

Attachment B

EERA Edits to Proposed Findings of Facts

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

**In the Matter of the Application of Birch
Coulee Solar LLC for a Site Permit for the
up to 125 MW Birch Coulee Solar Project
in Renville County, Minnesota**

OAH Docket No. 5-2500-40417
MPUC Docket No. IP-7119/GS-23-477

**BIRCH COULEE SOLAR LLC'S
PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATIONS**

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This matter was assigned to Administrative Law Judge Jim Mortenson to conduct a public hearing on the Site Permit Application (MPUC Docket No. IP-7119/GS-23-477) (Application) of Birch Coulee Solar LLC (Birch Coulee Solar) to construct and operate an up to 125 megawatt (MW) alternating current photovoltaic (PV) solar energy generating facility located in the City of Franklin and Bandon, Birch Cooley, and Camp Townships in Renville County, Minnesota (Project). The Minnesota Public Utilities Commission (Commission) also requested that the Administrative Law Judge prepare findings of fact and conclusions of law and provide recommendations, if any, on conditions and provisions of the proposed Site Permit.

Public hearings on the Application were held on March 11, 2025 (in-person) and March 12, 2025 (remote-access). The factual record remained open until March 24, 2025, for the receipt of written public comments.

Haley Waller Pitts, Fredrikson & Byron, P.A., 60 South Sixth Street, Suite 1500, Minneapolis, Minnesota 55402, and Scott Groux, Development Manager, and Lauren Colwell, Permitting Project Manager, appeared on behalf of Birch Coulee Solar.

Craig Janezich, 121 Seventh Place East, Suite 350, St. Paul, MN 55101 appeared on behalf of Commission Staff at the in-person and remote access hearings.

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

STATEMENT OF ISSUES

Has Birch Coulee Solar satisfied the criteria established in Minn. Stat. § 216E.03, subd. 7 (2023) and Minn. R. 7850.4100 for a site permit for the Project?

SUMMARY OF RECOMMENDATIONS

The Administrative Law Judge concludes that Birch Coulee Solar has satisfied the applicable legal requirements and, accordingly, recommends that the Commission GRANT a site permit for the Project, subject to the conditions discussed below.

FINDINGS OF FACT

I. THE APPLICANT

1. Birch Coulee Solar is an independent power producer (IPP) and an affiliate of AES Clean Energy (AES).¹

2. AES owns and operates solar, battery, wind, and green hydrogen projects across the United States, grossing 6.9 gigawatts (GWs) in operation at the end of 2023. The Project will be the first solar project developed in Minnesota for an AES affiliate. AES is a division of The AES Corporation based in the United States and a publicly traded Fortune 500 company. The AES Corporation has projects spanning 13 other countries over four continents.²

II. PROCEDURAL HISTORY

3. On March 23, 2024, Birch Coulee Solar filed a Notice of its Intent to Submit a Site Permit Application for the Project under the alternative permitting procedures of Minn. R. 7850.2800-.3900.³

4. On July 29, 2024, Birch Coulee Solar submitted the Application for the Project.⁴

5. On July 31, 2024, Birch Coulee Solar submitted the Notice of Filing of the Application to persons interested in the Project, the Commission's Energy Facilities General List, Local Officials, Tribes, and Property Owners in accordance with Minnesota Rule 7850.2100.⁵

6. On August 6, 2024, the Commission issued a Notice of Comment Period requesting comments on whether the Application was complete within the meaning of the Commission's rules; whether the Commission should appoint an advisory task force; whether there were contested issues of fact with respect to the representations made in the Application; whether the Commission should direct the Executive Secretary to issue an authorization to initiate a State Historic Preservation Office (SHPO) Consultation to the Applicant; and whether there were any other issues or concerns that should be considered.⁶

7. On August 15, 2024, the International Union of Operating Engineers Local 49 and North Central States Regional Council of Carpenters (Local 49 and NCSRCC) filed comments on the completeness of the Application.⁷ On the same day, Birch Coulee Solar submitted the Confirmation of Notice Compliance Filing for the Application.⁸

¹ Ex. BCS-2 at 1-2 (Application).

² Ex. BCS-2 at 1 (Application).

³ Ex. BCS-1 (Notice of Intent by Birch Coulee Solar to Submit a Site Permit Application under the Alternative Permitting Process).

⁴ Exs. BCS-2 and BCS-3 (Application and Appendices).

⁵ Ex. BCS-4 (Notice of Filing Site Permit Application).

⁶ Ex. PUC-1 (Notice of Comment Period).

⁷ Local 49 and NCSRCC Comments (Aug. 19, 2024) (eDocket No. 20248-209556-01).

⁸ Ex. BCS-5 (Confirmation of Notice).

8. On August 19, 2024, EERA filed Completeness Comments and Recommendations. EERA recommended that the Commission accept the Application as complete, require Birch Coulee Solar to provide greenhouse gas (GHG) emission details for the construction stage of the Project, take no action on an advisory task force, and request a full Administrative Law Judge report with recommendations for the Project's public hearing.⁹
9. On August 21, 2024, Birch Coulee Solar filed a revised Appendix H - Agency Correspondence.¹⁰
10. On August 23, 2024, Birch Coulee Solar submitted reply comments concerning Application completeness.¹¹
11. On August 30, 2024, EERA filed supplemental comments recommending that the Commission find the Application to be complete.¹²
12. On September 5, 2024, the Commission issued proposed consent items.¹³
13. On September 10, 2024, the Commission issued an order finding the Application complete, declining to appoint an advisory task force, and requesting a full Administrative Law Judge report with recommendations for the Project's public hearing.¹⁴ The Commission also issued minutes from the September 9, 2024, consent calendar subcommittee meeting.¹⁵
14. On September 23, 2024, the Commission published the Notice of Public Information and Environmental Assessment (EA) Scoping Meetings scheduling meetings for October 9, 2024 (in-person) and October 10, 2024 (remote-access), opening up a public comment period until October 25, 2024, and requesting responses to three questions regarding the Project: (1) What potential human and environmental impacts of the proposed Project should be considered in the EA?; (2) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA?; and (3) Are there any unique characteristics of the proposed Project that should be considered in the EA?¹⁶
15. On October 7, 2024, the Commission filed a sample solar site permit.¹⁷
16. On October 24, 2024, the Minnesota Department of Transportation (MnDOT) filed scoping comments.¹⁸

⁹ Ex. EERA-1 (Comments and Recommendations Regarding Application Completeness).

¹⁰ Ex. BCS-6 (Revised Appendix H to SPA).

¹¹ Ex. BCS-7 (Completeness Reply Comments).

¹² Ex. EERA-2 (Response to Reply Comments on Application Completeness).

¹³ Ex. PUC-2 (Proposed Consent Items).

¹⁴ Ex. PUC-3 (Order).

¹⁵ Ex. PUC-4 (Minutes – Consent).

¹⁶ Ex. PUC-5 (Notice of Information & Scoping Meeting).

¹⁷ Ex. PUC-6 (Sample Permit).

¹⁸ MnDOT Scoping Comments (Oct. 24, 2024) (eDocket No. [202410-211275-01](#)).

17. On October 25, 2024, LIUNA Minnesota and North Dakota (LIUNA),¹⁹ Minnesota Department of Natural Resources (DNR),²⁰ Local 49, and NCSRCC²¹ filed scoping comments. The Commission filed the Affidavit of Publication of the notice of public information and EA scoping meetings in the Renville County Register newspaper.²² Birch Coulee Solar filed comments providing Project updates.²³
18. On November 1, 2024, EERA filed written public comments received on the scope of the EA for the Project including comments from Scott Refsland on behalf of Renville County.²⁴
19. On November 6, 2024, Birch Coulee Solar filed comments in response to comments submitted during the scoping comment period.²⁵
20. On November 14, 2024, the Administrative Law Judge issued a notice of prehearing conferred scheduled for November 19, 2024.²⁶
21. On November 19, 2024, EERA filed the transcripts from the in-person and the virtual Public Information and Scoping meetings.²⁷
22. On November 21, 2024, the Administrative Law Judge issued a prehearing order establishing a schedule for the proceedings.²⁸
23. On November 25, 2024, EERA filed the EA scoping decision for the Project.²⁹
24. On November 26, 2024, EERA filed the Notice of EA Scoping Decision.³⁰
25. On February 25, 2025, Birch Coulee Solar filed the direct testimony of Scott Groux, including Schedules A and B.³¹
26. On February 26, 2025, EERA filed the EA for the Project.³² Also, the Commission filed a Notice of Public Hearings and Availability of Environmental Assessment providing for an in-person hearing on March 11, 2025, in Franklin, Minnesota and a remote hearing on March 12, 2025, via WebEx. The Commission also requested comments from the public on (1) whether the Commission should grant a site permit for the proposed solar energy generating system, and (2) if

¹⁹ LIUNA Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211350-01](#)).

²⁰ DNR Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211346-01](#)).

²¹ Local 49 and NCSRCC (Oct. 25, 2024) (eDocket No. [202410-211340-01](#)).

²² Ex. PUC-8 (Notice of Hearing and EA Availability).

²³ Ex. BCS-8 (Scoping Comments).

²⁴ Ex. EERA-3 (Written Comments on the Scope of Environmental Assessment).

²⁵ Ex. BCS-9 (Response to Scoping Comments).

²⁶ Notice of Prehearing Conference (Nov. 14, 2024) (eDocket No. [202411-211922-01](#)).

²⁷ Ex. EERA-4 (Oral Public Comments on Scope of EA).

²⁸ Prehearing Order (Nov. 21, 2024) (eDocket No. [202411-212233-01](#)).

²⁹ Ex. EERA-5 (EA Scoping Decision).

³⁰ Ex. EERA-6 (Notice of EA Scoping Decision).

³¹ Ex. BCS-10 (Direct Testimony of Scott Groux and Schedules A and B).

³² Ex. EERA-7 (EA).

granted, what additional conditions or requirements should be included in the Site Permit. The Commission stated that it would accept written comments through March 24, 2025.³³

27. On February 27, 2025, EERA filed the notification of the publication of the EA to the THPO.³⁴ EERA also filed the notification of the publication of the EA to state and federal agencies.³⁵

28. On February 28, 2025, EERA filed the notification of the mailing of the EA to libraries.³⁶

29. On March 4, 2025, EERA filed notice of public hearings and the EA's availability in the Environmental Quality Board (EQB) Monitor.³⁷

30. On March 5, 2025, Birch Coulee Solar filed the combined exhibit list for the Project.³⁸

31. On March 2010, 2025, the Commission filed a handout of the Public Hearing presentation.³⁹

32. On March 14, 2025, Birch Coulee Solar filed the Affidavit of Publication of the notice of public hearings and the EA's availability in the Renville County Register newspaper.⁴⁰

33. On March 24, 2025, the close of the public hearing comment period, comments were submitted by the following: Birch Coulee Solar; EERA; DNR; and Ann Brazil.⁴¹

34. On March 31, 2025, Scott Refsland filed written comments on behalf of Renville County.⁴²

35. On April 7, 2025, Birch Coulee Solar filed its Response to Public Hearing Comments and Proposed Findings of Fact, Conclusions of Law, and Recommendation.

III. DESCRIPTION OF THE PROJECT

36. Birch Coulee Solar is proposing to construct and operate the Project, an up to 125 MW solar farm in Renville County, Minnesota. The Project will connect to the electric transmission grid through the existing Xcel Energy Franklin 115 kV substation.⁴³ A short (<500 ft) aboveground

³³ Ex. PUC-8 (Notice of Hearing and EA Availability).

³⁴ Ex. EERA-8 (Notification of EA to Tribal Historic Preservation Officers, Tribal Government Contacts, and Agencies).

³⁵ Ex. EERA-8 (Notification of EA to Tribal Historic Preservation Officers, Tribal Government Contacts, and Agencies).

³⁶ Ex. EERA-9 (Notice of EA Mailed to Public Libraries).

³⁷ Ex. EERA-10 (Notice of Public Hearings and EA Availability on EQB Monitor).

³⁸ Birch Coulee Solar – Combined Exhibit List (March 5, 2025) (eDocket No. [20253-216096-01](#)).

³⁹ Public Hearing Presentation (March 10, 2025) (eDocket No. [20253-216249-01](#)).

⁴⁰ Affidavit of Publication (March 14, 2025) (eDocket No. [20253-216409-01](#)).

⁴¹ Comment by Ann Brazil (March 24, 2025) (eDocket Nos. [20253-216708-01](#) and [20253-216715-01](#)); EERA Comments (March 24, 2025) (eDocket No. [20253-216742-01](#)); DNR Comments (March 24, 2025) (eDocket No. [20253-216754-01](#)); and Birch Coulee Solar – Comments on EA and DSP (March 24, 2025) (eDocket No. [20253-216743-01](#) and [20253-216743-02](#)).

⁴² Comment by Scott Refsland (March 31, 2025) (eDocket No. [20253-217001-01](#)).

⁴³ Ex. BCS-2 at 4 (Application).

