

OAH Docket No. 21-2500-40522
MPUC Docket No. IP-7138/ESS-24-279

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Snowshoe BESS, LLC for a Site Permit
for the up to 150 MW Snowshoe Energy
Storage Project in Olmsted County,
Minnesota

**FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATIONS**

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This matter was assigned to Administrative Law Judge Kimberly Middendorf for proceedings on the Site Permit Application (MPUC Docket No. ESS-24-279) (Application) of Snowshoe BESS, LLC (Applicant or Snowshoe BESS) to construct and operate the Snowshoe Energy Storage Project (Project) in Kalmar Township, Olmsted County, Minnesota. The Minnesota Public Utilities Commission (Commission) also requested that the Judge provide a full report with findings of fact, conclusions of law, and recommendations regarding the Project following public hearings.

Public hearings on the Application were held on April 23, 2025 (in-person), and April 24, 2025 (remote-access). The factual record remained open until May 9, 2025, for the receipt of written public comments.

Jeremy P. Duehr, Fredrikson & Byron P.A., and Mary Matze, Manager of Development for Spearmint Renewable Development Company, LLC (Spearmint Energy), appeared on behalf of Snowshoe BESS.

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

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

STATEMENT OF THE ISSUE

Has Snowshoe BESS satisfied the criteria established in Minn. Stat. § 216E.03, subd. 7 (2024) and Minn. R. 7850.4100 (2023) for a site permit for the Project?

SUMMARY OF RECOMMENDATIONS

Snowshoe BESS has satisfied the applicable legal requirements. Accordingly, it is recommended that the Commission **GRANT** a site permit for the Project, subject to the permit conditions recommended in Section XII below.

Based on the Application, proceedings, and other evidence in the record, the Judge makes the following:

FINDINGS OF FACT

I. APPLICANT

1. Snowshoe BESS is a wholly owned indirect subsidiary of Spearmint Energy.¹

2. Spearmint Energy is an energy company focused on developing, owning, operating, and optimizing Battery Energy Storage System (BESS) infrastructure used to reduce grid volatility and increase system resiliency. Spearmint Energy currently has more than 20 projects, totaling over 13 gigawatt hours of capacity, under development in ten states across the U.S.²

II. PROCEDURAL HISTORY

3. The Minnesota Power Plant Siting Act (PPSA) provides that no person may construct an energy storage system without a site permit from the Commission.³ Under the PPSA, “energy storage system” means “equipment and associated facilities designed with a nameplate capacity of 10,000 kilowatts or more that is capable of storing generated electricity for a period of time and delivering the electricity for use after storage.”⁴ The proposed Project is a BESS with a nominal power rating of up to 150 megawatt (MW) alternating current (AC) with approximately 600 megawatt-hours (MWh) of energy capacity. Therefore, a site permit is required from the Commission prior to construction.⁵

4. Under the PPSA, a site permit application for an energy storage system is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04(2)(9) (2024). On August 19, 2024, Snowshoe BESS filed a Notice of Intent to Submit a Site Permit Application (Application) for the Project under the alternative permitting procedures set forth in Minn. R. 7850.2800 to 7850.3900 (2023).⁶

5. On October 7, 2024, Snowshoe BESS submitted the Application for the Project to the Commission.⁷

6. On October 11, 2024, the Commission issued a Notice of Comment Period regarding the completeness of the Application. The Notice requested initial comments by October 25, 2024, reply comments by November 1, 2024, and supplemental comments

¹ Exhibit (Ex.) SNOW-3 at 1 (Site Permit Application, Figures, and Appendices A-K) (Application).

² Ex. SNOW-8 at 2:30–3:4 (Direct Testimony of Mary Matze with Schedules A–C) (Matze Direct).

³ Minn. Stat. § 216E.03, subd. 1.

⁴ Minn. Stat. § 216E.01, subd. 3a.

⁵ Ex. SNOW-3 at 8 (Application).

⁶ Ex. SNOW-1 (Notice of Intent to Submit a Site Permit Application Under the Alternative Permitting Process).

⁷ See Ex. SNOW-3 (Application).

by November 6, 2024.⁸ The Notice invited comments on whether the Application was complete within the meaning of the Commission's rules; whether there were contested issues of fact with respect to the representations made in the Application; whether the Commission should appoint an advisory task force; whether any additional procedural requirements should be considered; and whether the Commission should direct the Executive Secretary to issue an authorization to Snowshoe BESS to initiate consultation with the State Historic Preservation Office (SHPO).⁹

7. On October 14, 2024, Snowshoe BESS 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 Minn. R. 7850.2100.¹⁰

8. On October 24, 2025, the International Union of Operating Engineers (IUOE) Local 49 and the North Central States Regional Council (NCSRC) of Carpenters submitted comments on the Project.¹¹ Also on October 24, 2025, the Minnesota Department of Agriculture (MDA) submitted comments regarding coordination with the Applicant to develop appropriate agricultural impact minimization and mitigation measures.¹²

9. On October 25, 2024, the EERA filed its Comments and Recommendations on Application Completeness. EERA recommended that the Commission accept the Application as complete, take no action on an advisory task force, and request a full administrative law judge conduct public hearings and issue a report with findings, conclusions, and recommendations for the Project.¹³

10. On October 28, 2024, Snowshoe BESS submitted the Confirmation of Notice Compliance Filing for the Application.¹⁴

11. On October 29, 2024, Snowshoe BESS met with the MDA to discuss the Project and its potential impacts to agricultural land that may need to be addressed by mitigation or management measures.¹⁵

12. On October 31, 2024, Snowshoe BESS submitted reply comments concerning Application completeness and addressing MDA's initial comments.¹⁶ During the Applicant's meeting with MDA on October 29, 2024, MDA indicated that its initial

⁸ Ex. PUC-1 (Notice of Comment Period on Application Completeness).

⁹ Ex. PUC-1 (Notice of Comment Period on Application Completeness).

¹⁰ Ex. SNOW-4 (Notice of Application).

¹¹ Ex. EERA-1 (IUOE Local 49 and NCSRC of Carpenters Comments).

¹² Ex. EERA-2 (MDA Comments).

¹³ Ex. EERA-3 at 6 (EERA Comments and Recommendations on Application Completeness).

¹⁴ Ex. SNOW-5 (Confirmation of Notice Compliance Filing).

¹⁵ See Ex. SNOW-6 (Completeness Reply Comments); Ex. EERA-4 (MDA Reply Comments).

¹⁶ Ex. SNOW-6 (Completeness Reply Comments).

comments were intended to convey that appropriate agricultural mitigation measures should be developed by Snowshoe BESS and MDA during the permitting process.¹⁷

13. On November 1, 2024, MDA submitted supplemental comments confirming that MDA and the Applicant have had initial discussions regarding the Project and have agreed to coordinate development of an appropriate mitigation plan addressing potential impacts to agricultural land.¹⁸

14. On November 14, 2024, the Commission issued proposed consent items.¹⁹

15. On November 19, 2024, the Commission issued an order finding the Application complete, declining to appoint an advisory task force, and requesting that an administrative law judge conduct public hearings and issue a full report with findings, conclusions, and recommendations for the Project.²⁰ The Commission also issued minutes from the November 19, 2024 consent calendar subcommittee meeting.²¹

16. On November 26, 2024, the Commission issued a Notice of Public Information and Environmental Assessment Scoping Meetings to provide the public with information about the Project and the state's permitting process, as well as an opportunity to participate in developing the scope of the environmental assessment (EA).²² An in-person meeting was noticed for December 9, 2024, and a remote-access meeting was noticed for December 12, 2024. A written comment period was also open through December 30, 2024. The Notice requested comments on two questions regarding the Project: (1) What potential human and environmental impacts or unique characteristics of the proposed Project should be considered in the EA?; and (2) Are there any methods to minimize, mitigate, or avoid potential impacts of the proposed Project that should be considered in the EA?²³

17. On November 27, 2024, the Commission filed a sample energy storage system site permit.²⁴

18. On December 9, 2024, Commission Staff and EERA held an in-person public meeting in Byron, Minnesota. Two members of the public provided oral comments during the in-person public meeting. No members of the public submitted oral comments or questions during the remote-access public meeting held on December 12, 2024.²⁵

¹⁷ Ex. EERA-4 (MDA Reply Comments).

¹⁸ Ex. EERA-4 (MDA Reply Comments).

¹⁹ Proposed Consent Items (Nov. 14, 2024) (eDocket No. [202411-211904-01](#)).

²⁰ Ex. PUC-2 (Order on Application Completeness).

²¹ Minutes – November 19, 2024 Consent (Nov. 19, 2024) (eDocket No. [202411-212107-01](#)).

²² Ex. PUC-3 (Notice of Public Information and Environmental Assessment Scoping Meetings).

²³ Ex. PUC-3 (Notice of Public Information and Environmental Assessment Scoping Meetings); PUC-8 (Environmental Quality Board (EQB) Monitor Submission – Scoping Meeting); Ex. EERA-17 (EQB Monitor Submission – Scoping Meeting).

²⁴ Ex. PUC-4 (Energy Storage System Sample Permit).

²⁵ Ex. EERA-7 (Oral Comments – Virtual Public and Scoping Meeting 12-12-24); Ex. EERA-8 (Oral Comments – Public Information and Scoping Meeting Byron MN 12-09-24).

19. On December 23, 2024, the Minnesota Department of Natural Resources (MDNR) submitted comments regarding potential environmental impacts that should be considered in the EA for the Project. The MDNR requested that EERA address fugitive dust levels and dust suppression measures and wildlife friendly erosion control measures in the EA.²⁶ The MDNR also recommended that the Project utilize downward facing lighting that minimizes blue hue and employ biodegradable erosion control materials. MDNR advised against the use of chloride products to control dust.²⁷

20. On December 31, 2024, IUOE Local 49 and NCSRC of Carpenters submitted comments requesting that the Project's local economic impacts be studied in the EA.²⁸

21. On January 6, 2025, the Judge issued a Notice of and Order for Prehearing Conference.²⁹

22. On January 7, 2025, EERA filed transcripts from the public meetings held on December 9, 2024 (in-person) and December 12, 2024 (remote-access).³⁰

23. On January 13, 2025, EERA issued its Environmental Assessment Scoping Decision.³¹

24. On January 14, 2025, EERA served and filed its Notice of Environmental Assessment Scoping Decision.³²

25. On February 3, 2025, the Judge issued a Prehearing Order establishing a schedule for the proceedings.³³

26. On March 20, 2025, the Commission authorized Snowshoe BESS to initiate consultation with SHPO in accordance with Minn. Stat. § 138.655 (2024).³⁴

27. On April 9, 2025, EERA issued the EA for the Project.³⁵ Also, the Commission issued a Notice of Public Hearings and Availability of Environmental Assessment,³⁶ as well as a correction,³⁷ providing for an in-person public hearing on April 23, 2025, in Byron, Minnesota, and a remote-access public hearing on April 24, 2025. The Commission also requested comments from the public on: (1) whether the

²⁶ Ex. EERA-5 (MDNR Scoping Comments).

²⁷ Ex. EERA-5 (MDNR Scoping Comments).

²⁸ Ex. EERA-6 (IUOE Local 49 and NCSRC of Carpenters Comments).

²⁹ Notice and Order for Prehearing Conference (Jan 6, 2025) (eDocket No. [20251-213580-01](#)).

³⁰ Ex. EERA-7 (Oral Comments – Virtual Public and Scoping Meeting 12-12-24); Ex. EERA-8 (Oral Comments – Public Information and Scoping Meeting Byron MN 12-09-24).

³¹ Ex. EERA-9 (Environmental Assessment Scoping Decision).

³² Ex. EERA-10 (Notice of Environmental Assessment Scoping Decision).

³³ First Prehearing Order (Feb. 3, 2025) (eDockets ID No. [20252-214874-01](#)).

³⁴ Ex. PUC-5 (Authorization to Initiate SHPO Consultation).

