage of the proceeding is the appropriate time to consider issues of local labor

¹³ *Id.*

¹⁴ Ex. 121 (Notice of Filing Route and Joint Site Permit).

¹⁵ Ex. EERA-200 (EERA Comments on Application Completeness).

¹⁶ Ex. 400 (Comment on Application Completeness); Ex. 401 (Completeness Comment Attachment 1 – Bismarck Tribune); Ex. 402 (Completeness Comment Attachment 2 - ND Monitor); Ex. 403 (Completeness Comment Attachment 3 - Letter to ND Public Service Commission).

¹⁷ Ex. 400 (Comment on Application Completeness).

¹⁸ Comments on Application Completeness from IUOE Local 49 and NCSRC, Oct. 18, 2024, eDocket ID No. [202410-211122-01](#).

utilization, and reserved the right to respond to LIUNA's comments during the record development phase of the proceeding.¹⁹ Benton Solar also stated that it: (i) supported EIP's recommendation that the Commission accept the Applications as substantially complete; (ii) had no objection to EIP's recommendation that the Commission request an ALJ prepare a full report and recommendations for the Project's public hearing; (iii) supported EIP's recommendation that the Commission process the Applications concurrently, including joint environmental review; (iv) agreed that an advisory task force is not necessary; and (v) requested that the Applications be deemed complete by the Commission.²⁰

14. On October 30, 2024, LIUNA submitted supplemental comments reiterating the concerns articulated in their initial comments, expressing concern that the Applicant will hinder the development of a robust record without direction from the Commission, and restating that any factual disputes around local labor usage, namely around conduct of NEER affiliates in neighboring states, are relevant and could be addressed through an informal or contested case proceeding.²¹ LIUNA proposed that the Commission issue an order to develop a record, either through an informal process or a contested case proceeding, regarding Benton Solar's likely utilization of local labor and the economic impacts of such local labor employment.²²

15. On November 6, 2024, LIUNA petitioned for intervention as a party in the Commission's consideration of Benton Solar's Applications.²³

16. On November 8, 2024, Benton Solar filed affidavits of mailing and publication for the notice of filing of the Applications.²⁴

17. On November 19, 2024, Benton Solar filed a non-objection letter to LIUNA's request to intervene.²⁵

18. On November 21, 2024, the Commission issued its a Notice of Commission Meeting for its December 3, 2024 Agenda Meeting to include a review of Benton Solar's Applications' completeness, the procedural process for the Applications and an additional item of consideration: "Should the Commission approve LIUNA's petition to intervene as a party in [Commission] consideration of the application of [NEER]?"²⁶

19. On November 27, 2024, EIP filed sample site permits for the Solar Facility and the BESS and a sample route permit for the Transmission Line.²⁷

¹⁹ Ex. 122 (Reply Comments on Application Completeness).

²⁰ *Id.*

²¹ Ex. 404 (Supplemental Comments on Application Completeness).

²² *Id.*

²³ Ex. 406 (LIUNA Intervention Petition).

²⁴ Ex. 123 (Affidavits of Mailing and Publication).

²⁵ Ex. 124 (Benton Solar's Letter Not Objecting to LIUNA Intervention).

²⁶ Ex. PUC-251 (Notice of Commission Meeting).

²⁷ Ex. 126 (Sample Solar Site Permit); Ex. 127 (Sample Energy Storage System); Ex. 128 (Sample Route Permit).

20. On December 2, 2024, Local 49 and the Carpenters jointly petitioned for intervention as parties in the Commission’s consideration of Benton Solar’s Applications.²⁸

21. On December 19, 2024, the Commission issued an Order (“December 19 Order”) accepting the Applications as substantially complete, authorizing review under the alternative permitting process, and directing: (i) a joint public hearing and combined environmental review for the Applications; (ii) a contested case proceeding be referred to the Court of Administrative Hearings; (iii) the intervention of LIUNA, Local 49, and Carpenters be granted; and (iv) an ALJ to develop the record in accordance with the Commission’s finding that the Applicant’s labor practices in other states are relevant to the statutory criteria to be applied in this matter.²⁹

22. On December 26, 2024, the Commission issued a Notice of Public Information and Environmental Assessment (“EA”) Scoping Meetings (“EA Scoping Meetings”) scheduling meetings for January 14, 2025 (in-person) and January 15, 2025 (remote access), and opening the comment period until January 31, 2025.³⁰ In the Notice, the Commission sought comments on: (i) What potential human and environmental impacts of the proposed Project should be considered in the EA?; (ii) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA?; (iii) Are there any unique characteristics of the proposed Project that should be considered in the EA?³¹

23. On January 13, 2025, Benton Solar filed affidavits of publication for the Notice of Public Information and EA Scoping Meetings.³²

24. On January 14 and 15, 2025, the Commission and EIP conducted the meetings. As discussed in detail below, approximately 40 people attended the in-person meeting EA Scoping Meeting on January 14, 2025, and seven attendees provided oral comments, and the following evening, approximately ten people attended the remote access meeting and two people provided oral comments.³³

25. On February 5, 2025, EIP filed the oral and written comments it received on the scope of the EA.³⁴

26. On February 7, 2025, EIP filed a letter stating that no alternative sites or routes were identified during the comment period.³⁵

²⁸ Petition for Intervention from Local 49 and Carpenters, Dec. 2, 2024, eDockets ID No. [202412-212585-01](#).

²⁹ Ex. 131 (Order Accepting the Applications as Complete, Establishing Procedural Requirements, and Notice and Order for Hearing (“December 19 Order”).

³⁰ Ex. 132 (Notice of Public Information and Environmental Scoping Meeting).

³¹ *Id.* at 3.

³² Ex. 136 (Benton Solar, LLC’s Affidavits of Publication).

³³ Ex. 156 at 6 (Environmental Assessment (“EA”).

³⁴ Ex. 140 (Written Public Comments on the Scope of the Environmental Assessment); Ex. 141 (Oral Comments on the Scope of the Environmental Assessment).

³⁵ Ex. 142 (Alternatives Identified During Scoping Comment Period).

27. On February 12, 2025, Benton Solar filed response comments to the public scoping comments.³⁶

28. On February 27, the Commission filed proposed consent items including whether there were alternatives that should be included in the EA Scoping Decision.³⁷

29. On March 3, 2025, the Commission filed notice that consideration of alternatives in the EA had been removed from the consent agenda.³⁸

30. On March 4, 2025, the Commission authorized EIP to solely analyze the route identified by the Applicant.³⁹

31. On March 13, the Commission filed notice that it would consider whether alternatives should be included in the EA Scoping Decision.⁴⁰

32. On March 18, 2024, the Commission authorized EIP to solely analyze the site identified by the Applicant.⁴¹

33. On March 26, 2025, EIP issued its EA Scoping Decision.⁴²

34. On March 27, 2027, EIP filed a notice of the EA Scoping Decision.⁴³

35. On April 10, 2025, EIP filed documentation that the Notice of EA Scoping Decision had been published in the EQB Monitor.⁴⁴

36. On July 24, 2025, EIP filed its EA, which assessed the potential environmental impacts of the Project, including to resources within 1 mile of the boundary of the Site or Route (“Project Area”).⁴⁵

37. On July 25, 2025, EIP filed confirmation of EA availability and mailing.⁴⁶

38. On August 4, 2025, the Commission issued a Notice of Public Hearings and Availability of EA (“Notice of EA”), scheduling hearings for August 26, 2025 (remote access) and August 27, 2025 (in-person).⁴⁷ In the Notice of EA, the Commission sought comments at

³⁶ Ex. 143 (Benton Solar, LLC Response to Scoping Comments).

³⁷ Ex. PUC-261 (Proposed Consent Items).

³⁸ Ex. PUC-262 (February 28, 2025 Consent).

³⁹ Ex. PUC-263 (Order Limiting the Scope of the Environmental Assessment to the Route Identified in the Route Permit Application).

⁴⁰ Ex. PUC-264 (Proposed Consent Items); Ex. PUC-265 (March 17, 2025 Consent).

⁴¹ Ex. PUC-266 (Order Limiting the Scope of the Environmental Assessment to Site Identified in the Site Permit Application).

⁴² Ex. 147 (Environmental Assessment Scoping Decision).

⁴³ Ex. 148 (Notice of Environmental Scoping Decision).

⁴⁴ Ex. 149 (Notification of Environmental Scoping Decision on EQB Monitor).

⁴⁵ Ex. 156 (EA).

⁴⁶ Ex. 157 (Notice of Environmental Assessment of Availability to State Agencies and Tribal Historic Preservation Officers); Ex. 158 (Notice of Public Hearings and Availability of Environmental Assessment); Ex. 159 (Notification of Environmental Assessment Mailed to Public Library).

⁴⁷ Ex. PUC-270 (Notice of Public Hearings and Availability of Environmental Assessment).

the meeting or on: (i) Should the Commission grant site permits for the proposed solar energy generating system and the battery energy storage system?; (ii) Should the Commission issue a route permit for the Transmission Line associated with the Solar Facility and the BESS? (iii) If granted, what additional conditions or requirements should be included in the site permits and/or in the route permit?⁴⁸ The Notice of EA also opened the public comment period until September 12, 2025.

39. On August 5, 2025, EIP filed confirmation of EA mailing to a public library.⁴⁹

40. On August 19, 2025, Benton Solar filed affidavits of publication confirming publication of the Notice of EA.⁵⁰

41. On August 26 and 27, 2025, the ALJ presided over the public hearings.

42. As summarized in more detail below, commenters filed comments following the public hearings from September 2 until September 12, 2025.⁵¹

43. The public comment period closed September 12, 2025.⁵²

B. Contested Case Procedural Background

44. In addition to the above general procedural background, additional procedural events occurred with respect to the contested case ordered by the Commission to address criteria under Minn. Stat. § 216E.04, subd. 7(b)(15) related to local employment and economic impacts.

45. On January 27, 2025, the ALJ issued a Prehearing Order (“First Prehearing Order”) establishing the procedural schedule for the contested case proceeding, setting the date of June 30, 2025 as the date to file direct testimony, July 18, 2025 as the date for rebuttal testimony, August 15, 2025 as the date for surrebuttal testimony, and August 20, 2025 as the date for the in-person evidentiary hearing.⁵³

⁴⁸ *Id.*

⁴⁹ Ex. PUC-271 (Notification of Environmental Assessment Mailed to Public Library).

⁵⁰ Ex. 166 (Cover Letter, Affidavits of Publication, and Certificate of Service).

⁵¹ Public Comment by Darin Broton, Executive Director of AgriGrowth, Sept. 2, 2025, eDockets ID No. [20259-222829-01](#); Public Comments by Minnesota Department of Natural Resources (“MnDNR”), Sept. 12, 2025, eDockets ID No. [20259-222952-01](#); Vegetation Management Planning Work Group, Sept. 12, 2025, eDockets ID No. [20259-222927-01](#); Public Comments by Jaclyn Litfin, Sept. 12, 2025, eDockets ID No. [20259-223005-01](#); Public Comments from the Benton County Sheriff’s Office, Sept. 12, 2025, eDockets ID No. [20259-223004-01](#); Public Comments by Tammy Stark, Sept. 12, eDockets ID No. [20259-223003-01](#); Public Comments from Wanda Schroeder, Executive Director of Central Minnesota Builders Association, Sept 12, 2025, eDockets ID No. [20259-222989-01](#); Public Comments from Julie Lunning, President of the St. Cloud Area Chamber of Commerce, Sept. 12, 2025, eDockets ID No. [20259-222987-01](#); Public Comments by Mitchell Litfin, Sept. 12, 2025, eDockets ID No. [20259-223104-01](#); Corrected Public Comments from EIP, Sept. 16, 2025, eDockets ID [20259-223051-01](#).

⁵² Ex. PUC-270 (Notice of Public Hearings and Availability of Environmental Assessment).

⁵³ Ex. 137 (First Prehearing Order).

46. On March 19, 2025, the ALJ entered a Protective Order to facilitate, as necessary, the exchange of confidential trade secret information and documents.⁵⁴

47. Benton Solar and LIUNA filed witness testimony: Benton Solar filed direct testimony June 30, 2025⁵⁵; LIUNA filed direct testimony on July 21, 2025⁵⁶; on August 6, 2025, Benton Solar⁵⁷ and LIUNA⁵⁸ filed rebuttal testimony; and on August 15, 2025, Benton Solar⁵⁹ and LIUNA⁶⁰ filed surrebuttal testimony.

48. On August 12, 2025, the ALJ issued a prehearing order (“Second Prehearing Order”) establishing the location and date of the evidentiary hearing.⁶¹

49. On August 28, 2025, the ALJ conducted an evidentiary hearing and received the parties’ exhibits into the record.⁶² LIUNA cross examined Adam Gracia, developer for the Project.⁶³

III. DESCRIPTION OF THE PROJECT

A. Solar Facility

50. Benton Solar proposes to construct and operate the Solar Facility, an up-to 100-MW AC solar energy facility, located in Minden Township, Benton County, that will use solar panels to collect energy from the sun to produce direct current (“DC”) electrical power.⁶⁴

51. The Solar Facility will consist of the PV panels, tracking system, inverters, transformers, underground electrical collection system, approximately 7.6 miles of gravel access roads, security fencing, a substation, and associated facilities.⁶⁵ Benton Solar proposes to locate the Solar Facility within a 951.4-acre area (the “Site”) that Benton either owns or has under lease. Based on preliminary design, Benton Solar anticipates that approximately

⁵⁴ Ex. 146 (Protective Order).

⁵⁵ Ex. 152 (Direct Testimony of Ashley Nunez (“Nunez Direct”)); Ex. 153 (Direct Testimony of Anthony Bass (“Bass Direct”)); Ex. 154 (Direct Testimony of Cody MacDonald (“MacDonald Direct”)); Ex. 155 (Direct Testimony of Adam Gracia (“Gracia Direct”).

⁵⁶ Ex. 407 (Direct Testimony of Steve Cortina (no line #s)); Ex. 408 (Direct Testimony of Lucas Franco - Attachment A (“Franco Direct Attachment A”)); Ex. 409 (Direct Testimony of Lucas Franco (no line #s)); Ex. 412 (Corrected Direct Testimony of Steve Cortina (“Cortina Direct”)); Ex. 413 (Corrected Direct Testimony of Lucas Franco (“Franco Direct”).

⁵⁷ Ex. 162 (Rebuttal Testimony of Adam Gracia with Schedule 1 (“Gracia Rebuttal”).

⁵⁸ Ex. 410A (Rebuttal Testimony of Lucas Franco (“Franco Rebuttal”).

⁵⁹ Ex. 165 (Surrebuttal Testimony of Adam Gracia (“Gracia Surrebuttal”).

⁶⁰ Ex. 415 (Surrebuttal Testimony of Lucas Franco (“Franco Surrebuttal”)); Ex. 416 (Surrebuttal Testimony of Lucas Franco Attachment A (NSPA Report)); Ex. 417 (Surrebuttal Testimony of Steve Cortina); Ex. 418 (Surrebuttal Testimony of Steve Cortina Attachment 1); Ex. 419 (Surrebuttal Testimony of Steve Cortina Attachment 2).

⁶¹ Ex. 163 (Second Prehearing Order).

⁶² Evidentiary Hearing 9:00 a.m. Transcript (Aug. 28, 2025).

⁶³ *Id.*

⁶⁴ Ex. 102 at 1, 20 (SPA).

⁶⁵ *Id.* at 20-28.

631.9 acres of the Site will be developed for the Solar Facility (the “Preliminary Development Area”).⁶⁶

52. The Solar Facility will utilize PV panels made of silicon, aluminum frame, an undermount aluminum frame or side-mount weatherized plastic backing, heat-resistant front glass, and a laminated material encapsulating the panels for weather protection, depending on the manufacturer. The PV panels will be mounted on a tracking rack that will angle the PV panels between ± 52 degrees throughout the day and have a resting angle of 52 degrees. The top edge of the PV panels on the racking system could be up to 20 feet in height from the ground based on topography and manufacturer specifications.⁶⁷

53. The tracking system will move the panels incrementally throughout the day to track the sun from east to west and consists of all the components involved in fastening the PV panels to the tracker rows, plus the tracker beams, gearboxes, motors, and foundations. To the extent practicable, the tracking system foundations will be driven steel piles not requiring concrete.⁶⁸

54. Energy generated by the Solar Facility will be collected through cables mounted under the PV panels and transmitted to the inverters, which convert the electricity from DC to AC. The electricity is then sent to the step-up transformer that converts the electricity to 34.5 kV so that it can be transmitted through a series of underground cables that comprise the electrical collection system, and delivered to the collector substation. The electrical collection system will be direct buried cable. The underground cables will be installed via open trench or plowed, 3 to 4 feet deep. Collection cables may be installed via directional boring under certain features (e.g., roads, driveways, rivers) to minimize impacts. The power will be stepped up at the Project’s collector substation to be transmitted through Benton Solar’s proposed Transmission Line to the existing Great River Energy (“GRE”) Benton County Substation.⁶⁹

55. Additional associated facilities of the Solar Facility include an operations and maintenance facility, supervisory control and data acquisition system, meteorological evaluation tower, stormwater basins, and temporary features (e.g., laydown yards).⁷⁰

56. Benton Solar estimates the cost to construct the Solar Facility and the BESS (described below) will be about \$324.5 million depending on various factors such as construction labor, Project equipment and materials, electrical and communication systems, taxes/tariffs, and final design considerations.⁷¹ The Solar Facility and the BESS are estimated to have an operational life of 25-30 years, and Benton Solar calculated the decommissioning

⁶⁶ Ex. 156 at 15 (EA); *see also* Ex. 102 at 10 (SPA).

⁶⁷ Ex. 156 at 16; *see also* Ex. 102 at 20-21 (SPA).

⁶⁸ Ex. 156 at 16; *see also* Ex. 102 at 20-21 (SPA).

⁶⁹ Ex. 102 at 26 (SPA).

⁷⁰ *Id.* at 1.

⁷¹ Ex. 156 at 27 (EA).

costs at the end of the operational life as about \$13 million and component salvage value of about \$14 million.⁷²

57. Benton anticipates that construction will begin in 2026 to meet an in-service goal of the fourth quarter in 2027. The actual construction schedule is dependent upon permitting, final design, delivery of equipment, and workforce availability.⁷³ Benton Solar estimates that the Project will create approximately 150 to 300 temporary construction jobs,⁷⁴ and it has committed to using union labor for the construction of the Project.⁷⁵

B. BESS

58. The Solar Facility will be paired with the 100-MW BESS, a centralized, AC-coupled battery system that will store power from the solar array and/or the electric grid, allowing power to be distributed during times when it is most needed.⁷⁶ The BESS will be centrally located in the western portion of the Site, near the substation, on approximately 3.1 acres.⁷⁷

59. The BESS is comprised of individual battery cells that are assembled either in series or parallel in sealed battery modules. Benton Solar will install battery modules in self-supporting racks that are electrically connected either in series or parallel.⁷⁸

60. Multiple self-contained energy storage system cabinets will house the batteries and the battery management systems (“BMS”) that are used in conjunction with the site-wide programmable logic controller (“PLC”) to monitor battery voltage, current, temperature, charge, discharge, thermal management, fault diagnosis, and more.⁷⁹ The BMS and PLC ensure that the BESS effectively responds to grid emergency conditions and provide a secondary safety system designed to safely shut down the BESS in the event of an emergency. The self-contained energy storage system cabinets also contain the required heating, ventilation, and air conditioning for thermal management of the BESS during operation.⁸⁰

61. This non-occupiable, containerized design provides system segmentation and spatial separation of BESS components, which greatly reduces the risk of fire propagation and prevents people from becoming trapped inside if a fire does occur. Separate containers also allow isolation of conditions in the unlikely event of an incident (e.g., overheating, fire).⁸¹

⁷² *Id.* at 23-24.

⁷³ *Id.* at 21.

⁷⁴ *Id.* at 21.

⁷⁵ Ex. 143 at 12 (Benton Solar, LLC Response to Scoping Comments); Ex. 155 at 8:21-9:4 (Gracia Direct); Ex. 162 at 6:12-14 (Gracia Rebuttal).

⁷⁶ Ex. 156 at 15 (EA); *see also* Ex. 102 at 24 (SPA).

⁷⁷ Ex. 156 at 17-18 (EA).

⁷⁸ Ex. 102 at 24 (SPA).

⁷⁹ *Id.* at 24.

⁸⁰ *Id.* at 26; Ex. 153 at 2-5 (Nunez Direct).

⁸¹ Ex. 102 at 24 (SPA); Ex. 153 at 2-5 (Nunez Direct).

62. The BESS will also contain a power conversion system (“PCS”) that enables it to charge and discharge effectively. The PCS consists of an inverter, transformer, protection equipment, DC and AC circuit breakers, filter equipment, equipment terminals, and a connection cabling system. Electric energy is transferred from the Solar Facility and/or the grid to the batteries during a battery charging cycle and from the batteries to the grid and/or the Solar Facility during a battery discharge cycle. The PCS converts electric energy from AC to DC when energy is transferred from the grid to the battery and from DC to AC when energy is transferred from the battery to the grid and/or the Solar Facility. The energy conversion is enabled by a bidirectional inverter that connects the DC battery system to the AC electrical grid. The PCS will also include a transformer that converts the AC side output of the inverter to medium AC voltage to increase the overall efficiency of the BESS and to protect the PCS in the event of system electrical faults.⁸²

63. The BESS design will comply with the International Fire Code 2018, National Fire Protection Association Standard 855, and the National Electric Code. Benton Solar will require its selected suppliers to perform the UL 9540A Large Scale Fire Test, which is a “Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems.” Benton Solar will procure equipment that has demonstrated, through a third-party nationally recognized testing laboratory, containment of a thermal runaway event (i.e., that the event will not spread from one battery rack to another).⁸³

64. Features such as remote monitoring, temperature control, heat and smoke detection, and fire suppressant systems will also be utilized to ensure proper operation and safety of the BESS.⁸⁴

65. Energy from the BESS will be distributed through the underground electrical collection system described above that collects energy from the BESS and Solar Facility and ultimately transmits it to the GRE substation.⁸⁵

C. Transmission Line

66. Benton Solar proposes to connect the Solar Facility and the BESS to the electrical grid through approximately 0.5-mile of new 115-kV Transmission Line, located in Minden Township, Benton County. The Transmission Line would originate at a new collector substation in the southwestern portion of the Site and terminate at the GRE substation.⁸⁶

67. Benton Solar proposes to locate the Transmission Line within an approximately 48.3-acre area on two privately owned parcels (the “Route”).⁸⁷ The Route exits the proposed Benton Solar collector substation and travels south for 0.11 mile; turns east for

⁸² Ex. 102 at 26 (SPA).

⁸³ *Id.*

⁸⁴ Ex. 156 at 18 (EA); *see also* Ex. 102 at 24-26 (SPA).

⁸⁵ Ex. 102 at 26 (SPA).

⁸⁶ Ex. 156 at 15, 19 (EA); *see also* Ex. 114 at 7-9 (RPA).

⁸⁷ Ex. 156 at 15 (EA); *see also* Ex. 114 at 6 (RPA).

0.16 mile; turns south for 0.22 mile; then turns southwest for 0.02 mile where it terminates at the point of change of ownership structure to be designed and installed by GRE.⁸⁸

68. Benton Solar proposes a 100-foot permanent Project right-of-way (“ROW”) centered on the Project Alignment (50 feet either side) for the entirety of the Project Alignment. The Route varies in width, ranging from 454.7 feet to 1,308.3 feet.⁸⁹ The route width is typically wider than the actual right-of-way, which is the area required for safe operation of the Transmission Line. This extra width provides flexibility when constructing the Transmission Line but is not so wide that it is impossible to determine where the Transmission Line would be constructed. A wider route width allows permittees to work with landowners to address their concerns and to address engineering issues that may arise after a permit is issued. The route width, in combination with the anticipated alignment, is intended to balance flexibility and predictability.⁹⁰

69. Benton Solar proposes to construct the Transmission Line using primarily 115-kV single-circuit steel monopole structures up to 110 feet tall, with an average pole height of 45 to 95 feet above ground line. Benton Solar is designing the Transmission Line with average spans of 300 to 500 feet between structures and maximum spans of 700 feet.⁹¹

70. Benton Solar estimates the cost to construct the Transmission Line will be between \$6 and \$13 million depending on various factors such as construction labor, Project equipment and materials, electrical and communication systems, taxes/tariffs, and final design considerations.⁹² The expected service life is about 40 years, although it is possible the line and structures will last longer than 40 years.⁹³

71. Benton Solar will construct the Project using primarily 115-kV single-circuit monopole structures. Primary structure types include monopole tangent structures in a single-circuit delta configuration with a single shield wire, braced post insulators, and direct embedded foundation. If it is not feasible to embed a pole into the ground, concrete piers may be used.⁹⁴

72. The Project also will require a collector substation, described above, to step up the voltage from the associated Benton Solar Project to 115 kV.⁹⁵

⁸⁸ Ex. 114 at 6 (RPA).