115 kV transmission line will connect the Project substation to a utility-owned switchyard, which will connect to the Franklin substation via a utility-owned ring-bus point of interconnection (POI). If a utility-owned switchyard is not needed, the Project substation will connect directly to the Franklin substation via a short (<500 ft) aboveground 115 kV transmission line.⁴⁴ The need for a utility-owned switchyard will be determined prior to construction.⁴⁵

37. The Project will consist of PV panels, trackers, inverters, transformers, approximately 6.4 miles of gravel access roads, security fencing, electric collection lines, a project substation, and associated facilities.⁴⁶ Birch Coulee Solar proposes to locate the solar facilities in blocks within the 1,041.6 acres of land under lease or owned by the Applicant. Based on preliminary design, Birch Coulee Solar anticipates approximately 768.2 acres within the 1,041.6-acre land control area⁴⁷ will be developed for the solar facilities. The solar facilities will be connected to the Project substation via 34.5 kilovolt (kV) underground electric collection lines. The collection corridor is estimated to comprise approximately 8.5 acres of the preliminary development area.⁴⁸

38. Birch Coulee Solar estimates the total capital costs to construct the Project, including development, engineering, procurement, and construction (EPC), and interconnection, to be approximately \$245 million. Birch Coulee Solar indicates that actual total costs may vary up to 20%, as costs depend on the timing of construction, final panel selection, labor costs, taxes, and tariffs.⁴⁹

39. The estimated Project decommissioning cost, approximately \$13 million, and component salvage value, approximately \$10 million, was created using 2024 dollars. The actual cost of decommissioning the Project will be dependent on labor costs and the market value of salvageable components at the time of decommissioning. Birch Coulee Solar considers the estimate accuracy range for the total decommissioning cost to be -30 percent to +50 percent.⁵⁰

40. The Project operation and maintenance (O&M) costs include ground-based yearly inspections, lease payments, operational staff wages, taxes, and other inspection/maintenance. Birch Coulee Solar estimates the annual operation cost at approximately \$1 million.⁵¹

IV. SITE LOCATION AND CHARACTERISTICS

41. The proposed Project is located in Birch Coulee, Camp, and Bandon Townships and the city of Franklin in Renville County. Minnesota State Highway 19 (TH 19) runs east-west immediately south of the site, County State Aid Highway 5 (CSAH 5) runs north-south along the

⁴⁴ Ex. EERA-7 at 1 (EA).

⁴⁵ Ex. EERA-7 at 2 (EA).

⁴⁶ Ex. BCS-2 at 9, 10 (Application).

⁴⁷ Land control area means the 1,041.6-acre area for which Birch Coulee Solar is assumed to have site control through ownership, a lease agreement, or an easement. *See* Ex. EERA-7 at viii (EA).

⁴⁸ Ex. EERA-7 at 2 (EA).

⁴⁹ Ex. EERA-7 at 32 (EA).

⁵⁰ Ex. EERA-7 at 32 (EA).

⁵¹ Ex. EERA-7 at 32 (EA).

westernmost portion of the site, and County Road 73 (CR 73) runs north-south through the central southern portion of the site.⁵²

42. The Project would be located on approximately 768 acres within an area of approximately 1,041 acres of land owned or leased by the Applicant. Ninety-seven percent of the site is currently used as cultivated farmland, with the remaining three percent consisting of minimal tree cover, county drainage ditches, farmsteads, and township and county roads.⁵³

43. The Franklin 115 kV substation and associated infrastructure is located in the southwestern portion of the Project area⁵⁴. There are two transmission lines; one 69 kV line runs along the southern and western perimeter of the site and one 115 kV line, owned by Xcel Energy, runs along the southern and western portion of the site, passing through the site near the Franklin 115 kV substation. The Twin City & Western Railroad has one active rail line, primarily operated by the Minnesota Prairie Line, Inc., that runs through the city of Franklin. A small, community-scale solar garden is west of the land control area across CR 5. There are no known pipelines within the Project area.⁵⁵

V. PROJECT SCHEDULE

44. Birch Coulee Solar anticipates Project construction will begin in 2028 with completion and operation anticipated in 2030.⁵⁶

VI. SUMMARY OF PUBLIC COMMENTS

45. During the public information and environmental review scoping meeting (in-person) on October 9, 2024, comments were provided regarding drainage, potential impacts on property values, dust control, fire protection, decommissioning financial assurance, noxious weeds, federal tax incentives for the Project, ownership changes, training for local emergency response teams, vegetative screening, local workforce, and power purchase agreements.⁵⁷

46. During the public information and environmental review scoping meeting (remote-access) on October 10, 2024, no members of the public provided verbal comments.⁵⁸

⁵² Ex. EERA-7 at 16 (EA).

⁵³ Ex. EERA-7 at 16 (EA).

⁵⁴ Project area means one mile from the land control area and collection line corridor. *See* Ex. EERA-7 at ix (EA).

⁵⁵ Ex. EERA-7 at 46-47 (EA).

⁵⁶ Exs. EERA-7 at 2, 33 (EA) and BCS-10 at 4:7-9 (Direct Testimony of Scott Groux).

⁵⁷ *See* Franklin 6:00 p.m. Public Information and Scoping Meeting at 19-33 (Oct. 9, 2024); Ex. EERA-4 (Oral Comments on the Scope of Environmental Assessment).

⁵⁸ *See* Webex 6:00 p.m. Public Information and Scoping Meeting Transcript (Oct. 10, 2024); Ex. EERA-4 (Oral Comments on the Scope of Environmental Assessment).

47. During the scoping comment period ending October 25, 2024, written comments were submitted by LIUNA,⁵⁹ DNR,⁶⁰ MnDOT,⁶¹ Local 49 and NCSRCC,⁶² Renville County,⁶³ and members of the public.⁶⁴ No site, route, or system alternatives were recommended for study.

48. LIUNA's comments recognized the significant energy and socioeconomic benefits of the Project, and requested additional information from Birch Coulee Solar regarding its construction plans and the use of local and union labor.⁶⁵

49. DNR requested that the EA include analysis of the following topics: security fencing; dust; lighting; bats, and wildlife-friendly erosion control.⁶⁶

50. MnDOT requested that the EA include analysis of Project access, protected species, and blowing snow control.⁶⁷

51. Birch Coulee Solar filed comments providing updates on the Project's in-service date, the Minnesota Wetland Conservation Act Notice of Decision, and GHG emissions offset calculations.⁶⁸

52. Renville County provided comments, filed on November 1, 2024, noting that the Project generally complies with County setbacks and requesting that the Commission consider adding language to the Site Permit requiring the site be kept clean and weed free. The County also provided comments concerning tile lines, decommissioning, road use, emergency response, and vegetative screening.⁶⁹

53. Members of the public submitted written comments, filed on November 1, 2024, generally expressing support for the Project, as well as identifying certain topics for inclusion in the EA, including wetland analysis.⁷⁰

54. Birch Coulee Solar filed comments responding to comments made during the scoping meeting and during the written comment period. Specifically, Birch Coulee Solar did not object to the requests for different topics being analyzed in the EA made by DNR, MnDOT, Local 49 and LIUNA. Birch Coulee Solar responded to Renville County's comments noting that it looked forward to continued coordination with the County.⁷¹

⁵⁹ LIUNA Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211350-01](#)).

⁶⁰ DNR Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211346-01](#)).

⁶¹ MnDOT Scoping Comments (Oct. 24, 2024) (eDocket No. 202410-211275-01).

⁶² Local 49 and NCSRCC (Oct. 25, 2024) (eDocket No. [202410-211340-01](#)).

⁶³ See Ex. EERA-3 at 3-5 (Written Comments on the Scope of EA).

⁶⁴ See Ex. EERA-3 at 6-23 (Written Comments on the Scope of EA).

⁶⁵ LIUNA Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211350-01](#)).

⁶⁶ DNR Scoping Comments (Oct. 25, 2024) (eDocket No. [202410-211346-01](#)).

⁶⁷ MnDOT Scoping Comments (Oct. 24, 2024) (eDocket No. 202410-211275-01).

⁶⁸ Ex. BCS-8 (Scoping Comments).

⁶⁹ See Ex. EERA-3 at 3-5 (Written Comments on the Scope of EA).

⁷⁰ See Ex. EERA-3 at 6-23 (Written Comments on the Scope of EA).

⁷¹ Ex. BCS-9 (Response to Scoping Comments).

55. On March 11 and 12, 2025, Administrative Law Jim Mortenson presided over public hearings on the Application for the Project via in-person and remote means, respectively.⁷² Two individuals provided comments during the in-person hearing expressing support for the Project. Two individuals commented during the remote hearing, one regarding the County's comments concerning the Project, and another regarding vegetation management.

56. The written public comment period remained open through March 24, 2025. Written comments were submitted by DNR, EERA and Ann Brazil.⁷³ DNR filed comments recommending special permit conditions for security fencing, facility lighting, dust control, wildlife friendly erosion control, tree removal, and a vegetation management plan (VMP).⁷⁴ EERA filed comments regarding the draft decommissioning plan, the draft VMP, and EERA's recommended special permit conditions.⁷⁵ Ms. Brazil's comment related to the proximity of the Project and Xcel Energy's Minnesota Energy Connection transmission line project.⁷⁶

VII. PERMITTEE

57. The Permittee for the Project is Birch Coulee Solar.⁷⁷

VIII. CERTIFICATE OF NEED

58. The Project is exempt from certificate of need requirements pursuant to Minn. Stat. § 216B.243, subd. 8(a)(7) because Birch Coulee Solar, an IPP, applied for a Site Permit to construct the Project.⁷⁸

IX. SITE PERMIT CRITERIA

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

60. On April 3, 2024, Birch Coulee Solar submitted a Solar Size Determination request to EERA.⁷⁹ On April 12, 2024, EERA informed Birch Coulee Solar that, based on the information provided, the Solar Project is subject to the Commission's siting authority and must seek approval

⁷² See Franklin 6:00 p.m. Public Hearing Transcript (Franklin 6:00 p.m. Tr.) (March 11, 2025); and WebEx 6:00 p.m. Public Hearing Transcript (WebEx 6:00 p.m. Tr.) (March 12, 2025).

⁷³ Comment by Ann Brazil (March 24, 2025) (eDocket Nos. [20253-216708-01](#)) and [20253-216715-01](#)); EERA Comments (March 24, 2025) (eDocket No. [20253-216742-01](#)); and DNR Comments (March 24, 2025) (eDocket No. [20253-216754-01](#)).

⁷⁴ DNR Comments (March 24, 2025) (eDocket No. [20253-216754-01](#)).

⁷⁵ EERA Comments (March 24, 2025) (eDocket No. [20253-216742-01](#)).

⁷⁶ Comment by Ann Brazil (March 24, 2025) (eDocket Nos. [20253-216708-01](#)).

⁷⁷ Ex. BCS-2 at 3 (Application).

⁷⁸ Ex. EERA-7 at 34 (EA); Ex. BCS-10 at 1:16-20 (Direct Testimony of Scott Groux); Ex. BCS-2 at 4 (Application).

⁷⁹ Ex. BCS-2 at 1 (Application).

for the Solar Project under the Power Plant Siting Act (PPSA) (Minn. Statute 216E).⁸⁰ Therefore, a site permit is required prior to construction of the Solar Project.⁸¹

61. An LEPGP powered by solar energy is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04. Birch Coulee Solar filed the Application under the process established by the Commission in Minn. R. 7850.2800-7850.3900.⁸²

62. Under Minn. Stat. § 216E.04, for an LEPGP permitted under the alternative permitting process, EERA prepares for the Commission an EA containing information on the human and environmental impacts of the proposed Project and addresses mitigating measures. The EA is the only state environmental review document required to be prepared on the Project.

X. APPLICATION OF SITING CRITERIA TO THE PROJECT

A. Human Settlement.

63. Minnesota law requires consideration of the Project's effects on human settlement, including displacement of residences and businesses, noise created by construction and operation of the Project, and impacts to aesthetics, cultural values, recreation, and public services.⁸³

i) Aesthetics.

64. The visible elements of the Project will consist of new PV arrays, transformers and inverters, up to three permanent weather stations, an O&M building (if on site), a new substation and short 115 kV transmission line, a switchyard, and security fencing surrounding the Project.⁸⁴

65. Portions of the Project will be visible from local roads, and nearby residences. For most people who pass through the Project area on TH 19, CSAH 5, CR 73, or local roads the impact intensity level is expected to be minimal. For individuals with greater viewer sensitivity, such as people who live in the Project area, the impact intensity level is anticipated to be moderate to significant.⁸⁵

66. Impacts from facility lighting can be minimized by using shielded and downward facing light fixtures and using lights that minimizes blue hue.⁸⁶

67. Birch Coulee Solar will work with adjacent landowners to determine the need for additional vegetation screening and landscaping to minimize aesthetic impacts of the Project.⁸⁷ In oral and written comments filed after the public scoping meeting, Renville County originally requested that Birch Coulee Solar mitigate aesthetic impacts by planting two rows of staggered evergreen trees

⁸⁰ Ex. BCS-2 at 1 (Application).