³⁵ Ex. EERA-11 (EA).

³⁶ Ex. PUC-6 (Notice of Public Hearings and Availability of Environmental Assessment).

³⁷ Ex. PUC-7 (Notice of Public Hearings and Availability of Environmental Assessment – Corrected for Typo).

Commission should grant a site permit for the Project; and (2) if granted, what additional conditions or requirements, if any, should be included in the site permit. The Commission stated that it would accept written comments through May 8, 2025.³⁸

28. On April 11, 2025, Snowshoe BESS submitted a compliance filing confirming that the Applicant consulted with the SHPO regarding the Project in accordance with Minn. Stat. § 138.665 (2024), and that the associated Phase I Archaeological Reconnaissance Survey was filed with the Application.³⁹ The compliance filing also included a comment letter from the SHPO, dated September 26, 2024, confirming that the SHPO reviewed the Phase I Archaeological Reconnaissance Survey and agreed that there are no properties listed in the National or State Registers of Historic Places and no known or suspected archaeological properties in the area that will be affected by the Project.⁴⁰

29. On April 14, 2025, EERA served and filed a Notification of Environmental Assessment Availability to Tribal Historic Preservation Officers;⁴¹ Tribal Governments;⁴² and Agencies.⁴³

30. On April 15, 2025, the Commission published the Notice of Public Hearings and Availability of Environmental Assessment in the EQB Monitor.⁴⁴

31. On April 15, 2025, Snowshoe BESS filed the Direct Testimony of Mary Matze.⁴⁵ Among other topics, the Direct Testimony of Mary Matze addressed the Applicant's coordination with the SHPO and other interested stakeholders; discussed key industry safety standards applicable to the Project; and provided limited comments on several special permit conditions proposed by EERA.⁴⁶

32. A public hearing was held on April 23, 2025 at Somerby Golf Club in Byron, Minnesota. The transcript from that hearing was filed on May 19, 2025.⁴⁷ Two persons provided oral comments at this public hearing.

33. A remote-access public hearing was held via Webex on April 24, 2025. The transcript from that hearing was filed on May 19, 2025.⁴⁸ No members of the public submitted oral comments or questions during that hearing. Snowshoe BESS responded

³⁸ Ex. PUC-6 (Notice of Public Hearings and Availability of Environmental Assessment).

³⁹ Ex. SNOW-7 (Confirmation of SHPO Consultation); see Ex. SNOW-3 at Appendix F (Application; Phase 1 Archaeological Reconnaissance Survey).

⁴⁰ Ex. SNOW-7 at Attachment 1 (Confirmation SHPO Consultation).

⁴¹ Ex. EERA-13 (Notification of Environmental Assessment Availability to Tribal Historic Preservation Officers).

⁴² Ex. EERA-14 (Notification of Environmental Assessment Availability to Tribal Governments).

⁴³ Ex. EERA-15 (Notification of Environmental Assessment Availability to Agencies).

⁴⁴ Ex. PUC-9 (EQB – Notice of Public Hearing and Availability of Environmental Assessment).

⁴⁵ Ex. SNOW-8 (Matze Direct).

⁴⁶ Ex. SNOW-8 (Matze Direct); see Ex. EERA-11 at Appendix C (EA; Draft Site Permit).

⁴⁷ Byron Public Hearing Transcript (Byron Tr.) (Apr. 23, 2025).

⁴⁸ WebEx Public Hearing Transcript (WebEx Tr.) (Apr. 24, 2025).

to questions at the public hearings, as applicable. The written public comment period remained open through May 8, 2025.

34. On April 28, 2025, the Commission filed a copy of the public hearing presentation.⁴⁹

35. On May 5, 2025, Matt Grant, Fire Chief, City of Byron Fire Department, submitted a public comment.⁵⁰

36. On May 8, 2025, EERA,⁵¹ MDA,⁵² MDNR,⁵³ and the Minnesota Interagency Vegetation Management Plan Working Group (VMPWG)⁵⁴ filed comments.

37. On May 23, 2025, Snowshoe BESS filed responses to the comments submitted during the comment period.⁵⁵

III. PROJECT DESCRIPTION

38. The proposed Project is a BESS with a nominal power rating of up to 150 MWac and approximately 600 MWh of energy capacity on approximately 28 acres in Kalmar Township, Olmsted County, Minnesota.⁵⁶ In addition to battery energy storage enclosures, the Project will consist of inverters and transformers, electrical feeder lines, a tap line, a substation, storage and parking areas, access roads, fencing, and other minor equipment and subcomponents that are typical of a BESS project.⁵⁷ The Project will utilize lithium-ion or similar battery technology to provide up to 150 MW of charging (consuming power from the grid) and discharging (generating power onto the grid) capacity for up to four hours of reliable, deliverable on-peak energy.⁵⁸

39. The Project is designed to connect to the electric grid via a new overhead, bi-directional 161 kilovolt (kV) tap line of approximately 300 feet between the Project substation and the adjacent Southern Minnesota Municipal Power Agency (SMMPA)-Maple Leaf Substation.⁵⁹ Approval from Midcontinent Independent System Operator (MISO) through a Generator Interconnection Agreement (GIA) is required to connect the Project to the electrical transmission system.⁶⁰

40. The Project layout and preliminary design considers applicable energy loss (approximately 8 to 10 percent losses) and would allow for a maximum of 150 MWac of

⁴⁹ Public Hearing Presentation (Apr. 28, 2025) (eDocket No. [20254-218212-01](#)).

⁵⁰ Comment by Matt Grant (May 5, 2025) (eDocket No. [20255-218603-01](#)).

⁵¹ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#));

⁵² Comment by MDA (May 8, 2025) (eDocket No. [20255-218709-01](#)).

⁵³ Comment by MDNR (May 8, 2025) (eDocket No. [20255-218718-01](#)).

⁵⁴ Comment by the VMPWG (May 8, 2025) (eDocket No. [20255-218729-01](#)).

⁵⁵ Ex. SNOW-10 (Response to Comments).

⁵⁶ Ex. SNOW-3 at 1 (Application).

⁵⁷ Ex. SNOW-3 at 1 (Application).

⁵⁸ Ex. SNOW-3 at 3 and 16 (Application).

⁵⁹ Ex. SNOW-3 at 3 and 24 (Application).

⁵⁹ Ex. SNOW-3 at 1 (Application).

⁶⁰ Ex. SNOW-3 at 15 (Application).

energy storage and transmission onto the grid.⁶¹ Snowshoe BESS submitted an interconnection request for the Project in 2020 and expects to sign a GIA in the first quarter of 2026.⁶²

41. The proposed Project is expected to contribute to Minnesota's transition to a carbon-free electricity supply by allowing wind and solar projects to continue to produce energy when they would otherwise be curtailed due to low demand.⁶³ In addition to the Project's energy shifting capabilities, the Project will provide ancillary and reliability services required to safely and reliably operate the grid. The Project will use state-of-the-art battery, inverter, and other technologies, which will allow it to provide critical services to assist the grid operator with maintaining the voltage and frequency of the transmission system.⁶⁴

42. The Project will provide cost-effective energy storage to Minnesota and regional ratepayers by providing specific energy, capacity, and ancillary services on the wholesale power market on a merchant basis.⁶⁵

43. Unlike many renewable projects, which typically sell all generated energy to one or more offtaker(s) in the form of a long-term Power Purchase Agreement (PPA), the complex and dispatchable nature of a BESS project is often better suited for the merchant market and other contracting structures. Snowshoe BESS anticipates entering into a tolling agreement with its affiliated merchant energy business or similar third-party market participant. Under a toll structure, the power stored by the Project and its other services, will be offered to wholesale customers, including Minnesota utilities and cooperatives that have identified a need for additional energy and capacity, as well as corporate and industrial customers that have set renewable energy goals.⁶⁶ It is also possible the Project could operate under a different revenue structure including fully or partially contracting with a utility for capacity, energy, and/or ancillary services. For example, the Project or Snowshoe BESS could be sold to a utility, in which event the utility could use the Project to manage its own electrical load, and an enforceable mechanism for the sale of the power stored by the facility may not be applicable for the Project to operate or sell its stored power.⁶⁷

IV. SITE LOCATION AND CHARACTERISTICS

44. The Project is in Kalmar Township, Olmsted County, Minnesota, approximately one mile east of the city of Byron, 2.1 miles west of the city of Rochester, and just north of U.S. Highway 14 in Olmsted County.⁶⁸

⁶¹ Ex. SNOW-3 at 16 (Application).

⁶² Ex. SNOW-3 at 15 (Application).

⁶³ Ex. SNOW-3 at 3 (Application).

⁶⁴ Ex. SNOW-3 at 3 (Application).

⁶⁵ Ex. SNOW-3 at 4 (Application).

⁶⁶ Ex. SNOW-3 at 4 (Application).

⁶⁷ Ex. SNOW-3 at 4 (Application).

⁶⁸ Ex. SNOW-3 at 12 (Application).

45. The Project site will encompass 27.2 acres of predominantly agricultural land together with an existing access road owned by Southern Minnesota Municipal Power Agency (SMMPA) and a 6.9-acre area encompassing an easement area Snowshoe BESS could utilize for Project access if the existing access is unavailable for Project use.⁶⁹ Snowshoe BESS has, through voluntary agreements, secured 100 percent of the private real estate rights necessary to construct the Project. All land required for the Project, except for the access road, will be leased, with all equipment being owned by the Snowshoe BESS.⁷⁰

46. Snowshoe BESS has coordinated with SMMPA, the owner of the SMMPA-Maple Leaf Substation and existing access road, regarding Snowshoe BESS's use of the existing access road to access the Project.⁷¹ The Applicant also has a separate access easement that could be utilized if SMMPA and Snowshoe BESS are unable to reach a mutual agreement regarding shared use of the existing access road.⁷²

47. Snowshoe BESS estimates that approximately 23 acres of the site are necessary to accommodate the final design and engineering of the proposed Project (i.e., the preliminary development area), but the full 27.2 acres may be utilized in the final design for a combination of permanent and temporary construction facilities, with a portion of these temporary areas being returned to natural condition or agricultural use following the completion of construction. If a new access road must be constructed for Project access, an additional 0.7 acres of land will be necessary for the new access road. The preliminary development area includes a gravel pad containing Project infrastructure, in addition to two stormwater management ponds, proposed grading areas, access road connection to the existing SMMPA access road, and parking and storage areas external to the fence line.⁷³

V. PROJECT SCHEDULE

48. Snowshoe BESS plans to construct the Project with testing and commissioning anticipated to occur in the fourth quarter of 2027, and an anticipated in-service date in late 2027.⁷⁴

VI. SUMMARY OF PUBLIC COMMENTS

49. During the completeness comment period ending November 6, 2024, written comments were filed by IUOE Local 49 and NCSRC of Carpenters,⁷⁵ MDA,⁷⁶ and

⁶⁹ Ex. SNOW-3 at 2 (Application).

⁷⁰ Ex. SNOW-3 at 1 (Application); see Ex. SNOW-4 at 1 (Notice of Application).

⁷¹ Ex. SNOW-3 at 2 (Application).

⁷² Ex. SNOW-3 at 2 (Application).

⁷³ Ex. SNOW-3 at 15–16 (Application).

⁷⁴ Ex. SNOW-3 at 6–8 (Application).

⁷⁵ Ex. EERA-1 (IUOE Local 49 and NCSRC of Carpenters Comments).

⁷⁶ Ex. EERA-2 (MDA Comments); Ex. EERA-4 (MDA Reply Comments).