⁸⁹ Ex. 156 at 24 (EA).

⁹⁰ *Id.* at 8.

⁹¹ Ex. 153 at 11 (Bass Direct); Ex. 114 at 7 (RPA); Ex. 102 at 28 (SPA).

⁹² Ex. 156 at 27 (EA).

⁹³ *Id.* at 25.

⁹⁴ Ex. 114 at 7 (RPA).

⁹⁵ *Id.* at 1.

IV. SITE LOCATION AND CHARACTERISTICS

73. The Project is located in Minden Township (Sections 12 and 23-26, Township 36N, Range 30W) in Benton County, east of the city of St. Cloud, Minnesota. State Route 95 runs east to west through the center of the Site.⁹⁶

74. The approximately 951-acre Site is located in a rural setting and the existing land use is predominately agricultural.⁹⁷ Approximately 88 percent of the Site is currently used for cultivated crops, approximately 4.5 percent is hay or pasture, and approximately 3.6 percent is deciduous forest.⁹⁸

75. Benton Solar selected the Site based on sufficient solar resource, environmental setting, proximity to existing electric transmission infrastructure, and landowner participation.⁹⁹

76. Within the Route, approximately 53.7 percent of the land is currently for hay or pastureland and 28 percent is used for cultivated crops. The remaining 18 percent of the land in the Route is deciduous forest, grassland, mixed forest and barren land.¹⁰⁰

77. Benton Solar selected the location of the Route based on environmental setting, proximity to existing electric transmission infrastructure, landowner participation, location of parcel and property lines, and to accommodate GRE's plans for 345-kV improvements.¹⁰¹

78. The built environment in and around the Site and the Route includes, a snowmobile trail, Trail No. 87, maintained by the Benton County Snowmobile Club that runs through the Site;¹⁰² one existing transmission line that intersects the Route just north of the proposed substation;¹⁰³ several existing transmission lines in the vicinity of the Route;¹⁰⁴ and residences and farmsteads scattered around the nearby landscape.¹⁰⁵

79. The Project's layout follows the Commission guidelines and avoids prohibited sites unless there was no feasible or prudent alternative.

⁹⁶ Ex. 156 at 27 (EA).

⁹⁷ *Id.* at 32, 42; *see also* Ex. 102 at 39, 47 (SPA).

⁹⁸ Ex. 156 at 42 (EA); *see also* Ex. 102 at 66 (SPA).

⁹⁹ Ex. 156 at 27 (EA); *see also* Ex. 102 at 10 (SPA).

¹⁰⁰ Ex. 156 at 43 (EA); *see also* Ex. 114 at 29 (RPA).

¹⁰¹ Ex. 114 at 6 (RPA).

¹⁰² Ex. 156 at 50 (EA).

¹⁰³ *Id.* at 33; *see also* Ex. 114 at 50 (RPA).

¹⁰⁴ Ex. 156 at 33, 35 (EA); *see also* Ex. 114 at 50 (RPA).

¹⁰⁵ Ex. 156 at 35 (EA).

V. EASEMENT/LEASE AGREEMENTS

80. Benton Solar has full land control of the entire Site,¹⁰⁶ and Benton Solar has secured easements with the owners of the land in the Route.¹⁰⁷

VI. EA SCOPING PROCESS AND SUMMARY OF RELATED PUBLIC COMMENTS

81. Under Minn. R. 7849.1200 and Minn. R. 7850.3700, EIP is responsible for conducting an environmental review for the Project. The Commission authorized EIP to combine the environmental review for the Applications in its December 19 Order.¹⁰⁸

82. The EA scoping process has two primary purposes: (1) to gather public input as to the impacts and mitigation measures to study in the EA and (2) to focus the EA on those impacts and mitigation measures that will aid in the Commission's decisions on the Applications.¹⁰⁹

83. EA Scoping Meetings were held on January 14 and 15, 2025, pursuant to the December 26, 2024 Notice of Public Information and EA Scoping Meetings.¹¹⁰

A. Oral Comments at the January 14, 2025 In-Person Public Information and Scoping Meeting

84. Following introductions and presentations from the Commission, Benton Solar, and EIP, the following individuals offered comments at the in-person January 14 EA Scoping Meeting: Michael Odenthal, Jeffrey Reed, Tamara Sell, Mitch Litfin, Rachel Stuckey, Ed Popp, and Jaclyn Litfin.¹¹¹

85. Michael Odenthal, a resident of Benton County, indicated that he was opposed to the Project and intended to file a class action lawsuit.¹¹² Odenthal was also concerned about the impartiality of the proceeding.¹¹³

86. In addition, Odenthal asked a number of questions about the Project including whether there was a customer for the energy, why the location was selected, and the extent of potential effects from the Project on the residential neighborhood, local roads, and the surrounding environment.¹¹⁴ Benton Solar explained that the location was chosen based on several factors, including solar resource, minimizing environmental impact, and the proximity to the point of interconnection (in this case the Benton County Substation).¹¹⁵

¹⁰⁶ Ex. 102 at 1, 8, 10 (SPA).

¹⁰⁷ Ex. 114 at 20 (RPA).

¹⁰⁸ December 19 Order.

¹⁰⁹ Ex. 147 (Environmental Assessment Scoping Decision).

¹¹⁰ Ex. 132 (Notice of Public Information and Environmental Scoping Meeting).

¹¹¹ Sauk Rapids 6:00 p.m. Public Hearing Transcription ("Sauk Rapids 6:00 p.m. Tr.") (Jan. 14, 2025).

¹¹² *Id.* at 41:17-20, 42:16-19.

¹¹³ *Id.* at 18-20.

¹¹⁴ *Id.* at 49-52, 67.

¹¹⁵ *Id.* at 50-51.

87. Odenthal additionally posed questions about the safety of the batteries involved in the BESS based on problems he was aware of with electric car batteries and questioned NEER's experience with similar facilities.¹¹⁶ Benton Solar responded that it was unfamiliar with the technology used in the electric cars, but did not believe the cars were operational energy storage systems that have fire safety systems in their design.¹¹⁷ Benton Solar indicated the proposed Project is similar in size to other NEER affiliate projects.¹¹⁸

88. Lastly, Odenthal questioned Benton Solar's engagement with Benton County.¹¹⁹ An unidentified speaker clarified that three or four members from Benton County Board were present at the EA Scoping Meeting.¹²⁰

89. Jeffrey Reed, a resident and neighboring landowner, expressed concern about the impact to viewshed, his property's value, and community feel.¹²¹ Reed suggested installing a fence, hill, or berm with trees to address his viewshed concerns.¹²²

90. Tamara Sell, a resident and neighboring landowner, inquired about the location of Project and expressed concern over the local impact of the Project including on landowners, property taxes, the local economy and construction work opportunities, and the local roads.¹²³ Benton Solar explained that it intends to use local union labor for the Project.¹²⁴ Benton Solar explained that it does not expect the Project to increase property taxes.¹²⁵ For roads, Benton Solar explained that it intends to enter into a road use agreement with Benton County and to repair roads to the same condition prior to construction.¹²⁶

91. Sell also inquired about the risks associated with the BESS and the Transmission Line related to fire and other emergencies, BESS emissions, and electric and magnetic fields ("EMF") from the BESS.¹²⁷ Benton Solar explained that the BESS equipment undergoes rigorous safety testing, including to assess the performance of the safety equipment to isolate and contain events under worst case conditions.¹²⁸ The Transmission Line components also undergo rigorous safety testing specific to transmission lines.¹²⁹ Benton Solar clarified that during operations of the Project, there are no emissions and no risk of EMF to the surrounding areas.¹³⁰

¹¹⁶ *Id.* at 58-60.

¹¹⁷ *Id.* at 60.

¹¹⁸ *Id.* at 58.

¹¹⁹ *Id.* at 54-55.

¹²⁰ *Id.* at 54.

¹²¹ *Id.* at 42-44.

¹²² *Id.* at 44-45.

¹²³ *Id.* at 5, 45-49.

¹²⁴ *Id.* at 55-56.

¹²⁵ *Id.* at 53-54.

¹²⁶ *Id.* at 55.

¹²⁷ *Id.* at 52-53, 60, 62-63.

¹²⁸ *Id.* at 58-60.

¹²⁹ *Id.* at 61.

¹³⁰ *Id.* at 63.

92. Sell inquired about Benton Solar’s prior experience with storage systems and whether the BESS was an experiment.¹³¹ Benton Solar explained that its parent company, NEER, has several projects around the country and in Minnesota. While most of those projects are either wind or solar, NEER is starting to add BESS equipment to existing and new sites.¹³² As a result, NEER has experience constructing and operating these sites safely and effectively, with 2 gigawatts of battery storage at 36 operational sites.¹³³

93. Lastly, Sell further inquired about the tax benefit and how that will be allocated.¹³⁴ Benton Solar explained that the payment is an annual payment to the tax assessor for Benton County, which is used just as property tax dollars are.¹³⁵

94. Mitch Litfin, a resident and neighboring landowner, expressed concern with the Project impacting his viewshed, and requested the fire departments receive training and money for training.¹³⁶ Litfin posed the question how much water it takes to put out a fire at a battery.¹³⁷ Benton Solar responded that it advises fire departments not to apply water to the BESS if it catches fire.¹³⁸ Litfin also asked how to terminate the fire.¹³⁹ Benton Solar further explained that it allows it to terminate itself, with the primary focus being the safety of the personnel and surrounding areas, not the BESS in the container.¹⁴⁰

95. Rachel Stuckey, Executive Director of the Minnesota Conservative Energy Forum (“MCEF”) and the Minnesota Land and Liberty Coalition, spoke in support of getting more energy on the grid, highlighting the roads may be improved by the Project and the production tax going locally – 80% to the county and 20% to the township.¹⁴¹ Stucky encouraged the public attendees to share feedback and concerns with Benton County, highlighting that public input is important.¹⁴²

96. Ed Popp, Benton County Commissioner, explained that because the Project is more than one megawatt, the Commission has jurisdiction, and that there is another project similar to the Benton Solar Project in Benton County that is north by Langola Township.¹⁴³ Popp further explained that they were approached early on by the Applicant, that the process is controlled by the State of Minnesota and the Commission, not Benton County, and that Benton County will probably use the benefits mentioned for tax relief.¹⁴⁴ Popp also explained that the only way that the Project will devalue properties is if they are put up for sale and they

¹³¹ *Id.* at 57.

¹³² *Id.* at 56-58.

¹³³ *Id.* at 56.

¹³⁴ *Id.* at 47-49.

¹³⁵ *Id.* at 53-55.

¹³⁶ *Id.* at 65.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.* at 65-66.

¹⁴² *Id.* at 89.

¹⁴³ *Id.* at 69-71.

¹⁴⁴ *Id.* at 71-72.

property is unsold and that it was the County Board's understanding that the Project is going on private property, with people getting a fair amount of rent per acre.¹⁴⁵

97. Jaclyn Litfin, a resident in the neighboring rural area, expressed concern about the lack of long-term studies about the technology and the health impacts of the proposed Project, risk of wildfire and air quality in the area, hot spots, the impact to viewshed, and the impact to property value.¹⁴⁶ Litfin also requested the Applicant provide more information on mitigation measures, highlighting the viewshed concern and shielding, and inquired about the availability of the EA.¹⁴⁷ EIP responded that the EA will be put on eDockets, provided the docket numbers, offered to include Litfin on the mailing list, and explained that there will be an additional comment period after the EA is posted.¹⁴⁸ Litfin posed the questions about the next steps in the process.¹⁴⁹ Commission Staff explained the Commission's review process, that the next set of hearings will likely be sometime in August, and notice would be provided.¹⁵⁰ Benton Solar explained that it is assessing the mitigation options and is aware of the Benton County ordinance requirements as it relates to screening.¹⁵¹

B. Oral Comments at the January 15, 2025 Virtual Public Information and Scoping Meeting

98. In addition to the Project introductions given by the Commission, Benton Solar, and EIP, the following individuals offered comments at the January 15, 2025 remote access meeting: Amanda Othoudt and a participant identified as LRusin.

99. Amanda Othoudt, with Benton Economic Partnership ("BEP"), inquired about the remediation plan, communications the Applicant has had with surrounding fire stations, whether the fire stations have the appropriate equipment, and whether local companies would be hired for the construction.¹⁵² Benton Solar responded there is a decommissioning plan filed with the Application that is intended to be followed at the conclusion of the Project, a monetary bond or surety will be provided to Benton County which is re-evaluated every five years, and it has communicated with Benton County Emergency Management Department, the Foley Fire Department, and the Sauk Rapids Fire Department to provide an overview of the battery storage facility.¹⁵³ Benton Solar further explained its recommendation for fire personnel during the rare event that a thermal event occurs is to maintain safety of personnel and take a perimeter approach to prevent the spread to neighboring areas, keeping their personnel safe; no special equipment is required.¹⁵⁴ Benton

¹⁴⁵ *Id.* at 72-73.

¹⁴⁶ *Id.* at 75-82.

¹⁴⁷ *Id.* at 82-83.

¹⁴⁸ *Id.* at 83.

¹⁴⁹ *Id.* at 83-84.

¹⁵⁰ *Id.* at 84-85.

¹⁵¹ *Id.* at 86.

¹⁵² Remote Access 6:00 p.m. Public Hearing Transcript at 30, 33, 36 (Jan. 15, 2025).

¹⁵³ *Id.* at 31, 33-34.

¹⁵⁴ *Id.* at 33-34.

Solar stated its intent is to use local union labor and is in the process of hiring a general contractor for the Project, specifying the general contractor will use local union labor.¹⁵⁵

100. LRusin participated via the virtual chat function and requested information about the cons or negatives of the Project to the homeowners and landowners surrounding the Project.¹⁵⁶ Benton Solar explained it is taking into account visual impact for residences within 1,000 feet of the Project and developing a visual screening plan in accordance with Benton County's ordinance for community solar gardens, with the intent to minimize the impact for surrounding residences and homes outside the Project boundary.¹⁵⁷

C. Written Comments Pursuant to December 26 Notice

101. Pursuant to the December 26 Notice, written comments were submitted by Minnesota Department of Transportation ("MnDOT"), Minnesota Department of Natural Resources ("MnDNR"), Minnesota Future Farmers of America Foundation ("Minnesota FFA Foundation"), and members of the public.

102. MnDOT provided comments, requesting the Applicant (i) provide a summary of cultural field surveys and coordination with SHPO; (ii) provide an anticipated schedule for completion of cultural field surveys if they have not been completed; (iii) prepare a Post Review Discovery Plan to be submitted for MnDOT's review outlining unanticipated discovery steps including the notification of Cultural Resources Unit staff within 24 hours during construction; (iv) provide copies of any MnDOT permits to the Office of Environmental Stewardship Protected Species Unit; (v) consult with the US Fish and Wildlife Service with respect to listed species that may be in the Project area; (vi) consult with the MnDNR to conduct species-specific surveys prior to construction and that copies of field survey data/reports within its right-of-way be submitted with permits applications for review; (vii) plan to utilize access points from local roads where possible; (viii) consult with District Permitting and Traffic Control staff to ensure chosen points of access have been reviewed by MnDOT District 3 staff and are permittable; (ix) ensure that the location of the water basin near Trunk Highway 95 will not negatively impact existing land and infrastructure and may require review by a District Hydraulics Engineer to determine if a drainage permit is required.¹⁵⁸

103. MnDNR provided comments suggesting that the EA should: (i) evaluate measures to minimize impacts to Blanding's turtle and address the avoidance measures outlined in the Natural Heritage review letter; (ii) recommend the fence be designed in accordance with the MnDNR's *Commercial Solar Siting Guidance and Fencing Handbook for 10 ft Woven Wire Deer Exclusion Fence*, reaches a minimum height of 10 feet to prevent deer and other large wildlife from entering the facility, gaps at the bottom of the fence be incorporated to allow turtles to travel through the fenced area where Blanding's turtles are known to occur, advising against barbed wire; (iii) assess the most appropriate setback requirements between the security fencing and the nearby by road right-of-way to minimize

¹⁵⁵ *Id.* at 36.

¹⁵⁶ *Id.* at 32.

¹⁵⁷ *Id.* at 32-33.

¹⁵⁸ Ex. 139 (Comments by MnDOT).

disruption to wildlife travel corridors, recommending 50 feet; (iv) discuss measures to mitigate impacts lighting will have on wildlife; (v) discuss tree removal to address necessary restriction to protect bats, recommending tree removal be avoided between June 1 through August 15; (vi) address fugitive dust levels and suppression measures taken during construction and operations, advising against products that contain chloride; (vii) discuss wildlife-friendly erosion control measures, recommending the use of biodegradable materials that are flexible and rectangular; and (viii) discuss construction and vegetation reestablishment phases minimizing stormwater runoff, stabilization of soil, and supporting habitats, recommending a Vegetation Management Plan (“VMP”) throughout permitted sites consistent with *Prairie Establishment and Maintenance Technical Guidance for Solar Projects* and coordination with the Vegetation Management Plan Working Group (“VMPWG”).¹⁵⁹

104. Val Aarsvold, Executive Director of the Minnesota FFA Foundation, provided comments in support of Applicant’s contributions as a community partner to their educational programs and community engagement.¹⁶⁰

105. Jeffrey Reed, Jenna Reed, Aaron Dresow, Alison Dresow, Tammy Biery, Scott Stark, Michelle Johnson, Andi McGeary, Leigh Rusin, Luke Rusin, Jen Carlson, Eric Carlson, Sig Feierabend, Sarah Feierabend, Tracy Braem, Matt Braem, Brian Erte, Camryn Geiselhart, Matt Geiselhart, Mitchell Litfin, Jaclyn Litfin, Tamara Sell, Michael Odenthal, Dave Zormeier, Lynn Cairns, John Olsen, and Steve Jurek submitted a joint comment in opposition to the Project requesting the Commission reconsider the siting of a project in close proximity to residences and expressing concern about the scale of the Project, the potential impact on the feel and character of the community, noise, viewshed, potential health impact, impact to the recently re-paved road during construction, and potential environmental impact. Specific to environmental concerns, the commenters raised concerns concerning impact to agricultural land, disruption to soil health and quality, potential harm to wildlife, potential impact due to the removal of 10 acres of trees, and lack of long-term studies available. The commenters requested the Commission consider the following as it relates to the proposed Project: (i) strong restoration plan; (ii) comprehensive wildlife protection plans; (iii) visual buffers to completely shield the solar properties from sight during construction and installation; (iv) annual well water testing; (v) erosion control measures; (vi) stormwater management; (vii) noise impact studies and limited hours for activities for noise reduction; (viii) independent studies on the long-term health effects of exposure to PV panels and battery fields.¹⁶¹

106. Brent Cronquist submitted comments questioning the Project’s health risks, security risks, impact to property values and taxes, and how the Site will be maintained. Cronquist also expressed concern with the limited time allowed for public input.¹⁶²

107. Barbara Reese, Brian McIver, Cindy Albright, Dan Fiecke, Kurt Adelman, Michael Bartowsheski, Patrick Arnold, Pete Cosgrove, Ronald Oelrich, and Sir William

¹⁵⁹ Ex. 138 (Comments by MnDNR).

¹⁶⁰ Ex. 140 at 3 (Written Public Comments on the Scope of the Environmental Assessment).

¹⁶¹ *Id.*

¹⁶² *Id.* at 16.

Blahut submitted comments in support of the Project, highlighting the increase in tax revenue, the rights of property owners, local job creation, and energy independence.¹⁶³

108. Dan Starry submitted written comments, explaining he did not ask questions at the meeting in Sauk Rapids, but had the following questions: (i) land area of the BESS; (ii) BESS manufacturing and country of origin; (iii) life of PV panels; (iv) PV panel disposal location; (v) degradation of PV panels; (vi) who pays for operational costs; and (vii) government subsidizing of the operation.¹⁶⁴

109. Eric Haffner and Heather Shultz submitted joint comments that they were unaware of a solar farm in conjunction with a transmission line replacement and expressing concern about the Project's potential impact to the scenery and wildlife habitat as well as the limited notice period.¹⁶⁵

110. Jaclyn and Mitch Litfin provided joint comment expressing concern over the impact to viewshed, potential health risks associated with the proposed Project, impact to cultural and historical lands in the county, impact to the endangered bat species, per- and polyfluoroalkyl substances ("PFAs") potential impacts, and requesting that the Commission consider moving the Project away from their homes.¹⁶⁶

111. Jeffrey Reed submitted comments requesting a hill or some sort of visual mitigation to protect from the visual impact to their property and value.¹⁶⁷

112. Jenna Reed submitted comments expressing concern over the visual impact of the Project, requesting large solar farms not be installed in direct view of residential areas or a decrease in Project size, the impact of the Project on her well-water, the health impacts of the Project in 30 years, the impact to the wildlife surrounding the Project Area, and explaining the sentimental value of her property.¹⁶⁸

113. Leigh Rusin submitted comments expressing concern over the Project's potential impact on wildlife and ecosystems, property value, viewshed, and requesting some measure be taken for visual mitigation for those homes surrounded on 3 sides by PV panels.¹⁶⁹

114. Matt Braem submitted comments questioning the site selection, who the power will be sold to, the responsibilities for the maintenance and security of the Project, potential impact on his real estate value, lack of knowledge as it relates to impact on land and health of the new technology for storage, potential for vandalism to the Project, and requesting an alternative site be used.¹⁷⁰

¹⁶³ *Id.* at 14, 17-19, 32, 38, 45-48, 54.

¹⁶⁴ *Id.* at 20.

¹⁶⁵ *Id.* at 22.

¹⁶⁶ *Id.* at 23-24.

¹⁶⁷ *Id.* at 26.

¹⁶⁸ *Id.* at 27-31.

¹⁶⁹ *Id.* at 34-35.

¹⁷⁰ *Id.* at 36.

115. Michael Odenthal submitted comments in opposition to the Project, alleging that a subsidiary of BlackRock was proposing the Project and lack of notice of the January EA Scoping Meetings, as well as expressing concern over severe weather in the area, fire risk of the BESS, and the potential impact to property value and the environment.¹⁷¹

116. Michelle Johnson submitted comments in opposition to the Project and expressing concern about the impact of the Project on her migraines and long-term health, potential impact on the water table as a result of flooding in the spring, potential for flooding of nearby properties, potential impact to property values, potential for breaking of glass and leeching during decommissioning, and the potential impact that any battery fires, as the one in Moss Landing in California, would have on air quality.¹⁷²

117. Sarah Feierabend submitted comments on behalf of herself and her family expressing concern on the impact to viewshed and character of her residential neighborhood, potential impact to the local wildlife migration patterns and habitats, and potential impact to property value.¹⁷³

118. Scott Myers submitted comments expressing concern over the increased traffic on 55th Avenue NE and 2nd Street SE and the lack of notice received on the Project. Myers also posed a question on the type of storage to be used in the BESS, whether there was an environmental mitigation plan in place in the event of a BESS failure, and the notification of neighboring residents on mitigation and evacuation plans in the event of a BESS failure.¹⁷⁴

119. Steve Jurek submitted comments opposing the Project, expressing concern about the potential impact of the long-term environmental impact, loss of farmland, and potential impact to property value, suggesting trees and vegetation around the perimeter of the Project.¹⁷⁵

120. Steve Oetken submitted comments opposing the Project and expressing concern about the Project's proximity to housing and a public golf course and posing a question about the Project's effect on airport flights.¹⁷⁶

121. Tamara Sell submitted comments opposing the Project expressing concerns about noise during construction and operation, potential for fire and emission of gasses from the BESS, EMF, safety risks associated with connecting to the grid, potential negative effects to the local community and environment including to water and crops, property insurance, property taxes, local emergency responders and the viewshed. Sell requested EIP, MnDNR, U.S. Fish and Wildlife or the Environmental Protection Agency ("EPA") further assess the impact the Project could have. In addition, Sell questioned the qualifications of the contractor used for the construction of the Project. Sell also posed questions about the plan for disposal

¹⁷¹ *Id.* at 40-42.

¹⁷² *Id.* at 43-44.

¹⁷³ *Id.* at 50-51.

¹⁷⁴ *Id.* at 53.

¹⁷⁵ *Id.* at 55.