⁸¹ Ex. BCS-2 at Appendix B – Size Determination (Application).

⁸² Ex. BCS-1 (Notice of Intent by Birch Coulee Solar LLC to Submit a Site Permit Application under the Alternative Permitting Process); Ex. BCS-2 at 4 (Application).

⁸³ Minn. R. 7850.4100, subp. A.

⁸⁴ Ex. EERA-7 at 51 (EA).

⁸⁵ Ex. EERA-7 at 47-52 (EA).

⁸⁶ Ex. EERA-7 at 52 (EA).

⁸⁷ Ex. EERA-7 at 53 (EA).

along roadways and in front of residences.⁸⁸ As discussed further herein, Birch Coulee Solar has further coordinated with Renville County regarding vegetative screening.

68. EERA proposed adding to the Draft Site Permit (DSP) Special Condition Section 5.1 requiring the permittee to coordinate with jurisdictional road management authorities to develop vegetative screening plans for state, county, and township roads adjacent to or bisecting the Project.⁸⁹ Birch Coulee Solar does not support this proposed special condition because screening along all roadsides has not historically been required by the Commission and would be burdensome and unduly expensive, with unclear benefit. Further, because the Project is applying for a Site Permit from the Commission, local ordinance requirements do not apply. Following the public scoping meetings, Birch Coulee Solar has coordinated with the County to identify specific locations for vegetative screening and is requesting feedback from the two adjacent residences affected by that screening regarding the scope proposed by the County.⁹⁰

EERA recommended removing Section 5.1 of the Draft Site Permit upon learning of coordination between Birch Coulee Solar and Renville County regarding vegetative screening plans.

69. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize visual impacts. Further, Section 4.3.8 of the Site Permit requires the permittee to consider landowner input with respect to visual impacts and to use care to preserve the natural landscape.⁹¹

ii) Noise.

70. The Minnesota Pollution Control Agency (MPCA) has established standards for the regulation of noise levels. The most restrictive MPCA noise limits are 60–65 A-weighted decibels (dBA) during the daytime and 50–55 dBA during the nighttime.⁹²

71. In Minnesota, noise standards are based on noise area classifications (NAC) corresponding to the location of the listener, referred to as a receptor. NACs are assigned to areas based on the type of land use activity occurring at that location. Household units, designated camping and picnicking areas, resorts and group camps are assigned to NAC 1; recreational activities (except designated camping and picnicking areas) and parks are assigned to NAC 2; agricultural and related activities are assigned to NAC 3.⁹³

72. The primary noise receptors are the local residences. Although there are no residences with the land control area, there are 14 residences in local proximity (within 0.25 miles), one of which is surrounded by the land control area. The proposed Project is in a rural, agriculturally dominated area. Rural noise levels typically range from 30-55 dBA depending on the activity, time-of-day, weather, and season. The Project vicinity's existing sound character also includes audible traffic

⁸⁸ See Ex. EERA-7 at 53 (EA); Webex 6:00 p.m. Public Information and Scoping Meeting Transcript at 29:17-20 (Oct. 10, 2024); Ex. EERA-4 (Oral Comments on the Scope of Environmental Assessment); and Ex. EERA-3 at 4-5 (Written Comments on the Scope of EA).

⁸⁹ Ex. EERA-7 at 53 (EA).

⁹⁰ Birch Coulee Solar – Comments on the EA and DSP at 5 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)); Ex. BCS-10 at 11:3-8 (Direct Testimony of Scott Groux).

⁹¹ Ex. EERA-7 at 52 (EA).

⁹² Minn. R. 7030.0040.

⁹³ Ex. EERA-8 at 44 (EA).

sounds from TH 19, which runs across the southern edge of the Project, and operational sounds from the existing Franklin 115 kV substation, which is adjacent to the southwestern portion of the Project.⁹⁴

73. Distinct noise impacts during construction are anticipated to be minimal to significant depending on the activity occurring and equipment being used. Noise from construction will be temporary, intermittent, limited to daytime hours and localized.⁹⁵

74. Noise levels during operation of the Project are anticipated to be negligible.⁹⁶

75. Noise from routine maintenance activities is anticipated to be negligible to minimal. Noise from the electrical collection system is not expected to be perceptible.⁹⁷

76. 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. Birch Coulee Solar also indicated that it may limit the duration of foundations installation in sections of the preliminary development area where the distance to the nearest residence is not far enough for sound to dissipate to NAC-1 compliant levels. Additionally, Birch Coulee Solar may elect to erect temporary mobile noise barriers adjacent to installations to reduce impacts.⁹⁸

77. EERA proposed adding to Special Condition Section 5.2 to the DSP, which would require the permittee to inform nearby residences of active construction hours and provide notice detailing when major noise-producing construction activities are planned to occur.⁹⁹ Birch Coulee Solar does not support this proposed special condition as it is duplicative and vague. Section 4.1 of the Commission's typical site permit requires permittees to give landowners notice of the start of construction, and Birch Coulee Solar will comply with that requirement. Further, Birch Coulee Solar has concerns about being able to comply with this condition because the proposed condition is vague as to whom it would apply, under what circumstances, and how many times notice would need to be provided.¹⁰⁰

EERA proposed revising Section 5.2 of the Draft Site Permit as follows:

5.2 Construction Noise ~~Notification~~ Notice for Nearby-Local Residences

The Permittee shall provide inform nearby residences- a construction noise notice to the 14 local residences within 0.25-miles of the Project, as identified in the Site Permit Application. The notice must include the following:

⁹⁴ Ex. EERA-7 at 55 (EA).

⁹⁵ Ex. EERA-7 at 55 (EA).

⁹⁶ Ex. EERA-7 at 56 (EA).

⁹⁷ Ex. EERA-7 at 56 (EA).

⁹⁸ Ex. EERA-7 at 56 (EA).

⁹⁹ Ex. EERA-7 at 56 (EA).

¹⁰⁰ Birch Coulee Solar – Comments on the EA and DSP at 5-6 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

(a) anticipated construction dates;

(b) a projected construction schedule listing the anticipated duration of each construction stage;

(c) anticipated daytime of active construction hours, and provide notice detailing when major noise-producing construction activities are planned to occur.

78. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize noise impacts. Further, Section 4.3.7 of the Site Permit requires the permittee to comply with noise standards established under Minnesota noise standards as defined under Minnesota Rule, part 7030.010 to 7030.0080, and to limit construction and maintenance activities to daytime hours to the extent practicable.¹⁰¹

iii) Cultural Values.

79. The Project contributes to the growth of renewable energy and is 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. Impacts are anticipated to be long-term, but minimal.¹⁰²

80. In the Application, Birch Coulee Solar discussed fostering partnerships with the Renville County 4-H club, local Women's Civic Club, and Franklin Lion's Club for the upcoming year.¹⁰³

81. EERA proposed adding to the DSP Special Condition Section 5.3 requiring the permittee to continue community partnerships that provide resources to the Franklin area 4-H program, support local events, and assist community restoration projects throughout the Project's lifespan.¹⁰⁴ Birch Coulee Solar does not support this proposed special condition because as discussed in Section 4.2.9 of the Application, Birch Coulee Solar is actively and voluntarily pursuing local partnerships in the community. Birch Coulee Solar respectfully submits that a permit condition related to these voluntary engagement commitments is not appropriate and has not typically been included in other Commission site permits. Likewise, Birch Coulee Solar argues, the proposed permit condition is vague in that it is unclear how compliance could be demonstrated (i.e., what "supporting local events" or "community restoration projects" mean).¹⁰⁵

EERA proposed revising Section 5.3 of the Draft Site Permit as follows:

5.3 Community Partnerships

The Permittee shall continue community partnerships that provide resources to the Renville County 4-H club, local Women's Civic Club, and Franklin's Lion Club.
~~the Franklin area 4-H program, support local events, and assist community~~

¹⁰¹ Ex. EERA-7 at 56 (EA).

¹⁰² Ex. EERA-7 at 57 (EA).

¹⁰³ Ex. EERA-7 at 58 (EA).

¹⁰⁴ Ex. EERA-7 at 58 (EA).

¹⁰⁵ Birch Coulee Solar – Comments on the EA and DSP at 6 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

~~restoration projects throughout the Project's lifespan.~~ The Permittee shall keep records of its community partnership efforts and provide them upon the request of Commission staff.

iv) *Land Use and Zoning.*

82. Development of a solar farm in this area will temporarily change the land use from predominantly agricultural uses to energy generation for the life of the Project, at least 30 years. The change of land use will have a minimal to moderate impact on the rural character of the surrounding area, and a minimal impact on the 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 with other infrastructure in the area such as existing transmission lines and the adjacent substation.¹⁰⁶

83. The Project is expected to be compatible with county planning goals and zoning ordinances. Birch Coulee Solar states that it will apply the structure setback to its facilities in a manner consistent with Renville County setback requirements.¹⁰⁷

84. After the Project's useful life, the land control area could be restored to agricultural or other planned land uses by implementing appropriate restoration measures. Impacts can be minimized by using best practices to protect land and water quality.¹⁰⁸ Birch Coulee Solar has indicated that the Project will be decommissioned such that agricultural activities can resume once decommissioning has been completed. Any project land temporarily leased from participating landowners will revert to the landowners, furthering the Renville County's goals of providing long-term agricultural opportunities once decommissioned.¹⁰⁹

85. EERA proposed Special Condition Sections 5.4 and 5.13 requiring the permittee to adhere to all Renville County renewable energy setback requirements and to adhere to Renville County fencing right-of-way (ROW) setbacks.¹¹⁰ Birch Coulee Solar does not support these special conditions because they are both unnecessary and could be viewed as eroding the Commission's siting authority.¹¹¹ A site permit from the Commission preempts land use regulations required by local governments.¹¹² The Project has already been sited to follow the Renville County fencing ROW and Commercial Solar Energy Conversion System setback requirements, and any changes to the Project boundary would be subject to further permitting.¹¹³

EERA proposed revising Section 5.4 of the Draft Site Permit as follows:

¹⁰⁶ Ex. EERA-7 at 62 (EA).

¹⁰⁷ Ex. EERA-7 at 62 (EA).

¹⁰⁸ Ex. EERA-7 at 58 (EA).

¹⁰⁹ Ex. EERA-7 at 63 (EA).

¹¹⁰ Ex. EERA-7 at 63 and 126 (EA).

¹¹¹ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹¹² Minn. Stat. § 216E.10, subd. 1 (2023).

¹¹³ Ex. BCS-2 at 44-45 (Application); Birch Coulee Solar – Comments on the EA and DSP at 6-7 and 12-13 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

5.4 Renville County Setbacks

The Permittee shall adhere to ~~all~~ Renville County's renewable energy setback requirements as listed in the 2021 revision of Chapter 15 of the Renville County Land Use Ordinance.

EERA recommended removing Section 5.13 from the Draft Site Permit upon revising Section 5.4 to define setbacks based on Renville County's requirements.

86. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize land use and zoning impacts. Further, the Site Permit has several permit conditions related to the preservation and restoration of agricultural land, including Sections 4.3.17, 4.3.18, 9.0, and 9.2.

v) *Property Values.*

87. Impacts to property values within the local vicinity could occur; however, changes to a specific property's value are difficult to determine.¹¹⁴

88. The EA's discussion around potential property value impacts recites some of the available literature and studies that support the conclusion that the Project will not have a significant impact on property values.¹¹⁵ However, the EA also recites some anecdotal and second-hand history about the experience of selling a specific property located proximate to the Project that was raised by an area resident—not the property owner. The EA goes on to provide information about the property's marketing period and sales history, and notes that the property was on the market for longer than the average in Minnesota and sold for 31% less than its initial listing price.¹¹⁶ Birch Coulee Solar notes that the property sold in December 2024 for an amount equivalent to the estimated market value in April 2024, before it was listed for sale, per publicly-available records. Birch Coulee Solar stated that these facts are important context in assessing potential property value impacts from the Project.¹¹⁷

89. 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.¹¹⁸

vi) *Tourism and Recreation.*

90. Recreation and tourism in the vicinity of the Project are largely related to activities including hunting, fishing, canoeing and kayaking, and snowmobiling.¹¹⁹

¹¹⁴ Ex. EERA-7 at 65 (EA).

¹¹⁵ Ex. EERA-7 at 65 (EA).

¹¹⁶ Ex. EERA-7 at 66 (EA).

¹¹⁷ Birch Coulee Solar – Comments on the EA and DSP at 2-3 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹¹⁸ Ex. EERA-7 at 66 (EA).

¹¹⁹ Ex. EERA-7 at 66 (EA).