EERA.⁷⁷ Snowshoe BESS responded to written comments concerning Application completeness on October 31, 2024.⁷⁸

50. Two members of the public provided verbal comments during the Public Information and Environmental Assessment Scoping Meeting held on December 9, 2024 (in-person). Both commenters expressed support for the Project and recommended that the EA examine local economic impacts.⁷⁹

51. No members of the public spoke during the Public Information and Environmental Assessment Scoping Meeting held on December 12, 2024 (remote-access).⁸⁰

52. Public hearings were held on April 23 and 24, 2025, via in-person and remote means, respectively.⁸¹ Two individuals provided comments during the in-person hearing, and no individuals commented during the remote-access hearing. Nate Runke, a representative of IUOE Local 49, offered comments in support of the Project.⁸² Byron Fire Department Chief, Matt Grant, had questions and suggestions concerning fire management and suppression strategies and potential impacts to air quality.⁸³ Snowshoe BESS responded to questions at the public hearings, as applicable, and committed to coordinating with emergency responders to develop an emergency response plan.⁸⁴

53. The written public comment period remained open through May 8, 2025. Five written comments were submitted.⁸⁵

54. EERA filed comments on the draft decommissioning plan, the draft vegetation management plan (VMP), and the changes between the sample site permit and the proposed Draft Site Permit. Regarding the decommissioning plan, EERA recommended revisions related to the plan, decommissioning objective, scheduled updates, Project description, use of capacity, permits and notification, tasks and timing, cost estimate, and financial assurance.⁸⁶ EERA also provided comments on the Project's draft VMP on behalf of the VMPWG. EERA noted that Snowshoe BESS's plan for site restoration and implementation appears to be achievable and includes a range of potential seed mixes that can meet its objectives of establishing perennial vegetation that stabilizes soils and reduces run-off, does not impede facility components or obstruct

⁷⁷ Ex. EERA-3 at 6 (EERA Comments and Recommendations on Application Completeness).

⁷⁸ Ex. SNOW-6 (Completeness Reply Comments).

⁷⁹ Ex. EERA-8 at 15–17 (Oral Comments – Public Information and Scoping Meeting Byron MN 12-09-24); see also Ex. EERA-11 at 28 (EA).

⁸⁰ Ex. EERA-7 (Oral Comments – Virtual Public and Scoping Meeting 12-12-24).

⁸¹ See generally Byron Tr. (Apr. 23, 2025); WebEx Tr. (Apr. 24, 2025).

⁸² Byron Tr. at 21:9–21 (Apr. 23, 2025).

⁸³ Byron Tr. at 22–23 and 25 (Apr. 23, 2025).

⁸⁴ Byron Tr. at 23:18–24:11, 28:25–29:12 (Apr. 23, 2025).

⁸⁵ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)); Comment by MDA (May 8, 2025) (eDocket No. [20255-218709-01](#)); Comment by MDNR (May 8, 2025) (eDocket No. [20255-218718-01](#)); Comment by the VMPWG (May 8, 2025) (eDocket No. [20255-218729-01](#)); and Comment by Matt Grant (May 8, 2025) (eDocket No. [20255-218603-01](#)).

⁸⁶ See Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)).

maintenance and access, and increases biodiversity through the use of native species.⁸⁷ EERA recommended that Snowshoe BESS continue to coordinate with the VMPWG as it finalizes the vegetation management plan, including the development of diverse native seed mixes; refinement of the installation, management, and monitoring plans; and a list of species substitutions for each seed mix.⁸⁸ Regarding the Draft Site Permit special conditions, EERA summarized the changes it made from the Commission's sample site permit, reflected in the Draft Site Permit included with the EA.⁸⁹ EERA also acknowledged Snowshoe BESS's suggested revisions to the Draft Site Permit and made additional recommendations on permit conditions.⁹⁰

55. MDA recommended removal of Special Condition 5.5 (Agricultural Impact Mitigation Plan) from the Draft Site Permit as requested by the Applicant.⁹¹ MDA's comments confirm that the Draft Site Permit includes appropriate measures to protect agricultural lands, soil, and infrastructure from impacts from the Project. Specifically, MDA found that Sections 4.3.9 through 4.3.11 of the Draft Site Permit are adequate for protecting neighboring agricultural lands and soils from impacts, and Sections 4.3.19, 4.3.22, 4.3.26, and 4.4 of the Draft Site Permit are adequate for protecting local and regional drainage networks.⁹²

56. MDNR submitted comments addressing fencing, lighting, wildlife friendly erosion control, dust control, and the VMP.⁹³ MDNR's comments generally restate the recommendations provided in its scoping comments submitted on December 23, 2024.⁹⁴ MDNR stated it supports Special Conditions 5.1, 5.6, 5.9, 5.10, and 5.11 of the Draft Site Permit.⁹⁵ MDNR noted that its review of the VMP identified a high percentage of non-native grasses and advised against planting non-native seed mixes.⁹⁶

57. Matt Grant, Fire Chief, City of Byron Fire Department submitted a comment regarding available water resources for the Project. Mr. Grant suggested extending a water line from a nearby residential development and installing a city water main at the site.⁹⁷

VII. PERMITTEE

58. The permittee for the Project is Snowshoe BESS.⁹⁸

⁸⁷ Comment by the VMPWG at 1 (May 8, 2025) (eDocket No. [20255-218729-01](#)).

⁸⁸ Comment by the VMPWG at 4 (May 8, 2025) (eDocket No. [20255-218729-01](#)).

⁸⁹ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)).

⁹⁰ See Ex. SNOW-8 at 13:22–14:15 (Matze Direct).

⁹¹ Comment by MDA (May 8, 2025) (eDocket No. [20255-218709-01](#)).

⁹² Comment by MDA (May 8, 2025) (eDocket No. [20255-218709-01](#)).

⁹³ Comment by MDNR (May 8, 2025) (eDocket No. [20255-218718-01](#)).

⁹⁴ See Ex. EERA-5 (MDNR Scoping Comments).

⁹⁵ Comment by MDNR (May 8, 2025) (eDocket No. [20255-218718-01](#)).

⁹⁶ Comment by MDNR at 2 (May 8, 2025) (eDocket No. [20255-218718-01](#)).

⁹⁷ Comment by Matt Grant (May 8, 2025) (eDocket No. [20255-218603-01](#)).

⁹⁸ Ex. SNOW-3 at 5 (Application).

VIII. CERTIFICATE OF NEED

59. The Project is exempt from certificate of need requirements pursuant to Minn. Stat. § 216B.243, subd. 8(9) (2024) because the Project is an energy storage system.⁹⁹

IX. TRANSMISSION ROUTE PERMIT

60. The PPSA provides that no person may construct a high-voltage transmission line without a route permit from the Commission.¹⁰⁰ The PPSA defines a high-voltage transmission line as “a conductor of electric energy and associated facilities designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length.”¹⁰¹

61. Snowshoe BESS proposes to connect the Project to the grid via a new 161 kV tap line approximately 300 feet in length.¹⁰² The tap line is not a high-voltage transmission line under the PPSA and, therefore, a route permit from the Commission is not required for the Project.¹⁰³

X. SITE PERMIT CRITERIA

62. Energy storage systems are governed by Minn. Stat. ch. 216E and Minn. R. ch. 7850.¹⁰⁴ Minn. Stat. § 216E.01, subd. 3a, defines “energy storage system” as “equipment and associated facilities designed with a nameplate capacity of 10,000 kilowatts or more that is capable of storing generated electricity for a period of time and delivering the electricity for use after storage.”

63. The proposed Project is a BESS with a nominal power rating of up to 150 MWac with approximately 600 MWh of energy capacity and, therefore, a site permit is required from the Commission prior to construction of the Project.¹⁰⁵

64. An energy storage system is eligible for the alternative permitting process authorized by Minn. Stat. § 216E.04.¹⁰⁶ Snowshoe BESS filed its Application under the process established by the Commission in Minn. R. 7850.2800 to 7850.3900.¹⁰⁷

⁹⁹ Ex. SNOW-3 at 5 (Application).

¹⁰⁰ Minn. Stat. § 216E.03, subd. 1.

¹⁰¹ Ex. SNOW-3 at 5 (Application).

¹⁰¹ Minn. Stat. § 216E.01, subd. 4.

¹⁰² Ex. SNOW-3 at 23 (Application).

¹⁰³ Ex. SNOW-3 at 11 (Application).

¹⁰⁴ See 2023 Minn. Laws, ch. 60, art. 12, § 67 (directing the Commission to utilize applicable provisions of Minn. R. ch. 7850 to site energy storage systems and exempting energy storage systems from the requirements of Minn. R. 7850.4400); see *a/so* Ex. SNOW-3 at 1 (Application).

¹⁰⁵ Ex. SNOW-3 at 8 (Application).

¹⁰⁶ Minn. Stat. § 216E.04, subd. 2(9).

¹⁰⁷ See Ex. SNOW-1 (Notice of Intent to Submit a Site Permit Application Under the Alternative Permitting Process).

65. Under Minn. Stat. § 216E.04, for an energy storage system permitted under the alternative permitting process, EERA prepares 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.¹⁰⁸

66. The PPSA requires that site permit determinations “be guided by the state’s goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state’s electric energy security through efficient, cost-effective power supply and electric transmission infrastructure.”¹⁰⁹

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

- (1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power facilities and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;
- (2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
- (3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
- (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;
- (5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
- (6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;

¹⁰⁸ Minn. Stat. § 216E.04, subd. .5

¹⁰⁹ Minn. Stat. § 216E.03, subd. 7.

- (7) evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 and 2;
- (8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;
- (9) evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
- (10) evaluation of the future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;
- (11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved;
- (12) when appropriate, consideration of problems raised by other state and federal agencies and local entities;
- (13) evaluation of the benefits of the proposed facility with respect to (i) the protection and enhancement of environmental quality, and (ii) the reliability of state and regional energy supplies;
- (14) evaluation of the proposed facility's impact on socioeconomic factors; and
- (15) evaluation of the proposed facility's employment and economic impacts in the vicinity of the facility site and throughout Minnesota, including the quantity and quality of construction and permanent jobs and their compensation levels. The commission must consider a facility's local employment and economic impacts, and may reject or place conditions on a site or route permit based on the local employment and economic impacts.¹¹⁰

68. In addition to the PPSA, the Commission is governed by Minn. R. 7850.4100 (2023), which mandates consideration of the following factors when determining whether to issue a permit for a large electric power generating plant:

¹¹⁰ Minn. Stat. § 216E.03, subd. 7.

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;
- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and
- N. irreversible and irretrievable commitments of resources.¹¹¹

69. There is sufficient evidence in the record for the Commission to assess the Project using the criteria and factors set out above.

¹¹¹ Minn. R. 7850.4100.

XI. APPLICATION OF THE SITING CRITERIA TO THE PROPOSED PROJECT

A. Human Settlement.

70. 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.¹¹²

1. Displacement.

71. Displacement can occur when residences or other buildings are located within a proposed site.¹¹³ The Project is located in a predominantly agricultural area, adjacent to the existing SMMPA-Maple Leaf Substation, with relatively few residences and widely dispersed farmsteads among row crop farm fields. The nearest structures are outbuildings and grain bins associated with a farmstead approximately 960 feet north of the site.¹¹⁴

72. No residences will be displaced and none of the structures associated with the farmstead will be removed because of the Project.¹¹⁵ As such, no mitigation is proposed.

2. Noise.

73. Noise is defined as any undesired sound. It is measured in units of decibels on a logarithmic scale. The A-weighted scale (dBA) is used to duplicate the sensitivity of the human ear. A three dBA change in sound is barely detectable to average human hearing, whereas a five dBA change is clearly noticeable. A ten dBA change is perceived as a sound doubling in loudness.¹¹⁶

74. 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 3.¹¹⁷

75. Noise standards are expressed as a range of permissible dBA over a one-hour period. L₁₀ may be exceeded ten percent of the time, or six minutes per hour, while L₅₀ may be exceeded 50 percent of the time, or 30 minutes per hour. Standards

¹¹² Minn. R. 7850.4100(A).

¹¹³ Ex. EERA-11 at 85 (EA).

¹¹⁴ Ex. SNOW-3 at 46 (Application).

¹¹⁵ Ex. SNOW-3 at 47 (Application); Ex. EERA-11 at 85 (EA).

¹¹⁶ Ex. EERA-11 at 39 (EA).