¹⁷⁶ *Id.* at 56.

and replacement of the BESS. Lastly, Sell expressed concern about the potential for cyber attacks on the BESS.¹⁷⁷

122. Tammy Biery submitted comments expressing concern of the Project's potential impact to wildlife, potential impact to wind patterns and drifting, potential impact with the loss of irrigation from the farm fields, proximity to an airport, potential impact to property value, potential health impact, the environmental impact of tree removal, and the Project's proximity to homes.¹⁷⁸

123. Benton Solar submitted Response Comments responding to concerns regarding site selection, visual concerns and mitigation measures, sound levels, property impacts, health and safety impacts, EMF and PFAs potential impacts, emergency and response planning, environmental and wildlife impacts, Project construction and decommissioning, substation risks and fencing, among others. In addressing the comments concerning the potential impacts of the Project, Benton explained that it adequately addressed the potential impacts on the environment and human activities in its Applications, directing commenters to the relevant sections of the Applications. In particular, Benton Solar directed commenters to the sections that detailed how the Project is designed to meet applicable government requirements related to the environment, including those related to protecting wildlife and water resources, as well as requirements protecting human health and activities, including those related the safety of local residents, and will continue coordinating with state agencies, including MnDNR and MnDOT.¹⁷⁹

124. Additionally, Benton Solar provided clarification that it will continue working on a screening plan to minimize visual impacts to the extent practicable; it does not anticipate impacts to insurance and property taxes for participating landowners hosting Project infrastructure; it will coordinate with local emergency responders to develop an Emergency Action Plan and to perform training; it is working toward securing an agreement related to the sale of power generated by the Project; BlackRock, Inc. is not part of the NEER family of companies; it provided a commitment letter to hire an Engineering, Procurement, and Construction ("EPC") contractor that will enter into a site-specific Project Labor Agreement ("PLA") with appropriate unions for the construction of the Project; and it directed commenters to the studies and analysis performed to date on the Project as well as the research around PV panels in use today.¹⁸⁰

D. Scoping Decision

125. The EA Scoping Decision was issued on March 26, 2025 following thorough public comment. The EA Scoping Decision specified the issues to be analyzed in the EA for the Project. The EA Scoping Decision stated that the EA would describe the Project and the human and environmental resources of the Project Area and provide information on the potential impacts of the Project and possible mitigation measures. The EA Scoping Decision also reflected that the EA would identify impacts that cannot be avoided and

¹⁷⁷ *Id.* at 57-69.

¹⁷⁸ *Id.* at 70-71.

¹⁷⁹ Ex. 143 (Benton Solar, LLC Response to Scoping Comments).

¹⁸⁰ *Id.*

irretrievable commitments of resources, as well as permits from other government entities that may be required for the Project. The EA would also include a discussion of the merits of the proposed Project site with respect to the siting factors in Minn. R. 7850.4100. The EA would not, however, analyze alternative site or route locations.¹⁸¹ The EA Scoping Decision also indicated the EA was anticipated to be completed and available in July 2025.¹⁸²

126. Notice of the Scoping Decision was filed on March 27, 2025, and EIP filed a confirmation of its publication in the EQB Monitor on April 10, 2025.¹⁸³

VII. EA

127. On July 24, 2025, EIP issued the EA, addressing the matters identified in the Scoping Decision. The EA described the Project, highlighted resources affected by the Project, and evaluated the potential human and environmental impacts of the proposed Project, as well as possible mitigation measures.¹⁸⁴

128. The EA evaluated key issues that had been raised during the scoping process, such as: (i) visual impacts on nearby residences; (ii) impacts to property values in the local vicinity; (iii) noise; (iv) concerns with EMF; (v) human health impacts; (vi) effect on cultural values and recreation for the community; (vii) socioeconomic effects; (viii) effects on archeological and historic resources; (ix) effects on natural resources; and (x) safety in the event of a potential fire or other emergency at the Solar Facility or BESS.¹⁸⁵

129. The EA included five appendices: Appendix A, the EA Scoping Decision; Appendix B, Maps; Appendix C, the proposed Draft Site Permit for the Solar Facility (“Solar Facility DSP”); Appendix D, the proposed Draft Site Permit for the BESS (“BESS DSP”); Appendix E, the proposed Draft Route Permit (“DRP”).¹⁸⁶

130. The confirmation of the distribution of the notices of the EA availability was filed on August 4, 2025.¹⁸⁷

VIII. PUBLIC HEARINGS AND COMMENTS

131. Pursuant to the August 4, 2025 Notice of EA, public hearings were held on August 26 and 27, 2025.¹⁸⁸

¹⁸¹ Ex. EERA-203 (Alternatives Identified During Scoping Comment Period); Ex. PUC-263 (Order Limiting the Scope of the Environmental Assessment to Route Identified in Route Permit Application); Ex. PUC-266 (Order Limiting the Scope of the Environmental Assessment to Site Identified in the Site Permit Application).

¹⁸² Ex. 147 (Environmental Assessment Scoping Decision).

¹⁸³ Ex. 148 (Notice of Environmental Scoping Decision); Ex. 149 (Notification of Environmental Scoping Decision on EQB Monitor).

¹⁸⁴ Ex. 156 (EA).

¹⁸⁵ *Id.* at III-VI.

¹⁸⁶ Ex. 156 (EA).

¹⁸⁷ Ex. 158 (Notice of Public Hearings and Availability of Environmental Assessment)

¹⁸⁸ *Id.*

A. Public Comments and Questions at the August 26, 2025 6:00 p.m. Hearing

132. The remote access public hearing was held on the Project on August 26, 2025, at 6:00 p.m.¹⁸⁹ Following introductions and presentations from Commission and EIP staff, and Benton Solar, the following individuals provided oral comments at the August 26, 2025, 6:00 p.m. remote access hearing: Rachel Stucky, Gregg Mast, Amanda Othoudt, Diane Hageman, and John Svihel.¹⁹⁰

133. Rachel Stucky, the executive director of the MCEF, provided oral comments in support of the Project. MCEF is an organization dedicated to advancing an all-of-the-above approach to energy solutions for Minnesota, prioritizing clean, reliable, and affordable sources alongside investments to local communities. Stucky stated the Project is a major step forward in clean energy generation and a meaningful investment in central Minnesota's economy. Through pairing solar generation with battery storage, the Project will strengthen Minnesota's grid, ensuring reliability during peak demand and reducing dependence on volatile fuel markets. Stucky also highlighted the stability of the company behind the Project, NEER, which has a proven track record of investment in communities through infrastructure and contributing to local charities, partnering with schools, funding local projects, and otherwise being a reliable long-term partner.¹⁹¹

134. Gregg Mast, the executive director of Clean Energy Economy Minnesota ("CEEM"), provided oral comments in support of the Project. CEEM is an industry-led nonpartisan nonprofit organization representing the business voice of energy efficiency and clean energy in Minnesota, with membership consisting of nearly 80 energy efficiency and clean energy companies, ranging from startups to Fortune 100 and 500 companies. Mast stated the Project will deliver significant economic benefits, including hundreds of jobs during construction and several full-time jobs for the lifetime of the Project, an increased and stable tax revenue stream to local governments, and production tax revenues that can be used by the local governments to fund schools, infrastructure, and other essential services. Mast also stated that the Project will contribute over 300 million to the gross domestic product across its lifetime. Together, those benefits make clean energy projects like Benton Solar's Project one of the best tools available to drive long-term economic development in Greater Minnesota. Additionally, Mast stated the Project's BESS is going to boost grid resiliency and reliability, and the Project's Solar Facility is going to enable Minnesota's achievement of 100 percent clean energy by 2040.¹⁹²

135. Amanda Othoudt, the executive director of the BEP, provided oral comments in support of the Project. BEP is a public-private nonprofit organization located in Benton County, Minnesota, that promotes and facilitates economic development in the county. It has over 130 members, including NEER, which Othoudt stated has proved to be a contributing member of the community. Othoudt stated BEP supports the Project because it will help meet Minnesota's renewable energy goals, its capital investment in Benton County

¹⁸⁹ Remote Access 6:00 p.m. Public Hearing Transcript (Aug. 26, 2025) ("Remote Access 6:00 p.m. Tr."); Sauk Rapids 6:00 p.m. Public Hearing Transcription (Aug. 27, 2025) ("Sauk Rapids 6:00 p.m. Tr.").

¹⁹⁰ Remote Access 6:00 p.m. Tr. at 7:5-26:13 (Aug. 26, 2025) (Panait, Hicks, Gracia).

¹⁹¹ *Id.* at 26-29.

¹⁹² *Id.* at 29-34.

of over \$300 million will have significant benefits to the community, it will diversify the local energy portfolio, it will create jobs in the communities and stimulate the local economy, and bring indirect economic benefits to local businesses.¹⁹³

136. Diane Hageman, a resident of St. Cloud, Minnesota, provided oral comments supporting the Project. Hageman stated she had experienced NEER's involvement in the community firsthand through its support of a local high school and summer festival. Hageman stated as a citizen she was glad to see a project like this in the area, because we have to be more careful with our environment.¹⁹⁴

137. John Svihel, a participating landowner in the Project, provided oral comments in support of it. Svihel stated the Project will be a great use of his property, which is hilly, sandy, highly rotatable, and almost all irrigated. If the property is taken out of agricultural production, it would no longer be pumping groundwater for irrigation, and there would be no nitrates passing through the soil into the groundwater. After the lifetime of the Project is up and the PV panels are removed, the property will be returned to its natural state or just open bare farmland, and would be contiguous rather than subdivided. He also stated Benton Solar was great to work with.¹⁹⁵

B. Public Comments and Questions at the August 27, 2025 6:00 p.m. Hearing

138. A public hearing was held on the Project on August 27, 2025, at 6:00 p.m. at the Sauk Rapids Government Center in Sauk Rapids, Minnesota. Following introductions and presentations from Commission, EIP staff, and Benton Solar, the following individuals provided comments at the in-person hearing: Junior Geislinger, Kurt Adelman, Jeffrey Reed, Brent Cronquist, Jaclyn Litfin, Patrick Herbst, and Pam Benoit.¹⁹⁶

139. Junior Geislinger, a representative with Local 49, provided oral comments in support of the Project. Local 49 is composed of over 15,000 members across Minnesota, North Dakota, and South Dakota, more than 1,400 of which live within Benton County or one of its adjacent counties. Many of Local 49's members make their living by building and maintaining Minnesota's energy infrastructure and consider it important to maintain the high job standards the energy industry has traditionally had for construction workers, both in compensation and the quality of work performed, as we transition our electric system into more renewable generation asserts like wind and solar. Geislinger stated Local 49 appreciates Benton Solar's commitment to use local labor on this Project, which is estimated to create between 150 and 300 construction jobs, and its commitment to use American-made solar products.¹⁹⁷

140. Kurt Adelman, a landowner who has property in the Project, read a letter on behalf of an individual named Jake Bauerly in support of the Project. The letter stated Bauerly is also a landowner participating in the Project, the Project would be a success for the broader

¹⁹³ *Id.* at 34-36.

¹⁹⁴ *Id.* at 36-37.

¹⁹⁵ *Id.* at 37-39.

¹⁹⁶ Sauk Rapids 6:00 p.m. Tr. at 7:20-23:16 (Aug. 27, 2025) (Panait, Hicks, Gracia).

¹⁹⁷ *Id.* at 25-27.

economic well-being of Benton County. The Project is a major economic investment that would directly and indirectly benefit the region, including through job creation, construction spending, long term lease payments to Benton County, and increased tax revenue, including a production tax to Benton County and townships involved. These economic benefits are essential for Benton County, which is ranked the sixth poorest county in Minnesota.¹⁹⁸ Adelman also expressed his own support for the Project.¹⁹⁹

141. Jeffrey Reed, a homeowner in a development adjacent to the Project, provided oral comments in opposition to the Project. Reed stated the Project impacts his and his neighbor's dream of living out in the county, specifically through visual impacts of the Project ruining the landscape, and also negatively impacts their property values because people will not want to purchase homes across the street from a huge solar project. Reed requested some sort of hill or berm with vegetation on top installed to screen the view of the Project.²⁰⁰ Adam Gracia responded by stating Benton Solar looked forward to ongoing conversations about establishing a visual screening plan that addresses those concerns.²⁰¹

142. Brent Cronquist, a homeowner near the Project, provided oral comments agreeing with Reed's comments. Cronquist also stated he had short-term concerns with safety, property values, and traffic increases, and long-term concerns with the impact the Project would have on the environment. Cronquist also requested the view of the Project be blocked.²⁰²

143. Jaclyn Litfin, a homeowner near the Project, provided oral comments in opposition to the Project. Litfin stated she and others had provided input throughout the Project process thus far, had been sold their land from a prior landowner that did not disclose the Project was coming into the area, and would have gone a different direction if it had been disclosed. Litfin specified her opposition to the Project was based on its proximity to her home and requested that a stronger screening plan be put in place, which she understood to currently involve 4-foot trees around the Project or perhaps a 4-foot berm within the areas across from the affected homes. Litfin stated that was insufficient, and requested an 8-foot berm, which would match and cover the 8-foot chain-link fence around the Project. Litfin referenced a similar berm was put around a solar project in Sherburne County, and it was effective in screening the view.²⁰³ Benton Solar responded that it has been working on the visual screening plan for the Project and is evaluating heights and vegetation options, and looks forward to working together to find a solution that works for all parties.²⁰⁴

144. Litfin also asked a question on behalf of a neighbor named Leigh Rusin about whether an 8-foot fence with barbed wire on top posed a threat to wildlife and was consistent with MnDNR recommendations.²⁰⁵ Benton Solar responded by stating the Project

¹⁹⁸ *Id.* at 27-29.

¹⁹⁹ *Id.* at 29.

²⁰⁰ *Id.* at 29-31.

²⁰¹ *Id.* at 32.

²⁰² *Id.* at 32-33.

²⁰³ *Id.* at 33-40.

²⁰⁴ *Id.* at 40-41.

²⁰⁵ *Id.* at 45-46.

is designed consistent with those MnDNR recommendations and guidelines. The only areas using barbed wire are around the Substation in the southwest portion of the Project.²⁰⁶

145. Litfin additionally asked if water runoff from solar panels had potential to carry aluminum, lead, heavy metals, and other such contaminants to the groundwater, in both short and long term periods.²⁰⁷ Benton Solar responded by stating the solar panels for the Project are nonhazardous and pose no health or safety risks to the public or the environment, and undergo a leaching procedure test per the EPA, which the panels must pass in order to be eligible for procurement for the Project. Benton further explained the Great Plains Institute and the Minnesota Department of Health are both currently looking at solar projects and water quality, and they're finding improvements to water quality, specifically from solar installations at a utility scale, because the projects transition the land out of cropland that is often treated with pesticides and fertilizers on an annual basis and to a native plant community that is not receiving those chemicals.²⁰⁸

146. Patrick Herbst, a supervisor in St. George Township, provided oral comment, stating he supported Litfin's request for a berm around the Project.

147. Pam Benoit, Benton County Commissioner, provided oral comments in support of the homeowners seeking a berm around the Project. Benoit stated that is not something the Benton County or township has any say over. Benoit also asked if any state or federal funds were going towards the Project and what the current fire prevention plan is for the Project, because other solar projects from other companies had out of date emergency contact information.²⁰⁹ Benton Solar responded by stating no state or federal funds were being used for the Project, and Benton Solar representatives have met multiple times with the Sauk Rapids fire chief, and the Project will have a full-time site manager living in the community, as well as a 24/7 continuously manned remote operations control center.²¹⁰ Additionally, the vegetation at the Project will be maintained to keep it away from electrical cables, a fire ring will be put around the perimeter of the site, and the site can be shut down remotely if needed.²¹¹ Lastly, Benton Solar has engaged with the local first responders regarding the approach for handling a battery fire.²¹²

C. Written Comments Pursuant to the Notice of EA

148. Pursuant to the Notice of EA,²¹³ MnDOT, MnDNR, EIP, a number of local organizations, and community members submitted written comments.

149. On August, 20, 2025, Benton County filed a public comment requesting Benton Solar develop a visual screening plan with an earthen berm approximately six feet high to screen the visual impacts of the Solar Facility from the residents in Rua Mitchel Court

²⁰⁶ *Id.* at 46.

²⁰⁷ *Id.* at 47-48:22, 49-50.

²⁰⁸ *Id.* at 48:23-49:11, 50:8-50:24.

²⁰⁹ *Id.* at 41-42.

²¹⁰ *Id.* at 42-43.

²¹¹ *Id.* at 43-44.

²¹² *Id.* at 44-45.

²¹³ Ex. 158 (Notice of Public Hearings and Availability of Environmental Assessment).

NE. Benton County requested the earthen berm due to the high concentration of residences in the area around Rua Mitchel Court NE and the fact that the soil quality is not sufficient to support the long-term survival of trees and other vegetation.²¹⁴

150. Gerry Goble expressed his support for the Project and noted NEER's engagement with the community.²¹⁵

151. Twenty-five members of the public submitted comments in support of the Project because of the increase in tax revenue, the rights of property owners, local job creation, and energy independence.²¹⁶

152. Bill Stevens, Chamber President of the Foley Area Chamber of Commerce submitted comments in support for the Project, noting the economic opportunity for the region.²¹⁷

153. Mary Swingle, President/CEO of The Boys & Girls Club of Central Minnesota submitted a comment in support of the Project, highlighting NEER's history being an involved member of the community.²¹⁸

154. Darin Broton, Executive Director of Minnesota AgriGrowth submitted a comment in support of the Project because it would preserve farmland "that would likely be converted into housing or industrial developments" and would provide much-needed energy.²¹⁹

155. MnDNR filed comments recommending some practices and requesting some special conditions to protect wildlife in the area. In particular, MnDNR noted the potential likelihood of Blandings' turtles being present at the Site or Route due to the Site and Route containing areas that could serve as habitat for the turtles. MnDNR, therefore, requested a permit condition requiring compliance with the state-listed endangered and threatened species requirements. Additionally, MnDNR requested a number of special permit conditions to protect local wildlife: limiting tree clearing, requiring shielded lights, requiring wildlife-friendly erosion control measures, requiring non-chloride products for dust control, and requiring coordination with MnDNR on the security fence. MnDNR also noted its appreciation of Benton Solar's continued coordination with the VMPWG on the VMP and that any dewatering would require a separate permit.²²⁰

156. VMPWG filed comments that it has reviewed the VMP submitted with the Applications, recommended Benton Solar address its comments in its preconstruction VMP submission, and clarified it does not recommend action from the Commission at this time. VMPWG stated that while Benton Solar's site restoration is "achievable and includes a range of potential seed mixes that can meet the anticipated permit conditions," it recommeneds the

²¹⁴ Ex. PUC-272 (Public Comment of Benton County).

²¹⁵ Public Comment by Gerry Goble, Aug. 29, 2025, eDockets ID No. [20259-222626-01](#).

²¹⁶ Public Comments, Sept. 2, 2025, eDockets ID No. [20259-222801-01](#)

²¹⁷ Public Comment by the Foley Area Chamber of Commerce, Sept. 8, 2025, eDockets ID No. [20259-222798-01](#).

²¹⁸ Public Comment by Boys & Girls Clubs of Central Minnesota, Sept. 8, 2025, eDockets ID No. [20259-222797-01](#).

²¹⁹ Public Comments by AgriGrowth, Sept. 2, 2025, eDockets ID No. [20259-222829-01](#).

²²⁰ Public Comments by MnDNR, Sept. 12, 2025, eDockets ID No. [20259-222952-01](#)

following be included in the preconstruction submission: (i) a description of the known or likely agricultural drainage features; (ii) include description of vegetation management areas for the Transmission Line ROW management area and stormwater basin area; (iii) verify the chemical application history of the Site in addition to the soil testing already intended to determine if special methods will be necessary to allow for successful native vegetation establishment; (iv) provide seed installation detail for the Transmission Line ROW management area and stormwater basin area; (v) provide seed mixes for the Transmission Line ROW management area and stormwater basin area; (vi) VMPWG recommended additions and/or substitutions to the buffer management area and array management area seed mixes; (vii) clarify whether vegetative screening will be utilized and, if so, include a complete list of the species and size of plant material, summary of the planting methods, and guidance for installation following best practices in the visual screening plan; (viii) clarify if grazing is considered as an adaptive management strategy and, if so, include a grazing plan and a drought contingency plan; (ix) discuss any populations of invasive species or noxious weeds known to be present on the site; (x) provide additional information about anticipated herbicide use including type, frequency, and surfactant rate; (xi) provide additional information about control of trees and shrubs; (xii) provide management information for the Transmission Line ROW management area and stormwater basin area; (xiii) provide a table with management schedule in a specified format; (xiv) provide an assessment of anticipated outcomes of vegetation establishment; (xv) provide description of monitoring protocols and methods used in monitoring; and (xvi) develop a monitoring plan including methods and assessment of anticipated outcomes. Lastly, the VMPWG recommended the Applicant enroll the Project in the Habitat Friendly Solar Program and continue to coordinate with EIP staff and other agencies as it finalizes its VMP.²²¹

157. Jaclyn Litfin submitted a comment opposing the issuance of a site or route permit based on its deviation from the agricultural and rural character of the region. In the alternative, Litfin requested an eight-foot berm with evergreen trees on top, early installation of the berm, and long-term maintenance requirements.²²²

158. Troy Heck, Sheriff of Benton County submitted comments in support of the Project, highlighting the recent donation to help purchase new radios for the department, and more broadly NEER's willingness to engage in the Benton County / St. Cloud area community and support local public safety.²²³

159. Tammy Stark submitted a public comment requesting a requirement for an eight-foot visual screen.²²⁴

160. Wanda Schroeder, Executive Director of the Central Minnesota Builders Association submitted comments acknowledging Benton Solar's "proactive and thoughtful engagement with [its] members."²²⁵

²²¹ Public Comments by VMPWG, Sept. 12, 2025, eDockets ID No 20259-222927-01.

²²² Public Comments by Jaclyn Litfin, Sept. 12, 2025, eDockets ID No. [20259-223005-01](#).

²²³ Public Comments by Benton County Sheriff's Office, Sept. 12, 2025, eDockets ID No. [20259-223004-01](#).

²²⁴ Public Comments by Tammy Stark, Sept. 12, 2025, eDockets ID No. [20259-223003-01](#).

²²⁵ Public Comments by Central Minnesota Builders Association, Sept. 12, 2025, eDockets ID No. [20259-222989-01](#).

161. Julie Lunning, President of the St. Cloud Area Chamber of Commerce submitted a comment noting NEER's "strong community engagement, willingness to collaborate, and commitment to providing information in a transparent way."²²⁶

162. EIP submitted corrected comments addressing modifications to the decommissioning plan and agreeing with MnDNR's requested permit condition requiring compliance with state rules on state-listed endangered and threatened species. In particular, EIP recommended updating the decommissioning plan in pre-construction compliance filings to encompass the entire Project; cite the permit requirement to restore the land to pre-Project condition; include a revision history; add additional details to the Project description; include information about the use of the generation output; combine information about permitting and notification; and include additional information about the timing of decommissioning activities.²²⁷

163. Mitchell Litfin submitted a comment opposing the Project because of the changes to the visual landscape and the potential human health risks. In the alternative, if the Commission grants the permits, Litfin requested permit conditions for an eight-foot berm with mature trees; baseline and annual testing of well water within a mile of the Site; and an annual contribution to the Sauk Rapids Fire Department.²²⁸

164. Benton Solar submitted Response Comments responding to topics raised by members of the public in the public hearings and in the written comments, including visual impacts, property values, runoff affecting well water, emergency response for the BESS, fencing, and traffic, and directing commenters to the relevant sections of the Applications and the EA. For visual impact, Benton Solar explained that it has been developing a visual screen for the Rua Mitchel Court NE area to address residents' concerns and has been engaging in ongoing conversations with those residents since January 2025. Benton Solar responded to concerns about property values by noting that its market impact analysis, Appendix H in the Joint Site Permit Application, concluded that the Project would not have a negative effect on property values. Benton Solar's response also directed commenters to information in the EA summarizing the research on the effects of large-scale solar projects on property values. In response to questions about well water, Benton Solar noted that it procures PV panels that have undergone the EPA's testing procedures to verify that the panels do not leach hazardous materials. In addition, the presence of the Solar Facility may improve groundwater quality, and by extension, well water quality, by reducing the amount of fertilizer used around the wells. For emergency response, Benton Solar explained that it has procedures in place to respond to a fire, including hiring a local site manager and having access to a 24/7 operations control room, and the BESS has design features that minimize the risk of such an event. Additionally, it has been coordinating with local emergency responders to provide training on responses to any potential BESS fires. In response to a comment about the potential for wildlife to be harmed by security fencing, Benton Solar noted that the fence is designed in compliance with MnDNR's wildlife friendly recommendations and will have smooth, high-tensile wire instead of barbed wire. Lastly, Benton Solar explained that construction would

²²⁶ Public Comment by St. Cloud Area of Commerce, Sept. 12, 2025, eDockets ID No. [20259-222987-01](#).