91. There are no recreational resources within the Project boundary fence lines.¹²⁰

92. Impacts to tourism and recreation are anticipated to be minimal and temporary. Due to construction, there will be short-term increases in traffic and noise that could potentially impact recreational activities in close proximity to the Project area. However, impacts will be temporary. There is a snowmobile trail within the current land control area for the Project, but it runs outside of the preliminary development area and therefore outside of the fence line. Consultation with the Renville County Drift Runners over the snowmobile trail confirmed no adverse effect of the Project on trail access, and the snowmobile club does not anticipate any issues. No significant long-term impacts to recreational activities are anticipated.¹²¹

vii) Displacement.

93. There are no residences, business, or structures such as barns or sheds located within the Project, and none will be displaced by the Project. No mitigation is proposed.¹²²

viii) Transportation and Public Services.

94. Potential impacts to the electrical grid, roads and railroads, and other utilities are anticipated to be short-term, intermittent, and localized during construction. Impacts to water (wells and septic systems) are not expected to occur. Overall, construction-related impacts are expected to be minimal, and are associated with possible traffic delays. During operation, negligible traffic increases would occur for maintenance. Impacts are unavoidable but can be minimized.¹²³

95. Birch Coulee Solar indicates that the final Project design will avoid impacts to underground and overhead utilities, and underground utilities will be marked prior to construction start. A well construction permit from the Minnesota Department of Health (MDH) would be required if a well is installed at the O&M building (if on site) in the future.¹²⁴

96. Impacts to electrical infrastructure that cross the Project can be mitigated by appropriate coordination with the owners of the existing infrastructure and following industry best practices.¹²⁵

97. Changes or additions to driveways from county roads will require coordination with local authorities and permits from Renville County.¹²⁶

98. EERA proposes special conditions related to traffic control and road usage in Sections 5.5 and 5.6 of the DSP.¹²⁷ Birch Coulee Solar does not support these proposed special conditions because the topic of traffic control is already covered in Section 4.3.22 of the Commission's typical site permit, which requires permittees to generally coordinate with local road authorities regarding

¹²⁰ Ex. EERA-7 at 67, Figure 23 (EA).

¹²¹ Ex. EERA-7 at 68 (EA).

¹²² Ex. EERA-7 at 137 (EA).

¹²³ Ex. EERA-7 at 68 (EA).

¹²⁴ Ex. EERA-7 at 72 (EA).

¹²⁵ Ex. EERA-7 at 72 (EA).

¹²⁶ Ex. EERA-7 at 73 (EA).

¹²⁷ Ex. EERA-7 at 73 (EA).

road use and impacts. Also, Section 5.6 is unnecessary because Section 4.3.22 of the Commission’s typical site permit requires coordination with local road authorities.¹²⁸ Instead, Birch Coulee Solar stated that it intends to enter into a road use agreement for the Project and stated that it would not object to the following special condition, which reflects Birch Coulee Solar’s commitment:

The Permittee shall enter into a Road Use Agreement with Renville County and affected Townships. The Road Use Agreement shall include a description of how the Permittee will coordinate traffic control with local road authorities. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff.¹²⁹

EERA supported addressing the Section 5.5 traffic control plan in Section 5.6. EERA proposed revising Section 5.6 of the Draft Site Permit submitted by Birch Coulee Solar as follows:

5.6 Road Use Agreement

The Permittee shall enter into a Road Use Agreement with Renville County and affected Townships. The Road Use Agreement shall include a description of how the Permittee will coordinate traffic control with local road authorities. The Permittee shall, prior to the use of such roads, make satisfactory arrangements with the appropriate county or township governmental body having jurisdiction over roads to be used for construction of the Project for maintenance and repair of roads that will be subject to extra wear and tear due to transportation of equipment and Project components. The Permittee shall keep records of compliance with this section and provide them upon the request of Commission staff

99. No active pipelines are near the Project area; therefore, no mitigation is required.¹³⁰

100. No active railroads are within the Project area; therefore, no mitigation is required.¹³¹

101. The current Project plan generated a “no notice required” from the Federal Aviation Administration (FAA)’s Notice Criteria Tool for all components of the Project; therefore, no mitigation is required. Birch Coulee Solar indicates that, although unlikely, if a crane higher than 150 feet will be required that will necessitate filing with the FAA, they will make the requisite filing and follow appropriate protocol.¹³²

¹²⁸ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹²⁹ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹³⁰ Ex. EERA-7 at 73 (EA).

¹³¹ Ex. EERA-7 at 73 (EA).

¹³² Ex. EERA-7 at 73-74 (EA); Ex. BCS-2 at 48 (Application).

ix) *Socioeconomics.*

102. 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.¹³³

103. Construction of the Project is likely to result in increased expenditures for lodging, food and fuel, transportation, and general supplies at local businesses during construction. Construction of the Project will create local job opportunities for various trade professionals and will also generate and circulate income throughout the community by investing in local business expenditures as well as state and local taxes.¹³⁴

104. Birch Coulee Solar anticipates the Project will require up to 300 jobs during the construction and installation phases, and 3 long-term personnel during the operations phase.¹³⁵

105. In Direct Testimony, Birch Coulee Solar stated that “[c]onstruction of the Project would provide temporary increases to the revenue of the area through increased demand for lodging, food services, fuel, transportation, and general supplies. Birch Coulee Solar will issue a Request for Proposal (RFP) to one or more qualified EPC contractors to oversee and manage the construction of the Project. In this RFP, Birch Coulee Solar intends to include a strong preference for bids that utilize local, union construction craft employees to the greatest extent feasible in accordance with the Project’s timeline, budget, and safety requirements. Birch Coulee Solar expects that the selected EPC contractor will collaborate with organized labor unions and other stakeholders to develop a workforce and hiring plan that maximizes the local economic benefits of the Project.”¹³⁶

106. Once the Project is operational, Birch Coulee Solar will pay property tax and production taxes on the land and energy production to local governments. Property taxes are calculated on the land underlying the facility. Because the land for the solar generating facility is used primarily for solar generation, the land is classified as Class 3a (commercial/industrial/public utility) which is taxed at a higher rate than land used primarily for homestead or agriculture. The value of the generation equipment is exempted from the property tax.¹³⁷

107. Minnesota has adopted a production tax of \$1.20/megawatt hours (MWh) paid 80 percent to counties and 20 percent to the cities and townships. Birch Coulee Solar estimates an average annual solar energy production and property tax revenue over the life of the Project of approximately \$350,000 for Renville County and approximately \$175,000 in local jurisdictional revenue. Each jurisdiction will receive an amount of production tax revenue proportional to the respective acreage within the Project.¹³⁸

¹³³ Ex. EERA-7 at 75 (EA).

¹³⁴ Ex. EERA-7 at 75 (EA).

¹³⁵ Ex. EERA-7 at 76 (EA); Ex. BCS-10 at 5:19-23 (Direct Testimony of Scott Groux).

¹³⁶ Ex. BCS-10 at 6:20-28 and 7:1-2 (Direct Testimony of Scott Groux).

¹³⁷ Ex. EERA-7 at 77 (EA).

¹³⁸ Ex. EERA-7 at 77-78 (EA); Ex. BCS-10 at 6:3-5 (Direct Testimony of Scott Groux).

108. Birch Coulee Solar anticipates providing financial assurance for decommissioning in the form of self-bond, surety bond, a federally insured certificate of deposit, government-backed securities, corporate guarantee, letter of credit, or cash. The financial assurance will begin in the tenth year after construction is initiated. The financial assurance will be posted in quarters in years 10, 15, 20, and 25.¹³⁹

109. The Project's draft decommissioning plan proposes to begin posting financial assurance in year 10 of Project operations.¹⁴⁰ This timing is consistent with guidance from the Department of Commerce and with current Commission practice.¹⁴¹

110. Renville County has provided comments regarding the Project's decommissioning plan.¹⁴² In Direct Testimony, Birch Coulee Solar explained that Renville County requested \$13.5 million in financial assurance beginning in year one of the Project.¹⁴³ In contrast, consistent with applicable guidance and other recent projects,¹⁴⁴ Birch Coulee Solar's draft decommissioning plan identifies a net decommissioning cost and proposes to begin providing financial assurance in year 10 of Project operations.¹⁴⁵ At the virtual public hearing, Renville County stated that its overall concern was to ensure that County residents would not be responsible for decommissioning the Project.¹⁴⁶ Birch Coulee Solar believes that the estimated net decommissioning cost included in the draft decommissioning plan filed with the Application is conservative relative to the net decommissioning estimates from other similarly sized utility-scale solar projects.¹⁴⁷ Nonetheless, as a result of Birch Coulee Solar's coordination with Renville County, Birch Coulee Solar will coordinate with County staff and provide the County with a second decommissioning cost estimate. Birch Coulee Solar plans to include that second estimate with the updated

¹³⁹ Ex. EERA-7 at 78 (EA); Ex. BCS-2 at Appendix G – Decommissioning Plan, p. 8 (Application).

¹⁴⁰ Ex. BCS-10 at 10:3-4 (Direct Testimony of Scott Groux); Ex. BCS-2 at Appendix G– Decommissioning Plan, p. 9 (Application).

¹⁴¹ Ex. EERA-7 at 78 (EA).

¹⁴² See Ex. EERA-3 (Written Comments on the Scope of EA).

¹⁴³ See Ex. EERA-3 (Written Comments on the Scope of EA).

¹⁴⁴ See *In the Matter of the Department of Commerce Working Group on Decommissioning of Wind and Solar Facilities*, MPUC Docket No. E-999/M-17-123, EERA Recommendations on Review of Solar and Wind Decommissioning Plans at 4 (March 16, 2020); see, e.g., *In the Matter of the Application of Louise Solar Project, LLC for a Site Permit for the 50 MW Louise Solar Project in Mower County, Minnesota*, MPUC Docket No. IP-7039/GS-20-647, Compliance Filing - Decommissioning Plan at 7 (Oct. 21, 2024); see also *In the Matter of the Application of Byron Solar, LLC for a Certificate of Need, Site Permit, and Route Permit for the up to 200 MW Byron Solar Project and 345 kV Transmission Line in Dodge and Olmsted Counties, Minnesota*, MPUC Docket No. IP-7041/GS-20-763, Site Permit Application, Appendix H – Decommissioning Plan at 1-4 (Aug. 21, 2021).

¹⁴⁵ Ex. BCS-2 at Appendix G – Decommissioning Plan, p. 9 (Application).

¹⁴⁶ WebEx 6:00 p.m. Tr. at 17:25-18:1-6 (March 12, 2025).

¹⁴⁷ See, e.g., *In the Matter of the Application of Byron Solar, LLC for a Certificate of Need, Site Permit, and Route Permit for the up to 200 MW Byron Solar Project and 345 kV Transmission Line in Dodge and Olmsted Counties, Minnesota*, MPUC Docket No. IP-7041/GS-20-763, Site Permit Application, Appendix H – Decommissioning Plan at 1-5 (Aug. 21, 2021) (estimating decommissioning costs of \$13,212,400 or \$43,130 per MW after resale and salvage); see also *In the Matter of the Application of Lake Wilson Solar Energy LLC for a Certificate of Need and a Site Permit for the up to 150 MW Lake Wilson Solar and Associated Battery Storage Project in Murray County, Minnesota*, MPUC Docket No. IP-7070/GS-21-792, Site Permit Application, Appendix G – Decommissioning Plan at 11-12 and Attachment B (Feb. 9, 2023) (estimating decommissioning costs of \$17,754,100 or \$118,360 per MW after resale and salvage).

decommissioning plan submitted prior to construction pursuant to Section 9.1 of the Commission's site permit.¹⁴⁸

111. EERA proposes special conditions related to decommissioning and project ownership in Sections 5.7 and 5.8 of the DSP.¹⁴⁹ Birch Coulee Solar does not support Section 5.7 because it does not reflect that the Project's Decommissioning Plan already complies with Commission requirements and could undermine the Commission's permitting authority with respect to this Project. Additionally, the EA acknowledges that "Birch Coulee Solar's draft decommissioning plan is consistent with Commerce application guidance and with current Commission practice."¹⁵⁰ Birch Coulee Solar is concerned that requiring a "mutually agreeable" plan with Renville County may have the effect of the Project being subject to substantially different requirements than other solar projects permitted by the Commission.

EERA proposed revising Section 5.7 of the Draft Site Permit as follows:

5.7 Decommissioning Plan

The Permittee shall coordinate with Renville County ~~as the Permittee to develop~~ a ~~mutually agreeable decommissioning plan~~ Project Decommissioning Plan consistent with Section 9.1 of this permit. The Permittee shall provide Renville County with a second decommissioning cost estimate prior to construction. The Permittee shall include the second estimate in the updated Project Decommissioning Plan pursuant to Section 9.1 of this permit.

Birch Coulee Solar does not ~~support~~ oppose Section 5.8 but proposes the following revisions to specify to whom the notice should be provided:

5.8 Ownership Change Notification

The permittee shall notify Renville County ~~officials~~ Board of Commissioners if there is an ownership change pursuant to Section 2.1 of this permit and shall provide the new contact information.¹⁵¹

EERA has no objection to Birch Coulee's Solar proposed revisions to Section 5.8 of the Draft Site Permit.