¹¹⁷ Ex. EERA-11 at 39 (EA).

vary between daytime and nighttime hours. There is no limit to the maximum loudness of a noise.¹¹⁸

76. The primary noise receptors are the local residences. The nearest residence is associated with the farmstead and is located approximately 1,200 feet from the site boundary.¹¹⁹ The property owner for the residence is the same as the owner from which Snowshoe BESS has leased land for the Project. An additional 14 residences are located between 1,600 and 3,200 feet of the site boundary.¹²⁰

77. Noise receptors could also include individuals working outside in the Project vicinity. Potential noise impacts from the Project are associated with construction noise and operational noise.¹²¹

78. Noise from construction will be temporary in duration, limited to daytime hours and potentially moderate to significant depending on location, the phase of construction, and the equipment being used.¹²² Sound levels from grading equipment are not dissimilar from the typical tractors and larger trucks used in agricultural communities during harvest. Noise from construction activities would dissipate with distance and be audible at varying decibels, depending on the locations of the equipment and receptor.¹²³ Snowshoe BESS will mitigate noise impacts by limiting construction to daytime hours to the extent practicable and ensuring that equipment/vehicles are operated with properly functioning mufflers and noise-control devices.¹²⁴

79. Unlike solar facilities, which do not operate during the night, BESS facilities can be expected to operate throughout the day, resulting in noise levels that may vary throughout the day.¹²⁵ The primary noise sources during facility operation are BESS containers, substation transformer(s), heating ventilation and air conditioning (HVAC) equipment at the operation and maintenance (O&M) building and within BESS containers, and auxiliary transformers.¹²⁶ Noise from routine maintenance activities is anticipated to be negligible to minimal. Noise from the electrical collection system is not expected to be perceptible.¹²⁷ Additional mitigation measures to minimize noise during operation include selecting individual BESS units with lower noise levels, installing equipment silencers on BESS enclosures, installing noise barriers (such as fences or berms), and imposing operational limits.¹²⁸

¹¹⁸ Ex. EERA-11 at 39 (EA).

¹¹⁹ Ex. SNOW-3 at 46 (Application).

¹²⁰ Ex. SNOW-3 at 44, 46, 59 and Appendix E (Application).

¹²¹ Ex. SNOW-3 at 40 (Application).

¹²² Ex. EERA-11 at 40 (EA).

¹²³ Ex. EERA-11 at 40 (EA).

¹²⁴ Ex. SNOW-3 at 60 (Application).

¹²⁵ Ex. EERA-11 at 41 (EA).

¹²⁶ Ex. EERA-11 at 41 (EA).

¹²⁷ Ex. EERA-11 at 41 (EA).

¹²⁸ Ex. EERA-11 at 41 (EA).

80. The record demonstrates that Snowshoe BESS has taken steps to avoid and minimize noise impacts. Further, Sections 4.3.7, 5.2, and 5.5 of the Draft Site Permit address noise impacts from the Project.¹²⁹ No additional mitigation is proposed.

3. *Aesthetics.*

81. The visible elements of the facility will consist of approximately 192 new BESS enclosures, a fenced area of approximately 7.6 acres, a Project substation, up to four new transmission structures, a new ten-foot chain link fence topped by barbed wire surrounding the facility, new stormwater ponds, and potentially a new O&M building.¹³⁰ Exterior security lighting will be installed at the Project substation and switch activated lights will be located at each BESS enclosure for repair and maintenance purposes.¹³¹ Cameras will be installed at gate locations and along the fence line.¹³²

82. The Project is proposed to be located in a rural, rolling, agricultural setting and is generally naturally screened from 14th Street Northwest to the north, east, and west by the existing topography.¹³³

83. Aesthetic impacts of the Project are anticipated to be minimal for residents outside the Project vicinity and for others with low viewer sensitivity, such as travelers along U.S. Highway 14.¹³⁴ For these viewers, BESS enclosures would be relatively difficult to see due to the rolling topography and existing vegetation along the highway, and the substation and transmission structures would be indiscernible from those of the adjoining Maple Leaf Substation.¹³⁵ Residents in the Project vicinity and areas residents traveling local roads are likely to be more sensitive to aesthetic impacts, but the topography of the site and existing screening around nearby residences will tend to screen the 10-foot enclosures and surrounding fence.¹³⁶

84. Minimizing aesthetic impacts from energy storage facilities is primarily accomplished by locating the facilities so that they are not immediately adjacent to homes, ensuring that damage to natural landscapes during construction is minimized, and shielding the facilities from view by terrain or vegetation. Impacts from facility lighting can be minimized by using shielded and downward facing light fixtures and using lights that minimize blue hue.¹³⁷ One residence is located within a quarter-mile of the Project; this residence is screened from the Project by topography. An additional 14 residences are located between 1,600 and 3,200 feet of the site boundary.¹³⁸

¹²⁹ Ex. EERA-11, Appendix C at 5 and 13 (Draft Site Permit).

¹³⁰ Ex. PUC-5 (Authorization to Initiate SHPO Consultation).

¹³¹ Ex. EERA-11 at 38 (EA).

¹³² Ex. EERA-11 at 37 (EA).

¹³³ Ex. EERA-11 at 37 (EA).

¹³⁴ Ex. SNOW-3 at 42 (Application).

¹³⁵ Ex. EERA-11 at 37 (EA).

¹³⁶ Ex. SNOW-3 at 4 (5Application).

¹³⁷ Ex. EERA-11 at 37 (EA).

¹³⁸ Ex. EERA-11 at 38 (EA).

¹³⁹ Ex. EERA-11 at 44–45 (EA).

85. The record demonstrates that Snowshoe BESS has taken steps to avoid and minimize impacts to aesthetics. Further, Sections 4.3.8 and 5.1 of the Draft Site Permit address potential visual impacts from the Project.¹³⁹

4. *Cultural Values.*

86. Construction and operation of the Project is not anticipated to impact or alter the work life and leisure pursuits of residents or visitors in the Project area or affect land use in such a way as to impact the underlying culture or community unity of the area.¹⁴⁰ Because of the relatively small size of the Project and distance from homes, businesses and recreational resources, impacts to cultural resources from the Project are anticipated to be minimal.¹⁴¹

87. There are no conditions included in the Draft Site Permit that directly address mitigation for impacts to cultural values. Section 4.3.20 addresses impacts to cultural properties.¹⁴²

5. *Land Use and Zoning.*

88. The Project is sited within Kalmar Township in Olmsted County.¹⁴³ Snowshoe BESS designed the Project to comply with the standards outlined in the Kalmar Township and Olmsted County Zoning Ordinances.¹⁴⁴

89. The Project is located within a rural area approximately one mile east of the city of Byron and approximately two miles west of Rochester. The current land use of the site is agricultural.¹⁴⁵

90. The Project's impacts to agricultural lands in Olmsted County are minimal and will have limited impact on the rural nature of the region.¹⁴⁶ Although energy storage systems are not specifically addressed in local planning documents or zoning codes, the Project is generally consistent with local land use ordinances and Olmsted County's Comprehensive Plan.¹⁴⁷

91. The Project will change land use at the site from agricultural to energy storage production for the expected 30-year life of the Project. After the Project's useful life, the site could be restored to agricultural or other planned land uses by implementing appropriate restoration measures.¹⁴⁸

¹³⁹ Ex. EERA-11, Appendix C at 5 and 12 (Draft Site Permit).

¹⁴⁰ Ex. EERA-11 at 43 (EA).

¹⁴¹ Ex. EERA-11 at 43 (EA).

¹⁴² Ex. EERA-11 at 43 (EA) and Appendix C at 9 (Draft Site Permit).

¹⁴³ Ex. SNOW-3 at 66 (Application).

¹⁴⁴ Ex. SNOW-3 at 68 (Application).

¹⁴⁵ Ex. SNOW-3 at 66 (Application).

¹⁴⁶ Ex. SNOW-3 at 69 (Application).

¹⁴⁷ Ex. EERA-11 at 43 (EA).

¹⁴⁸ Ex. EERA-11 at 43 (EA).

92. The Draft Site Permit addresses preservation and restoration of agricultural land in Sections 4.3.22, 5.5, 5.6, and 9.2.

6. *Property Values.*

93. Electrical generating facilities can impact property values.¹⁴⁹ EERA staff was unable to locate peer reviewed literature that addressed potential impacts to property values from stand-alone BESSs.¹⁵⁰

94. Impacts to the value of specific properties within the Project vicinity are difficult to determine but could occur. Considerations such as setbacks, benefits to the community, economic impact, noise, and screening could have an unpredictable range of influence over property value. To the extent that negative impacts do occur, they are expected to decrease with distance from the Project. Aesthetic and noise impacts that might affect property values would be limited to residences and parcels in the Project vicinity where the facility may be visible and where noise impacts from operation may occur.¹⁵¹ Impacts to property values can be mitigated by reducing aesthetic impacts and encumbrances to future land use. Sections 4.3.8 and 5.1 of the Draft Site Permit address potential visual impacts from the Project.¹⁵² Impacts can also be mitigated through individual agreements with neighboring landowners.¹⁵³

7. *Recreational Resources*

95. Regional outdoor recreation includes hiking, snowmobiling, biking, and hunting. These activities predominantly occur on public roadways, private lands, or informal private trails.¹⁵⁴ No public recreational lands or opportunities are located within or adjacent to the site or within a quarter mile of the site.¹⁵⁵

96. Impacts to recreation are anticipated to be nominal. In addition, construction and operation of the Project is not anticipated to impact recreation or tourism in the Project area.¹⁵⁶ Because no impacts are anticipated, no mitigation is proposed.

8. *Public Service and Infrastructure*

97. Large energy projects can impact public services, such as buried utilities or roads.¹⁵⁷

¹⁴⁹ Ex. EERA-11 at 46 (EA).

¹⁵⁰ Ex. EERA-11 at 46 (EA).

¹⁵¹ Ex. EERA-11 at 46–47 (EA).

¹⁵² Ex. EERA-11, Appendix C at 5 and 12 (Draft Site Permit).

¹⁵³ Ex. EERA-11 at 47 (EA).

¹⁵⁴ Ex. SNOW-3 at 69 (Application).

¹⁵⁵ Ex. SNOW-3 at 69 (Application).

¹⁵⁶ Ex. EERA 11 at 64 (EA)

¹⁵⁷ Ex. EERA-11 at 48 (EA).

98. If an O&M facility is constructed, Snowshoe BESS may install a well for drinking water or an onsite-septic system for sanitary services.¹⁵⁸

99. No impacts to railroads are anticipated. The Project will avoid railroad property and railroad right-of-way (ROW).¹⁵⁹

100. The Project's southern boundary is adjacent to U.S. Highway 14, though no access to the site is available from U.S. Highway 14.¹⁶⁰ The anticipated access point to the Project will be off the existing SMMPA access road to the SMMPA-Maple Leaf Substation. One alternate access route is under consideration and would be constructed off 14th Street Northwest to the north.¹⁶¹ Although final design for the Project is not complete, minor field access or driveway changes may be required, but no changes to existing roadways are anticipated.¹⁶²

101. During construction, workers and trucks delivering construction material and equipment will use the existing state, county, and township road system to access the Project. Traffic during construction is estimated to be approximately 20 to 40 pickup trucks, cars, and/or other types of employee vehicles onsite during construction. Truck traffic to the site will vary by construction phase. Snowshoe BESS anticipates up to 15 semi-trucks per day will be used for delivery of facility components. Construction traffic will be perceptible to area residents, but because the average daily traffic in the area is well below design capacity, this increased traffic is not expected to affect traffic function.¹⁶³ Overweight or oversized loads are unlikely. If they are required, Snowshoe BESS will obtain appropriate approvals from state and local agencies prior to construction.¹⁶⁴

102. No impacts to roads are anticipated during the operation. Negligible traffic increases would occur for maintenance.¹⁶⁵

103. No long-term impacts to electric utilities will occur because of the Project. The Project will not impact existing transmission lines, and Snowshoe BESS does not anticipate any customer outages during construction of the Project and connection to the Maple Leaf Substation.¹⁶⁶ Section 4.3.5 of the Draft Site Permit is a standard permit condition that requires the permittee to minimize disruptions to public utilities.¹⁶⁷ Snowshoe BESS will coordinate with Gopher State One Call before and during construction to fully understand infrastructure locations and safety concerns and to avoid possible structural conflicts.¹⁶⁸ Snowshoe BESS will also conduct an American Land Title

¹⁵⁸ Ex. EERA-11 at 48 (EA).