²²⁷ Comments by EIP, Sept. 16, 2025, eDockets ID No. [20259-223051-01](#). EIP's comments were originally filed on September 12, and then a corrected version was filed on September 16.

²²⁸ Public Comments by Mitchell Litfin, Sept. 11, 2025, eDockets ID No. [20259-223104-01](#).

likely result in 20-30 additional truck trips per day on local roads, but the additional traffic should not impact pedestrian safety.²²⁹

165. In addition, Benton Solar responded to written comments submitted by EIP staff, MnDNR and VMPWG. In response to EIP staff's comments about the decommissioning plan, Benton Solar indicated that it would provide the requested and recommended information in the pre-construction decommissioning plans as requested. In response to EIP's proposed special permit conditions, Benton Solar indicated it did not oppose the inclusion of the conditions. In response to MnDNR's comments and proposed special permit conditions, Benton Solar did not oppose any of the recommended permit conditions, agreed to coordinate with MnDNR on fencing, and would seek any applicable water appropriation permits as needed. Lastly, Benton Solar indicated that it appreciated VMPWG's insight into the VMP and would coordinate with VMPWG on the VMP.²³⁰

IX. ADEQUACY OF EA

166. The Commission is required to determine the adequacy of the EA. To be adequate, the EA must, among other things, address the issues and alternatives identified in the EA Scoping Decision.²³¹

167. EIP concluded that there were no alternatives identified during the EA Scoping Meetings or in the comments, and the Commission authorized EIP to limit its review to the Project identified in the Applications.²³²

168. None of the oral or written comments or the evidence in record call into question the adequacy of the EA.

169. The evidence in the record demonstrates that the EA is adequate because it addresses the issues raised in the EA Scoping Decision, provides responses to the substantive comments received during the scoping process, and was prepared in compliance with Minn. Stat. § 216E.04; Minn. R. 7850.2900 to 7850.3900.

X. CRITERIA FOR A SITE PERMIT

170. At the time Benton Solar filed its Joint Site Permit Application, large electric power facilities were governed by the Power Plant Siting Act ("PPSA") (Minn. Stat. Ch. 216E and Minn. R. part 7850). Pursuant to the notice from EIP and 2024 Minn. Laws Ch. 126, art. 7, sec. 16, the Joint Site Permit Application, which was filed prior to July 1, 2025, will continue to be reviewed under the PPSA.²³³

²²⁹ Response Comments by Benton Solar at 1-5, Sept. 26, 2025, eDockets ID No. _____ ("Response Comments").

²³⁰ Response Comments at 5-10.

²³¹ Minn. R. 7850.3700, subp. 3-4.

²³² Ex. 142 (Alternatives Identified During Scoping Comment Period); Ex. 144 (Order Limiting the Scope of the Environmental Assessment to Route Identified in the Route Application Permit); Ex. 145 (Order Limiting the Scope of the Environmental Assessment to Site Identified in the Site Application Permit).

²³³ Ex. PUC-267 (Notice of Legislation Changes).

171. Under the PPSA, “[L]arge electric power facilities” include both “large electric power generating plant[s],” defined as “electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more” and “energy storage system[s],” defined as “equipment and associated facilities designed with a nameplate capacity of 10,000 kilowatts or more that is capable of storing generated electricity for a period of time and delivering the electricity for use after storage.”²³⁴

172. No person can construct a large electric power facility without a site permit from the Commission.²³⁵ Because the Solar Facility and the BESS are both large electric power facilities, they each require a site permit from the Commission.

173. The Commission’s rules establish two tracks for permitting large electric power facilities: the full permitting process and the alternative permitting process.²³⁶ Large electric power facilities powered by solar energy and energy storage systems are eligible for the alternative permitting process.²³⁷

174. On August 20, 2024, Benton Solar filed a notice that it intended to utilize the alternative permitting process.²³⁸

175. Under the alternative process, EIP prepares for the Commission an environmental assessment containing information on the human and environmental impacts of the proposed project and addresses mitigating measures. The environmental assessment is the only state environmental review document required to be prepared on the Project.²³⁹

176. When deciding whether to issue a site permit for a solar energy facility or an energy storage system, the Commission’s decision is to be “be guided by the state’s goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state’s electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.”²⁴⁰ To that end, the Commission considers factors set forth in Minn. Stat. § 216E.03, subd. 7, which states that the Commission’s decision should be guided, but not limited to:

- A. evaluation of research and investigations relating to the effects on land, water and air resources of large electric power facilities and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing

²³⁴ Minn. Stat. § 216E.01.

²³⁵ Minn. Stat. § 216E.03, subd. 2.

²³⁶ Minn. Stat. §§ 216E.03 and 216E.04; Minn. R. 7850.1700–.2700 (full permitting procedures); Minn. R. 7850.2900–7850.3900 (alternative permitting procedures).

²³⁷ Minn. Stat. § 216E.04, subd. 2.

²³⁸ Ex. 100 (Notice of Intent to Submit a Site Permit Application and Route Permit Application under the Alternative Process).

²³⁹ Minn. Stat. § 216E.04, subd. 5.

²⁴⁰ Minn. Stat. § 216E.03, subd. 7.

adverse impacts of water and air discharges and other matters pertaining to the effects of powerplants on the water and air environment;

- B. 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;
- C. evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
- D. evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;
- E. analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
- F. evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
- G. evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;
- H. evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;
- I. evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
- J. evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;
- K. evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved;
- L. when appropriate, consideration of problems raised by other state and federal agencies and local entities;
- M. 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;

- N. evaluation of the proposed facility's impact on socioeconomic factors; and
- O. 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.

177. Consistent with the statute, Minn. R. 7850.4100(A)-(N), establishes criteria for the Commission to consider in determining whether to issue a permit for large electric power facilities:

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;
- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and

N. irreversible and irretrievable commitments of resources.

178. The Commission must also consider whether the applicant has complied with all applicable procedural requirements.²⁴¹

179. The Commission's rules require the applicant to provide information regarding any potential impacts of the proposed Project, potential mitigation measures, and any adverse effects that cannot be avoided as part of the application process.

180. There is sufficient evidence in the record for the ALJ to assess the proposed Site using the criteria set out above.

XI. APPLICATION OF SITING CRITERIA TO THE PROJECT

A. Human Settlement

1. Displacement

181. Displacement can occur when residences or other buildings are located within a proposed site. There are no residences, businesses, or structures such as barns or sheds located within the Preliminary Development Area, and none will be displaced by the Project.²⁴²

182. Accordingly, the record shows that no residences will be displaced and no mitigation is proposed.

2. Noise

183. The Solar Facility and the BESS are subject to sound level requirements in Minn. R. Ch. 7030 for Noise Pollution Control. These rules are enforced by Minnesota Pollution Control Agency through the use of Noise Area Classifications ("NAC") that are defined in Minn. R. 7030.0050, subp. 2 in terms of land use. The sound standards for each NAC are defined in Minn. R. 7030.0040, subp. 2.

184. Noise is measured on a logarithmic scale in units of decibels. The A-weighted decibel scale ("dBA") is used to reflect the selective sensitivity of human hearing. Humans can detect sound changes of 3 dBA, with a significant change noticeable at 5 dBA.²⁴³

185. The proposed Project is in a rural, agriculturally dominated area. The primary noise receptors are the local residences and potentially include individuals working outside in the Project's vicinity. Rural residential areas were assumed to have an ambient daytime noise level of 40 dBA and an ambient nighttime noise level of 38 dBA. Residences are in NAC 1.²⁴⁴

²⁴¹ Minn. R. 7854.1000, subp. 3.

²⁴² Ex. 102 at 42 (SPA); *see also* Ex. 156 at 34 (EA).

²⁴³ Ex. 156 at 44 (EA); *see also* Ex. 102 at 42 (SPA).

²⁴⁴ Ex. 156 at 45-46 (EA).

186. During construction, there will be temporary, moderate to significant noise limited to daytime hours. Sound levels from grading equipment are not dissimilar from the typical tractors and larger trucks used in agricultural communities during harvest. Pile driving of the rack supports will be the most significant source of construction noise.²⁴⁵

187. During operation, the primary sources of sound from the Solar Facility and the BESS will be the solar inverters, BESS inverters, BESS containers, and the substation step-up transformer. Noise levels are expected to be constant throughout the day and, although still constant, lower during non-daylight hours. The noise levels have the potential to be moderate, but are expected to be minimal with mitigation.²⁴⁶

188. Benton Solar conducted a noise study for 549 receptors at 5 feet above ground level and under the assumption that all noise sources were being operated simultaneously at their maximum sound level. The study also assumed mitigation measures including barrier walls around BESS equipment. The study effectively measured the greatest possible sound level from the Solar Facility and the BESS.²⁴⁷

189. The study concluded that for residential areas, there is an expected maximum noise level of 45 dBA during the night for a resident along the northwestern border of the Project. This is under the daytime L₅₀ dBA noise standard of 60 dBA and under the nighttime standard of 50 dBA. This study was conducted under the assumption that several mitigations were implemented, such as attenuation/silencer kits for the inverters and sound walls around the BESS.²⁴⁸

190. The noise levels will be mitigated. During construction, Benton Solar will limit activities to daylight hours as well as the use of sound control devices on vehicles and equipment.²⁴⁹ During operation, noise will be mitigated through various potential noise mitigation features, including noise attenuation kits for BESS inverters and silencers for battery containers,²⁵⁰ depending on the ultimate Project equipment selection.²⁵¹

191. Sections 4.3.7 and 5.2 of the Solar Facility DSP and BESS DSP require compliance with noise standards and place limits on construction and maintenance activities to daylight hours. No other mitigation is proposed.²⁵²

192. Accordingly, the record indicates that the Solar Facility and the BESS have been designed to meet the applicable noise standards and minimize sound levels.

²⁴⁵ *Id.* at 46; *see also* Ex. 102 at 44 (SPA).

²⁴⁶ Ex. 156 at 46 (EA); *see also* Ex. 102 at 44-45 (SPA).

²⁴⁷ Ex. 102 at 45-46 (SPA); Ex. 154 at 10-11 (MacDonald Direct).

²⁴⁸ Ex. 156 at 46 (EA); Ex. 102 at 45-46 (SPA); Ex. 154 at 10-11 (MacDonald Direct).

²⁴⁹ Ex. 156 at 47 (EA); *see also* Ex. 102 at 44 (SPA).

²⁵⁰ Ex. 102 at 45 (SPA).

²⁵¹ *Id.*; *see also* Ex. 156 at 46 (EA).

²⁵² Ex. 156 at 47 (EA).

3. *Aesthetics*

193. Aesthetics refers to the visual quality of an area as perceived by the viewer and forms the impression a viewer has of an area. Aesthetics are subjective, meaning their relative value depends upon the perception and philosophical or psychological responses unique to individuals. Impacts to aesthetics are equally subjective and depend upon the sensitivity and exposure of an individual. How an individual values aesthetics, as well as perceived impacts to a viewshed, can vary greatly.²⁵³

194. A viewshed includes the natural landscape and built features visible from a specific location. Natural landscapes can include wetlands, surface waters, distinctive landforms, and vegetation patterns. Buildings, roads, bridges, and power lines are examples of built features.²⁵⁴

195. Viewers' exposure to a viewshed has several variables including frequency and duration of views, and view location. For example, a high exposure viewshed would be observed frequently by large numbers of people. These variables, as well as other factors such as viewing angle or time of day, affect the aesthetic impact.²⁵⁵

196. The existing landscape of in the vicinity of the Project is rural and agricultural consisting of generally flat terrain, dominated by agricultural crop fields of corn, soybeans, and vegetables, with the surrounding area also supporting a variety of woodlands, wetlands, and drainages. The built environment in the Project Area includes existing transmission lines. Residences and farmsteads are scattered around the nearby landscape.²⁵⁶

197. The Solar Facility and the BESS will be a noticeable change in the landscape, converting approximately 951.4 acres of agricultural fields into solar production. The visible elements of the Solar Facility will consist of new PV panel arrays, transformers and inverters, a BESS, weather stations, a new substation, and security fencing surrounding the Project. Panels will have a relatively low profile, with a maximum height of 20 feet off the ground at maximum tilt.²⁵⁷

198. For residents outside the vicinity of the Solar Facility and for others with low viewer sensitivity, such as travelers along State Highways 23 and 95, aesthetic impacts are anticipated to be minimal. For these viewers, the PV panels would be relatively difficult to see due to fencing and vegetation or would be visible for a very short period.²⁵⁸

199. For residents in the vicinity of the Solar Facility and the BESS and for others with high viewer sensitivity living on or traveling on local roads in the Project vicinity, aesthetic impacts are anticipated to be moderate to significant.²⁵⁹

²⁵³ *Id.* at 36.

²⁵⁴ *Id.* at 35.

²⁵⁵ *Id.*

²⁵⁶ *Id.* at 35-36; *see also* Ex. 102 at 47 (SPA).

²⁵⁷ Ex. 156 at 36-37 (EA).

²⁵⁸ *Id.* at 37.

²⁵⁹ *Id.* at 36-37.

200. Minimizing aesthetic impacts from solar generating facilities and transmission lines is primarily accomplished by locating the facilities so that they are not immediately adjacent to homes, ensuring that damage to natural landscapes during construction is minimized, and shielding the facilities from view by terrain or vegetation. Impacts from facility lighting can be minimized by using shielded and downward facing light fixtures and using lights that minimize blue hue.²⁶⁰

201. EIP recommended the inclusion of a special permit condition requiring visual screening and that Benton Solar document coordination with landowners adjacent to the Site in developing the visual screening plan.²⁶¹

202. Benton Solar will implement best management practices (“BMPs”) to minimize the impact the Solar Facility and the BESS could have on existing scenic integrity. The Solar Facility and the BESS will be designed and sited to minimize visual impacts.²⁶²

203. Additionally, Benton Solar has been and will continue coordinating with landowners at Rua Mitchel Court to mitigate visual impacts of the Solar Facility and the BESS for residents located near the eastern edge of the Site.²⁶³ Benton Solar agreed to the proposed permit special condition requiring the development of a visual screening plan in coordination with local residents.²⁶⁴

204. The record demonstrates that Benton Solar has taken steps to avoid and minimize aesthetic impacts.

205. Further, Sections 4.3.8 and 5.1 of the Solar Facility DSP and BESS DSP address potential visual impacts.

206. No further mitigation is needed.

4. *Property Values*

207. Impacts to property values can be measured in three ways: sale price, sales volume, and marketing time. These measures are influenced by a complex interaction of factors, including the presence of a solar facility. Property values are assessed by professional property appraisers who assess a property’s value by looking at the property after a project has been constructed. Since the assessor does not take the before and after into account in the same way a landowner might, the property value may not address the fear and anxiety felt by landowners facing the potential for negative impacts to their property’s value.²⁶⁵

208. Generally, electrical generating facilities can impact property values. Often, negative effects result from impacts that extend beyond the project location. Examples include emissions, noise, and visual impacts. Unlike fossil-fueled electric generating facilities, the

²⁶⁰ *Id.* at 37.

²⁶¹ *Id.* at Solar Facility DSP Condition 5.1.

²⁶² Ex. 102 at 52 (SPA).

²⁶³ Response Comments at 1-2; Ex. 155 at 13 (Gracia Direct).

²⁶⁴ Response Comments at 7.

²⁶⁵ Ex. 156 at 48 (EA).

Solar Facility and the BESS would not generate emissions. Potential impacts from operational noise of the Solar Facility and the BESS are to be mitigated. Aesthetic impacts will occur, but because the Project is relatively low in height—as compared to a wind turbine or a smokestack—impacts would be localized.²⁶⁶

209. Impacts to the value of specific properties within the Project vicinity are difficult to determine because there is limited information available about the effects, but energy infrastructure could affect property values. Benton Solar conducted a Market Impact Analysis on property values that concluded that there was no market data suggesting that the Project will have a negative impact on rural residential or agricultural property values in the surrounding area.²⁶⁷ A nationwide study found no uniform change to property values due to solar facilities being cited within 0.5 miles of the property.²⁶⁸ Other studies with smaller sample sizes also did not find a consistent negative impact on sale values for properties near large solar facilities.²⁶⁹ One study in Minnesota found a 4 percent reduction for home sale prices when located within 0.5 miles of a large-scale solar facility.²⁷⁰ The study did not include consideration of site features or site design, for example setbacks or landscaping features, which could play a role in nearby property valuation.²⁷¹

210. For Benton Solar, impacts to the value of specific properties within the Project Area are difficult to determine but could occur. Considerations such as setbacks, benefits to the community, economic impact, and vegetative screening could have an unpredictable range of influence over property value. Several, but not all, of the closest residents have some screening from the Solar Facility and the BESS.²⁷²

211. Based on the analysis of other utility-scale solar projects, minimal to moderate property value impacts could occur, but significant negative impacts to property values in the Project Area are not anticipated. To the extent that negative impacts do occur they are expected to be within 0.5 miles of the Solar Facility and to decrease with distance from the Solar Facility and the BESS and with time.²⁷³

212. Impacts to property values can be mitigated by reducing aesthetic impacts and impacts to future land use. Impacts can also be mitigated through individual agreements with neighboring landowners, such as creating a vegetation screening plan.²⁷⁴

213. Additionally, as noted above, Benton Solar has been and will continue coordinating with residents of Rua Mitchel Court to develop a screening plan.²⁷⁵

²⁶⁶ *Id.* at 48.

²⁶⁷ Ex. 108 (Appendix H – Market Impact Analysis); Ex. 155 at 13 (Gracia Direct).

²⁶⁸ Ex. 156 at 48 (EA).

²⁶⁹ *Id.* at 48-49.

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.* at 49.

²⁷³ *Id.*

²⁷⁴ *Id.*

²⁷⁵ Response Comments at 1-2; Ex. 155 at 13 (Gracia Direct).

214. Further, Section 5.1 of the Solar Facility DSP and BESS DSP require the development of a visual screening plan for affected landowners.²⁷⁶

215. Accordingly, the record indicates that the Project will appropriately mitigate any impacts to property values.

5. *Socioeconomic Considerations*

216. A project can affect socioeconomic indicators in a region including employment opportunities and income.²⁷⁷

217. In Minden Township, the percentage of individuals living at or below the poverty level (1.4 percent) is less than the state average (9.2 percent).²⁷⁸ In Benton County, the percentage of individuals living at or below the poverty level (13.7 percent) is higher than the state average of (9.3 percent).²⁷⁹

218. Educational services, health care, and social assistance make up 23.5 percent of the civilian employed population 16 years or older in Minden Township, followed by transportation, warehousing, and utilities (12.9 percent); manufacturing (11.2 percent); and construction (10.9 percent). Educational services, health care, and social assistance make up 27.8 percent of the civilian employed population 16 years or older in Benton County, followed by manufacturing (15.2 percent) and retail trade (12.0 percent).²⁸⁰

219. The impact intensity level of the Project is anticipated to be positive. Potential impacts associated with construction will be positive, but minimal and short-term. Significant positive effects might occur for individuals. Impacts from operation will be long-term, positive, and moderate. The Project will not disrupt local communities or businesses and does not disproportionately impact low-income or minority populations. Adverse impacts are not anticipated.

220. Construction and operation of the Project is anticipated to have a minimal to significant and positive effect on the socioeconomics of Benton County based on expenditures during construction, wages, and tax revenue.²⁸¹ During construction, the Solar Facility and the BESS likely will result in increased expenditures for lodging, food and fuel, transportation, and general supplies at local businesses during construction.²⁸²

221. In addition, construction of the Project will require approximately 150-300 workers, creating employment opportunities and likely resulting in additional economic activity due to wages paid to laborers constructing the Project.²⁸³

²⁷⁶ Ex. 156 at 49 (EA).

²⁷⁷ Ex. 102 at 52 (SPA).

²⁷⁸ *Id.* at 54.

²⁷⁹ Ex. 156 at 51 (EA).

²⁸⁰ Ex. 102 at 54 (SPA).

²⁸¹ Ex. 156 at 50 (EA); *see also* Ex. 102 at 55-56 (SPA).

²⁸² Ex. 156 at 51 (EA); Ex. 155 at 8:6 (Gracia Direct).

²⁸³ Ex. 156 at 51 (EA); *see also* Ex. 102 at 55-56 (SPA).

222. Testimony from witnesses for Benton Solar and LIUNA indicate that the economic benefit to Benton County will be higher if Benton Solar's Project is constructed with a higher percentage of local labor.²⁸⁴ The testimony is also consistent with the conclusions in the EA.²⁸⁵

223. LIUNA filed testimony expressing concern that the Project may not be constructed using a significant amount of local labor based on the use of local labor by other NEER subsidiaries in North Dakota.²⁸⁶

224. However, Benton Solar has committed, in a letter filed on the docket and in response to several public comments, to utilizing an EPC contractor to construct the Project who will utilize union labor.²⁸⁷ Further, based on testimony in the record, utilization of union labor is strongly correlated with significant utilization of a local workforce.²⁸⁸ Moreover, Benton Solar's EPC contractor has already executed a Project-specific PLA with unions including LIUNA that ensures the Project will utilize union and local workers. Additionally, Benton Solar provided testimony that the other projects constructed by NEER subsidiaries in Minnesota have utilized a significant amount of local labor.²⁸⁹

225. Based on the evidence in the record, Benton Solar will be constructed with a significant amount of local labor, which will have direct and indirect positive economic impacts in Benton County and the region around the Project. There is sufficient evidence in the record that Benton Solar has committed to having its EPC utilize union labor, that the use of union labor will result in the use of local labor, and that the EPC has agreements with unions to staff the construction jobs for the Project.

226. Following construction, the operation of the Project will continue to provide economic benefits to the region, including through wages.²⁹⁰

227. Additionally, Benton Solar will increase the local tax revenue by providing approximately \$200,000 to Benton County and \$50,000 to Minden Township annually.²⁹¹ Based on prior expenditures of Benton County and Minden Township, the increase in revenue

²⁸⁴ Ex. 162 at 1-2, Schedule 1 (Gracia Rebuttal) (describing the economic benefits associated with construction of the Project); Ex. 408 (Franco Direct Attachment A) (noting the increased local spending of local labor); Ex. 412 at 4:10-30 (Cortina Direct). Consistent with Minnesota law, the Findings of Fact and Conclusions of Law defines local to include workers who reside within 150 miles of the Project. Minn. Stat. § 216B.2422.

²⁸⁵ Ex. 156 at 52 (EA).

²⁸⁶ Ex. 408 at 11 (Franco Direct Attachment A); Ex. 412 at 8-10 (Cortina Direct); Ex. 413 at 6-8 (Franco Direct).

²⁸⁷ Sauk Rapids 6:00 p.m. Tr. at 55-56 (Jan. 14, 2025); Remote Access 6:00 p.m. Tr. at 36 (Jan. 15, 2025); Ex. 143 at 12, Attachment 1 (Benton Solar Response to Scoping Comments); Ex. 155 at 8:21-9:4 (Gracia Direct); Ex. 165 at 2-3 (Gracia Surrebuttal); Ex. 153 at 16:5-9 (Bass Direct).

²⁸⁸ Ex. 156 at 52 (EA); *see also* Ex. 162 at 7:1-6 (Gracia Rebuttal) (explaining that projects built with union labor rely on union halls to staff the project, which typically results in a large percentage of local workers). *See also* Ex. 413 at 4:14 (Direct Testimony of Lucas Franco) ("Use of union labor helps to maximize local labor content...."); Ex. 408 at 8 (Franco Direct Attachment A).

²⁸⁹ Ex. 162 at 6-7 (Gracia Rebuttal).

²⁹⁰ *Id.* at Schedule 1.

²⁹¹ Ex. 156 at 53 (EA). *See also* Ex. 102 at 56 (SPA); Ex. 155 at 7:10-15 (Gracia Direct).

would represent modest beneficial impact to the County over the life of the Project, while the increase in revenue to Minden Township would be significant.²⁹²

228. The record shows that, overall, the Solar Facility and the BESS will have a positive impact on the socioeconomics of the region by increasing employment opportunities, stimulating economic activity, and providing additional tax revenue.²⁹³ Any adverse socioeconomic from the loss of agricultural land and income will be mitigated through lease payments to landowners over the lifespan of the Project.²⁹⁴

229. The Site is not within a census tract which Minnesota statute deems an environmental justice area. Therefore, disproportionate and adverse impacts to these populations are not expected, and mitigation is not proposed. Additionally, the Project Area is not within Indian Country as that term is defined in 18 U.S. C. 1151.²⁹⁵

230. Accordingly, the record shows that the Solar Facility and the BESS are expected to have positive socioeconomic impacts, including significant local employment opportunities. No mitigation is required.