¹⁴⁸ Ex. BCS-10 at 9:13-21 (Direct Testimony of Scott Groux).

¹⁴⁹ Ex. EERA-7 at 79 (EA).

¹⁵⁰ Ex. EERA-7 at 78 (EA).

¹⁵¹ Birch Coulee Solar – Comments on the EA and DSP at 8-10 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

B. Public Health and Safety.

112. Minnesota law requires consideration of the Project's potential effect on health and safety.¹⁵²

i) Electromagnetic Fields (EMF).

113. Currently, there are no federal regulations regarding allowable extremely low frequency EMF (ELF-EMF) produced by power lines in the United States; however, state governments have developed state-specific regulations.¹⁵³

114. The Commission limits the maximum electric field under high voltage transmission lines in Minnesota to 8.0 kV/m. It has not adopted a standard for magnetic fields.¹⁵⁴

115. The primary sources of EMF from the Project will be from the solar arrays, buried electrical collection lines, and the transformers installed at each inverter.¹⁵⁵

116. No health impacts from EMF are anticipated. EMF diminishes with distance from a conductor or inverter. The nearest solar array is located approximately 240 feet from the nearest residence, with the nearest inverter being 435 feet from the nearest residence,¹⁵⁶ and the gen-tie line is 1,950 feet from the nearest residence.¹⁵⁷ At this distance both electric and magnetic fields will dissipate to background levels. No additional mitigation is proposed.¹⁵⁸

ii) Public Safety and Emergency Services.

117. Emergency services in the Project area are provided by local law enforcement and emergency response agencies located in nearby communities. Law enforcement in the Project area is provided by the Renville County Sheriff. Fire service is provided by the Franklin Fire & Rescue. The nearest urgent care facility is the CentraCare Redwood Hospital in Redwood, approximately 12.5 miles west of the Project.¹⁵⁹

118. Construction and operation of the Project will have minimal impacts on the security and safety of the local population. The Project design and construction will meet applicable federal, state, and local standards (e.g., MISO and the National Electrical Safety Code). The Project will also include fencing and locked gates for authorized access only.¹⁶⁰

119. Birch Coulee Solar will coordinate with emergency and non-emergency response teams for the Project, including law enforcement, fire departments, and ambulance services. The type and number of responding agencies will depend on the incident requiring emergency services.

¹⁵² Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100, subp. B.

¹⁵³ Ex. EERA-7 at 83 (EA).

¹⁵⁴ Ex. EERA-7 at 84 (EA).

¹⁵⁵ Ex. EERA-7 at 84 (EA).

¹⁵⁶ Ex. EERA-7 at Appendix C, p. 43 (EA).

¹⁵⁷ Ex. BCS-2 at 48 (Application).

¹⁵⁸ Ex. EERA-7 at 85 (EA).

¹⁵⁹ Ex. EERA-7 at 85 (EA).

¹⁶⁰ Ex. BCS-2 at 23 (Application).

Birch Coulee Solar will develop an Operations and Emergency Action Site Safety Plan prior to construction that outlines local contacts (first responders and internal construction, and O&M staff) and emergency procedures for evacuation, fire response, extreme weather, injury, and criminal behavior. This plan will identify all available Site access points. Additionally, construction will comply with applicable local, state, and federal safety regulations. Birch Coulee Solar will follow industry safety procedures during and after construction of the Project such as posting clear signage during construction activities.¹⁶¹

120. TH 19 contains a living snow fence that protects the road curve from snow blowing and drifting issues.¹⁶² The Project will not impact the snow fence.¹⁶³

121. Established industry safety procedures will be followed during and after construction of the Project. Birch Coulee Solar indicates that the Project will be fenced and locked to prevent unauthorized access, and signs will be posted to warn unauthorized persons not to enter fenced area due to the presence of electrical equipment.¹⁶⁴

122. DNR recommended requiring at least 10-foot-tall perimeter fencing, noting that it will not issue a deer removal permit for facilities with woven wire fences lower than 10 feet. DNR also noted it supported a special condition requiring the Applicant to coordinate with DNR on finalizing a security fence design.¹⁶⁵ Birch Coulee Solar has stated that it designed its 7-foot-tall security fencing, with a 1-foot high-tensile smooth wire at the top, in compliance with applicable National Electric Code requirements to prevent public and larger wildlife access.¹⁶⁶ Birch Coulee Solar has demonstrated that the perimeter fencing currently contemplated for the Project is reasonable and Section 4.3.32 of the Site Permit adequately addresses the security fencing, and the record does not contain any contrary evidence. The fencing proposed for the Project is consistent with other site permits issued by the Commission.¹⁶⁷

123. EERA proposed adding to the DSP Special Condition Section 5.9 requiring the permittee to develop and incorporate a Project Fire Risk Assessment into the filed Emergency Response Plan. EERA also proposed Section 5.10 requiring the permittee to work and train with local emergency response teams that may have to enter the Project to ensure teams are aware of access

¹⁶¹ Ex. BCS-2 at 23 (Application).

¹⁶² Ex. EERA-7 at 87 (EA).

¹⁶³ Birch Coulee Solar – Comments on the EA and DSP at 4 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹⁶⁴ Ex. EERA-7 at 87 (EA).

¹⁶⁵ DNR Comments (March 24, 2025) (eDocket No. [20253-216754-01](#)).

¹⁶⁶ Ex. BCS-2 at 15 (Application).

¹⁶⁷ See, e.g., *In the Matter of the Application of Northern States Power Co. d/b/a Xcel Energy for a Site Permit for the up to 250 MW Sherco 3 Solar Energy Generating System in Sherburne County, Minnesota*, Order Issuing Site Permit, Site Permit at Section 4.3.32 (July 31, 2024) (PUC Docket No. E-002/GS-23-217) (eDocket No. 20247- 209139-01); *In the Matter of the Application of Lake Wilson Solar Energy LLC for a Certificate of Need and a Site Permit for the up to 150 MW Lake Wilson Solar and Associated Battery Storage Project in Murray County, Minnesota*, Order Granting Certificate of Need and Issuing Site Permit, Site Permit at Section 4.3.31 (April 23, 2024) (PUC Docket No. IP-7070/GS-21-792) (eDocket No. 20244-205861-01); *In the Matter of the Application of Byron Solar, LLC for a Certificate of Need, Site Permit, and Route Permit for the up to 200 MW Byron Solar Project and 345 kV Transmission Line in Dodge and Olmsted Counties, Minnesota*, Order Granting Certificate of Need and Issuing Site and Route Permits, Site Permit at Section 4.3.31 (May 1, 2023) (PUC Docket No. IP-7041/GS-20-763) (eDocket No. 20235-195471-02).

points and can perform their duties safely.¹⁶⁸ Birch Coulee Solar does not support Section 5.9 because Birch Coulee Solar is unsure what a “fire risk assessment” would include and is not aware of similar requirements imposed on any other Commission-permitted solar projects. Birch Coulee Solar states that because the proposed special condition is vague, it is unclear how to comply with it. Further, Birch Coulee Solar submits that the Commission’s general Site Permit already includes a general condition related to emergency response (Section 8.12, Emergency Response). Birch Coulee Solar believes that the general permit condition is protective, and the record does not support any additional condition specific to this Project.

EERA proposed revising Section 5.9 of the Draft Site Permit as follows:

5.9 Fire Risk Assessment

The Permittee shall develop and incorporate a Project Fire Risk Assessment into the ~~filed~~ Emergency Response Plan required by Section 8.12 of this permit. The Fire Risk Assessment must include an assessment of potential fire risks, possible mitigation measures, and fire response measures.

Birch Coulee Solar does not support Section 5.10 because the Commission’s typical site permit already includes a general condition related to emergency response (Section 8.12), which requires the permittee to prepare an emergency response plan in consultation with emergency responders and obtain and register location indicators and provides that information to emergency responders.¹⁶⁹

EERA proposed revising Section 5.10 of the Draft Site Permit as follows:

5.10 Emergency Response Training

The Permittee shall work and train with local emergency response teams that may have to enter the Project to ensure teams ~~are aware of~~ can utilize Project access points and ~~can~~ perform their necessary duties ~~safely~~.

124. EERA proposed Section 5.11 of the DSP requiring the permittee to coordinate with MnDOT regarding possible mitigation measures to reduce the crash risk associated with proposed access points along TH 19. Birch Coulee Solar states that Section 5.11 is no longer necessary.¹⁷⁰ As discussed in the Direct Testimony of Scott Groux, as a result of coordination with MnDOT, Birch Coulee Solar has already revised Project plans for site access to be oriented east-west from County Road 5 instead of north-south from TH 19.¹⁷¹ Additionally, to minimize traffic utilizing the existing 115-kV Franklin substation driveway, Birch Coulee Solar removed the temporary laydown area in the southern portion of the Project area and will use the existing driveway for the

¹⁶⁸ Ex. EERA-7 at 88 (EA).

¹⁶⁹ Birch Coulee Solar – Comments on the EA and DSP at 10-11 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹⁷⁰ Birch Coulee Solar – Comments on the EA and DSP at 11 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

¹⁷¹ Ex. BCS-10 at 5:2-13 (Direct Testimony of Scott Groux).

one-time delivery of the generator step-up transformer and control house for the Project Substation.¹⁷²

EERA recommended removing Section 5.11 of the Draft Site Permit upon learning that Birch Coulee Solar has removed the access road off TH 19 and large temporary laydown yard in the southern portion of the Project from the Project layout.

125. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize impacts to public safety and emergency services. Further, Public safety is addressed in Sections 4.3.30, 8.12, 8.13, and 9.1 of the Site Permit.

C. Land-Based Economies.

126. Minnesota law requires consideration of the Project's potential effect on land-based economies – specifically, agriculture, forestry, tourism, and mining.¹⁷³

127. The Project is not anticipated to impact forestry or mining.¹⁷⁴ Tourism is discussed in Section A(vi) above.

i) Agriculture.

128. Agricultural use dominates approximately 97 percent (1,041.6 acres) of the land control area, where corn and soybeans are the dominant crops.¹⁷⁵

129. Approximately 90.9 percent of the land within Renville County is considered prime farmland. Nearly all the Project land control area is classified as prime farmland or prime farmland if drained.¹⁷⁶

130. Potential impacts to agricultural producers are anticipated to be minimal to moderate. Lost farming revenues will be offset by lease or easement agreements. A loss of farmland in Renville County would occur for the life of the Project. Potential impacts are localized and unavoidable but can be minimized.¹⁷⁷

131. In the draft VMP for the Project, Birch Coulee Solar indicates that best management practices (BMPs) would be implemented during construction in order to minimize and mitigate long-term impacts to agricultural lands, including performing regular inspections during any earthmoving phases, preventing soil profile mixing, monitoring compaction, halting construction during wet weather conditions, ensuring proper site drainage and erosion control, and limiting the spread of noxious weeds and invasive species by cleaning construction equipment. Following

¹⁷² Ex. BCS-10 at 5:5-9 (Direct Testimony of Scott Groux).

¹⁷³ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. C.

¹⁷⁴ Ex. EERA-7 at 137 (EA).

¹⁷⁵ Ex. EERA-7 at 89 (EA).

¹⁷⁶ Ex. EERA-7 at 90 (EA).

¹⁷⁷ Ex. EERA-7 at 89 (EA).

construction, Birch Coulee Solar indicates that disturbed areas would be repaired and restored to pre-construction contours and characteristics to the extent possible.¹⁷⁸

132. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize impacts to agriculture, and that the site will be able to be returned to agricultural uses after the Project is decommissioned. Further, Sections 4.3.9, 4.3.10, 4.3.11, 4.3.16, 4.3.17, 4.3.18, 4.3.20, 4.3.21, 4.3.25, and 4.3.29 of the Site Permit address agricultural mitigation and soil-related impacts.¹⁷⁹

D. Archaeological and Historic Resources.

133. Minnesota law requires consideration of the Project's potential effects on historic and archaeological resources.¹⁸⁰

134. Birch Coulee Solar contacted the eleven federally recognized Tribal Nations in Minnesota, including Minnesota Tribal Nations' Tribal Historic Preservation Officers (THPOs) and the Minnesota Indian Affairs Council (MIAC) for additional information or comment on the Project. MIAC noted that the Project intersects with, and is near, several state archeological sites, and is located within an area that is likely to contain cultural resources. MIAC recommended Birch Coulee Solar conduct additional research and cultural management fieldwork with monitoring alongside tribal consultation to regional THPOs.¹⁸¹

135. Birch Coulee Solar provided the draft Phase I Archaeological Investigation report to the Lower Sioux Community THPO and Upper Sioux Community THPO in February 2024. The THPOs provided feedback and comments, which Birch Coulee Solar incorporated into the report. Birch Coulee Solar provided the updated Phase I Archaeological Investigation report to the SHPO for concurrence on March 15, 2024, and received concurrence from the SHPO on May 3, 2024, that "no additional work is recommended for the Project to proceed as planned."¹⁸²

136. In the Application, Birch Coulee Solar indicated that before construction begins, an Unanticipated Discoveries Plan will be prepared and should any previously unknown cultural resources or human remains be encountered, work will stop, and the discovery will be examined by an archaeologist. If the discovery is determined to be a significant cultural resource, SHPO and OSA will be notified.¹⁸³

137. Birch Coulee Solar also stated that they will continue to coordinate with the THPOs from the Lower Sioux Community and Upper Sioux Community regarding measures to avoid and/or mitigate impacts to the identified culturally sensitive areas of Tribal concern within the land control area.¹⁸⁴

¹⁷⁸ Ex. BCS-2 at Appendix F (Application); Ex. EERA-7 at 95 (EA).