¹⁵⁹ Ex. EERA-11 at 48 (EA).

¹⁶⁰ Ex. SNOW-3 at 61 (Application).

¹⁶¹ Ex. SNOW-3 at 61 (Application).

¹⁶² Ex. SNOW-3 at 64 (Application).

¹⁶³ Ex. EERA-11 at 48–49 (EA).

¹⁶⁴ Ex. SNOW-3 at 64 (Application).

¹⁶⁵ Ex. EERA-11 at 49 (EA).

¹⁶⁶ Ex. EERA-11 at 49 (EA).

¹⁶⁷ Ex. EERA-11, Appendix C at 5 (Draft Site Permit).

¹⁶⁸ Ex. SNOW-3 at 65 (Application); Ex. EERA-11, Appendix C at 11 (Draft Site Permit).

Association survey to identify the locations of underground utilities.¹⁶⁹ Final Project design will minimize and avoid impacts to underground utilities. If conflicts are unavoidable, Snowshoe BESS will coordinate with the utility to develop an approach to reroute or otherwise protect the utilities.¹⁷⁰

104. Construction and operation of the Project will have minimal impacts on the security and safety of the local populace.¹⁷¹ In general, BESS facilities are comprised of equipment that pose limited dangers under normal conditions of use by trained personnel. Industry best practices for safety will be implemented during the construction and operation of the Project.¹⁷² Snowshoe BESS will work with local emergency responders, including the Olmsted County Sheriff's office and the Byron and Rochester fire departments, to make sure they know how to respond to emergencies at the Project. An Emergency Response Plan will be prepared in coordination with local emergency responders prior to construction.¹⁷³

105. Electronic interference from the proposed Project is not anticipated. There are no radio, microwave, or television towers located within the site. Because the BESS facilities are relatively low (less than 20 feet), they are well below the line of sight used in many communication system signals. Electronic interference associated with communications infrastructure and devices, including agricultural navigation systems, is related to a phenomenon known as corona. Impacts are not expected, because anticipated electric fields are below levels expected to produce significant levels of corona.¹⁷⁴

B. Public Health and Safety

106. Minnesota law requires consideration of the Project's potential effect on health and safety.¹⁷⁵

107. Construction and operation of the Project are expected to have minimal impacts on the health and safety of the general public.¹⁷⁶

108. Health and safety concerns during construction of a BESS project are similar to any electrical substation and include injuries due to falls, equipment malfunction and/or misuse, and electrocution.¹⁷⁷ To prevent health and safety incidents, Snowshoe BESS requires all parties involved with the Project to create comprehensive health and safety plans and protocols.¹⁷⁸

¹⁶⁹ Ex. SNOW-3 at 65 (Application).

¹⁷⁰ Ex. SNOW-3 at 65 (Application).

¹⁷¹ Ex. SNOW-3 at 65 (Application).

¹⁷² Ex. SNOW-3 at 65 (Application).

¹⁷³ Ex. SNOW-3 at 65 (Application), Ex. EERA-11, Appendix C at 18-19 (Draft Site Permit).

¹⁷⁴ Ex. EERA-11 at 85 (EA).

¹⁷⁵ Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(B).

¹⁷⁶ Ex. SNOW-3 at 50 (Application).

¹⁷⁷ Ex. SNOW-3 at 51 (Application).

¹⁷⁸ Ex. SNOW-3 at 51 (Application).

109. During operations, the Project will not require the use or storage of large quantities of hazardous materials that might otherwise have the potential to spill or leak into area groundwater. To avoid potential impacts to water and soil resources, all hazardous materials stored outdoors will be stored within secondary containment. Secondary containment will contain leaks if they occur.¹⁷⁹

1. Electric and Magnetic Fields.

110. Any electrical device will have electric and magnetic fields (EMF) present. Electric fields arise from the voltage or electrical charges, while magnetic fields arise from the flow of electricity or current that travels along transmission lines, power feeder lines, substation transformers, house wiring, and electrical appliances.¹⁸⁰

111. 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.¹⁸¹ In Minnesota, the Commission has imposed a maximum electric field limit of 8 kV per meter measured at one meter (3.28 feet) above the ground. Minnesota has not adopted a standard for magnetic fields.¹⁸²

112. The primary sources of EMF from the Project will be from the buried electrical collection lines, the transformers installed at each inverter, and the Project tap line between the Project substation and the Maple Leaf substation. The batteries create a magnetic field that rapidly degrades with distance. The batteries do not produce electric fields.¹⁸³

113. No health impacts from EMF are anticipated. EMF diminishes with distance from a conductor or inverter. The nearest home is approximately 1,200 feet from site boundary. At this distance, both electric and magnetic fields will dissipate to background levels. No additional mitigation is proposed.¹⁸⁴

2. Public Safety and Emergency Services.

114. The Project will be designed and constructed in compliance with applicable electric codes. Electrical work will be completed by trained technicians. Electrical inspections will ensure proper installation of all components, and the Project will undergo routine inspection.¹⁸⁵

115. Snowshoe BESS has designed the Project in compliance with safety codes, regulations, and industry recommendations. Snowshoe BESS will employ advances in technology, adhere to applicable codes/standards, and develop emergency response

¹⁷⁹ Ex. SNOW-3 at 51 (Application).

¹⁸⁰ Ex. SNOW-3 at 52 (Application).

¹⁸¹ Ex. EERA-11 at 57 (EA).

¹⁸² Ex. SNOW-3 at 52 (Application).

¹⁸³ Ex. EERA-11 at 58 (EA).

¹⁸⁴ Ex. EERA-11 at 58 (EA).

¹⁸⁵ Ex. EERA-11 at 60 (EA).

procedures to further reduce the likelihood and impacts associated with fire and battery thermal runaway-induced events.¹⁸⁶

116. Snowshoe BESS has incorporated safety precautions into the preliminary design protocols of the proposed Project. Snowshoe BESS has designed the Project to use lithium iron phosphate (LFP) battery technology. The selection of the LFP technology is due in part to the greater safety profile of LFP batteries compared to other battery technologies.¹⁸⁷ Snowshoe BESS's layout and installation of the equipment will incorporate appropriate spacing to minimize risk of fire propagation between equipment, and between the equipment and surrounding landscape. Transformers and other electrical equipment on site will comply with industry standards to reduce the chance of fire and spill events.¹⁸⁸

117. The battery management system and site controller ensure that BESS components of the Project are operating within the original equipment manufacturer's operating parameters and warranty requirements. If any operating limit is exceeded or an alarm is triggered, either a fault signal is sent to the whole battery string to disconnect it from the inverter, or the rack contacts will open to disconnect individual racks. This real-time, automated system is designed to identify operational malfunctions or other safety hazards immediately and prevent incidents. Detected faults, abnormal conditions, and gas detection will also be transmitted to remote operators and on-site status indicators.¹⁸⁹

118. Health and safety concerns during construction of a BESS project are typical to any electrical substation and include injuries due to falls, equipment malfunction and/or misuse, and electrocution. To prevent health and safety incidents, Snowshoe BESS requires all parties involved with the Project to create comprehensive health and safety plans and protocols.¹⁹⁰

119. During operations, the Project will not require the use or storage of large quantities of hazardous materials that might otherwise have the potential to spill or leak into area groundwater. To avoid potential impacts to water and soil resources, all hazardous materials stored outdoors will be stored within secondary containment. Secondary containment will contain leaks if they occur.¹⁹¹ In addition to the typical operational risks associated with an electric facility (falls, electrical accidents, etc.) battery storage facilities include a heightened risk of thermal runaway events and fires. During operation, there are occupational risks like those associated with construction. Public risks would result from unauthorized entry into the facility.¹⁹²

¹⁸⁶ Ex. SNOW-8 at 8:1–6 (Matze Direct).

¹⁸⁷ Ex. SNOW-8 at 8:9 (Matze Direct).

¹⁸⁸ Ex. SNOW-3 at 54 (Application).

¹⁸⁹ Ex. SNOW-3 at 55 (Application).

¹⁹⁰ Ex. SNOW-3 at 51 (Application).

¹⁹¹ Ex. SNOW-3 at 51 (Application).

¹⁹² Ex. EERA-11 at 58 (EA).

120. The main safety hazard of a BESS is battery failure leading to thermal runaway, which has the potential to spread to nearby batteries and containers, quickly presenting an emergency. The movement of electrons and lithium ions within the battery cell produces electricity as well as heat. Lithium-ion batteries are designed to allow heat to dissipate from the cell to maintain a controlled reaction. Thermal runaway is a phenomenon when a battery cell generates heat at a greater rate than the heat can dissipate from the cell, resulting in a cascading chemical reaction which produces additional heat. Thermal runaway events can result in extremely high temperatures, smoke, fire, and potential ejection of gas, shrapnel, and particulates. Although BESSs are a relatively new technology, there is a growing body of research that informs industry standards to minimize the potential for these types of incidents and mitigate potential safety concerns in the event of such incidents.¹⁹³

121. In addition, the Draft Site Permit includes several requirements to ensure adequate public safety protections, including requiring Snowshoe BESS to: (1) provide landowner educational materials and appropriate signage; (2) prepare hazard mitigation analysis (HMA) detailing the testing results for the selected equipment and the risks associated with the technology at least 30 days prior to the pre-construction meeting; (3) file an emergency response plan with the Commission and local first responders prior to operation; (4) disclose any extraordinary events to the Commission, such as fires; and (5) prepare a decommissioning plan prior to construction to be updated every five years.¹⁹⁴

122. EERA proposes modifying Section 5.4 (Hazard Mitigation Analysis) of the DSP to require Snowshoe BESS to file with the Commission an affidavit of the distribution of the Hazard Mitigation Analysis to emergency responders with jurisdiction over the Project.¹⁹⁵ Snowshoe BESS did not object to EERA's suggested modification.¹⁹⁶

123. The record supports the inclusion of the following special condition as modified by EERA, and agreed to by Snowshoe BESS:

5.4 Hazard Mitigation Analysis

The Permittee shall file a Hazard Mitigation Analysis detailing the results of the equipment testing, and the risks associated with the technology, along with an affidavit of distribution of the Hazard Mitigation analysis to emergency responders with jurisdiction over the project, at least 30 days prior to the pre-construction meeting.

¹⁹³ Ex. EERA-11 at 59 (EA).

¹⁹⁴ Ex. EERA-11 at 61 and Appendix C at Sections 4.3.27, 5.4, 8.11, 8.12, 9.1 (EA; Draft Site Permit).

¹⁹⁵ Comment by EERA at 9 (May 8, 2025) (eDocket No. [20255-218706-01](#)).

¹⁹⁶ Ex. SNOW-10 (Response to Comments).