6. *Cultural Values*

231. Cultural values can be defined as shared community beliefs or attitudes that define what is collectively important to the group. These values provide a framework for individuals and community thought and action. Infrastructure projects believed inconsistent with these values can deteriorate community character. Those found consistent with these values can strengthen it. Projects often invoke varying reactions and can, at times, weaken community unity.²⁹⁶

232. Individual and community-based renewable energy is becoming more valued across the nation. Utility-scale renewable projects—generally located far from load centers in rural areas—are also valued, but, at times, opposed by residents. The highly visible, industrial look and feel of these projects can erode the rural feeling that is part of a residents' sense of place.²⁹⁷

233. Cultural values can be informed by ethnic heritage. Residents of Benton County derive primarily from European ancestry, nearly half being German. Cultural values are also informed by work and leisure pursuits, for example, farming and snowmobiling, as well as land use, such as agricultural cropland. Many seasonal events are held in the surrounding area, such as the Benton County Fair held every August in Sauk Rapids to the west of the Site. Additionally, Sauk Rapids River Days is held in the area in June every year.

²⁹² Ex. 102 at 56 (SPA); Ex. 155 at 7 (Gracia Direct).

²⁹³ Ex. 156 at 51 (EA).

²⁹⁴ *Id.* at 53.

²⁹⁵ *Id.* at 41.

²⁹⁶ *Id.* at 38.

²⁹⁷ *Id.* at 38.

An annual spring pow wow is held in collaboration with the American Indian Center in St. Cloud as well.²⁹⁸

234. Benton Solar also identified annual community events, including live music, carnival rides and pow wows, as cultural practices in the region.²⁹⁹

235. The Solar Facility and the BESS contribute to the growth of renewable energy and are likely to strengthen and reinforce this value in the area. At the same time, the development of the Project will change the character of the area. The value residents put on the character of the landscape within which they live is subjective, meaning its relative value depends upon the perception and philosophical or psychological responses unique to individuals. Because of this, construction of the Project might—for some residents—change their perception of the area’s character thus potentially eroding their sense of place.³⁰⁰

236. The record shows that public sentiment in the Project area is mixed. Some members of the public expressed concern about the visual impact of the Solar Facility³⁰¹ and property values.³⁰² Other members of the public expressed support for the Project because of its ability to provide additional tax revenue, homegrown energy, and the rights of property owners to use their property.³⁰³ One participating landowner noted that the Solar Facility and the BESS were a good use of his property, which has hilly and sandy conditions that are not conducive to agriculture and that participation in the Project would prevent his land from being subdivided and further developed.³⁰⁴

237. Benton Solar does not anticipate that construction or operation of the Solar Facility and the BESS will affect or alter community or the annual cultural events conducted in the region surrounding the Project.³⁰⁵ Benton Solar is also coordinating with affected residents to develop a visual screening plan.³⁰⁶ But, as the EA notes, the Solar Facility and the BESS will change the character of the area.³⁰⁷

238. Accordingly, the record indicates that the Solar Facility and the BESS are designed to minimize impacts to cultural values, and no additional mitigation is required.

²⁹⁸ *Id.*; see also Ex. 102 at 59 (SPA).

²⁹⁹ Ex. 102 at 59 (SPA).

³⁰⁰ Ex. 156 at 38-39 (EA).

³⁰¹ Sauk Rapids 6:00 pm Tr. at 42-45, 49-52, 64-65, 75-82 (Jan. 14, 2025) (Reed, Odenthal, M. Litfin, J. Litfin); Ex. 140 (Written Public Comments on the Scope of the Environmental Assessment); Ex. PUC-272 (Public Comment of Benton County); Sauk Rapids 6:00 pm Tr. at 29-31, 33, 36-40, 41 (Aug. 27, 2025) (Reed, Cronquist, Litfin, Herbst, Benoit); Public Comments by Jaclyn Litfin, Sept. 12, 2025, eDockets ID No. [20259-223005-01](#).
³⁰² Sauk Rapids 6:00 p.m. Tr. at 45-49, 55 (Sell, Reed) (Jan. 14, 2025); Sauk Rapids 6:00 pm Tr. at 33 (Aug. 27, 2025) (Cronquist); Ex. 140 (Written Public Comments on the Scope of the Environmental Assessment).

³⁰³ Ex. 140 (Written Public Comments on the Scope of the Environmental Assessment); Remote Access 6:00 p.m. Tr. at 26-36, 37-39 (Stucky, Mast, Othoudt, Hageman, Svihel) (Aug. 26, 2025); Sauk Rapids 6:00 p.m. Tr. at 25-29 (Geislinger, Adelman, Bauerly); Public Comments by Gerry Gobel, Sept. 2, 2025, eDockets ID No. [20259-222801-01](#).

³⁰⁴ Remote Access 6:00 p.m. Tr. at 37-39 (Aug. 26, 2025) (Svihel).

³⁰⁵ Ex. 156 at 38-39 (EA); see also Ex. 102 at 59 (SPA).

³⁰⁶ Response Comments at 1-2; Ex. 155 at 13 (Garcia Direct).

³⁰⁷ Ex. 156 at 38-39 (EA).

7. *Recreation*

239. Recreational activities in the area include snowmobiling, snowshoeing, biking, and hiking. Impacts to recreation can be direct or indirect. Direct impacts are impacts that directly impede the use of a recreational resource, for example, closing of a trail to facilitate project construction. Indirect impacts reduce the enjoyment of recreational resources but do not prevent use, for example, aesthetic impacts visible from a scenic overlook.³⁰⁸

240. The Site does not overlap any public conservation easements, officially designated wilderness areas, scientific or natural areas, wildlife management areas, or national wildlife refuges. Benton Solar identified a range of recreational activities within five miles of the Project, including parks, lakes, golf courses and natural areas.³⁰⁹ Additionally, a snowmobile trail (Trail No. 87), maintained by the Benton County Snowmobile Club, runs through the Site, and the Site overlaps a portion of the Sherburne Sands Conservation Opportunity Area.³¹⁰

241. Impacts to recreation are anticipated to be minimal and temporary. During construction, there may be temporary effects from traffic and noise as well as some restrictions on the use of a portion of the Elk River.³¹¹ Additionally, impacts to the Sherburne Sands Conversation Opportunity Area are anticipated to be negligible because there are no current conservation projects within the portion of the Site that overlaps the Sherburne Sands Conversation Opportunity Area.

242. For Trail No. 87, there will be short term effects while Benton Solar coordinates with landowners and the County to reroute the trail.³¹²

243. Section 5.3 of the Solar Facility DSP and BESS DSP is a special condition requiring coordination with property parties to reroute Trail No. 87. Benton Solar did not object to the condition.³¹³ Impacts to other recreational activities are anticipated to be negligible and do not require mitigation.

8. *Public Services and Infrastructure*

244. Public services are those services that are provided to citizens by a local, state, or federal government entity, including services that support public health and safety such as waste and wastewater management, electric and other utilities, transportation infrastructure, pipelines, and railroads.³¹⁴

³⁰⁸ *Id.* at 50.

³⁰⁹ Ex. 102 at 59-61 (SPA).

³¹⁰ Ex. 156 at 50 (EA).

³¹¹ *Id.*; *see also* Ex. 102 at 62 (SPA).

³¹² Ex. 156 at 50 (EA); *see also* Ex. 102 at 62 (SPA).

³¹³ Response Comments at 7.

³¹⁴ Ex. 156 at 53 (EA); *see also* Ex. 102 at 62-63 (SPA).

245. *Water and Wastewater:* Water and wastewater in the area are managed through private wells and septic systems. Benton Solar does not anticipate impacts to water or wastewater.³¹⁵

246. *Electric Utilities:* There is an existing transmission line in the Site from the primary electric provider, and there may be underground utilities. Benton Solar will coordinate with the owner of the transmission line and Gopher One Call to avoid any impacts to the transmission line or underground utility facilities during construction.³¹⁶

247. *Transportation:* There are approximately eight major roads near the Site.³¹⁷ During construction, Benton Solar anticipates increased traffic, approximately 20-30 trucks per day, on the highway and local and county roadways. The increase will be perceptible to area residents and may cause delays on some roads. The impacts will be minimal for the relatively short construction delivery period.³¹⁸

248. *Railroad:* There is an active railroad track about 3.9 miles southwest of the Site.³¹⁹ No impacts to railroads are anticipated.³²⁰

249. *Pipelines:* There are no pipelines in the Site or within one mile of the Site. No impacts to pipelines are anticipated.³²¹

250. *Airports:* There are two airports within ten miles of the Site. No impacts to airports are anticipated, given the Project's distance from the nearest airport.³²²

9. *Land Use and Zoning*

251. Although a site permit issued by the Commission supersedes local zoning, building, or land use controls, the Commission's site permit decision must be guided by consideration of impacts to local zoning and land use consistent with the legislative direction to minimize human settlement and other land use conflicts.³²³

252. The Solar Facility and the BESS will occupy land designated as Laurentian Mixed Forest Province and the Eastern Broadleaf Forest Province, but the area and land cover in the Project Area is dominated by cultivated agriculture and hay/pastureland, with scattered forested area and developed areas around farmsteads.³²⁴

³¹⁵ Ex. 156 at 54 (EA); *see also* Ex. 102 at 63 (SPA).

³¹⁶ Ex. 156 at 54 (EA); *see also* Ex. 102 at 63 (SPA).

³¹⁷ Ex. 156 at 54 (EA); *see also* Ex. 102 at 63-65 (SPA).

³¹⁸ Ex. 156 at 54-55 (EA); *see also* Ex. 102 at 65 (SPA).

³¹⁹ Ex. 156 at 54 (EA); *see also* Ex. 102 at 65 (SPA).

³²⁰ Ex. 156 at 55 (EA).

³²¹ *Id.* at 53-54; *see also* Ex. 102 at 63 (SPA).

³²² Ex. 156 at 54-55 (EA). *See also* Ex. 102 at 65 (SPA); Ex. 153 at 18 (Bass Direct).

³²³ Minn. Stat. §§ 216E.03, subd. 7, 216E.10, subd. 1.

³²⁴ Ex. 156 at 41-42 (EA).

253. Generally, the Benton County 2040 Comprehensive Plan encourages businesses and residents to utilize clean energy, including solar power, in permitted areas.³²⁵ The Site is in an agricultural zone under Benton County development code and is located in an annexation area.³²⁶ The long-term plan for the annexation area is office/business park and low density mixed residential land use.³²⁷

254. Development of the Solar Facility will temporarily change the land use from predominantly agricultural uses to energy generation for the life of the Project. The change of land use will have a minimal to moderate impact on the rural character of the surrounding area, and a minimal impact on the county character as a whole. Although the land is being converted from primarily agricultural to be used for energy production, the land use is consistent, in part, with other infrastructure in the area such as existing transmission lines.³²⁸

255. Sections 9 and 9.2 of the Solar Facility DSP and BESS DSP require decommissioning and include a requirement for the permittee to restore the land following decommissioning. Additionally, Benton Solar will follow an Agricultural Impact Mitigation Plan (“AIMP”) to ensure that agricultural land can be restored to its original condition to grow crops again.³²⁹

256. Accordingly, the record demonstrates that no additional mitigation is required.

B. Public Health and Safety

1. EMF

257. EMF are invisible forces that result from the presence of electricity including from natural sources and electrical devices, such as household objects. The strength of an electric field decreases rapidly as it travels from the conductor and is easily shielded or weakened by most objects and materials.³³⁰

258. There have been several studies over the years assessing the association between EMF and human health. In 2002, the Minnesota State Interagency Working Group on EMF Issues, comprised of staff from state agencies, boards, and Commission studied EMF and concluded: “the current body of evidence is insufficient to establish a cause and effect relationship between EMF and adverse health effects. However, as with many other environmental health issues, the possibility of a health risk cannot be dismissed.”³³¹

³²⁵ Ex. 102 at 68 (SPA).

³²⁶ Ex. 156 at 42-43 (EA); *see also* Ex. 102 at 66 (SPA).

³²⁷ Ex. 102 at 68 (SPA).

³²⁸ *Id.*; Ex. 156 at 43 (EA).

³²⁹ Ex. 156 at 44 (EA); *see also* Ex. 102 at 68 (SPA).

³³⁰ Ex. 156 at 56-58 (EA).

³³¹ *Id.* at 58 (quoting Minnesota Interagency Working Group on EMF Issues, A White Paper on Electric and Magnetic Field Policy and Mitigation Options, (2002), <https://apps.commerce.state.mn.us/eera/web/project-file?legacyPath=/opt/documents/EMF%20White%20Paper%20-%20MN%20Workgroup%20Sep%202002.pdf>).

259. The primary sources of EMF from the Solar Facility and the BESS will be from the PV panels, buried electrical collection lines, and the transformers installed at each inverter. The EMF generated by PV panels is at the level generally experienced near common household appliances. Measured magnetic fields at utility-scale PV projects drop to very low levels of 0.5 milligauss (“mG”) or less at distances of 150 feet from inverters.³³² As a result, Benton Solar anticipates that any EMF from the Solar Facility and the BESS would dissipate to acceptable background levels before reaching any residence.³³³ Potential impacts are anticipated to be negligible and are not expected to negatively affect human health. Impacts will be long-term and localized but can be minimized. Because the nearest solar array is located approximately 315 feet from the nearest residence, EMF will dissipate to background levels before they reach any residences. No additional mitigation is needed.³³⁴

260. Stray voltage is voltage caused by an electric current in the earth, or in groundwater, resulting from the grounding of electrical equipment or an electrical distribution system. Stray voltage encompasses two phenomena: neutral-to-earth voltage (“NEV”) and induced voltage.³³⁵ NEV can occur where distribution lines enter structures and can be experienced by livestock that come into contact with one or more metal objects.³³⁶ Whether and what livestock experience is influenced by a number of factors including the ground is wet or dry.³³⁷ Induced voltage extends from transmission lines to nearby conductive objects.³³⁸

261. All electrical components in the Solar Facility and the BESS, including inverters and transformers, would be grounded in accordance with the National Electrical Safety Code (“NESC”). Constructing the Project to NESC standards would mitigate stray voltage concerns. Therefore, no impacts from stray voltage are anticipated.³³⁹

2. *Public Safety and Emergencies*

262. During construction, there may be an increased risk of injuries related to construction activities and the potential for injuries due to unauthorized entry into the facility. As a result, there may be a short-term increase in the demand on emergency services.³⁴⁰

263. The construction work will be bound by state and federal safety regulations and established industry safety procedures. Benton Solar will fence and lock the Solar Facility and the BESS to prevent unauthorized access. The Project will be designed and constructed in compliance with applicable electric codes. Electrical inspections will ensure proper

³³² *Id.* at 59.

³³³ Ex. 102 at 46 (SPA); Ex. 153 at 17 (Bass Direct).

³³⁴ Ex. 156 at 59 (EA).

³³⁵ *Id.* at 60.

³³⁶ *Id.*

³³⁷ *Id.*

³³⁸ *Id.* at 61

³³⁹ *Id.* at 60-61.

³⁴⁰ *Id.* at 63-64 (EA); *see also* Ex. 102 at 41-42 (SPA).

installation of all components, and the Project will undergo routine inspection. Electrical work will be completed by trained technicians.³⁴¹

264. Additionally, several members of the public expressed concerns about the potential for fire at the BESS and the potential effect on the community and local emergency responders.³⁴² Benton Solar provided responses and testimony indicating that the BESS has been designed to implement significant safety features, including a containerized system with multiple layers of separation between battery cells and racks of cells, battery management systems, and remote monitoring to mitigate risk.³⁴³

265. In addition to safety features inherent in the design, Benton Solar has also developed an emergency response plan in coordination with local emergency services that prioritizes the safety of residents, surrounding structures, and emergency responders. Benton Solar has provided training to local emergency responders on the plan and how to respond to an emergency at the BESS.³⁴⁴

266. Sections 4.3.30, 8.12, and 8.13 of the Solar Facility DSP and Sections 4.3.27, 8.11, and 8.12 of the BESS DSP address public safety and emergency response requirements. No additional mitigation is proposed.³⁴⁵

C. Land-Based Economies

267. Minnesota law requires consideration of the Project's potential effect on land-based economies—specifically, agriculture, forestry, tourism, and mining.³⁴⁶

1. Agricultural

268. Most of the land use in the Site and the Preliminary Development Area is agricultural land with cultivated crops.³⁴⁷ Benton Solar designed the Site to minimize the disturbances to prime farmland.³⁴⁸ Approximately 0.7 percent of the Preliminary Development Area is designated as prime farmland (4.6 acres), 0.9 percent is designated as prime farmland if drained (5.9 acres), 51.6 percent is designated as farmland of statewide importance (326.2 acres), and 46.7 percent is designated as not prime farmland (295.2 acres).

269. As a result, the Solar Facility and the BESS will remove approximately 628 acres of agricultural land from production for the life of the Project and convert it to solar energy production. The majority of the 628 acres will be planted with the array seed mix. This

³⁴¹ Ex. 156 at 64 (EA).

³⁴² Sauk Rapids 6:00 p.m. Tr. at 46-47, 58-60, 65 (Sell, Odenthal, Litfin) (Jan. 14, 2025); Remote Access 6:00 p.m. Tr. at 30, 33 (Odthoudt) (Jan. 15, 2025); Ex. 140 (Written Public Comments on the Scope of the Environmental Assessment) (Odenthal, Johnson, Sell).

³⁴³ Ex. 102 at 24-26 (SPA); Sauk Rapids 6:00 p.m. Tr. at 58-60 (Jan. 14, 2025); Ex. 152 at 3:17-5:10 (Nunez Direct); Ex. 153 at 6 (Bass Direct).

³⁴⁴ Ex. 152 at 5:18-6:8 (Nunez Direct); Ex. 143 at 6-7 (Benton Solar, LLC Response to Scoping Comments).

³⁴⁵ Ex. 156 at 64 (EA).

³⁴⁶ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. C.

³⁴⁷ Ex. 156 at 64 (EA).

³⁴⁸ Ex. 102 at 17 (SPA).

would reduce the amount of available cropland in Benton County by 0.3 percent during the life of the Project.³⁴⁹

270. The intensity of the impact is likely to be subjective. For example, conversion of farmland to solar energy production can be viewed as a conversion from one type of industrial use to another. Conversely, the conversion of farmland to solar energy production can be viewed as a negative impact to agricultural production. Restoring the Site with native grasses and forbs will reduce soil erosion, provide pollinator and wildlife benefits, and improve soil health.³⁵⁰

271. Benton Solar will offset potential revenue lost for participating landowners from alteration or utilization of land previously used for cropland production through leases and purchase options.³⁵¹

272. Following completion of Project construction, areas of temporary disturbance will be restored to preconstruction conditions or revegetated per the VMP.³⁵² Additionally, removing agricultural land from production and restoring the Site with native grasses and forbs will reduce soil erosion, provide pollinator and wildlife benefits, and improve soil health following the life of the Project.³⁵³

273. Additionally, Sections 4.3.9-4.3.11, 4.3.16-4.3.18, 4.3.20, 4.3.21, and 4.3.29 of the Solar Facility DSP and Sections 4.3.9-4.3.11, 4.3.15, 4.3.17, 4.3.18 and 4.3.26 of the BESS DSP require protection and restoration of the soil, development of an AIMP and a VMP, and compensation to landowners for damages to crops, fences and drain tile during construction. The record indicates that no further mitigation is needed.

2. *Forestry*

274. Active forestry operations, including commercial timber harvest, woodlots, or other forestry resources do not occur within the Site. Impacts to forestry operations will not occur.³⁵⁴

3. *Tourism*

275. In 2023, the leisure and hospitality industry in Benton County accounted for about \$68,763,385 in gross sales, and 1,212 private sector jobs.³⁵⁵

276. Tourism in the region is largely related to fairs and festivals, as well as culture and recreational activities, in St. Cloud and Sauk Rapids, both located four miles to the west of the Site. Local events include the Benton County Fair, Granite City Days Festival, Mississippi Music Fest, Rapids River Food Fest, Sartell Summer Fest, Rice Days, Foley Fun

³⁴⁹ *Id.* at 70; Ex. 156 at 64-65 (EA).

³⁵⁰ Ex. 156 at 65 (EA).

³⁵¹ Ex. 102 at 70 (SPA).

³⁵² *Id.*

³⁵³ Ex. 156 at 65 (EA).

³⁵⁴ *Id.* at 34.

³⁵⁵ *Id.* at 66.

Days, and Gilman Days. There are 94 public parks and 25 miles of trails that offer year-round recreation. The Minnesota Baseball Hall of Fame Museum and the Stearns History Museum are located in St. Cloud. The Sand Prairie Wildlife Management and Environmental Education Area are located in St. Cloud. Territory Golf Club and Wapicada Golf Club are also in St. Cloud.³⁵⁶

277. The Solar Facility and the BESS will be located on privately-owned land, away from parks and other tourist locations and outside the area where local events are held, therefore impacts to tourism are anticipated to be minimal. Short-term impacts to outdoor recreational activities could occur during construction due to noise and traffic increase, however these impacts will be temporary and short-term in duration.³⁵⁷

278. Because impacts are anticipated to be minimal, no additional mitigation measures are proposed.³⁵⁸

4. *Mining*

279. There are no gravel pits within the area of land control. The closest gravel pits are located approximately two miles west and southwest from the Site.³⁵⁹

280. Construction of the Project will require the use of sand and aggregate for backfill and access roads. The demand for sand and gravel will be temporary and is not expected to require new or expanded sand or aggregate operations.³⁶⁰

281. Impacts to mining will not occur and no mitigation is proposed.³⁶¹

D. Archaeological and Historic Resources

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

283. Benton Solar conducted a Phase Ia Cultural Literature Review and a Phase I Archaeological and Traditional Cultural Property Reconnaissance Inventory. Previously recorded cultural resources, archaeological sites, and historic buildings and structures have been identified in the Project Area, but are either outside of the Site or are considered not eligible for the National Register of Historic Places (“NRHP”). The Phase I identified five new avoidance areas of cultural significance near the Project of cultural significance. Benton

³⁵⁶ *Id.*

³⁵⁷ *Id.*; *see also* Ex. 102 at 71 (SPA).

³⁵⁸ Ex. 156 at 66-67 (EA).

³⁵⁹ *Id.* at 34.

³⁶⁰ *Id.*

³⁶¹ *Id.*

Solar has sited the Project to avoid these areas and will avoid these areas during construction. Benton Solar also indicates that they will create an unanticipated discoveries plan.³⁶²

284. Additionally, Benton Solar corresponded with 47 Native American Tribes, including 11 Minnesota Tribal Nations. Tribal cultural specialists from the Standing Rock Sioux Tribe, the Mille Lacs Band of Chippewa, the Rosebud Sioux Tribe, the Sisseton Wahpeton Oyate, and the Upper Sioux Community have attended survey efforts completed to date. During the surveys, five tribal resources were identified, and Benton Solar is working with the Tribes to identify and implement suitable avoidance measures.³⁶³

285. Sections 4.3.23 and 5.4 of the Solar Facility DSP and Sections 4.3.20 and 5.4 of the BESS DSP include conditions to avoid impacts to archaeological and historic resources where possible and to mitigate impacts where avoidance is not possible and to develop an unanticipated discoveries plan.³⁶⁴ No further mitigations are needed.

E. Natural Environment

1. Air Quality

286. Air quality is a measure of how pollution-free the ambient air is and how healthy it is for humans, other animals, and plants.³⁶⁵

287. Minimal intermittent air emissions are expected during construction of the Project. Project construction activities (e.g., clearing, grading, and hauling) may result in the short-term increase of: (i) airborne dust/particulate matter; and (ii) emissions, including carbon dioxide related to operation of construction equipment and vehicles. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring. For example, traveling to a construction site on a dry gravel road will result in more fugitive dust than traveling the same road when wet.³⁶⁶

288. Air emissions from Project construction activities would likely primarily include carbon dioxide, nitrogen oxides and other particulate matter. Motorized equipment will emit exhaust. This includes construction equipment and vehicles travelling to and from the Project. Exhaust emissions, primarily from diesel equipment, would vary according to the phase of construction. Greenhouse gas emissions will be mitigated by keeping vehicles in good working order.³⁶⁷

289. Fugitive dust and particulate emissions will be mitigated by the requirements of construction stormwater permit that will be obtained for the Project, a National Pollution Discharge Elimination System (“NPDES”) and State Disposal System (“SDS”) construction stormwater permit, and an associated stormwater pollution prevention

³⁶² *Id.* at 67. *See also* Ex. 102 at 72-73 (SPA); Ex. 154 at 4-7 (MacDonald Direct).

³⁶³ Ex. 156 at 67 (EA). *See also* Ex. 102 at 72 (SPA); Ex. 154 at 6 (MacDonald Direct); Ex. 155 at 10:22-11:8 (Gracia Direct).

³⁶⁴ Ex. 156 at 68 (EA).

³⁶⁵ *Id.*

³⁶⁶ *Id.* at 69.