¹⁷⁹ Ex. EERA-7 at 95 (EA).

¹⁸⁰ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. D.

¹⁸¹ Ex. EERA-7 at 96-97 (EA).

¹⁸² Ex. EERA-7 at 98 (EA); Ex. BCS-2 at Appendix H – Agency Correspondence (Application).

¹⁸³ Ex. EERA-7 at 99 (EA); Ex. BCS-2 at 52 (Application).

¹⁸⁴ Ex. EERA-7 at 99 (EA).

138. Section 4.3.23 of the Site Permit 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. No additional mitigation is proposed.¹⁸⁵

E. Natural Environment.

139. Minnesota law requires consideration of the Project's potential effects on the natural environment, including effects on air and water quality resources and flora and fauna.¹⁸⁶

i) Air Quality, GHG Emissions, and Climate Change.

140. Potential impacts to air quality during construction would be intermittent, localized, short-term, and minimal. Impacts are associated with fugitive dust and exhaust. Once operational, the Project will not generate criteria pollutants or carbon dioxide. Negligible fugitive dust and exhaust emissions would occur as part of routine maintenance activities. Impacts are unavoidable and do not affect a unique resource. Impacts can be mitigated and minimized.¹⁸⁷

141. Birch Coulee Solar indicates that BMPs will be used during construction and operation of the Project to minimize dust and emissions. Exhaust emissions can be minimized by using modern equipment with lower emissions ratings and properly functioning exhaust systems, not running the equipment unless necessary, and minimizing the number of driving trips. Watering exposed surfaces, covering open-bodied haul trucks, reducing speed limits on unpaved roads, containing excavated materials and treating stockpiles, and protecting and stabilizing soils are all standard construction practices.¹⁸⁸

142. As a component of the construction stormwater (CSW) permit that will be obtained for the Project, a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) CSW permit and an associated Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented prior to construction in order to minimize the potential for fugitive dust emissions.¹⁸⁹

143. The Agricultural Impact Mitigation Plan (AIMP) identifies construction BMPs related to soils and vegetation that will help to mitigate against fugitive dust emissions. Several sections of the draft plan indirectly mitigate impacts to air quality, including sections related to construction and vegetation removal, soils, erosion and sediment control, and restoration of the site to pre-construction conditions.¹⁹⁰

144. The Project will help to shift energy production in Minnesota and the upper Midwest toward carbon-free sources. Construction emissions will have a short-term negligible increase in GHGs that contribute to climate change. Overall, the Project will generate energy that can be used to displace energy otherwise generated by carbon-fueled sources. The total GHG emissions

¹⁸⁵ Ex. EERA-7 at 99 (EA).

¹⁸⁶ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. E.

¹⁸⁷ Ex. EERA-7 at 99 (EA).

¹⁸⁸ Ex. EERA-7 at 102 (EA).

¹⁸⁹ Ex. EERA-7 at 102 (EA).

¹⁹⁰ Ex. EERA-7 at 102 (EA).

produced by construction and operation of the Project will be minimal when compared to the reduction in GHG emissions long-term. The Project's design incorporates design elements that minimize impacts from the increase in extreme weather events such as increase flooding, storms, and heat wave events that are expected to accompany a warming climate.¹⁹¹

145. Construction activities will result in short-term increases in GHG emissions from the combustion of fossil fuels in construction equipment and vehicles. The Project's construction emissions are estimated to be 1,298.14 metric tons of CO₂ equivalent. Additional GHG emissions will be created by land use change from the loss of existing natural carbon sinks in the area, estimated at 1,342.76 metric tons of CO₂ equivalent. The majority of land-use change emissions will occur during construction due to the change from cropland to settlement, however the establishment of perennial vegetation and prairie can reduce this impact. Altogether, the GHG emissions from construction are an insignificant amount relative to Minnesota's overall emissions of approximately 137 million tons in 2020. Potential impacts due to construction GHG emissions are anticipated to be negligible.¹⁹²

146. Once operational, the Project will generate minimal GHG emissions. GHG emissions for project operation are estimated to be approximately 27.2 metric tons of CO₂ annually. Emissions are comprised of CO₂ from mobile combustion (7.6 tons) and electrical consumption (19.5 tons).¹⁹³ If electrical energy from the Project displaces energy that would otherwise be generated by carbon-fueled power plants (e.g., coal, natural gas), the Project could reduce GHG by approximately 99,500 metric tons of CO₂ equivalent annually. Thus, compared to non-renewable energy generation, the Project would be beneficial with respect to GHG emissions. Total GHG emissions resulting from construction and operation of the Project are anticipated to be minimal when compared to the long-term reduction in GHG emissions facilitated by the Project.¹⁹⁴

ii) *Geology and Groundwater.*

147. There are no designated Sole Source Aquifers within the land control area. However, a Wellhead Protection Area and Drinking Water Supply Management Area (DWSMA) are within the southern portion of the land control area. The DWSMA vulnerability is designated as very low. During construction, Birch Coulee Solar will store materials including fuel and gasoline in sealed containers to prevent spills, leaks, or other discharges in accordance with the SWPPP.¹⁹⁵

148. After construction activities are complete, Birch Coulee Solar will restore the land control area disturbed during construction as described in the VMP. Minnesota solar projects are considered semi-impervious in nature. An increase in impervious surfaces has the potential to increase stormwater runoff and, in turn, reduce groundwater recharge. Birch Coulee Solar will manage surface water that flows or falls onto impervious surfaces in accordance with conditions of the MPCA CSW Permit.¹⁹⁶

¹⁹¹ Ex. EERA-7 at 131 (EA).

¹⁹² Ex. EERA-7 at 132 (EA).

¹⁹³ Ex. BCS-2 at 64 (Application).

¹⁹⁴ Ex. EERA-7 at 132-133 (EA).

¹⁹⁵ Ex. BCS-2 at 55-56 (Application).

¹⁹⁶ Ex. BCS-2 at 56 (Application).

149. There are no water wells within the land control area; the nearest well is a private well associated to Residence 3. The Project will be at least 200 feet from the nearest occupied residence, thereby minimizing the risk of impacts on private wells. Birch Coulee Solar will assess any wells identified within the land control area during construction to determine if they are open, and seal them, if necessary, in accordance with MDH requirements.¹⁹⁷

150. Construction of the Project is not likely to require subsurface blasting and disturbances to groundwater flow from newly fractured bedrock. If needed, Birch Coulee Solar will discharge any construction trench water to surrounding areas using appropriate BMPs to minimize erosion, and allow it to infiltrate back into the ground in accordance with applicable permits.¹⁹⁸

151. The proposed Project substation, where the main transformer and associated aboveground storage tank and secondary containment will be, is outside of the Wellhead Protection Area and DWSMA. Birch Coulee Solar will prepare and implement a Spill Prevention, Countermeasures and Control (SPCC) plan for the main transformer at the Project substation to prevent spills or leaks in accordance with USEPA regulations.¹⁹⁹

152. Because of the shallow depth to groundwater in some areas of the Project, dewatering may be required during construction. If dewatering exceeds 10,000 gallons of water per day, a DNR water appropriation permit will be required.²⁰⁰

153. Although design is not yet finalized, if Birch Coulee Solar opts to install the O&M building within a permanent laydown yard in the preliminary development area, it will also likely install a well to provide water for drinking and sanitary services for approximately four employees.²⁰¹

154. Because the Project will disturb more than one acre, Birch Coulee Solar must obtain a CSW Permit from the MPCA. The CSW Permit will identify BMPs for erosion prevention and sediment control. As part of the CSW Permit, Birch Coulee Solar will also develop a SWPPP that describes construction activity, temporary and permanent erosion and sediment controls, BMPs, permanent stormwater management that will be implemented during construction and through the life of the Project.²⁰²

155. A NPDES permit to discharge stormwater from construction facilities will also be acquired by Birch Coulee Solar from the MPCA. BMPs will be used during construction and operation of the Project to protect topsoil and adjacent resources and to minimize soil erosion, whether the erosion is caused by water or wind.²⁰³

156. EERA proposed Section 5.12 of the DSP requiring the permittee to develop and file a project Laydown Area Protection Plan for laydown areas within the Wellhead Protection Area and DWSMA.²⁰⁴ Birch Coulee Solar does not support this special condition and noted that the source

¹⁹⁷ Ex. BCS-2 at 56 (Application).

¹⁹⁸ Ex. BCS-2 at 57 (Application).

¹⁹⁹ Ex. BCS-2 at 57 (Application).

²⁰⁰ Ex. EERA-7 at 106 (EA).

²⁰¹ Ex. EERA-7 at 107 (EA).

²⁰² Ex. EERA-7 at 108 (EA).

²⁰³ Ex. EERA-7 at 108 (EA).

²⁰⁴ Ex. EERA-7 at 108 (EA).

of the proposed special condition is unclear.²⁰⁵ As described in the Direct Testimony of Scott Groux, Birch Coulee Solar has removed the temporary laydown area in the southern portion of the Project area that was within the DWSMA.²⁰⁶ Two other laydown areas within the Anticipated Development Area²⁰⁷ are within the DWSMA and partially within the WHPA. Birch Coulee Solar notes that it will develop both a SWPPP and a SPCC Plan prior to construction. The SWPPP will detail BMPs to minimize the potential for downstream water quality impacts. Likewise, the NPDES/SDS Program specifically prohibits the discharge of anything other than stormwater, and the SPCC will apply to construction-related fuel storage and will be prepared prior to operation for operation-related fuel storage, should said storage exceed applicability thresholds.²⁰⁸

EERA recommended removing Section 5.12 of the Draft Site Permit upon learning that Birch Coulee Solar has removed the large temporary laydown yard in the southern portion of the Project from the Project layout.

iii) *Soils and Prime Farmland.*

157. Primary impacts to soils include compaction from construction equipment, soil profile mixing during grading and pole auguring, rutting from tire traffic, drainage interruptions, and soil erosion. Impacts to soils are likely to be greatest with the below-ground electrical collection system. Most of the soils within the solar facility project site and land control area are designated prime farmland (34.2%) and prime farmland if drained (55.8%), with the rest designated farmland of statewide importance (10.1%). Potentials impacts will be positive and negative, and short- and long-term. Isolated moderate to significant negative impacts associated with high rainfall events could occur. Because the soil at the Project will be covered with native perennial vegetation for the life of the Project, soil health is likely to improve.²⁰⁹

158. As part of the Application, Birch Coulee Solar completed a Prime Farmland Analysis to avoid prime farmland.²¹⁰ Birch Coulee Solar was unable to find a feasible or prudent alternative to the Project.²¹¹ This satisfies the requirement under Minn. R. 7850.4400, subp. 4 to show that no feasible and prudent alternative exists. Furthermore, Birch Coulee Solar prepared an AIMP in consultation with the Minnesota Department of Agriculture and a VMP to minimize Project impacts to designated prime farmland such as soil compaction, topsoil mixing, soil erosion, invasive and noxious weed species, and rutting.²¹² Birch Coulee Solar will also develop and implement a SWPPP to minimize soil erosion and impacts during construction. The SWPPP will include construction BMPs such as matting to minimize rutting, silt fencing, temporary

²⁰⁵ Birch Coulee Solar – Comments on the EA and DSP at 12 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁰⁶ Ex. BCS-10 at 5:6-9 (Groux Testimony).

²⁰⁷ Anticipated Development Area means the 768.2-acre area within the land control area where Birch Coulee Solar proposes to build the solar facilities. This area does not include the collection corridors or required setbacks. *See* Exs. EERA-7 at ix (EA) and BCS-2 at 7 (Application).

²⁰⁸ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁰⁹ Ex. EERA-7 at 110 (EA).

²¹⁰ Ex. BCS-2 at Appendix E (Application).

²¹¹ Ex. BCS-2 at Appendix E, p. 6 (Application).

²¹² Ex. BCS-2 at 8-9 and 57-60 (Application).

seeding/stabilization, and project phasing. The SWPPP will also include permanent stormwater management features as required.²¹³

159. Sections 4.3.9, 4.3.16, 4.3.17, and 4.3.18 of the Site Permit address soil-related impacts from the Project.²¹⁴

iv) Surface Water and Floodplains.