124. The record demonstrates that Snowshoe BESS has taken steps to avoid and minimize potential impacts to public safety and emergency services. Further, public safety is addressed in Sections 4.3.27, 5.4, 8.11, 8.12, and 9.1 of the Draft Site Permit.¹⁹⁷

C. Land-based Economies

125. Minnesota law requires consideration of the Project's potential effect on land-based economies – specifically, agriculture, forestry, tourism, and mining.¹⁹⁸

126. Of the economies listed in Minn. R. 7850.4100(C) (2023), agriculture, tourism, and recreation are present in the area around the Project. Because forestry and mining do not occur within the area, impacts will not occur.¹⁹⁹

1. Agriculture

127. The Project will impact approximately 23 acres of agricultural land during its operating life and will not result in a significant impact to land-based economies in the Project vicinity as this acreage constitutes less than 0.01 percent of the cropland in Olmsted County.²⁰⁰ Additionally, the Project will mitigate the loss of crop-related revenue to affected landowners by providing payments as provided in the applicable lease and easement agreements.²⁰¹ Consequently, the Project is not expected to have a significant impact on agricultural production in the county.²⁰²

128. The Draft Site Permit includes measures to mitigate agricultural and soil impacts, including, for example, the protection of topsoil; minimization of soil compaction implementation of a VMP and erosion prevention and sediment control practices; development of an Invasive Species Management Plan; and restoration or compensation for damages to crops and agricultural infrastructure.²⁰³

2. Tourism and Recreation

129. In 2023, the leisure and hospitality industry in Olmsted County accounted for about \$627.7 million in gross sales and employed an estimated 9,412 people.²⁰⁴ Downtown Rochester, which includes the Mayo Medical Center and the Rochester Arts District, is the top destination point for visitors to southern Minnesota. Additional tourism destinations in the Project area are related to recreational activities including bird watching, fishing, hunting, boating, golfing, and snowmobiling.²⁰⁵

¹⁹⁷ Ex. EERA-11, Appendix C at 11, 13, 19 (Draft Site Permit); see Comment by EERA at 9 (May 8, 2025) (eDocket No. [20255-218706-01](#)).

¹⁹⁸ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(C).

¹⁹⁹ Ex. EERA-11 at 86 (EA).

²⁰⁰ Ex. SNOW-3 at 72 (Application).

²⁰¹ Ex. SNOW-3 at 73 (Application).

²⁰² Ex. EERA-11 at 62 (EA).

²⁰³ Ex. EERA-11 at 62–63 (EA) and Appendix C (Draft Site Permit).

²⁰⁴ Ex. EERA-11 at 63 (EA).

²⁰⁵ Ex. EERA-11 at 63 (EA).

130. There are no wildlife management areas, Scientific and Natural Areas or state parks within one mile of the site. The closest Wildlife Management Area is the Moon Valley Wildlife Management Area, located approximately 4.4 miles northwest of the site. Although there are parks in and near the cities of Byron and Rochester, the nearest park is approximately two miles from the site. The nearest recreational trail is the Tiger Bear Trail snowmobile trail one mile west of the site.²⁰⁶

131. Impacts to recreation are anticipated to be nominal and the construction and operation of the Project are not anticipated to impact recreation or tourism in the Project area. Because no impacts are anticipated, no mitigation is proposed.²⁰⁷

D. Archaeological and Historic Resources

132. Minnesota Rule 7850.4100(D) (2023) requires consideration of the effects of the Project on historic and archaeological resources.

133. Archaeological resources are locations where objects or other evidence of archaeological interest exist, and can include aboriginal mounds and earthworks, ancient burial grounds, prehistoric ruins, or historical remains. Historic resources are sites, buildings, structures, or other antiquities of state or national significance.²⁰⁸

134. Snowshoe BESS contracted with Westwood Professional Services, Inc., (Westwood) to conduct a Phase Ia literature review and perform archaeological field surveys to identify archaeological, cultural, and historic resources within the site or the one-mile buffer.²⁰⁹ Applicant also contacted 11 federally-recognized Tribal Nations in Minnesota and the Minnesota Indian Affairs Council regarding the Project.²¹⁰

135. The Phase Ia review examined records from the SHPO and Minnesota Office of the State Archeologist (OSA).²¹¹ The literature review did not identify any previously recorded archaeological resources or National Register of Historic Places properties within one mile of the site.²¹² Additionally, archaeological field surveys were performed across the entire site.²¹³ No new or previously recorded archaeological, architectural, or historic sites were identified/reviewed during the survey.²¹⁴

136. Prudent siting to avoid archaeological and historic resources is the preferred mitigation.²¹⁵ Snowshoe BESS identified no previously recorded archaeological sites or historic resources in the site. Further, the SHPO confirmed it reviewed the Phase I Archaeological Reconnaissance Survey that was prepared for the Project and concluded

²⁰⁶ Ex. EERA-11 at 63–64 (EA).

²⁰⁷ Ex. EERA-11 at 64 (EA).

²⁰⁸ Ex. EERA-11 at 64 (EA).

²⁰⁹ See Ex. SNOW-3 at Appendix F (Application; Phase 1 Archaeological Reconnaissance Survey).

²¹⁰ Ex. EERA-11 at 64 (EA).

²¹¹ Ex. EERA-11 at 64 (EA).

²¹² Ex. EERA-11 at 64 (EA).

²¹³ Ex. SNOW-7 (Confirmation of SHPO Consultation).

²¹⁴ Ex. SNOW-7 (Confirmation of SHPO Consultation).

²¹⁵ Ex. EERA-11 at 65 (EA).

that “there are no properties listed in the National or State Registers of Historic Places and no known or suspected archaeological properties in the area that will be affected by” the Project.²¹⁶

137. Before construction of the Project begins, Snowshoe BESS will prepare an Unanticipated Discoveries Plan that will outline the steps to be taken if previously unrecorded cultural resources or human remains are encountered during construction. Should previously unknown archaeological resources be inadvertently encountered during Project construction and/or operation, work will stop, and the discovery will be examined by an archaeologist.²¹⁷ If the discovery is determined to be a significant cultural resource, the SHPO and OSA will be notified. Should human remains be inadvertently discovered, Snowshoe BESS will cease all work, law enforcement will be immediately contacted, and the OSA will be notified.²¹⁸

138. The record demonstrates that the Project will not cause adverse impacts to archaeological and historic resources. Further, Sections 4.3.20, 5.7, and 5.8 of the Draft Site Permit address archaeological and historic resources.

E. Natural Environment

139. Minnesota Rules Section 7850.4100(E) (2023) requires that the Commission consider the effects of the Project on the natural environment, including effects on air and water quality resources and flora and fauna.²¹⁹

1. Air Quality

140. Minimal intermittent air emissions are expected during construction of the Project. Air emissions associated with construction are highly dependent upon weather conditions and the specific activity occurring. For example, traveling to a construction site on a dry gravel road will result in more fugitive dust than traveling the same road when wet. Once operational, neither the generating facility nor the transmission line will generate criteria pollutants or carbon dioxide.²²⁰

141. Motorized equipment will emit exhaust. This includes construction equipment and vehicles travelling to and from the Project. Exhaust emissions, primarily from diesel equipment, would vary according to the phase of construction. Exhaust emissions can be minimized by keeping vehicles and equipment in good working order, and not running equipment unless necessary.²²¹

142. All projects that involve movement of soil or exposure of erodible surfaces generate some type of fugitive dust emissions. The Project will generate fugitive dust from travel on unpaved roads, grading, and excavation. Over the life of the Project, fugitive

²¹⁶ Ex. SNOW-7 at Attachment 1 (Confirmation of SHPO Consultation).

²¹⁷ Ex. SNOW-3 at 76 (Application); Ex. EERA-11, Appendix C at Section 5.7 (Draft Site Permit).

²¹⁸ Ex. SNOW-3 at 76–77 (Application).

²¹⁹ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(E).

²²⁰ Ex. EERA-11 at 66–67 (EA).

²²¹ Ex. EERA-11 at 67 (EA).

dust emissions will be reduced by the elimination of farming and establishment of permanent vegetative cover.²²² Snowshoe BESS will implement best management practices during construction and operation of the Project to minimize dust emissions.²²³ Additional practices may include watering or treating haul and access roads and other exposed dust producing areas, containment of excavated material, protection of exposed soil, soil stabilization, and treatment stockpiles to control fugitive dust.²²⁴

143. Following construction, the facility will not generate criteria pollutants or carbon dioxide emissions during normal operation.²²⁵

144. The record demonstrates that Snowshoe BESS has taken steps to avoid and minimize impacts to air quality. Further, Section 5.11 of the Draft Site Permit requires the Applicant to “minimize and avoid, if possible, the use of chloride-based dust control chemicals (i.e., calcium chloride, magnesium chloride).”²²⁶

2. Geology and Groundwater

145. Minnesota is divided into six groundwater provinces based on bedrock and glacial geology. The Project site is within Province 3, the Karst province, which can be characterized as having thin glacial sediments overlying thick and extensive bedrock prone to karst features such as sinkholes and caves. In this province, groundwater is typically derived from bedrock aquifers below the glacial sediment cover. Groundwater is generally readily available, but water quality is susceptible to pollution from surface activity because fractures and sinkholes can form passageways that funnel water and contaminants quickly from the surface to groundwater.²²⁷

146. Potential impacts to geology and groundwater can occur directly or indirectly. Impacts to geological resources are likely to be minimal, due to the thickness of surficial materials (76 to 150 feet) and the absence of karst features. Direct impacts to groundwater are anticipated to be limited to a single well for domestic use. Other direct impacts to groundwater associated with construction (for example, structure foundations that could penetrate shallow water tables or groundwater usage) are not anticipated. Indirect impacts could occur through spills or leaks of petroleum fluids or other contaminants that contaminate surface waters and that could ultimately contaminate groundwater. The disturbance of soil and vegetative cover could affect water quality in groundwater resources. Once constructed, the impervious surface area will be approximately eight acres, including the access road, the fenced area, and an additional five-foot graveled area along the perimeter of the fence line.²²⁸

²²² Ex. EERA-11 at 67 (EA).

²²³ Ex. SNOW-3 at 79 (Application).

²²⁴ Ex. SNOW-3 at 79 (Application).

²²⁵ Ex. SNOW-3 at 79 (Application); EERA-11 at 67 (EA).

²²⁶ Ex. EERA-11, Appendix C at 15 (EA; Draft Site Permit).

²²⁷ Ex. EERA-11 at 67–68 (EA).

²²⁸ Ex. EERA-11 at 69 (EA).

147. The Project is not located within any Wellhead Protection Areas or Drinking Water Supply Management Areas.²²⁹

148. Construction of Project facilities is not likely to require subsurface blasting. Therefore, disturbances to groundwater flow from newly fractured bedrock are not anticipated. Any dewatering required during construction will be managed in accordance with the stormwater pollution prevention plan (SWPPP) and discharged to the surrounding surface, thereby allowing it to infiltrate back into the ground to minimize potential impacts. If, during construction, dewatering exceeds withdrawal of more than 10,000 gallons of water per day or one million gallons per year, Snowshoe BESS will obtain a Water Appropriation Permit from MDNR.²³⁰

149. Project facilities are not likely to affect the use of existing water wells. Preliminary design indicates that Project facilities will be located at about 1,000 feet from the nearest identified drinking well. No impacts to this well are expected. If an unknown well is discovered that was not mapped on available mapping resources, Snowshoe BESS will assess whether the well is open, coordinate with the underlying landowner, and facilitate capping, if necessary and approved by the underlying landowner, in accordance with Minnesota Department of Health requirements.²³¹

150. Impacts to groundwater resources (including aquifers) are not anticipated during operation of the Project as water supply needs will be quite limited. If the Project requires potable water for facility personnel and O&M uses, this need would be satisfied with a single domestic-sized water well. Installation of any new wells requires notification to the Minnesota Department of Health, and construction by a well borer licensed by the Minnesota Department of Health.²³² A domestic water well license would be acquired by an approved well drilling contractor prior to installation, construction, and use of the water well.²³³

151. The BESS system will require concrete foundations. The depth that the foundations will be installed at is an estimated range of between one to three feet below ground surface (depending on soil conditions) and would, therefore, not impact aquifer resources.²³⁴

152. Disturbance to groundwater flow from construction activities are not anticipated. Any dewatering required during construction will be discharged to the surrounding upland vegetation, thereby allowing it to infiltrate back into the ground to minimize potential impacts. If dewatering results in more than 10,000 gallons per day or 1,000,000 gallons per year, a Water Appropriations Permit from MDNR is required.²³⁵

²²⁹ Ex. SNOW-3 at 86 (Application).