³⁶⁷ *Id.* at 72.

plan (“SWPPP”). Additionally, Benton Solar indicates that it intends to use mitigations measures such as watering exposed surfaces, covering disturbed areas, and reducing speed limits for vehicles on-site.³⁶⁸ Further, the AIMP contains construction BMPs related to soils and vegetation that will help to mitigate against fugitive dust emissions.³⁶⁹ Several sections of the draft AIMP indirectly mitigate impacts to air quality, including sections related to construction and vegetation removal, soils, erosion and sediment control, and restoration of the site to pre-construction conditions.³⁷⁰

290. No long-term negative impacts to air quality are anticipated to result from Project construction activities or operation.³⁷¹

291. Long-term, and overall, the Project is expected to have a positive impact on greenhouse gas emissions and help Minnesota reach its renewable energy goals.³⁷² The Project will have a positive effect on air quality by replacing electrical generation produced by burning fossil fuels, reducing associated greenhouse gas emissions.³⁷³

292. Accordingly, the record reflects the potential impacts to air quality are appropriately mitigated.

2. Soils

293. The soils within the Site are generally sandy, loamy and coarsely loamy in texture and range from poorly to well drained. As a result, the soils are susceptible to compaction or rutting during wet conditions due to the hydric texture of the soil. The soils are more susceptible to wind erosion during dry periods due to the nonhydric nature of the soil.³⁷⁴

294. Construction of the Solar Facility and the BESS will disturb approximately 631.9 acres within the Site. As with any ground disturbance, there is potential for soil compaction and erosion. Heavy rainfall or wind events during construction or prior to establishment of permanent vegetation, increase the risk that significant sedimentation and erosion could occur. Primary impacts to soils include compaction from construction equipment, soil profile mixing during grading and pole auguring, rutting from tire traffic, and soil erosion during construction. Low to moderate impacts are expected, with the isolated moderate the significant negative impact associated with heavy rainfall or wind events.³⁷⁵

295. Soil cover and management at the Solar Facility will change from cultivated cropland to a mixture of pervious areas with native groundcover plantings and semi-imperious surfaces. Once permanent vegetation is properly established, stormwater

³⁶⁸ *Id.* at 70.

³⁶⁹ *Id.*

³⁷⁰ *Id.* at 70-72; *see also* Ex. 102 at 74-75 (SPA).

³⁷¹ Ex. 102 at 74-75 (SPA).

³⁷² *Id.* at 75-80.

³⁷³ *Id.* at 75; Ex. 156 at 70.

³⁷⁴ Ex. 156 at 77 (EA).

³⁷⁵ *Id.* at 72; *see also* Ex. 102 at 87-88 (SPA).

management, as well as general soil health, will likely improve due to use of perennial, native plants.³⁷⁶

296. As a result, long-term positive impacts are expected due to the native perennial vegetation, which is likely to improve soil health over the operative life of the Solar Facility and the BESS.³⁷⁷

297. Additionally, potential impacts to soils can be mitigated by using BMPs and standard construction practices to establish temporary cover for exposed soil and control any sediment erosion.³⁷⁸

298. No further mitigation is needed.

3. *Geology and Groundwater*

299. Potential impacts to geology and groundwater can occur directly or indirectly. Direct impacts to groundwater are generally associated with construction, for example, structure foundations that could penetrate shallow water tables or groundwater usage. Indirect impacts could occur through spills or leaks of petroleum fluids or other contaminants that contaminate surface waters which could ultimately contaminate groundwater.³⁷⁹ Commenters also expressed concern that runoff from the PV panels could result in groundwater contamination.³⁸⁰ Lastly, the disturbance of soil and vegetative cover could affect water quality in groundwater resources.³⁸¹ Impacts to geological resources are likely to be minimal due to the absence of karst features.³⁸²

300. Additionally, indirect impacts are not anticipated because Benton Solar is not storing large quantities of hazardous materials that might otherwise have the potential to spill or leak into area groundwater. To minimize the potential for hazardous materials to enter groundwater resources, Benton Solar will develop and maintain a Spill Prevention, Control, and Countermeasure Plan (“SPCC”).³⁸³ Benton Solar also indicated that its panels are tested under EPA procedures to ensure that they are nonhazardous.³⁸⁴

301. Construction of the Project is not likely to require subsurface blasting, and newly fractured bedrock causing groundwater flow is not anticipated.³⁸⁵

302. During construction, if the water table is reached when pile driving, trenching for collection cables, or installing poles, dewatering will be needed. If this scenario occurs, Benton Solar will need a Water Appropriation Permit from the MnDNR. Benton Solar

³⁷⁶ Ex. 156 at 77 (EA); *see also* Ex. 102 at 87-88 (SPA).

³⁷⁷ Ex. 156 at 76-77 (EA); *see also* Ex. 102 at 81-88 (SPA).

³⁷⁸ Ex. 156 at 77 (EA); *see also* Ex. 102 at 88 (SPA).

³⁷⁹ Ex. 156 at 74 (EA).

³⁸⁰ Sauk Rapids 6:00 p.m. Tr. at 47-48 (Aug. 27, 2025).

³⁸¹ Ex. 156 at 74 (EA).

³⁸² *Id.* at 74-75.

³⁸³ Ex. 102 at 90 (SPA).

³⁸⁴ Sauk Rapids Tr. 6:00 p.m. at 48-49 (Aug. 27, 2025).

³⁸⁵ Ex. 156 at 74 (EA); *see also* Ex. 102 at 89-90 (SPA).

indicates that it will acquire this permit if required. Benton Solar has also stated that it will avoid the two irrigation wells located within the Site.³⁸⁶

303. During operations, the Solar Facility and the BESS will have minimal to no impact on the geology and groundwater of the area.

304. Accordingly, no additional mitigation is necessary.

4. *Surface waters and flood plains*

305. The Project has the potential to impact surface water resources. Energy projects could directly impact water resources if these features cannot be avoided through project design. Projects also have the potential to adversely impact surface waters through construction activities which move, remove, or otherwise handle vegetative cover and soils. Changes in vegetative cover and soils can change runoff and water flow patterns.³⁸⁷

306. The Project is located within the Mississippi River – St. Cloud watershed within the Upper Mississippi River Basin. Two public watercourses travel through the Project Area. The Elk River runs north to south through the western portion of the Project. An unnamed public stream runs east to west through the northern portion of the Project and eventually joins the Elk River.³⁸⁸

307. The Mississippi River – St. Cloud Watershed is an area that historically has been impacted by issues of shoreline loss due to development. It also suffers from high amounts of sedimentation from soil runoff. With this runoff, the rivers in the area have increased levels of phosphorous due to the high phosphorous levels in the sandy loam.³⁸⁹

308. Benton Solar completed aquatic resources field surveys for the Project in 2022, 2023, and 2024 with the objective of verifying, or updating, the publicly available information. Benton Solar observed and delineated four waterbodies (totaling 1.7 acres) and two waterbodies (totaling 0.2 acre) in the Site and Preliminary Development Area, respectively.³⁹⁰ There are 68.3 acres of mapped shoreland in the Site, only 12.3 of which are also mapped in the Preliminary Development Area.³⁹¹ There are 22.1 acres of Federal Emergency Management Agency–mapped floodplains in the Site, and 1.9 of these acres also occur in the Preliminary Development Area.³⁹²

309. Construction of the Project creates a potential for indirect impacts if sediment or fugitive dust created by excavation, grading, vegetation removal, and construction traffic reaching nearby surface waters.³⁹³

³⁸⁶ Ex. 156 at 75 (EA); *see also* Ex. 102 at 90 (SPA).

³⁸⁷ Ex. 156 at 78 (EA).

³⁸⁸ *Id.*; Ex. 102 at 90 (SPA).

³⁸⁹ Ex. 156 at 78-79 (EA).

³⁹⁰ *Id.* at 78. *See also* Ex. 102 at 91-92 (SPA); Ex. 154 at 8 (MacDonald Direct) (describing the delineation).

³⁹¹ Ex. 102 at 92 (SPA)

³⁹² *Id.* at 90.

³⁹³ Ex. 156 at 79 (EA).

310. The Solar Facility and the BESS are designed to avoid direct impacts to surface waters by avoiding placement of Project components such as access roads, solar arrays, inverters, or transmission structures in surface waters. Benton Solar will avoid surface waters by boring beneath them using horizontal drilling for the collection lines.³⁹⁴

311. In addition to affecting surface waters, construction may cause short-term, minimal impacts to flood plains. Floodplains are flat, or nearly flat, land adjacent to a river or stream that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which includes areas covered by the flood, but which do not experience a strong current. Floodplains prevent flood damage by detaining debris, sediment, water, and ice.³⁹⁵

312. Impacts to the floodplains may occur during construction. Benton Solar states that it will minimize grading to areas only where necessary, and that the Project was sited to avoid any unnecessary grading. These impacts are expected to be short-term and minimal, as the Site is just outside of the floodplain.³⁹⁶

313. Once construction is completed, impacts to floodplains are expected to be beneficial and long-term, overall. While construction may alter the topography near the floodplain of the Elk River, the conversion of cropland to native prairie-like conditions will aid water infiltration and minimize flooding.³⁹⁷

314. During construction, BMPs and standard construction practices can minimize the potential for exposed soils and fugitive dust emissions to reach surface waters. Minimizing grading to areas only where necessary and avoiding unnecessary grading can minimize damage to flood plains.³⁹⁸

315. Overall, and due to the establishment of perennial vegetation at the Solar Facility, the Project is expected to have a long-term positive impact on water quality.³⁹⁹

316. Additionally, Benton Solar will implement the BMPs and other requirements in the SWPPP—a component of the NPDES/SDS permit required for construction—in order to avoid and minimize impacts to surface waters and floodplains during construction.⁴⁰⁰

317. Further, several standard permit conditions mitigate risks to surface waters and flood plains. Section 4.3.17 of the Solar Facility DSP requires a VMP, which will allow for revegetation of fields for better ground water infiltration of rainwater. Sections 4.3.11 and 4.3.16 require control practices to minimize erosion and restoration of the Site.⁴⁰¹ Lastly,

³⁹⁴ *Id.*

³⁹⁵ *Id.* at 80.

³⁹⁶ *Id.*; *see also* Ex. 102 at 31 (SPA).

³⁹⁷ Ex. 156 at 80-81 (EA).

³⁹⁸ *Id.* at 78-79; *see also* Ex. 102 at 92 (SPA).

³⁹⁹ Ex. 156 at 79 (EA).

⁴⁰⁰ Ex. 102 at 7, 28, 31, 92 (SPA).

⁴⁰¹ Ex. 156 at 79-80 (EA).

section 4.3.25 of the Solar Facility DSP and section 4.3.22 of the BESS DSP require repair of any damaged drainage tile.

318. No further mitigation is needed.

5. *Wetlands*

319. Benton Solar assessed the potential for wetlands within the Project footprint through a formal water resource delineation in 2022, 2023, and 2024. Additional wetland analysis, including wetland mapping and identification, was conducted for this EA using desktop reviews of available resources (i.e., National Wetlands Inventory (“NWI”) data, MnDNR Public Waters Inventory, etc.).⁴⁰²

320. A total of 13 wetlands totaling 22.8 acres were observed and delineated within the Site. Approximately 1.45 acre of wetlands identified in the NWI database occurs in the Preliminary Development Area.⁴⁰³ The field delineation conducted by SWCA for Benton Solar identified only 0.1 acres of wetlands in the Preliminary Development Area.⁴⁰⁴

321. Although wetlands have been identified within the Preliminary Development Area, the preliminary site layout for the Solar Facility and the BESS avoids locating solar arrays and associated facilities in wetlands. The wetlands still within Site are along the border of the Project or within collection line corridors. There may be potential for temporary, short-term impacts to wetlands that occur during installation of the electrical collection lines.⁴⁰⁵

322. If wetland impacts are required for the final layout, coordination with the appropriate agency, such as the U.S. Army Corps of Engineers (“USACE”) under Section 404 and 401 of the Federal Clean Water Act and the Benton County Soil and Water Conservation District (“SWCD”) under the Minnesota Wetland Conservation Act (“WCA”), would occur prior to construction.⁴⁰⁶

323. Additionally, Section 4.3.13 of the Solar Facility DSP and the BESS DSP generally prohibits placement of the solar energy generating system or associated facilities in public waters and public waters wetlands. The permit condition does allow for electric collector or feeder lines to cross or be placed in public waters or public waters wetlands subject to permits and approvals by the MnDNR and the USACE, and local units of government as implementers of the WCA.⁴⁰⁷

324. No further mitigation is needed.

⁴⁰² *Id.* at 81-82; *see also* Ex. 102 at 93 (SPA).

⁴⁰³ Ex. 156 at 82-82 (EA).

⁴⁰⁴ *Id.* at 83; *see also* Ex. 102 at 93 (SPA).

⁴⁰⁵ Ex. 156 at 83 (EA). *See also* Ex. 102 at 93 (SPA); Ex. 154 at 8:16-18 (MacDonald Direct).

⁴⁰⁶ Ex. 156 at 84 (EA).

⁴⁰⁷ *Id.*

6. Vegetation

325. The Project is located in both the Laurentian Mixed Forest Province and the Eastern Broadleaf Forest Province. Pre-settlement vegetation in the Mixed Forest Province consisted of mix of conifer, hardwood and mixed conifer-hardwood forests, and maple-basswood. Pre-settlement vegetation in the Eastern Broadleaf Forest Province consisted primarily of oak barrens.⁴⁰⁸

326. Based on a desktop analysis of existing vegetation, the Site is primarily cultivated crops (88.1 percent) followed by hay/pasture (4.5 percent) and deciduous forest (3.6 percent).⁴⁰⁹

327. The Solar Facility and the BESS will eliminate vegetative cover and create impermeable surfaces at access roads and inverter skids.⁴¹⁰ Additionally, construction activities at the Solar Facility and the BESS could introduce or spread invasive species and noxious weeds and the early phases of site restoration and seeding of native species can result in populations of non-native and invasive species on the Site.⁴¹¹

328. It will also convert agricultural land to perennial, low growing vegetative cover, resulting in a net increase in vegetative cover for the life of the Project. Agricultural land within the Project would be converted to perennial, low growing vegetative cover, resulting in a net increase in vegetative cover for the life of the Project. Under the arrays, a roughly 70/30 grass/flower and forbs mixture will primarily be used so that vegetation won't shade the PV panels and undesirable or noxious weeds can be easily identified.⁴¹²

329. The VMPWG recommended that Benton Solar continue to coordinate with EIP and VMPWG as it finalizes the VMP. VMPWG also recommended that Benton Solar include additional information in its VMP addressing Site hydrology, Site preparation activities including obtaining a history of chemical application to the Site, whether Benton Solar intends to have a visual screening plan, whether Benton Solar anticipates using grazing, Benton Solar's intended herbicide use plan, the management schedule and the monitoring protocols.⁴¹³

330. VMPWG also recommended several changes to the seed mix substitution.⁴¹⁴ In Response Comments, Benton Solar agreed to coordinate with VMPWG and EIP on the VMP and the requested.⁴¹⁵

⁴⁰⁸ *Id.*; see also Ex. 102 at 94 (SPA).

⁴⁰⁹ Ex. 102 at 94 (SPA).

⁴¹⁰ Ex. 156 at 84 (EA).

⁴¹¹ *Id.* at 85; see also Ex. 102 at 94-95 (SPA).

⁴¹² Ex. 156 at 84 (EA).

⁴¹³ Comments by VMPWG at 1, Sept. 12, 2025, eDockets ID No. [20259-222927-01](#).

⁴¹⁴ *Id.* at 3.

⁴¹⁵ Response Comments at 10.

331. Benton Solar indicates that it will use BMPs to minimize impacts to vegetation and the potential for noxious weeds, restore areas disturbed during construction, and will use an appropriate seed mix.⁴¹⁶

332. Additionally, Sections 4.3.17, and 4.3.18 of the Solar Facility DSP require the development of a VMP and an AIMP to minimize damage to vegetation or the introduction of invasive species. Additionally, Section 4.3.15 requires Benton Solar to minimize the removal of trees to the extent possible.⁴¹⁷

333. No additional mitigation is needed.

7. *Wildlife*

334. The Project Area landscape is dominated by agriculture, also including roads, homes, and farmsteads. Landscape types and vegetation communities vary throughout the local vicinity. Small pockets of forested lands, wetlands, and grassland, provide habitat for terrestrial and avian wildlife. The Site and Preliminary Development Area are primarily agricultural and developed.⁴¹⁸ Wildlife utilizing the Site are common species associated with disturbed habitats and are accustomed to human activities (e.g., agricultural activities and road traffic) occurring in the Project Area.⁴¹⁹

335. There are no MnDNR wildlife management areas or migratory waterfowl feeding and resting, or U.S. Fish and Wildlife Service Waterfowl Production areas within one mile of the Site.⁴²⁰

336. Construction at the Solar Facility and the BESS would likely lead to wildlife displacement that currently uses these agricultural lands; a concern noted by commenters.⁴²¹ More mobile species would abandon habitat for nearby adjacent habitats. Less mobile species could be directly impacted by construction equipment.⁴²²

337. Fencing around solar facilities represents a potential impact to wildlife inhabiting the area. Although deer can jump many fences, they can become tangled in both smooth and barbed-wire fences, especially if the wires are loose or installed too closely together.⁴²³

338. Potential impacts also include collision mortality, where birds may fly into solar panels or other infrastructure, and predation, where predators may exploit solar sites.

⁴¹⁶ Ex. 102 at 95-96 (SPA).

⁴¹⁷ Ex. 156 at 85-86 (EA); *see also* Ex. 102 at 95 (SPA).

⁴¹⁸ Ex. 102 at 97 (SPA).

⁴¹⁹ *Id.* at 96; Ex. 156 at 86 (EA).

⁴²⁰ Ex. 156 at 87 (EA).

⁴²¹ Ex. 140 at 6, 31, 35, 36, 50, 63-64 (Written Public Comments on the Scope of the Environmental Assessment).

⁴²² Ex. 156 at 87 (EA).

⁴²³ *Id.* at 87; *see also* Ex. 102 at 97-98 (SPA).

Additionally, bird behavior such as foraging, nesting, and territoriality within solar sites can increase their vulnerability to these risks.⁴²⁴

339. The Solar Facility and the BESS are located in areas that are currently disturbed to minimize disruption of habitats.⁴²⁵ Additionally, Benton Solar has designed the Solar Facility and the BESS to minimize harm to wildlife, including utilizing fencing that is consistent with MnDNR's recommendation to use smooth wire instead of barbed wire, using less reflective solar panels, and restoring the area for native perennial vegetation to provide habitat.⁴²⁶

340. Additionally, sections 4.3.16 and 4.3.32 of the Solar Facility DSP require the restoration of habitats and the use of fencing that minimizes impacts to wildlife. Section 8.14 of the Solar Facility DSP and section 8.13 of the BESS DSP require that Benton Solar report wildlife fatalities.⁴²⁷

341. Accordingly, the impact intensity level is expected to be minimal.

8. *Rare and Unique Natural Resources*

342. Construction and operation of the Project may adversely impact rare and unique resources through the taking or displacement of individual plants or animals, invasive species introduction, and habitat loss. Conversely, in some cases solar sites can be managed to provide habitat.⁴²⁸

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

344. There are no MBS sites of moderate, high, or outstanding biodiversity significance within Site. Additionally, there are no native plant community sites, calcareous fens, waterfowl production areas, or wildlife management areas within the Site.⁴²⁹ Accordingly, no impacts to rare or significant habitats are expected.

345. For rare species, a review of the Site identified six rare species of animals that are likely to occur in the Site: northern long eared bat, a federally listed species and state-listed species of concern; the tricolored bat, proposed federal species and state-listed species of concern; monarch butterfly, a federal candidate species; whooping crane, an experimental population; and bald and golden eagles, protected under the Bald and Golden Eagle Protection Act.⁴³⁰ But there are no critical habitats for those species in the Site.⁴³¹ A National Heritage

⁴²⁴ Ex. 156 at 87 (EA); Ex. 102 at 97-98 (SPA); Sauk Rapids 6:00 p.m. Tr. at 43-44, 46-51, 79 (Jan. 14, 2025).

⁴²⁵ Ex. 102 at 97 (SPA).

⁴²⁶ *Id.* at 97-98.

⁴²⁷ Ex. 156 at 88 (EA).

⁴²⁸ *Id.*

⁴²⁹ *Id.* at 88-89 (EA); *see also* Ex. 102 at 105 (SPA).

⁴³⁰ Ex. 156 at 90-91 (EA). *See also* Ex. 102 at 98-101 (SPA); Ex. 154 at 8-9 (MacDonald Direct)

⁴³¹ Ex. 156 at 90-91 (EA); *see also* Ex. 102 at 98-101 (SPA).

Review, in 2023 and 2024, indicated that there were four state-listed species that have a potential to occur in the Site: Blanding's turtle, a state threatened species; the creek heelsplitter, a state species of special concern; the loggerhead shrike, a state endangered species; and the tubercled rein orchid, a state threatened species.⁴³² Benton Solar's review also identified several other state-listed species and documented their potential to occur in the Site.⁴³³

346. MnDNR commented that the Site has habitat suitable for Blanding's turtles.⁴³⁴ MnDNR also recommended a permit condition requiring compliance with MnDNR procedures for state-listed endangered and threatened species to address concerns about the Blanding's turtles.⁴³⁵ Benton Solar did not object to the MnDNR's recommendation.⁴³⁶

347. Benton Solar will use BMPs to minimize habitat disturbance and utilize construction practices that could interfere with habitats, including avoiding disturbances to bat hibernacula and trees during active season (April – September) and following setbacks from any eagle nests.⁴³⁷ Techniques for minimizing impacts to wildlife and vegetation also minimize impacts to rare species. Avoiding identified areas of species occurrence or preferred habitat is the preferred mitigation measure.⁴³⁸

348. Benton Solar also agrees with MnDNR's proposed special permit condition requiring compliance with state endangered and threatened species laws.⁴³⁹

349. No further mitigation is needed.

F. Design Options and Cost

350. Evaluation of design options and costs of proposed Project are relevant where there are alternatives sites proposed.⁴⁴⁰

351. The Site was chosen based on the solar resources available, proximity to the point of interconnection, and willingness of the landowners,⁴⁴¹ and no alternatives were considered or proposed.⁴⁴²

⁴³² Ex. 156 at 92 (EA). *See also* Ex. 102 at 100-105 (SPA); Ex. 154 at 8-9 (MacDonald Direct).

⁴³³ Ex. 156 at 93 (EA); *see also* Ex. 102 at 100-105 (SPA).

⁴³⁴ Comments by MnDNR at 1-2, Sept. 12, 2025, eDockets ID No. [20259-222952-01](#) ("MnDNR Comments").

⁴³⁵ *Id.*

⁴³⁶ Response Comments at 8.

⁴³⁷ Ex. 102 at 106-07 (SPA).

⁴³⁸ Ex. 156 at 93; *see also* Ex. 154 at 9 (MacDonald Direct).

⁴³⁹ Response Comments at 8.

⁴⁴⁰ Minn. R. 7850.4100(G) & (L); Minn. R. 7850.3100.

⁴⁴¹ Ex. 102 at 12-16 (SPA).

⁴⁴² Ex. 142 (Alternatives Identified During Scoping Comment Period); Ex. 156 at 97 (noting Factors G and L "do not apply as the design of the proposed project is the only design under consideration).

G. Use of Existing Infrastructure

352. There are no existing large electric power generating facilities in the area, and Benton Solar is not utilizing an existing facility.⁴⁴³

353. There are several existing transmission lines in the vicinity of the Site.⁴⁴⁴

H. Electrical System Reliability

354. The Solar Facility and the BESS are expected to maintain or improve the reliability of the electrical system.⁴⁴⁵

I. Unavoidable Adverse Effects to Human and Natural Environment

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

- (i) Fugitive dust.
- (ii) Noise disturbance to nearby residents and recreationalists.
- (iii) Visual disturbance to nearby residents and recreationalists.
- (iv) Soil compaction and erosion.
- (v) Vegetative clearing (loss of shelter belts).
- (vi) Disturbance and temporary displacement of wildlife, as well as direct impacts to wildlife inadvertently struck or crushed.
- (vii) Minor amounts of marginal habitat loss.
- (viii) Possible traffic delays.
- (ix) Minor GHG emissions from construction equipment and workers commuting.⁴⁴⁶

356. Unavoidable adverse impacts associated with the operation would last for the life of the Project, and include:

- (i) Visual impacts of the Project.
- (ii) Cultural impacts due to a change in the sense of place for local residents.

⁴⁴³ Minn. R. 7850.4100(I); Ex. 156 at 97 (EA).