160. The Project is in the Minnesota River – Mankato watershed of the Minnesota River Basin. There are no lakes, rivers, or streams that cross the land control area. The DNR's Public Waters Inventory (PWI) identified no watercourses or basins within the land control area. Public waters include wetlands, water basins, and watercourses of significant recreational or natural resource value in Minnesota. A public waters designation means that DNR has regulatory jurisdiction over the water. There are no PWI waterbodies within the area of land control. The nearest PWI body of water is County Ditch 111, approximately 0.7 miles northwest of the Project, and the Minnesota River, approximately 1 mile south of the Project.²¹⁵

161. The surface waters within the land control area are limited to county drainage ditches and wetlands. County Ditch 109A is an open ditch system that crosses the Project from the northeast corner to the south. Judicial Ditch 14-23 is an open ditch system that crosses east/west along the southern boundary of the Project before joining County Ditch 109A. The Renville County Drainage Department manages both ditches and their associated drain tiles within the land control area.²¹⁶

162. There are no waters listed by the MPCA as impaired waters within the land control area. The nearest impaired water is Purgatory Creek, approximately 0.9 miles southwest of the Project, which is listed as impaired for *Escherichia coli*. The Minnesota River, approximately 1 mile south of the Project, is listed as impaired for mercury and PCBs in fish tissue, nutrients, and turbidity.²¹⁷

163. There are no Federal Emergency Management Agency (FEMA) 100-year floodplains within the vicinity of the Project. The nearest FEMA 100-year floodplain is associated with the Minnesota River, 1 mile south of the Project.²¹⁸

164. The Project is 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.²¹⁹

165. The EA suggests that, if the Project uses inadequate stormwater management during construction, it could lead to negative impacts on water quality due to increased sedimentation deposited into the Minnesota River and it could impact Minnesota River's flood capacity.²²⁰ Birch

²¹³ Ex. BCS-2 at 59-60 (Application).

²¹⁴ Ex. EERA-7 at 110-111 (EA).

²¹⁵ Ex. EERA-7 at 111 (EA).

²¹⁶ Ex. EERA-7 at 111 (EA).

²¹⁷ Ex. EERA-7 at 113 (EA).

²¹⁸ Ex. EERA-7 at 113 (EA).

²¹⁹ Ex. EERA-7 at 113 (EA).

²²⁰ Ex. EERA-7 at 113-114 (EA).

Coulee Solar has stated that it will comply with Section 4.3.11 of the Site Permit requiring the permittee to acquire a CSW Permit, which is intended to protect surface waters, and no water quality impacts to the Minnesota River are anticipated.²²¹

166. Overall, the Project is expected to have a long-term positive impact on water quality due to the establishment of perennial vegetation at the Project.²²²

167. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize surface water and floodplain impacts. Further, Sections 4.3.11 and 4.3.16 of the Site Permit address potential impacts to surface waters.²²³

v) *Wetlands.*

168. Although 26.3 acres of wetlands have been identified within the land control area, the preliminary layout for the Project avoids locating solar arrays and associated facilities in wetlands.²²⁴

169. The Project layout has been designed to avoid all wetlands delineated to date. If wetland impacts are required for the final layout, Birch Coulee Solar will obtain any necessary permits and coordinate with the appropriate agency, such as the USACE under Section 404 and 401 of the Federal Clean Water Act (CWA) and the Renville County SWCD under the Minnesota Wetland Conservation Act (WCA), prior to construction.²²⁵

170. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize wetland impacts. Further, Section 4.3.13 of the Site Permit generally prohibits placement of the solar energy generating system or associated facilities in public waters and public waters wetlands.²²⁶

vi) *Vegetation.*

171. The solar facility is located in the North Central Glaciated Plains, Minnesota River Prairie subsection of the Prairie Parkland Province. This gently rolling ground moraine subsection is split in half by the Minnesota River. The area was historically tall grass prairie systems pocketed by scattered wet, dry, dry-mesic, and gravel prairies with floodplain forests of silver maple, elm, cottonwood, and willow along the Minnesota River and other streams. Fire was the most common natural disturbance before settlement, and fire suppression has allowed for the development of woodlands. The current land use within the subsection is predominantly agricultural, and tallgrass prairie remnants are rare. The land cover within the Project area is dominated by cultivated agriculture, with scattered areas of trees, native vegetation, and developed areas around roads and parcel boundaries.²²⁷ According to the U.S. Geological Survey National Land Cover Database,

²²¹ Birch Coulee Solar – Comments on the EA and DSP at 4 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²²² Ex. EERA-7 at 113-114 (EA).

²²³ Ex. EERA-7 at 114 (EA).

²²⁴ Ex. EERA-7 at 116 (EA).

²²⁵ Ex. EERA-7 at 116 (EA).

²²⁶ Ex. EERA-7 at 116 (EA).

²²⁷ Ex. EERA-7 at 117 (EA).

most of the land control area consists of cultivated crops. Additional landcover types represent a very small portion of the Site and consist of developed land, wetlands, deciduous forest, and barren land. Corn and soybeans represent the dominant crops in the land control area and have been for the past ten years.²²⁸

172. Land within the land control area will convert from an agricultural use to solar energy use for the life of the Project. Birch Coulee Solar designed the Project to avoid tree clearing. Birch Coulee Solar will also largely avoid the areas of non-agricultural vegetation based on their proximity to county drainage ditches with buffer areas.²²⁹

173. Birch Coulee Solar will seed the non-impervious portions of the Project with a low-growing vegetation seed mix in accordance with the VMP (Appendix F). The VMP will be developed in coordination with the Department of Commerce, and the Vegetation Management Working Group (VMWG), using best management practices established by the DNR and BWSR. The seed mixes will promote pollinator habitat, establish stable ground cover, reduce erosion and runoff, and improve infiltration. Control of invasive and noxious weeds will be ongoing during the construction and operation of the Project.²³⁰ Birch Coulee Solar will require seeding and management contractors have at least 5 years of experience installing native seed and maintaining native habitats. A qualified restoration ecologist will be contracted to monitor the vegetation on site, identify invasive and noxious weeds, and determine maintenance needs. Birch Coulee Solar intends to meet Minnesota's Habitat Friendly Solar Standard.

174. 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. A low growing native prairie seed mix containing grasses, sedges, and wildflowers will be used under the arrays to provide vegetative cover without interfering with operations. Additional native prairie seed mixes that include grasses, sedges, and wildflowers will be used outside of the arrays; a short-height seed mix for areas within the fence line and a mixed-height seed mix for areas outside the fence line. The fence line will have its own seed mix consisting of low-growing, non-native fescues to create a perimeter that is less susceptible to fire and easier to control vegetation along. In wetland and stormwater management units, native seed mixes that contain plants well suited for soils.²³¹

175. Prior to transporting to the Project, Birch Coulee Solar will use rumble strips and designated cleaning areas to remove noxious weeds and/or seeds from equipment. —The conservation easements along County Ditch 109A and Judicial Ditch 14-23 will be avoided as they fall within the setback distances from drainage ditches Birch Coulee Solar indicates they will follow. Additionally, Birch Coulee Solar has designed the Project to avoid tree clearing.²³²

EERA supported Renville County's proposed revisions to Section 4.3.21 of the Draft Site Permit which require Birch Coulee Solar to prevent the spread of noxious weeds throughout the life of

²²⁸ Ex. BCS-2 at 61 (Application).

²²⁹ Ex. BCS-2 at 62 (Application).

²³⁰ Ex. BCS-2 at 62 (Application).

²³¹ Ex. EERA-7 at 118 (EA).

²³² Ex. EERA-7 at 120 (EA).

the Project. To address the request of Renville County, it is appropriate to amend Section 4.3.21 of the Draft Site Permit as supported by EERA.

vii) *Wildlife and Habitat.*

176. Wildlife utilizing the Project area are common resident and migratory species associated with disturbed habitats and are accustomed to human activities (e.g., agricultural activities and road traffic) occurring in the area.²³³

177. The impact intensity level is expected to be minimal to moderate. Impacts could be positive or negative and depend on species type. Potential impacts will be short- and long-term and can be mitigated.²³⁴ The largest impact to wildlife associated with solar facilities is fencing. The substation will be fenced compliant with the National Electric Safety Code (“NESC”) requirements and is expected to be a 7-foot-high chain link fence topped with a 1-foot-tall, barbed wire strand. A lockable gate will be installed with the Project substation site fencing. The perimeter will be fenced by permanent security fencing, a 7-foot-high woven wire fence topped with a 1-foot-tall strand of high-tensile wire. Although deer can jump many fences, they can become tangled in both smooth and barbed-wire fences, especially if the wire are loose or installed too closely together.

178. Once restored, the land control area will provide native habitat for the life of the Project. The Project does not contribute to significant habitat loss or degradation or create new habitat edge effects. The introduction of PV panels and fencing creates the potential for bird collisions and funneling wildlife towards roads in certain areas. Potential impacts can be mitigated in part through design and BMPs.²³⁵ Several special conditions were proposed by EERA to be included in the Draft Site Permit, including conditions for lighting, dust control, wildlife-friendly erosion control, and tree removal.

179. The record demonstrates that Birch Coulee Solar has taken steps to avoid and minimize wildlife and habitat impacts. Further, Sections 4.3.16, 4.3.32, and 8.14 of the Site Permit specify measures that will minimize impacts to wildlife. Birch Coulee Solar will continue to coordinate with MDNR and EERA regarding the Project’s perimeter fence, per Section 4.3.32 of the DSP.

F. Rare and Unique Natural Resources.

180. Minnesota law requires consideration of the Project’s potential effects on rare and unique natural resources.²³⁶

181. There are no Minnesota Biological Survey (MBS) sites of moderate, high, or outstanding biodiversity significance within the land control area.²³⁷

²³³ Ex. EERA-7 at 121 (EA).

²³⁴ Ex. EERA-7 at 121 (EA).

²³⁵ Ex. EERA-7 at 120 (EA).

²³⁶ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100, subp. F.

²³⁷ Ex. EERA-7 at 127-128 (EA).

182. The Northern Long Eared Bat (NLEB) is federally endangered. The U.S. Fish and Wildlife Service (USFWS) determined the Project is not likely to result in an incidental take of the NLEB. According to the DNR and USFWS, there are no known hibernacula in Renville County or Redwood County.²³⁸ Birch Coulee Solar does not anticipate the need to clear trees for the Project. However, any necessary tree clearing will occur in the winter months (November 1 to March 31), when bats are hibernating.²³⁹

183. The Tricolored Bat (TCB) is a proposed federally listed species and state listed species of concern. The USFWS determined the Project is not likely to adversely affect the TCB. According to the DNR it has only been found in small numbers in the state and a maternity colony has yet to be found in Minnesota.²⁴⁰

184. The USFWS determined the Project will have no effect on the monarch butterfly. All four native seed mixes designed for the Project include at least one milkweed species; once vegetation has been established the Project can provide foraging habitat for monarchs.²⁴¹

185. Bald eagles typically nest in mature trees near large lakes or streams. Nesting habitat suitable for bald eagles is not present within the land control area and the closest suitable nesting habitat is associated with the Minnesota River, approximately 1 mile south and southwest of the Project.²⁴² EERA proposed special condition Section 5.18 requiring the permittee to file documentation authorizing any Bald Eagle nest removal prior to construction. Birch Coulee Solar does not support this special condition because it is not necessary.²⁴³ The Project does not include suitable habitat for bald eagles, and there are no known bald eagle nests within the land control area.²⁴⁴

186. Prairie Bush Clover is a federally and state listed threatened species endemic to the upper Mississippi River Valley. The USFWS determined the Project will have no effect on prairie bush clover. The probability of species occurrence within the land control area is considered to be low due to the heavy agricultural use and lack of native prairie habitat suitable for prairie bush clover.²⁴⁵

187. The salamander mussel is a proposed endangered state listed species. The salamander mussel has been recorded in Chippewa and Nicollet Counties, northwest and southeast of Renville County along the Minnesota River, but it is currently restricted to the lower St. Croix River.²⁴⁶

188. The EA suggests that the TH 19 ROW may contain State-listed threatened or endangered species in the same area as the western proposed/existing Project access road and that construction

²³⁸ Ex. EERA-7 at 128 (EA).

²³⁹ Ex. BCS-2 at 58 (Application).

²⁴⁰ Ex. EERA-7 at 128 (EA).

²⁴¹ Ex. EERA-7 at 129 (EA).

²⁴² Ex. EERA-7 at 129 (EA).

²⁴³ Birch Coulee Solar – Comments on the EA and DSP at 13-14 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁴⁴ Exs. BCS-2 at 58 (Application) and EERA-7 at 129 (EA).

²⁴⁵ Ex. EERA-7 at 129-130 (EA).