²³⁰ Ex. SNOW-3 at 90 (Application).

²³¹ Ex. SNOW-3 at 90 (Application).

²³² Ex. EERA-11 at 70 (EA).

²³³ Ex. SNOW-3 at 90 (Application).

²³⁴ Ex. SNOW-3 at 90 (Application).

²³⁵ Ex. EERA-11 at 70 (EA).

Impacts to groundwater can also be minimized by mitigating impacts to soils and surface waters, as addressed in Sections 4.3.9, 4.3.11, 5.5, and 5.6 of the Draft Site Permit.²³⁶

3. Soils

153. Impacts to soils will occur during both the construction and, to a much lesser degree, operational stages of the Project. Grading impacts will primarily be from construction of foundations for the Project substation, BESS, O&M facility, laydown yard, basin areas, and access roads.²³⁷

154. Because the Project is located on slightly rolling topography within existing agricultural fields, grading will also be necessary to create a level surface for the Project. Some soil compaction may result from the installation of the foundations for the BESS modules. Soil compaction will be mitigated by use of low-impact equipment and methods, regrading, and tilling these areas following construction.²³⁸

155. During operation of the Project, ongoing soil compaction could occur from the use of access roads. This impact is expected to be negligible, confined to the roadbed, and mainly from relatively light duty maintenance vehicles. Overall, the Project is expected to reduce the potential for erosion by establishing permanent vegetation, as opposed to the current amount of exposed soils common to row cropping in the existing agriculture fields. Potential erosion will be further minimized by dressing access roads with gravel and installing culverts under access roads where necessary to redirect concentrated surface water runoff.²³⁹

156. The Project will disturb more than one acre of land and will therefore require coverage under a Minnesota Pollution Control Agency (MPCA) Construction Stormwater General Permit. Snowshoe BESS will obtain coverage under the MPCA's Construction Stormwater General Permit and prepare the required SWPPP prior to construction. The SWPPP will be implemented during construction activities and will include best management practices (BMPs), such as silt fencing (or other erosion control devices), revegetation plans, and management of exposed soils to prevent erosion. BMPs will be used during construction and operation of the Project to protect topsoil and adjacent resources and to minimize soil erosion from water or wind. Practices may include containment of excavated material, protection of exposed soil, stabilization of restored material, and treatment of stockpiles to control fugitive dust. Finally, the Project design will include installation of stormwater ponds in accordance with MPCA regulations to collect and treat runoff from the Project during its operation.²⁴⁰

²³⁶ Ex. EERA-11, Appendix C at 5–6, 13–14 (Draft Site Permit).

²³⁷ Ex. SNOW-3 at 92 (Application).

²³⁸ Ex. SNOW-3 at 92 (Application).

²³⁹ Ex. SNOW-3 at 92 (Application).

²⁴⁰ Ex. SNOW-3 at 92 (Application).

157. Sections 4.3.9, 4.3.11, 5.5, and 5.6 of the Draft Site Permit address soil-related impacts.²⁴¹

4. *Surface Water and Floodplains*

158. The Project is designed to avoid direct impacts to surface waters by siting away from surface waters.²⁴² The Project is located in the Zumbro River watershed.²⁴³ No mapped rivers, streams, lakes, or MDNR Public Waters are within the site. The nearest Public Waters Inventory (PWI) waterbodies include: Cascade Creek, located approximately 1.6 miles south of the site; and an unnamed tributary of Cascade Creek, located approximately 0.6 mile northeast of the site.²⁴⁴ There are no mapped floodplains within the site. The nearest mapped 100-year floodplain is along Cascade Creek, located approximately 1.6 mile southeast of the site.²⁴⁵ There are no waters listed by the MPCA as impaired waters within one mile of the Project. The nearest impaired water to the site is Cascade Creek. Cascade Creek is listed as impaired for fish bioassessment and turbidity and is approximately 1.6 miles southeast of the site.²⁴⁶

159. Construction of the Project creates a potential for indirect impacts if sediment or fugitive dust created by excavation, grading, vegetation removal, or construction traffic reaches nearby surface waters.²⁴⁷

160. Best management practices to minimize the impact on surface waters will be utilized as a part of the SWPPP, including, but not limited to, sediment control, revegetation plans, and management of exposed soils to prevent sediment from entering waterbodies. Preliminary design for the Project also anticipates two stormwater basins to control runoff from the Project.²⁴⁸

5. *Wetlands*

161. The potential for wetlands within the site was initially determined by reviewing desktop resources (i.e., the National Wetlands Inventory (NWI), National Hydrography Dataset (NHD), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, MDNR Public Waters Inventory (PWI), and the Natural Resource Conservation Service (NRCS) Soil Survey Geographic database (SSURGO2) for Olmsted County).²⁴⁹ Following review of desktop resources, Snowshoe BESS contracted

²⁴¹ Ex. EERA-11, Appendix C at 5–6, 13–14 (Draft Site Permit).

²⁴² Ex. EERA-11 at 73 (EA).

²⁴³ Ex. SNOW-3 at 92 (Application).

²⁴⁴ Ex. SNOW-3 at 92 (Application).

²⁴⁵ Ex. EERA-11 at 73 (EA).

²⁴⁶ Ex. EERA-11 at 73 (EA).

²⁴⁷ Ex. EERA-11 at 73 (EA).

²⁴⁸ Ex. EERA-11 at 73 (EA).

²⁴⁹ Ex. SNOW-3 at 93 and Appendix I (Application); Ex. EERA-11 at 74 (EA).

with Westwood to completed wetland delineation fieldwork within the site in April 2024.²⁵⁰ The field delineation determined there were no wetlands or waterways within the site.²⁵¹

162. Because there are no wetlands within the site, construction and operation of the facility will not create direct impacts to wetlands. There may be potential for temporary, short-term impacts to wetlands outside the site if there is erosion resulting from construction.²⁵² BMPs identified in the SWWP will minimize potential for sediment to reach offsite wetlands during construction.

163. There are no wetlands, waterways, or drain tiles on-site, so no direct effects on water resources are expected as a result of the Project. However, the Project is being designed and engineered to avoid and minimize impacts to any potential surrounding wetlands and water resources to the greatest extent practicable. During construction, appropriate BMPs will be implemented and maintained in accordance with a National Pollution Discharge Elimination System (NPDES) Permit and SWPPP that will be in place for the Project. Two stormwater basins will be used to collect and treat/discharge runoff following MPCA regulations. Additionally, the establishment of perennial vegetation around the facility and the installation of two stormwater ponds are expected to increase the residence time of water on-site by slowing the runoff rate and increasing the uptake of water on-site when compared to the current, cropped conditions. This will also lower the amount of nutrients leaving the site compared to row crop agriculture from both the reduction in fertilizer and pesticide application and the slowing of runoff brought about by the perennial vegetation. This slowing of runoff and reduction in the amount of nutrients leaving the site is expected to have a direct, positive effect on the water quality of any surface waters receiving runoff from the site and is also expected to positively benefit on-site wildlife and plant communities.²⁵³

6. *Vegetation*

164. The Project is located in the Rochester Plateau Subsection. Historically, tallgrass prairie and bur oak savanna covered this area with some lakes and headwaters of several rivers, including the Root River, Whitewater River, Zumbro River, and Canon River. Agriculture is the most prominent land use in this subsection, with few remnants of pre-settlement oak openings and barrens remaining.²⁵⁴

165. The Project is in the Rochester Plateau (222 Lf) subsection of the Eastern Broadleaf Forest Province. Prior to European settlement, vegetation in the Project area was primarily tallgrass prairie and bur oak savanna. Most of this subsection is heavily farmed, although some small areas of oak openings and barrens are still present. Current land use in the site is predominately agricultural. The site is dominated by cultivated crops

²⁵⁰ Ex. SNOW-3 at 93 and Appendix I (Application); Ex. EERA-11 at 74 (EA).

²⁵¹ Ex. EERA-11 at 74 (EA).

²⁵² Ex. EERA-11 at 75 (EA).

²⁵³ Ex. SNOW-3 at 94 (Application).

²⁵⁴ Ex. SNOW-3 at 96–97 (Application).

(25.4 acres or 93 percent), with smaller areas of grassland (1.4 acres or five percent) and pasture or hay (0.4 acres or two percent).²⁵⁵

166. Construction of the facility will eliminate vegetative cover and create impermeable surfaces, including the access road and the developed area of the facility. Snowshoe BESS estimates that approximately 23 acres (including both facility components and a revegetated area outside the fence line) will be converted from cropland for the life of the facility. Removal of vegetative cover exposes soils and could result in soil erosion. Temporary or permanent removal of vegetation also has the potential to affect wildlife habitat.²⁵⁶

167. Following construction, Snowshoe BESS plans to establish native vegetation over the remainder of the site outside the fenced area using seed mixes that include both native grasses and wildflowers. Once established, vegetation would be maintained using best practice guidance for establishing and maintaining the revegetated areas. Construction activities could introduce or spread invasive species and noxious weeds, and the early phases of site restoration and seeding of native species can result in populations of non-native and invasive species on site.²⁵⁷

7. *Wildlife and Habitat*

168. The Project landscape is dominated by agriculture and developed areas (roads, railroads, homes, and farmsteads). Other landscape types and vegetation communities in the Project area provide more varied habitats (e.g., woodlots and small grassland pockets) for wildlife.²⁵⁸

169. Wildlife utilizing the land control area are common species associated with disturbed habitats and are accustomed to human activities (e.g., agricultural activities and road traffic) occurring in the area. Mammals, reptiles, amphibians, and insects are present. These species include white-tailed deer, red fox, striped skunk, raccoon, coyote, American toad, garter snake, and a variety of insects including native bees, butterflies, and moths.²⁵⁹ Avian species common to the site include red-tailed hawk, wild turkey, American crow, eastern bluebird, mourning dove, and ring-necked pheasant. Common waterfowl like Canadian geese and mallards may use the site for short-term foraging after harvest.²⁶⁰

170. Non-avian wildlife individuals will be displaced to adjacent habitats during construction. Because the site does not provide critical habitat, this should not impact life cycle functions (for example, nesting). Direct significant impacts to individuals might occur -- that is, small species might be crushed or otherwise killed during construction.²⁶¹

²⁵⁵ Ex. EERA-11 at 75 (EA).

²⁵⁶ Ex. EERA-11 at 75 (EA).

²⁵⁷ Ex. EERA-11 at 76 (EA).

²⁵⁸ Ex. EERA-11 at 76 (EA).

²⁵⁹ Ex. EERA-11 at 77 (EA).

²⁶⁰ Ex. EERA-11 at 77 (EA).

²⁶¹ Ex. EERA-11 at 77 (EA).

171. The Project is located within the Mississippi Flyway, which is a major north-south migration route and within the Eastern Tallgrass Prairie Bird Conservation Region. Field investigations conducted in April 2024 identified minimal nesting habitat within the site, consistent with the site's current use as a cultivated field. There are no waterfowl feeding and resting areas within one mile of the site, and the nearest Important Bird Areas designated by the National Audubon Society is the Blufflands-Root River Important Bird Area, over 10 miles southeast of the site.²⁶²

172. Snowshoe BESS plans to re-vegetate a portion of the site outside of the fenced area with grassland species. Revegetating a portion of the site with pollinator-friendly species and reducing pesticide use in these areas will benefit smaller wildlife, such as rodents, birds, insects, and reptiles

173. Wildlife habitat in the area is currently highly fragmented. The row crop habitat at the site is not crucial to wildlife populations, although the land control area may be used as a travel corridor or, occasionally, as a food source (for example, standing corn). Following construction and restoration, a portion of the site will provide native grassland habitat for the life of the Project. Overall, the Project does not contribute to significant habitat loss or degradation, nor does it create new habitat edge effects.²⁶³

174. The Draft Site Permit includes measures to minimize and mitigate impacts to wildlife, including coordination with the MDNR to minimize impacts from fencing (Section 5.9), using wildlife-friendly erosion control materials (Section 5.10), and quarterly reporting of any wildlife injuries or fatalities (Section 8.13).²⁶⁴ Additional mitigation measures include removing wildlife caught in open trenches before backfilling and restricting mowing of established vegetation to avoid impacts to ground-nesting birds.²⁶⁵

8. Climate Change

175. The Project has the potential to shift energy production in Minnesota and the upper Midwest toward carbon-free sources. Construction emissions will have a short-term negligible increase in greenhouse gases that contribute to climate change. The Project's design incorporates design elements that minimize impacts from the increase in extreme weather events such as increase flooding, storms, and heat waves that are expected to accompany a warming climate.²⁶⁶

F. Rare and Unique Natural Resources.

176. Minnesota law requires consideration of the Project's potential effects on rare and unique natural resources.²⁶⁷

²⁶² Ex. EERA-11 at 77 (EA).