⁴⁴⁴ *Id.* at Fig. 11, 97 (noting that Factor H and J “are not studied as there is only one routing option”).

⁴⁴⁵ *Id.* at 97; Ex. 155 at 8:7-11 (Gracia Direct).

⁴⁴⁶ Ex. 156 at 94 (EA).

- (iii) Loss of land for agricultural purposes.
- (iv) Injury or death of birds that collide with PV panels.
- (v) Injury or death of birds and mammals from fencing.
- (vi) Rerouting of Snowmobile Trail No. 87.⁴⁴⁷

J. Irreversible and Irretrievable Commitments of Resources

357. Irreversible and irretrievable resource commitments are primarily related to Project construction, including the use of water, aggregate, hydrocarbons, steel, concrete, wood, and other consumable resources. Some, like fossil fuel use, are irretrievable. Others, like water use, are irreversible. Still others might be recyclable in part, for example, the raw materials used to construct PV panels would be an irretrievable commitment of resources, excluding those materials that may be recycled at the end of the panels' useful life. The commitment of labor and fiscal resources to develop, construct, and operate the Project is considered irretrievable.⁴⁴⁸

XII. SITE PERMIT CONDITIONS

358. The Solar Facility DSP includes a number of proposed permit conditions based on the site permit proceedings of other solar facilities permitted by the Commission. Many of those conditions have been discussed above. The conditions apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

359. Based on the analysis in the EA, EIP recommended the Solar Facility DSP and the BESS Facility DSP include four special conditions:

- The Permittee shall develop a site-specific Visual Screening Plan. The Visual Screening Plan shall be designed and managed to mitigate visual impacts to adjacent residences. The Visual Screening Plan shall at a minimum include: (a) objectives for screening of nearby residences; 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 trees and shrubs included in the Visual Screening Plan that are located within the Permittee's site control shall be included in the Site Plan filed under Section 8.3. The Permittee is required to maintain and ensure the successful growth, health, and maintenance of the vegetation for 3 years.

⁴⁴⁷ *Id.*

⁴⁴⁸ *Id.* at 94.

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

- (a) the Visual Screening Plan;
 - (b) documentation of coordination with landowners adjacent to the project site; and
 - (c) an affidavit of its distribution of the Visual Screening Plan to landowners adjacent to the project site.
- The Permittee shall complete a noise study for the project, including surrounding residential areas, to ensure noise levels are below state standards. The study shall include methodologies and assumptions. The study shall include the purpose of the monitoring, monitoring locations and their rationale, monitoring timing and duration, monitoring equipment, the monitored data, data processing, and data reporting. The permittee shall file with the Commission the results of the noise study within 12 months of operation of the project.
 - The Permittee shall coordinate with Benton County and the Benton County snowmobile club to reroute snowmobile trail 87 and any other snowmobile trails impacted by the project.
 - The Permittee shall develop an Unanticipated Discoveries Plan (UDP) 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 cultural resources or human remains found during construction shall be protected and examined. The Permittee shall file the UDP with the Commission at least 14 days prior to the pre-construction meeting.

360. In its response to public hearing comments, Benton Solar did not object to any of the special conditions.⁴⁴⁹

361. The record supports the inclusion of the special conditions in the Solar Facility DSP and the BESS DSP.

362. MnDNR requested the inclusion of 5 special conditions:

- The Permittee will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300)

⁴⁴⁹ Response Comments at 6-8.

and 6134). The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.

- The Permittee shall comply with DNR's tree clearing recommendations from June 1 to August 15 to minimize impacts to northern-long eared bats.
- The permittee shall use motion activated, down-lit, shielded lighting around and within the Project and coordinate with MnDOT on Approved Products for Luminaries with respect to approved Uplight ratings and nominal color temperatures.
- The permittee shall use erosion control materials that do not contain plastic or synthetic fibers or malachite green dye.
- The Permittee shall utilize non-chloride products for onsite dust control during construction.⁴⁵⁰

363. In its response to public hearing comments, Benton Solar did not object to any of MnDNR's proposed permit conditions except that it requested that the special permit condition requiring motion activated lighting be revised to switch-controlled lighting.⁴⁵¹

364. Benton Solar's proposed modification of MnDNR's proposed special conditions is reasonable and supported by the record.

365. The record supports the inclusion of MnDNR's proposed special conditions in the Solar Facility DSP and BESS DSP.

XIII. CRITERIA FOR A ROUTE PERMIT

366. As previously noted, the Applications will be reviewed under the PPSA. The PPSA provides that no person may construct a high-voltage transmission line without a Route Permit from the Commission.⁴⁵² Under the PPSA, a high-voltage transmission line includes a transmission line that is 100 kV or more and is greater than 1,500 feet in length.⁴⁵³ The proposed 115 kV Transmission Line is greater than 1,500 feet in length and, therefore, a route permit is required from the Commission prior to construction.⁴⁵⁴

367. As with the Solar Facility and the BESS, the Commission's rules establish two tracks for the permitting of a high-voltage transmission line. The "full permitting process" includes preparing an environmental impact statement ("EIS") and holding a contested case hearing.⁴⁵⁵ The "alternative permitting process" generally applies to modestly sized

⁴⁵⁰ MnDNR Comments at 1-3.

⁴⁵¹ Response Comments at 9.

⁴⁵² Minn. Stat. § 216E.03, subd. 2.

⁴⁵³ Minn. Stat. § 216E.01, subd. 4; Ex. 156 at 2 (EA).

⁴⁵⁴ Ex. 156 at 2 (EA).

⁴⁵⁵ See Minn. R. 7850.1700-.2700 (full permitting procedures); Ex. 156 at 2 (EA).

projects.⁴⁵⁶ It requires an EA instead of an EIS and a public hearing instead of a contested case hearing.⁴⁵⁷

368. Benton Solar's proposed Transmission Line will operate at a voltage between 100 and 200 kilovolts, and, therefore the Transmission Line is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04, subd. 2(3) and Minn. R. 7850.2800, subp. 1(C).⁴⁵⁸

369. The PPSA requires that route permit determinations "be guided by the state's goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state's electric energy security through efficient, cost-effective power supply and electric transmission infrastructure."⁴⁵⁹

370. Under the PPSA, for a route permit, the Commission and ALJ must be guided by the same factors set out above for a site permit provided in Minn. Stat. § 216E.03, subd. 7 and Minn. R. 7850.4100(A)-(N).

371. There is sufficient evidence in the record for the ALJ to assess the proposed route using the criteria set out above.

XIV. APPLICATION OF ROUTING CRITERIA TO THE PROJECT

A. Human Settlement

372. Minnesota statutory and rule criteria require consideration of the proposed transmission line routes' effect on human settlement, including displacement of residences and businesses, noise created during construction and by operation of the Project, and the route's impact on aesthetics, cultural values, recreation and public services.⁴⁶⁰

1. Displacement

373. There are 287 residences that occur within 1.0 mile of the Site. There are no residences within the Site or in the Route.⁴⁶¹

374. Accordingly, the record shows that no residences will be displaced and no mitigation is proposed.

2. Noise

375. As discussed previously, the primary noise receptors are the local residences and potentially include individuals working outside in the Project's vicinity.⁴⁶² The

⁴⁵⁶ See Minn. R. 7850.2800, subp. 1 (describing criteria for eligible projects); accord Minn. Stat. § 216E.04, subd. 2.

⁴⁵⁷ See Minn. R. 7850.2900–7850.3900 (alternative permitting procedures).

⁴⁵⁸ Ex. 156 at 2 (EA).

⁴⁵⁹ Minn. Stat. § 216E.03, subd. 7.

⁴⁶⁰ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(A).

⁴⁶¹ Ex. 114 at 40 (RPA); Ex. 156 at 34 (EA).

⁴⁶² Ex. 156 at 45–46 (EA).

proposed Project is in a rural, agriculturally dominated area.⁴⁶³ Rural residential areas were assumed to have an ambient daytime noise level of 40 dBA and an ambient nighttime noise level of 38 dBA.⁴⁶⁴

376. During construction, intermittent construction noise will occur and is dependent upon the activity.⁴⁶⁵ Major noise producing activities are associated with clearing and grading, material delivery, auguring foundation holes, setting structures, and stringing conductors.⁴⁶⁶ Noise from heavy equipment and increased vehicle traffic will be intermittent and occur during daytime hours.⁴⁶⁷ Noise associated with heavy equipment can range between 80 and 90 dBA at full power 50 feet from the source.⁴⁶⁸ Heavy equipment generally runs at full power up to 50 percent of the time. Point source sounds decrease six dBA at each doubling of distance; therefore, a 90 dBA sound at 50 feet is perceived as a 72 dBA sound at 400 feet and a 60 dBA sound at 1,600 feet.⁴⁶⁹ Construction noise might exceed state noise standards for short intervals at select times and locations.⁴⁷⁰

377. During operation, audible noise from power lines is created by small electrical discharges at specific locations along the surface of the conductor that ionize surrounding air molecules.⁴⁷¹ This phenomenon—common to all power lines—is known as corona and sounds like a crackling sound. In general, any imperfection on the surface of the conductor might be a source for corona.⁴⁷² Examples include dust and dirt, or nicks and burrs from construction. Resulting noise levels are dependent upon voltage level (corona noise increases as voltage increases) and weather conditions.⁴⁷³ The Transmission Line's conductors are designed to prevent the creation of coronas under ideal weather conditions.⁴⁷⁴ During inclement weather, there may be some audible sound. Often the sound of the weather event itself may mask any sound from the Transmission Line.⁴⁷⁵

378. Sound control devices on vehicles and equipment (e.g., mufflers), conducting construction activities during daylight hours, and running vehicles and equipment only when necessary are common ways to mitigate noise impacts.⁴⁷⁶ Benton Solar will adhere to noise control BMPs recommended to minimize construction sound levels and comply with MPCA standards, including but not limited to: limit heavy equipment activity (e.g., pile driving, drilling, and crane use) adjacent to residences or other sensitive receptors to the shortest possible period required to complete the work activity; Project construction will be

⁴⁶³ *Id.* at 45.

⁴⁶⁴ *Id.*

⁴⁶⁵ *Id.* at 46.

⁴⁶⁶ *Id.*

⁴⁶⁷ *Id.*

⁴⁶⁸ *Id.* at 46-47 (EA) (citing Federal Highway Administration, Noise: Construction Noise Handbook, (August 24, 2017), https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm).

⁴⁶⁹ *Id.*

⁴⁷⁰ *Id.* at 47.

⁴⁷¹ *Id.*

⁴⁷² *Id.*

⁴⁷³ *Id.*

⁴⁷⁴ Ex. 114 at 41 (RPA).

⁴⁷⁵ *Id.*

⁴⁷⁶ Ex. 156 at 47.

sequenced, and different construction activities may occur simultaneously in separate sections of the Route; minimize construction equipment idling; ensure that proper mufflers, intake silencers, and other noise reduction equipment are in place and in good working condition; where practical, locate stationary equipment such as compressors, generators, and welding machines away from sensitive receptors or behind sound mitigation barriers; and, when possible, limit construction activities to daylight hours.⁴⁷⁷ During operation, no mitigation is necessary because the noise associated with the Transmission Line during operation is expected to be well under the regulated noise limits.⁴⁷⁸

379. Section 5.3.6 of the DRP contains a standard condition that requires the permittee to comply with noise standards established under Minnesota noise standards as defined under Minn. R. 7030.010 to 7030.0080, and to limit construction and maintenance activities to daytime hours to the extent practicable.⁴⁷⁹

380. Accordingly, the record indicates that the Transmission Line has been designed to meet the applicable noise standards and minimize sound levels.

3. *Aesthetics*

381. The existing landscape in the area around the Transmission Line is rural and agricultural consisting of generally flat terrain, dominated by agricultural crop fields of corn, soybeans, and vegetables, with the surrounding area also supporting a variety of woodlands, wetlands, and drainages.⁴⁸⁰ Regional topography is characterized by nearly level to gently rolling plains.⁴⁸¹ Viewsheds in the area are generally long and open with only small, scattered areas where the view from a location would be blocked by vegetation, topography, or existing structures.⁴⁸² Viewsheds in the vicinity of, but outside of, the Project Route include existing roads and their associated, maintained ROWs; croplands and pastures; and overhead electric transmission and distribution lines.⁴⁸³

382. The built environment in the area around the Transmission Line includes existing transmission lines. Residences and farmsteads are scattered around the nearby landscape.⁴⁸⁴ Those likely to be viewing the Transmission Line include temporary observers (i.e., motorists, tourists, or recreationalists passing by the Route or using the general region intermittently). Residents nearer to the Transmission Line are expected to have a higher sensitivity to the potential aesthetic impacts than temporary observers as they may look at the Transmission Line more frequently than individuals passing through the area.⁴⁸⁵ There are no residences within the Route.⁴⁸⁶

⁴⁷⁷ Ex. 114 at 42 (RPA).

⁴⁷⁸ *Id.* at 40-42; Ex. 156 at 44-46 (EA).

⁴⁷⁹ Ex. 156 at 47 (EA).

⁴⁸⁰ *Id.* at 35; *see also* Ex. 114 at 44 (RPA).

⁴⁸¹ Ex. 114 at 44 (RPA).

⁴⁸² *Id.*

⁴⁸³ *Id.*

⁴⁸⁴ Ex. 156 at 35 (EA).

⁴⁸⁵ *Id.*

⁴⁸⁶ *Id.* at 34; *see also* Ex. 114 at 40 (RPA).

383. The Transmission Line is 0.5 miles long.⁴⁸⁷ There will be approximately seven new vertical structures not to exceed 110 feet above ground.⁴⁸⁸ Although the change will be noticeable, there are other existing transmission lines already in the area proposed for the line to be built.⁴⁸⁹ The Transmission Line will be immediately adjacent to an existing transmission line.⁴⁹⁰

384. The Transmission Line would alter the visual appearance within the vicinity by adding additional vertical and horizontal human-made structures to the existing landscape.⁴⁹¹ However, constructed features (e.g., existing utility lines and buildings), topography, and natural landscape features such as tree cover, in relation to a viewer's physical location, often will impede view of the Transmission Line and reduce direct impacts to viewsheds within the vicinity.⁴⁹² Proposed heights of Transmission Line infrastructure are not anticipated to exceed 110 feet.⁴⁹³ Proposed span lengths for the transmission line support structures are not anticipated to exceed 700 feet, with a minimum span of 100 feet.⁴⁹⁴ In coordination with GRE, Benton Solar has reduced the height of several structures and changed the span lengths to accommodate a separate transmission line project that GRE is designing and constructing.⁴⁹⁵ The Transmission Line will not create a new feature type within the landscape as existing overhead transmission and distribution lines are present within the landscape surrounding the route.⁴⁹⁶ Where pole structures are spaced farther apart, there will generally be less visual impact than in locations where poles are spaced closer together.⁴⁹⁷ The addition of approximately seven structures is not expected to result in impacts to visual resources.⁴⁹⁸

385. Benton Solar anticipates the Transmission Line will result in no impacts to visual resources, and thus no mitigation measures are required.⁴⁹⁹

386. Accordingly, the record indicates that the Transmission Line has been designed to meet the applicable aesthetics standards and minimize aesthetic impacts.⁵⁰⁰

4. *Cultural Values*

387. Cultural values are not expected to be impacted by the Transmission Line. The Transmission Line will not alter the rural character of the area, nor will it substantially alter the continuation of existing land use. The Transmission Line complies with the overall

⁴⁸⁷ Ex. 156 at 37 (EA).

⁴⁸⁸ *Id.*

⁴⁸⁹ *Id.*

⁴⁹⁰ *Id.*

⁴⁹¹ Ex. 114 at 44 (RPA).

⁴⁹² *Id.*

⁴⁹³ *Id.*

⁴⁹⁴ *Id.*

⁴⁹⁵ Ex. 153 at 12 (Bass Direct).

⁴⁹⁶ Ex. 114 at 44 (RPA).

⁴⁹⁷ *Id.*

⁴⁹⁸ *Id.*

⁴⁹⁹ *Id.*

⁵⁰⁰ Ex. 156 at 35-38 (EA); Ex. 114 at 44 (RPA).

goals of Benton County to conserve farmland and natural resources and to support economic and sustainable development. The Transmission Line is compatible with the rural, agricultural character of Benton County and with the economic and development goals set forth in the county's comprehensive plan. Further, the Transmission Line follows the ideal that development occur where infrastructure (e.g., substation and existing transmission) already exists.⁵⁰¹

388. Accordingly, the record indicates that the Transmission Line has been designed to meet the applicable cultural values standards and minimize cultural values impacts.⁵⁰²

5. *Recreation*

389. No parks, campsites, hiking trails, or snowmobile trails are located within the Project Route.⁵⁰³ The Elk River and its tributaries, located approximately 0.03 mile east of the Project ROW, intersect the Project Route at the northeast.⁵⁰⁴ The Transmission Line will introduce additional transmission structures to the landscape that may be visible to recreational users such as those on the Elk River.⁵⁰⁵

390. Tourist activities within the area around the Transmission Line are largely related to fairs and festivals as well as the recreational activities located four miles west of the Project.⁵⁰⁶

391. As discussed previously, noise impacts from construction are anticipated to be short-term, intermittent, and localized.⁵⁰⁷

392. Impacts on recreation and tourism due to construction of the Transmission Line are anticipated to be minimal and temporary in nature.⁵⁰⁸ Short-term disturbances include increased noise and dust.⁵⁰⁹ There are no long-term recreation impacts anticipated from the Transmission Line.⁵¹⁰

6. *Public Service and Infrastructure*

(i) *Public Utilities*

393. The primary electric provider in the Project Area is East Central Energy, which provides electricity to the surrounding area.⁵¹¹

⁵⁰¹ *Id.*; Ex. 156 at 38-39 (EA).

⁵⁰² Ex. 156 at 38-39 (EA); Ex. 114 at 47 (RPA).

⁵⁰³ Ex. 114 at 48 (RPA).

⁵⁰⁴ *Id.*

⁵⁰⁵ *Id.*

⁵⁰⁶ Ex. 156 at 66 (EA).

⁵⁰⁷ *Id.* at 50.

⁵⁰⁸ *Id.* at 66.

⁵⁰⁹ *Id.*

⁵¹⁰ *Id.*

⁵¹¹ *Id.* at 53; Ex. 114 at 50 (RPA).

394. There are no pipelines within the Project Area, the Route or within a mile of the Project Area.⁵¹²

395. Regional emergency management response services that serve the Project Route are provided by the Benton County Sheriff, St. Cloud fire department, Foley fire department, Sauk Rapids police department, and the St. Cloud Hospital ambulance.⁵¹³

396. There are existing transmission lines connecting to the same GRE-owned substation and are present in the vicinity of the Project Route.⁵¹⁴ One existing transmission line intersects the Project Route just north of the existing substation.⁵¹⁵

397. Impacts to water and wastewater services are not anticipated, as the Transmission Line will not require installation of either a well or septic system.⁵¹⁶

398. No long-term impacts to utilities will occur as a result of the Transmission Line.⁵¹⁷ The Transmission Line will not impact existing transmission lines. Limited, temporary impacts to service may occur during interconnection of the Transmission Line at the Benton County Substation. These outages are anticipated to be of short duration and closely coordinated with utilities and landowners.⁵¹⁸

399. Additionally, Section 5.4.3 of the DRP requires Benton Solar minimize disruption to existing public utility infrastructure.⁵¹⁹ No further mitigation is needed.

(ii) Roads and Traffic

400. There are approximately eight major roads near the Route (and, more broadly, the Site).⁵²⁰ During construction, Benton Solar anticipates increased traffic on the highway and local and county roadways, but the impacts are expected to be minor because there will be a small number of workers and equipment needed to construct the Transmission Line.⁵²¹

401. Section 5.3.14 of the DRP requires coordination with local governments for overweight and oversized loads.⁵²²

⁵¹² Ex. 156 at 55 (EA).

⁵¹³ Ex. 114 at 36 (RPA).

⁵¹⁴ Ex. 156 at 53 (EA); Ex. 114 at 50 (RPA).

⁵¹⁵ Ex. 114 at 50 (RPA).

⁵¹⁶ Ex. 156 at 53 (EA).

⁵¹⁷ *Id.* at 53-54.

⁵¹⁸ *Id.*; *see also* Ex. 114 at 37 (RPA).

⁵¹⁹ Ex. 156 at 55 (EA).

⁵²⁰ *Id.* at 54; Ex. 114 at 51 (RPA).

⁵²¹ Ex. 114 at 51 (RPA); Ex. 153 at 18 (Bass Direct).

⁵²² Ex. 156 at 55 (EA).

(iii) Airports

402. There are two airports within ten miles of the Route. No impacts to airports are anticipated, given the Route's distance from the nearest airport.⁵²³

(iv) Railroads

403. There is an active railroad track about 3.9 miles southwest of the Route.⁵²⁴ No impacts to railroads are anticipated.⁵²⁵

B. Public Health and Safety

1. EMF

404. The Transmission Line will have a maximum electric field of approximately 4.0 kV/m.⁵²⁶ This field strength is well below the Commission permit standard of 8.0 kV/m. The magnetic field is not expected to exceed 600 mG within the ROW of the Transmission Line.⁵²⁷

405. No health impacts from EMF are anticipated. EMF diminishes with distance from a conductor or inverter. The nearest resident to the proposed Transmission Line is approximately 285 feet away. At this distance EMF will dissipate to background levels.⁵²⁸ No additional mitigation is proposed.

2. Stray Voltage

406. As discussed with respect to the site permit criteria, stray voltage is voltage caused by an electric current in the earth, or in groundwater, resulting from the grounding of electrical equipment or an electrical distribution system. Stray voltage encompasses two phenomena: NEV and induced voltage.

407. The Transmission Line does not interconnect to businesses or residences and does not change local electrical service. As a result, impacts to residences or farming operations from NEV are not anticipated.⁵²⁹

408. The Transmission Line could induce a voltage on insulated metal objects within the final ROW; however, Benton Solar anticipates that the electric field will be just 4.0 kV/m, which is below the Commission's required maximum of 8.0 kV/M. Additionally, Section 5.4.1 of the DRP requires that transmission lines be constructed so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square AC between the ground and any non-stationary object within the ROW, including but

⁵²³ *Id.* at 54-55 (EA); *see also* Ex. 114 at 52 (RPA).

⁵²⁴ Ex. 156 at 54 (EA); *see also* Ex. 114 at 52 (RPA).

⁵²⁵ Ex. 156 at 55 (EA).

⁵²⁶ *Id.* at 59; Ex. 114 at 37-38 (RPA).

⁵²⁷ Ex. 156 at 59 (EA). *See also* Ex. 114 at 37-38 (RPA); Ex. 153 at 17:17-20 (Bass Direct).

⁵²⁸ Ex. 156 at 59 (EA).

⁵²⁹ *Id.* at 61; Ex. 114 at 38 (RPA).

not limited to large motor vehicles and agricultural equipment. Further, all fixed metallic objects on or off the ROW shall be grounded to comply with the NESC. As a result, impacts due to induced voltage are not anticipated to occur.⁵³⁰

409. No additional mitigation is proposed.

3. *Construction of the Transmission Line and Emergencies*

410. During construction, there is a possibility of construction related injury. As a result, there may be a short-term increase in the demand on emergency services.⁵³¹

411. Construction work will be bound by federal and state safety requires. No additional mitigation is needed.⁵³²

C. **Land-Based Economies**

1. *Agriculture*

412. Primary mapped land covers in the Route and Project ROW are hay/pasture (25.9 acres, 53.7 percent, and 3.2 acres, 51.8 percent, respectively) and cultivated crops (13.6 acres, 28.1 percent, and 1.7 acres, 27.6 percent, respectively). Field surveys did not observe signs of active farming practices in the Route, and there is no prime farmland in the Route.⁵³³

413. The Route width of the Transmission Line traverses land designated as not prime farmland.⁵³⁴

414. Construction and operation activities are not expected to result in the loss of agricultural-related jobs or in an appreciable net loss of income resulting from agricultural practices because no active agricultural practices currently occur in the Project ROW.⁵³⁵ However, perceived impacts to farmland are subjective and may be difficult to assess given the trade-offs between agricultural activities and utility-scale solar projects. For example, conversion of farmland to solar energy production can be viewed as a conversion from one type of industrial use to another. Conversely, the conversion of farmland to solar energy production can be viewed as a negative impact to agricultural production. Restoring the Route with native grasses and forbs will reduce soil erosion, provide pollinator and wildlife benefits, and improve soil health.⁵³⁶

415. The DRP includes conditions that address agricultural mitigation, where relevant, and soil-related impacts.⁵³⁷ Sections 5.3.10-5.3.13 require mitigation of potential

⁵³⁰ Ex. 156 at 59, 61 (EA); *see also* Ex. 114 at 39 (RPA).