²⁴⁶ Ex. EERA-7 at 130 (EA).

of the access roads could destroy State-listed species present in the ROW.²⁴⁷ EERA proposed Special Condition Section 5.19 requiring the permittee to comply with any MnDOT permit requirements deemed necessary by MnDOT's Office of Environmental Stewardship Protect Species Unit relating to vegetation in the TH 19 ROW. Birch Coulee Solar states that this proposed condition is not applicable.²⁴⁸ Birch Coulee Solar agreed to move the access road in the western portion of the Project area to be oriented east-west from County Road 5 instead of north-south from TH 19.²⁴⁹ Accordingly, no part of the Project would require vegetation management within the TH 19 ROW. Birch Coulee Solar understands that, if Project plans change, it would need to obtain applicable approvals for any changes.²⁵⁰

EERA recommended removing Section 5.19 of the Draft Site Permit upon learning that Birch Coulee Solar has removed the access road off TH 19 and large temporary laydown yard in the southern portion of the Project from the Project layout.

G. Application of Various Design Considerations.

189. Minnesota law requires consideration of the application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity.²⁵¹

190. Birch Coulee Solar is not required to analyze alternative sites pursuant to Minn. R. 7850.3100 unless it rejected alternative sites.²⁵² Birch Coulee Solar selected the proposed Project site based on a variety of factors, including willing landowners, environmental characteristics, no competition with other potential renewable energy projects, and interconnection availability. The proposed Project site was identified based on these factors, and no specific alternative sites for the Solar Project were considered.²⁵³

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

191. Minnesota law requires consideration of the use of existing large electric power generating plant sites.²⁵⁴

192. There are no existing large electric generating plant sites in the region.²⁵⁵

²⁴⁷ Ex. EERA-7 at 130 (EA).

²⁴⁸ Birch Coulee Solar – Comments on the EA and DSP at 14 (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁴⁹ Ex. BCS-10 at 5:2-5 (Direct Testimony of Scott Groux).

²⁵⁰ Exs. BCS-9 at 2 (Response to Scoping Comments) and EERA-7 at 89 (EA).

²⁵¹ Minn. R. 7850.4100, subp. G.

²⁵² Ex. BCS-2 at 9 (Application).

²⁵³ Ex. BCS-2 at 7-8 (Application).

²⁵⁴ Minn. R. 7850.4100(I).

²⁵⁵ Ex. EERA-7 at 12, Table 1 (EA).

I. Use of Existing Rights-of-Way.

193. Minnesota law requires consideration of the use of existing ROWs.²⁵⁶

194. The Project will be immediately adjacent to the existing Franklin 115 kV substation that already operates in the area.²⁵⁷ Existing infrastructure in the Project area and vicinity includes two transmission lines, a community-scale solar garden, and the Franklin 115 kV substation.²⁵⁸

J. Electrical System Reliability.

195. Minnesota law requires consideration of electrical system reliability.²⁵⁹

196. The Project will generate an annual average of approximately 264,000 MWh of renewable energy during its anticipated 30-year life span, enough to power approximately 25,142 homes per year.²⁶⁰

197. The Project has been designed to minimize outages or interruptions to electrical service: SCADA equipment and the CMMS will be used to monitor facility operations 24/7, identify problems, and create preventative maintenance schedules to reduce the chance of equipment failure that results in service outages. The local operations and maintenance team will be supported by the remote O&M engineering and technical services teams. Project components are designed to withstand extreme weather events, and the tracking system allows the panels to follow the sun throughout the day, maximizing energy generation.²⁶¹

198. Even on cloudy days, the Project will generate electricity to supply to the grid. The rotational tracking system allows panels to track the sun's position during winter, when the sun is at a lower angle in the sky, and panels can be rotated to prevent snow from building up on the panel surface.²⁶²

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

199. Minnesota law requires consideration of the costs of constructing, operating, and maintaining a facility which are dependent on design and route.²⁶³

200. Birch Coulee Solar estimates the Project capital construction costs, including development, EPC, and interconnection to be approximately \$245 million. Actual total costs may vary up to 20 percent as they are dependent upon factors such as timing of construction, final panel selection, labor costs, taxes, and tariffs.²⁶⁴

²⁵⁶ Minn. R. 7850.4100(H) and (J).

²⁵⁷ Ex. EERA-7 at 51 (EA).

²⁵⁸ Ex. EERA-7 at 50 (EA).

²⁵⁹ Minn. R. 7850.4100(K).

²⁶⁰ Ex. EERA-7 at 134 (EA).

²⁶¹ Ex. EERA-7 at 134-135 (EA).

²⁶² Ex. EERA-7 at 135 (EA).

²⁶³ Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100, subp. K.

²⁶⁴ Ex. BCS-2 at 21 (Application).

201. The principal operating and maintenance costs include inspections, which are typically ground-based and generally occur on a yearly basis. The estimated annual operation cost is \$1,000,000 and consists of lease payments, operational staff wages, taxes, and inspection/maintenance.²⁶⁵

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

202. Minnesota law requires consideration of the adverse human and natural environmental effects that cannot be avoided.²⁶⁶

203. Unavoidable adverse effects associated with construction of the Project (in some instances a specific phase of construction) would last through construction and could include the following, absent avoidance or mitigation measures:

- Fugitive dust.
- Noise disturbance to nearby residents and recreationalists.
- Visual disturbance to nearby residents and recreationalists.
- Soil compaction and erosion.
- Vegetative clearing (loss of shelter belts).
- Disturbance and temporary displacement of wildlife, as well as direct impacts to wildlife inadvertently struck or crushed.
- Minor amounts of marginal habitat loss.
- Possible traffic delays.
- Minor GHG emissions from construction equipment and workers commuting.²⁶⁷

204. Unavoidable adverse impacts associated with the operation would last as long as the life of the Project, and could include:

- Visual impacts of the Project.
- Cultural impacts due to a change in the sense of place for local residents.
- Loss of land for agricultural purposes.
- Injury or death of birds that collide with PV panels.

²⁶⁵ Ex. BCS-2 at 21 (Application).

²⁶⁶ Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100, subp. M.

²⁶⁷ Ex. EERA-7 at 135-136 (EA).

- Injury or death of wildlife from fencing.²⁶⁸

M. Irreversible and Irretrievable Commitments of Resources.

205. Minnesota law requires consideration of the irreversible and irretrievable commitments of resources that are necessary for the Project.²⁶⁹ Resource commitments are irreversible when it is impossible or very difficult to redirect that resource to a different future use; an irretrievable commitment of resources means the resource is not recoverable for later use by future generations.

206. 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.²⁷⁰

XI. SITE PERMIT CONDITIONS

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

208. The EA and EERA DSP included various recommendations and potential site permit conditions related to the Project, to which the Applicant responded in its direct testimony and written comments.²⁷¹

209. Birch Coulee Solar proposes revisions to Section 5.5 of the DSP because this topic is already covered in Section 4.3.22 of the Commission's typical site permit and proposes revisions. Birch Coulee Solar also proposes revisions to Section 5.6 of the DSP because it is unclear what is contemplated by a "development agreement." After revisions, the resulting condition will take the place of the Sections 5.5. and 5.6 of the DSP. The remaining special conditions will need to be renumbered accordingly.

5.5 Traffic Control and Road Use Agreement

The Permittee shall enter into a Road Use Agreement with Renville County and affected Townships. The Road Use Agreement shall include a description of how the Permittee will coordinate traffic control with local road authorities. The Permittee shall keep records

²⁶⁸ Ex. EERA-7 at 136 (EA).

²⁶⁹ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100, subp. N.

²⁷⁰ Ex. EERA-7 at 136 (EA).

²⁷¹ Ex. BCS-10 (Direct Testimony of Scott Groux) and Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

of compliance with this section and provide them upon the request of Commission staff.²⁷²

210. The record supports the inclusion of the Applicant's revisions to Sections 5.5 and 5.6 of the DSP.

211. Birch Coulee Solar proposes revisions to Section 5.8 of the DSP to specify to whom the notice should be provided:

5.8 Ownership Change Notification

The permittee shall notify Renville County ~~officials~~Board of Commissioners if there is an ownership change pursuant to Section 2.1 of this permit and shall provide the new contact information.²⁷³

212. The record supports the inclusion of the Applicant's revisions to Section 5.8 of the DSP.

213. Birch Coulee Solar proposes the removal of the following special conditions proposed by EERA: 5.1, 5.2, 5.3, 5.4, 5.7, 5.9, 5.10, 5.11, 5.12, 5.13, 5.18, and 5.19.²⁷⁴ Birch Coulee Solar's written comments included detailed explanation regarding why these special conditions proposed by EERA are not supported by the record. For the reasons stated in Birch Coulee Solar's written comments and as described elsewhere in these Findings, the record does not support the inclusion of those proposed special conditions in a site permit for the Project.

XII. NOTICE

214. Minnesota statutes and rules require an applicant to provide certain notice to the public and local governments before and during the site permit and route permit application processes.²⁷⁵ Birch Coulee Solar provided notices to the public and local governments in satisfaction of Minnesota statutory and rule requirements.²⁷⁶

215. Minnesota statutes and rules also require the EERA and the Commission to provide certain notice to the public throughout the site and route permit application processes.²⁷⁷ The EERA and the Commission provided the notices in satisfaction of Minnesota statutes and rules.²⁷⁸

²⁷² Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁷³ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁷⁴ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁷⁵ Minn. Stat. § 216E.03, subps. 3a, 4; Minn. R. 7850.3300; Minn. R. 7850.2100, subps. 2, 4.

²⁷⁶ Exs, BCS-1 (Notice of Intent by Birch Coulee Solar LLC to Submit a Site Permit Application under the Alternative Permitting Process); BCS-4 (Notice of Filing Site Permit Application); and BCS-5 (Confirmation of Notice).

²⁷⁷ Minn. Stat. § 216E.03, subps. 3a, 4; Minn. R. 7850.3300; Minn. R. 7850.2100, subps. 2, 4.

²⁷⁸ Exs. PUC-1 (Notice of Comment Period); PUC-5 (Notice of Information and Scoping Meeting); PUC-8 (Notice of Hearing and EA Availability); EERA-6 (Notice of EA Scoping Decision); EERA-8 (Notification of EA to THPOs, Tribal Government Contracts, and Agencies); EERA-9 (Notice of EA Mailed to Public Libraries); and EERA-10 (Notice of Public Hearings and EA Availability on EQB Monitor).

XIII. COMPLETENESS OF EA

216. The EA process is the alternative environmental review approved by the EQB for LEPGPs. The Commission is required to determine the completeness of the EA. An EA is complete if it and the record address the issues and alternatives identified in the Scoping Decision.²⁷⁹

217. Birch Coulee Solar proposed clarifications to numerous sections of the EA and those clarifications are supported by the record.²⁸⁰

218. The evidence in the record demonstrates that the EA is complete because the EA and the record created at the public hearing and during the subsequent comment period address the issues and alternatives raised in the Scoping Decision.²⁸¹

CONCLUSIONS OF LAW

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

2. The Commission and the Administrative Law Judge have jurisdiction over the Application for a site permit for the up to 125 MW proposed Project pursuant to Minn. Stat. §§ 216E.02 and 216E.03 (2023).

3. The Commission accepted the Application as substantially complete on September 10, 2024.²⁸²

4. Birch Coulee Solar has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E (2023) and Minn. R. Ch. 7850.

5. The Commission has substantially complied with the procedural requirements of Minn. Stat. Ch. 216E (2023) and Minn. R. Ch. 7850.

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

7. Public hearings were held on March 11, 2025 (in-person) and March 12, 2025 (remote-access). Proper notice of the public hearings was provided, and the public was given an opportunity to speak at the hearings and to submit written comments.

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

²⁷⁹ Minn. R. 4410.4400, subp. 3; Minn. R. 7850.3900, subp. 2.

²⁸⁰ Birch Coulee Solar – Comments on the EA and DSP (March 24, 2025) (eDocket Nos. [20253-216743-01](#) and [20253-216743-02](#)).

²⁸¹ Ex. EERA-5 (EA Scoping Decision).

²⁸² Ex. PUC-3 (Order).

9. The Commission has the authority under Minn. Stat. § 216E.03 (2023) to place conditions in a LEPGP site permit.
10. The Site Permit includes a number of important mitigation measures and other reasonable conditions.
11. It is reasonable to amend the Site Permit to include the changes proposed by EERA staff in the EA and as further revised by Birch Coulee Solar as described above.
12. The record in this proceeding demonstrates that Birch Coulee Solar has satisfied the criteria for a Site Permit as set forth in Minn. Stat. § 216E.03 (2023) and Minn. R. Ch. 7850 and all other applicable legal requirements.
13. The Project, with the permit conditions discussed above, satisfies the Site Permit criteria for an LEPGP in Minn. Stat. § 216E.03 (2023) and meets all other applicable legal requirements.
14. 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.
15. Any of the foregoing conclusions of law which are more properly designated findings of fact are hereby adopted as such.

RECOMMENDATION

Based upon these Conclusions, the Administrative Law Judge recommends that the Commission issue a Site Permit to Birch Coulee Solar to construct and operate the Project and associated facilities in Renville County, Minnesota and that the permit include the draft permit conditions amended as set forth in the Conclusions above.

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

Dated on _____

Jim Mortenson
Administrative Law Judge