⁵³¹ Ex. 156 at 63-64 (EA); *see also* Ex. 114 at 36-37 (RPA).

⁵³² Ex. 156 at 64 (EA).

⁵³³ Ex. 114 at 52-53 (RPA).

⁵³⁴ Ex. 156 at 65 (EA).

⁵³⁵ Ex. 114 at 53 (RPA).

⁵³⁶ Ex. 156 at 65 (EA).

⁵³⁷ *Id.*

impacts to soil and VMP to address impacts to vegetation. No additional mitigation is necessary.

2. *Forestry*

416. Active forestry operations, including commercial timber harvest, woodlots, or other forestry resources do not occur within the Route. Impacts to forestry operations will not occur.⁵³⁸

3. *Mining*

417. There are no gravel pits within the Route. The closest gravel pits are located approximately two miles west and southwest from the Route.⁵³⁹

418. To the extent that construction of the Transmission Line requires backfill and access roads, Benton Solar will use some sand and aggregate for those purposes. The demand for sand and gravel will be temporary and is not expected to require new or expanded sand or aggregate operations.⁵⁴⁰

419. Impacts to mining will not occur and no mitigation is proposed.⁵⁴¹

D. Archaeological and Historical Resources

420. Benton Solar contacted the Minnesota SHPO and Minnesota Office of the State Archaeologist (“OSA”) in October 2022 to gather cultural resources records related to the Route. No cultural resources listed on the Minnesota State Historic Sites Network records, Minnesota State Monument records, Minnesota State Register of Historic Places, or NRHP are located within the Route. None of the NRHP listings in Benton County are within the Route. The records search indicated that the Route contains no previously documented architectural inventory resources or archaeological sites.⁵⁴²

421. Additionally, Benton Solar corresponded with 47 Native American Tribes, including 11 Minnesota Tribal Nations. Tribal cultural specialists from the Mille Lacs Band of Ojibwe, the Rosebud Sioux Tribe, the Sisseton Wahpeton Oyate, and the Standing Rock Sioux Tribe have attended survey efforts completed to date. During the surveys, three archaeological and tribal resources were identified, and Benton Solar selected the Route to avoid the identified resources.⁵⁴³

422. Benton Solar will also prepare an Unanticipated Discovery Plan for the Transmission Line, and should construction or operation inadvertently encounter previously

⁵³⁸ *Id.*; Ex. 114 at 53-54 (RPA).

⁵³⁹ Ex. 156 at 34 (EA); Ex. 114 at 53-54 (RPA).

⁵⁴⁰ Ex. 156 at 34 (EA).

⁵⁴¹ *Id.*

⁵⁴² Ex. 114 at 55 (RPA).

⁵⁴³ *Id.* at 55-56; Ex. 156 at 67-68 (EA); Ex. 154 at 6 (MacDonald Direct); Ex. 155 at 10:22-11:8 (Gracia Direct).

undocumented archaeological resources or human remains, the discoveries will be reported to the SHPO or OSA, as applicable.⁵⁴⁴

423. In addition to siting the Route to avoid archaeological and historic resources, Section 3.15 of the DRP addresses archeological resources and requires the permittee to avoid impacts to archaeological and historic resources where possible and to mitigate impacts where avoidance is not possible.⁵⁴⁵ No further mitigation is needed.

E. Natural Environment

1. Air Quality

424. Construction activities (e.g., clearing, grading, and hauling) may result in the short-term increase of: (i) airborne dust/particulate matter; and (ii) emissions, including carbon dioxide related to operation of construction equipment and vehicles. No long-term impacts to air quality are anticipated to result from construction activities.⁵⁴⁶

425. Construction activities will have minimal greenhouse gas emissions and removal of vegetation during construction may increase carbon dioxide due to reduced respiration and storage in the vegetation resulting in negligible increase in greenhouse gas emissions in the short term. Long-term, and overall, the Project is expected to have a positive impact on greenhouse gas emissions and help Minnesota reach its renewable energy goals.⁵⁴⁷

426. As transmission lines themselves do not appreciably affect air quality, there will be no permanent impacts to air quality from the operation of the Transmission Line.⁵⁴⁸

427. Fugitive dust emissions will be mitigated by the requirements of construction stormwater permit that will be obtained for the Project, an NPDES and SDS construction stormwater permit, and an associated SWPPP, as well as by watering exposed surfaces, covering disturbed areas, reducing speed limits for vehicles on-site, and using other BMPs.⁵⁴⁹

428. Greenhouse gas emissions will be mitigated by keeping vehicles in good working order, reducing idling time, using vehicles that meet air emission standards and performing routine vehicle maintenance.⁵⁵⁰ No additional mitigation is needed.

2. Geology and Soil

429. The surface and near-surface geologic layers of the Project Route have been most heavily influenced by numerous glaciation events. The composition and thickness of

⁵⁴⁴ Ex. 114 at 56 (RPA); Ex. 154 at 15:22-23-16:2 (MacDonald Direct). *See also* Response Comments at 8 (stating no objection to the requirement to develop an unanticipated discoveries plan).

⁵⁴⁵ Ex. 156 at 68 (EA).

⁵⁴⁶ Ex. 114 at 58 (RPA).

⁵⁴⁷ *Id.* at 60.

⁵⁴⁸ *Id.* at 58.

⁵⁴⁹ Ex. 156 at 70-72 (EA).

⁵⁵⁰ *Id.* at 72; Ex. 114 at 61 (RPA).

glacial drift in Benton County varies greatly across its boundaries and is a function of the numerous distinct glaciation episodes. The drift is primarily composed of unsorted sand, gravel, and rock sediments deposited out of the glaciers (till) and settled fine-grained sediment associated with glacial meltwater.⁵⁵¹

430. There are no reported karst features within the Route or the Project Area.⁵⁵²

431. The soils deposited in the Route are nearly all nonhydryc or predominantly nonhydryc. There are no prime farmlands; prime farmlands, if drained; or farmlands of statewide importance within the Route.⁵⁵³

432. Construction of the Transmission Line could affect geology directly if foundations penetrate shallow water tables or indirectly if there are leaks from equipment or spills.⁵⁵⁴ It could also impact soil by removing protective vegetative cover and exposing soil to the effects of wind and precipitation, which could potentially lead to soil erosion and the loss of valuable soil resources and greater sediment yield to nearby water resources.⁵⁵⁵ Construction could also result in soil mixing.⁵⁵⁶

433. Construction should not affect the bedrock of the area nor is construction expected to create abrupt elevation changes,⁵⁵⁷ and potential impacts to soils can be mitigated by using BMPs and standard construction practices to minimize soil erosion.⁵⁵⁸

3. *Surface waters, floodplains, groundwater, and wetlands*

434. According to the USGS National Hydrography Dataset, there are no streams or ditches within the Project Route. Approximately 0.01 mile of the Elk River overlaps the northeast corner of the Route.⁵⁵⁹

435. The Route does not intersect any surface waters. As such, direct impacts to surface waters are not expected to occur. Indirect impacts to surface waters could occur due to the construction of the Transmission Line.⁵⁶⁰

436. Section 5.3.8 of the DRP requires implementation of erosion control measures to protect surface waters.⁵⁶¹

⁵⁵¹ Ex. 114 at 31 (RPA).

⁵⁵² Ex. 156 at 74 (EA).

⁵⁵³ Ex. 114 at 32 (RPA).

⁵⁵⁴ Ex. 156 at 74-75 (EA).

⁵⁵⁵ Ex. 114 at 35 (RPA).

⁵⁵⁶ Ex. 156 at 77 (EA).

⁵⁵⁷ *Id.* at 75; *see also* Ex. 114 at 31 (RPA).

⁵⁵⁸ Ex. 156 at 77 (EA); *see also* Ex. 114 at 35-36 (RPA).

⁵⁵⁹ Ex. 114 at 61 (RPA).

⁵⁶⁰ *Id.*; Ex. 156 at 79 (EA).

⁵⁶¹ Ex. 156 at 79 (EA).

437. According to Federal Emergency Management Agency Flood Insurance Rate Maps and data, the majority of the Route, and the entirety of the Project ROW, is located in an area of minimal flood hazard.⁵⁶²

438. Minimal impacts to topography, such as the creation of elevation changes or modifications to natural drainage patterns, may occur near the Elk River crossing where steep slopes with erosion prone soils could exist.⁵⁶³

439. As a component of the NPDES and SDS Construction Stormwater permit required for construction, Benton Solar will prepare a SWPPP, which includes BMPs and other requirements to mitigate sediment runoff.⁵⁶⁴ Implementation of the SWPPP will assist in stabilizing slopes and managing runoff and erosion during construction near the river crossing to ensure the existing drainage pattern remains afterwards, minimizing impacts from topography and soil/erosion that could indirectly impact other resources such as the Mississippi River.⁵⁶⁵

440. The Anoka Sand Plain Aquifer System lies beneath the Route and varies between a few feet to over 75 feet in thickness. The aquifer sits at a depth between 970 and 1,030 feet, which is on the shallower end of those found in Benton County.⁵⁶⁶

441. Potential impacts to groundwater can occur directly or indirectly from structures penetrating water tables or leaks and spills for equipment or storage.⁵⁶⁷ While Benton Solar does not intend to store hazardous materials that can leak, it has indicated that it will have a SPCC to mitigate harms related to spills.⁵⁶⁸

442. Construction of the Transmission Line is not expected to affect or utilize groundwater.⁵⁶⁹

443. If construction activities reach the water table, Benton Solar will be required to obtain a water appropriation permit.⁵⁷⁰

444. The USFWS National Wetlands Inventory indicates 0.02 acre of riverine wetland is present in the Route. No other wetlands, including calcareous fens, are present within the Project Route, nor are any located in the Project ROW. Benton Solar verified the absence of additional wetlands during its aquatic resources field surveys in spring 2023.⁵⁷¹

445. The Route was sited to avoid the riverine wetland, and Section 5.3.9 of the DRP prohibits the placement of energy facilities in public waters and public waters

⁵⁶² Ex. 114 at 63 (RPA).

⁵⁶³ Ex. 156 at 81 (EA).

⁵⁶⁴ Ex. 114 at 11, 21-22 (RPA).

⁵⁶⁵ Ex. 156 at 81 (EA).

⁵⁶⁶ *Id.* at 74.

⁵⁶⁷ *Id.*

⁵⁶⁸ Ex. 114 at 35-36 (RPA).

⁵⁶⁹ *Id.* at 63.

⁵⁷⁰ Ex. 156 at 75 (EA).

⁵⁷¹ *Id.* at 83-83; *see also* Ex. 114 at 64 (RPA).

wetlands.⁵⁷² If wetland impacts are required for the final layout, coordination with the appropriate agency, such as the USACE under Section 404 and 401 of the Federal Clean Water Act and the Benton County SWCD under the WCA, would occur prior to construction.⁵⁷³

446. No further mitigation is needed.

4. *Vegetation*

447. The Transmission Line Route lies within the Anoka Sand Plain Subsection Ecological Classification System (ECS) 222Mc in the Minnesota and Northeast Iowa Morainal Section in the Eastern Broadleaf Forest Province. Pre-settlement vegetation was dominated by oak barrens and openings on droughty uplands and brushlands on the sandplain.⁵⁷⁴ The existing land cover in the Project Route is described as a mosaic of mixed forest and herbaceous areas, with historic disturbances resulting from a gravel mine, agriculture, transmission line, and substation.⁵⁷⁵

448. Construction of the Transmission Line would alter the existing vegetation by removing trees resulting in changes to sunlight infiltration and soil exposure.⁵⁷⁶ In total, approximately 2.3 acres of tree removal will be required in the Project ROW.⁵⁷⁷

449. Benton Solar has minimized impacts through optimizing use of currently disturbed areas (e.g., hay/pasture) for siting of the Transmission Line. Temporarily disturbed areas will be revegetated and reseeded with a regionally appropriate seed mix. Benton Solar will also use BMPs to control and prevent the introduction of invasive species.⁵⁷⁸

450. Sections 5.3.10-5.3.13 require the use of a VMP and include restrictions on the use of pesticides and measures to mitigate risks of invasive species and noxious weeds.

451. No further mitigation is required.

5. *Wildlife*

452. Within the Project Route, wildlife associated with a mix of disturbed herbaceous and wooded areas are expected to be present. These wildlife species include various terrestrial bird, mammal, herptile, and insect species. The Project Route occurs in the Mississippi Flyway, an important north-south migration corridor between avian wintering habitat and breeding areas, and in the Prairie Hardwood Transition Bird Conservation Region.⁵⁷⁹

⁵⁷² Ex. 156 at 84 (EA).

⁵⁷³ *Id.*

⁵⁷⁴ Ex. 114 at 64 (RPA).

⁵⁷⁵ *Id.* at 65.

⁵⁷⁶ *Id.*; Ex. 156 at 85 (EA).

⁵⁷⁷ Ex. 114 at 66 (RPA).

⁵⁷⁸ *Id.* at 65.

⁵⁷⁹ *Id.* at 65-66.

453. There are no MnDNR wildlife management areas or migratory waterfowl feeding and resting, or USFWS Waterfowl Production areas within one mile of the site.⁵⁸⁰

454. Construction of the Transmission Line would likely lead to wildlife displacement that currently uses these the land. More mobile species would abandon habitat for nearby adjacent habitats. The ROW clearing would fragment wildlife habitat in this area, converting it from a forested habitat to an open, routinely maintained habitat. Impacts during construction are expected to be of short duration.⁵⁸¹

455. During operations, potential impacts to avian species (e.g., songbirds, raptors, and waterfowl) include those described above for non-avian species but also include potential impacts from electrocution and collision with transmission line conductors. Birds may be injured by colliding with transmission line structures and conductors.⁵⁸²

456. Benton Solar will follow practices outlined in the Avian Power Line Interaction Committee and restrict tree clearing from May 15-August 31.⁵⁸³

457. Section 5.3.16 of the DRP requires coordination with MnDNR to identify areas where bird diverters can be placed.⁵⁸⁴

458. No further mitigation is needed.

F. Effects on Rare and Unique Natural Resources

459. There are no MBS sites of moderate, high, or outstanding biodiversity significance within Route. Additionally, there are no native plant community sites, calcareous fens, waterfowl production areas, or wildlife management areas within the Route or Project Area.⁵⁸⁵ Accordingly, no impacts to rare or significant habitats are expected.

460. Review of the Route identified six federally listed species that may occur in the Route, but also concluded that there are no critical habitats for those species in the Route.⁵⁸⁶ A National Heritage Review, in 2023, indicated that there were four state-listed species that have a potential occurring in the Route.⁵⁸⁷ Benton Solar's review also identified several other state-listed species and documented their potential to occur in the Route.⁵⁸⁸

461. MnDNR commented that portions of the Route and the Project Area have habitat suitable for Blanding's turtles.⁵⁸⁹ MnDNR also recommended a special permit condition requiring compliance with MnDNR procedures for state-listed endangered and

⁵⁸⁰ Ex. 156 at 87 (EA).

⁵⁸¹ *Id.*

⁵⁸² *Id.* at 87.

⁵⁸³ Ex. 114 at 67 (RPA).

⁵⁸⁴ Ex. 156 at 88 (EA).

⁵⁸⁵ *Id.* at 88-89; Ex. 114 at 73 (RPA).

⁵⁸⁶ Ex. 156 at 90-91 (EA). *See also* Ex. 114 at 68-69, 74 (RPA); Ex. 154 at 8-9 (MacDonald Direct).

⁵⁸⁷ Ex. 156 at 92 (EA). *See also* Ex. 114 at 69-74 (RPA); Ex. 154 at 8-9 (MacDonald Direct).

⁵⁸⁸ Ex. 156 at 93 (EA). *See also* Ex. 114 at 69-74 (RPA); Ex. 154 at 8-9 (MacDonald Direct).

⁵⁸⁹ MnDNR Comments at 1-2.

threatened species to address concerns about the Blanding's turtles.⁵⁹⁰ Benton Solar did not object to MnDNR's recommendations.⁵⁹¹

462. Benton Solar will use best practices to minimize habitat disturbance and utilize construction practices that could interfere with habitats.⁵⁹²

463. No further mitigation is needed.

G. Use of Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines and Agricultural Field Boundaries

464. The Route does not parallel existing right-of-way because approximately 80 percent is within a single parcel owned by GRE and that is designated for use by electric utilities.⁵⁹³

465. Because there was only one route under review, the EA did not analyze use of existing rights-of-way.⁵⁹⁴

H. Use of Existing Transportation, Pipeline, and Electrical Transmission System Right-of-Way

466. The Route does not use existing transmission systems because approximately 80 percent is within a single parcel owned by GRE and that is designated for use by electric utilities.⁵⁹⁵

467. Because there was only one route under review, the EA did not analyze the use of existing transmission systems.⁵⁹⁶

I. Electrical System Reliability

468. Benton Solar will design the Project to meet applicable federal, state, and local codes, including the North American Electric Reliability Corporation Reliability Standards, the National Electric Safety Code, and Minn. R. § 8820.9920.⁵⁹⁷

469. Additionally, the Transmission Line is expected to maintain or improve the reliability of the electrical system.⁵⁹⁸

⁵⁹⁰ *Id.*

⁵⁹¹ Response Comments at 8.

⁵⁹² Ex. 114 at 65-67, 74 (SPA); Ex. 154 at 9:16-22 (MacDonald Direct).

⁵⁹³ Ex. 114 at 15 (RPA).

⁵⁹⁴ Ex. 156 at 97 (EA).

⁵⁹⁵ Ex. 114 at 15 (RPA).

⁵⁹⁶ Ex. 156 at 97 (EA).

⁵⁹⁷ Ex. 114 at 7 (RPA).

⁵⁹⁸ Ex. 156 at 97 (EA).

J. Design Options and Cost

470. Evaluation of design options and costs of a proposed project are relevant where there are alternative routes proposed.⁵⁹⁹

471. The Route was chosen to avoid sensitive environmental and cultural resources,⁶⁰⁰ and no alternatives were proposed by Benton Solar or any other commenters.⁶⁰¹

K. Unavoidable Adverse Effects to Human and Natural Environment

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

- (i) Fugitive dust.
- (ii) Noise disturbance to nearby residents and recreationalists.
- (iii) Visual disturbance to nearby residents and recreationalists.
- (iv) Soil compaction and erosion.
- (v) Vegetative clearing (loss of shelter belts).
- (vi) Disturbance and temporary displacement of wildlife, as well as direct impacts to wildlife inadvertently struck or crushed.
- (vii) Minor amounts of marginal habitat loss.
- (viii) Possible traffic delays.
- (ix) Minor GHG emissions from construction equipment and workers commuting.⁶⁰²

473. Unavoidable adverse impacts associated with the operation would last for the life of the Project, and include:

- (i) Visual impacts of the Project.
- (ii) Cultural impacts due to a change in the sense of place for local residents
- (iii) Loss of land for agricultural purposes.⁶⁰³

⁵⁹⁹ Minn. R. 7850.4100 (L); Minn. R. 7850.3100.

⁶⁰⁰ Ex. 114 at 13 (RPA).

⁶⁰¹ Ex. 142 (Alternatives Identified During Scoping Comment Period).

⁶⁰² Ex. 156 at 94 (EA).

⁶⁰³ *Id.*

L. Irreversible and Irretrievable Commitments of Resources

474. Irreversible and irretrievable resource commitments are primarily related to Project construction, including the use of water, aggregate, hydrocarbons, steel, concrete, wood, and other consumable resources. Some, like fossil fuel use, are irretrievable. Others, like water use, are irreversible. Still others might be recyclable in part, for example, the raw materials used to construct PV panels would be an irretrievable commitment of resources, excluding those materials that may be recycled at the end of the panels' useful life. The commitment of labor and fiscal resources to develop, construct, and operate the Project is considered irretrievable⁶⁰⁴

XV. ROUTE PERMIT CONDITIONS

475. The DRP includes a number of proposed permit conditions that were established in other route permit proceedings of other transmission lines permitted by the Commission. Many of those conditions have been discussed above. The conditions apply to site preparation, construction, cleanup, restoration, operation, maintenance, abandonment, decommissioning, and other aspects of the Project.

476. MnDNR requested the inclusion of four special conditions:

- The Permittee will comply with applicable Minnesota Department of Natural Resources requirements related to state-listed endangered and threatened species in accordance with Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134). The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.⁶⁰⁵
- The Permittee shall comply with the DNR's tree clearing recommendation from June 1 to August 15 to minimize impacts to northern-long eared bats.⁶⁰⁶
- The permittee shall use erosion control materials that do not contain plastic or synthetic fibers or malachite green dye.⁶⁰⁷
- The Permittee shall utilize non-chloride products for onsite dust control during construction.⁶⁰⁸

477. In its response to public hearing comments, Benton Solar did not object to MnDNR's proposed special permit conditions.⁶⁰⁹

⁶⁰⁴ *Id.*

⁶⁰⁵ MnDNR Comments at 1-2.

⁶⁰⁶ *Id.* at 2.

⁶⁰⁷ *Id.* at 3.

⁶⁰⁸ *Id.*

⁶⁰⁹ Response Comments at 8-10.

478. The record supports the inclusion of MnDNR’s proposed special permit conditions in the DRP.

CONCLUSIONS OF LAW

XVI. CONCLUSIONS APPLICABLE TO ALL APPLICATIONS

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

480. Pursuant to Minn. Stat. §§ 216E.02 and 216E.03, the Commission and the ALJ have jurisdiction over Benton Solar’s Joint Site Permit Application for the up to 100-MW Solar Facility and the up to 100-MW BESS and the Route Permit Application for the 115 kV high-voltage Transmission Line.

481. The Commission accepted the Applications as substantially complete on December 19, 2024.⁶¹⁰

482. The Commission, EIP, and Benton Solar have provided all notices required under Minnesota Statutes and Rules for the Applications and have substantially complied with the procedural requirements of Minn. Stat. Ch. 216E and Minn. R. Ch. 7850.

483. EIP has conducted the EA of the Project for the purposes of the Solar Facility Site Permit, BESS Site Permit and Route Permit pursuant to Minn. Stat. § 216E.04 and Minn. R. 7850.3700.

484. Public hearings were held on August 26, 2025 (remote access) and August 27, 2025 (in person). The in-person public hearing was conducted near the Project. Proper notice was provided for the hearings, and the public was provided an opportunity to speak at the hearings and to submit written comments.

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

XVII. CONCLUSIONS APPLICABLE TO SITE PERMIT APPLICATIONS

486. The Commission has authority under Minn. Stat. § 216E.03 to place conditions in a site permit.

487. The Solar Facility DSP and BESS DSP, as revised by EIP, contains a number of important mitigation measures and other reasonable conditions.

488. It is reasonable to amend the Solar Facility DSP and BESS DSP to include the changes proposed by MnDNR and EIP as detailed above.

⁶¹⁰ Ex. 131 (Order Accepting Applications as Complete, Establishing Procedural Requirements, and Notice of and Order for Hearing).

489. On this record, there is no potential site within a reasonable geographic area that is conducive to a substantial solar and BESS development that is not defined as prime farmland. Within this geographical limitation, there is no prudent and feasible alternative to the Benton Solar Site.

490. The record in this proceeding demonstrates that Benton Solar has satisfied the criteria for a site permit as set forth in Minn. Stat. §§ 216E.03, 216E.04 and Minn. R. Ch. 7850 and all other applicable legal requirements.

491. The Solar Facility and the BESS, with the permit conditions discussed above, satisfy the site permit criteria under Minn. Stat. §§ 216E.03, 216E.04 and Minn. R. Ch. 7850 and meet all other applicable legal requirements.

XVIII. CONCLUSIONS APPLICABLE TO ROUTE PERMIT APPLICATION

492. The Commission has authority under Minn. Stat. § 216E.03 to place conditions in a route permit.

493. The DRP contains a number of important mitigation measures and other reasonable conditions.

494. It is reasonable to amend the DRP to include the changes proposed by MnDNR as detailed above.

495. The record of this proceeding demonstrates that Benton Solar has satisfied the criteria for a route permit as set forth in Minn. Stat. §§ 216E.03, 216E.04, and Minn. R. Ch. 7850 and all other applicable legal requirements.

496. The Transmission Line, with the permit conditions identified above, satisfies the route permit conditions under Minn. Stat. §§ 216E.03, 216E.04 and Minn. R. Ch. 7850 and meets all other applicable legal requirements

RECOMMENDATION

497. Issuance of a Site Permit to construct and operate the 100-MW Solar Facility, a Site Permit to construct and operate the 100 MW BESS , and a Route Permit to construct and operate the 115-kV Transmission Line to Benton Solar, LLC, and that the issued Site Permits and Route Permit contain the conditions as set forth in the foregoing Findings of Fact and Conclusions of Law.

Dated: _____

Administrative Law Judge Megan J. McKenzie