²⁶³ Ex. EERA-11 at 77 (EA).

²⁶⁴ Ex. EERA-11 at Appendix C at 15 and 19 (Draft Site Permit).

²⁶⁵ Ex. EERA-11 at 78 (EA).

²⁶⁶ Ex. EERA-11 at 82 (EA).

²⁶⁷ Minn. Stat. § 216E.03, subd. 7(b); Minn. R. 7850.4100(F).

177. No impacts to any federally listed species are anticipated throughout construction and operation of the Project.²⁶⁸ Snowshoe BESS reviewed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database for the potential occurrence of federally-listed species, candidate species, or designated critical habitat that may occur within or near the site.²⁶⁹ Snowshoe BESS conducted a site reconnaissance on April 30, 2024, to identify and evaluate the available habitat in the site and vicinity that may be used by threatened or endangered species listed in the IPaC database or in the MDNR Minnesota Conservation Explorer tool. The site reconnaissance revealed minimal nesting habitat within the site for listed avian species.²⁷⁰

178. The IPaC results identified one federally endangered species, the northern long-eared bat (NLEB) (*Myotis septentrionalis*); one federally proposed endangered species, the tricolored bat (*Perimyotis subflavus*); one federally threatened species, the prairie bush-clover (*Lespedeza leptostachya*); and one federally designated as non-essential experimental population, the whooping crane (*Grus americana*), that may occur within or near the site.²⁷¹ The IPaC report also identified a candidate species for listing, monarch butterfly (*Danaus plexippus*).

179. Suitable NLEB and tri-colored bat habitat consists of a variety of forested habitat near water sources.²⁷² According to the MDNR and USFWS, there are no known NLEB or tri-colored bat maternity roost trees or hibernaculum in Olmsted County. However, the species may still occur within or near the Project.²⁷³ Because the Project will not require tree clearing, impacts to NLEB and tri-colored bats are not anticipated.²⁷⁴

180. There are no records of prairie bush clover or the required habitat within the site, and the probability of species occurrence within the site is low due to the heavy agricultural use. The Project will have no effect on the prairie bush clover.²⁷⁵

181. The whooping crane is designated as a non-essential experimental population in Wisconsin and consultation under Section 7(a)(2) of the Endangered Species Act is only required if Project activities will occur within a National Wildlife Refuge or National Park.²⁷⁶ The Project will have no effect on the whooping crane.²⁷⁷

182. No impacts to any Minnesota State endangered, threatened, or special concern species are anticipated throughout construction or operation of the Project.²⁷⁸ Snowshoe BESS submitted a formal MDNR Natural Heritage Information System data

²⁶⁸ Ex. SNOW-3 at 105 (Application).

²⁶⁹ See Ex. SNOW-3, Appendix J at Exhibit 1 (USFWS IPaC).

²⁷⁰ Ex. SNOW-3 at 100 (Application).

²⁷¹ Ex. SNOW-3 at 102 (Application).

²⁷² Ex. SNOW-3 at 102 (Application).

²⁷³ Ex. SNOW-3 at 102 (Application).

²⁷⁴ Ex. EERA-11 at 80 (EA).

²⁷⁵ Ex. EERA-11 at 81 (EA).

²⁷⁶ Ex. EERA-11 at 80 (EA); Ex. SNOW-3, Appendix J at Exhibit 1 (USFWS IPaC).

²⁷⁷ Ex. EERA-11 at 80 (EA).

²⁷⁸ Ex. SNOW-3 at 106 (Application).

request for the Project.²⁷⁹ MDNR identified the Rattlesnake Master (*Eryngium yuccifolium*) as a state-listed species of special concern in the vicinity of the Project.²⁸⁰ Because no viable habitat exists in the site, no impacts are anticipated and mitigation measures for the Rattlesnake Master are identified or proposed.²⁸¹

183. The Minnesota Biological Survey (MBS) systematically collects, interprets, and provides baseline data on the distribution and ecology of rare plants, rare animals, and native plant communities.²⁸² No MBS sites or native plant communities were identified in the site or in a one-mile buffer.²⁸³ The Native Prairie Assessment prepared by Snowshoe BESS did not identify any native prairies within the site. One Railroad ROW Prairie is located south of the site surrounding the existing railroad.²⁸⁴

184. Avoiding identified areas of species occurrence or preferred habitat is the preferred mitigation measure. The Project avoids identified areas of species occurrence and preferred habitat. No additional mitigation measures are proposed.²⁸⁵

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

G. Application of Various Design Considerations.

186. Minnesota law requires consideration of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity.²⁸⁶

187. Snowshoe BESS is not required to analyze alternative sites pursuant to Minn. R. 7850.3100 (2023) unless it rejected alternative sites.²⁸⁷ Snowshoe BESS selected the proposed site based on a variety of factors, including minimal environmental impacts, proximity to the electrical grid and existing transmission infrastructure, willing landowner participation, and available capacity on the grid to which the Project will interconnect.²⁸⁸

188. The design assumptions included in the Application accommodate a variety of battery technologies to allow flexibility during equipment selection at the time of construction.²⁸⁹ Specific equipment and technology selection will be dependent upon

²⁷⁹ See Ex. SNOW-3, Appendix J at Exhibit 3 (Application; MDNR Natural Heritage Review).

²⁸⁰ Ex. EERA-11 at 81 (EA).

²⁸¹ Ex. EERA-11 at 81 (EA).

²⁸² Ex. EERA-11 at 79 (EA).

²⁸³ Ex. SNOW-3 at 104 (Application).

²⁸⁴ See Ex. SNOW-3, Appendix K at 3 (Application; Native Prairie Assessment).

²⁸⁵ Ex. EERA-11 at 81 (EA).

²⁸⁶ Ex. SNOW-3 at 1 (Application).

²⁸⁷ Minn. R. 7850.3100; Ex. SNOW-3 at 20 (Application).

²⁸⁸ Ex. SNOW-3 at 20 (Application).

²⁸⁹ Ex. SNOW-3 at 23 (Application).

market conditions, equipment availability, battery efficiency, and site impacts at the time of construction.²⁹⁰

189. Some components may lose efficiency over the Project's life cycle. To maintain the facility's rated capacity, the BESS will undergo augmentation either through the addition of battery modules within the existing enclosures or the addition of supplemental battery enclosures. The augmentation schedule to maintain overall Project functionality will be determined during the design process after final equipment selection and will be based on the projected degradation of the batteries.²⁹¹

190. The record reflects that Snowshoe BESS will maximize energy efficiency while mitigating adverse environmental effects. The Project's final layout will optimize electrical storage and efficiency, while avoiding and minimizing impacts to human settlement, the environment, cultural resources, and infrastructure.²⁹²

H. Use of Existing Large Electric Power Generations.

191. Minnesota law requires consideration of whether the Project uses existing large electric power generating plant sites.²⁹³

192. Snowshoe BESS does not propose to use an existing large electric power generating plant site for the Project.²⁹⁴

I. Use of Existing Rights-of-Way.

193. Minnesota law requires the Commission to consider whether the Project uses or parallels existing ROWs, survey lines, natural division lines, and agricultural field boundaries.²⁹⁵

194. Existing transmission interconnection feasibility was a factor in determining the Project's location. Four existing transmission lines ranging from 69 kV to 161 kV are located in the Project vicinity—all of which are associated with the SMMPA-Maple Leaf Substation adjoining the western boundary of the site.²⁹⁶ Snowshoe BESS identified the SMMPA-Maple Leaf Substation as having available capacity and low interconnection costs.²⁹⁷

195. Snowshoe BESS anticipates that the site will be accessed through a gate off SMMPA's access road to the Maple Leaf Substation.²⁹⁸ Snowshoe BESS has coordinated with SMMPA regarding the Applicant's use of the existing access road to

²⁹⁰ Ex. SNOW-3 at 23 (Application).

²⁹¹ Ex. SNOW-3 at 23 (Application).

²⁹² Ex. SNOW-3 at 26 (Application).

²⁹³ Minn. R. 7850.4100(I).

²⁹⁴ Ex. EERA-11 at 2 (EA).

²⁹⁵ Minn. R. 7850.4100(H) and (J).

²⁹⁶ Ex. SNOW-3 at 19 (Application).

²⁹⁷ Ex. SNOW-3 at 18 (Application).

²⁹⁸ Ex. SNOW-3 at 17 (Application).

access the Project. SMMPA has indicated its willingness to allow use of the existing access road but would like to wait until the Project is closer to construction prior to execution of any agreement between SMMPA and Snowshoe BESS regarding use of the existing access road.²⁹⁹

196. Snowshoe BESS also has a separate access easement that could be utilized if SMMPA and Snowshoe BESS are unable to reach a mutual agreement regarding shared use of the existing access road.³⁰⁰

J. Electrical System Reliability.

197. Minnesota law requires consideration of electrical system reliability.³⁰¹

198. The Project is expected to contribute to Minnesota's transition to a carbon-free electricity supply by allowing wind and solar projects to continue to produce energy when they would otherwise be curtailed due to low demand. For example, often in the overnight hours, high winds allow for significant generation from wind turbines across Minnesota. At times, this generation potential exceeds the load capacity and some wind generation is thus curtailed by the grid operator to maintain stability of the grid. This Project could, by charging its BESS, reduce the need for curtailment by storing energy when it is available to be generated and then, during the daytime or evening hours, when demand is higher, discharge this stored energy back to the grid, supplementing existing generation and, potentially, reducing the need for traditional thermal (e.g., natural gas) generation.³⁰²

199. In addition to the Project's energy shifting capabilities, the Project will provide valuable ancillary and reliability services required to safely and reliably operate the grid. The Project will use state-of-the-art battery, inverter, and other technologies, which will allow it to provide critical services to assist the grid operator with maintaining the voltage and frequency of the transmission system.³⁰³

200. BESS systems can help offset power loss during extreme weather by dispersing stored power while energy producing facilities are down.³⁰⁴ The preliminary design of the Project has accounted for current and expected future climate conditions in the Project area. Snowshoe BESS will purchase equipment designed to ensure the highest level of operable reliability across the range of anticipated environmental conditions for the lifetime of the Project, such as temperature, precipitation, wind, mechanical loading, etc.³⁰⁵

²⁹⁹ Ex. SNOW-3 at 17 (Application).

³⁰⁰ Ex. SNOW-3 at 2 (Application).

³⁰¹ Minn. R. 7850.4100(K).

³⁰² Ex. SNOW-3 at 3 (Application).

³⁰³ Ex. SNOW-3 at 3 (Application).

³⁰⁴ Ex. SNOW-3 at 81 (Application).

³⁰⁵ Ex. SNOW-3 at 82 (Application).

201. The record shows that the Project will improve the reliability of the electrical system by providing an additional, low-cost source of capacity that is consistent with Minnesota's renewable energy goals.

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

202. Minnesota law requires consideration of the costs of constructing, operating, and maintaining a facility, which are dependent on design and route.³⁰⁶

203. Snowshoe BESS estimates the total installed capital cost for the entire Project will be approximately \$255 million.³⁰⁷ Actual capital costs depend on various factors, such as construction labor, Project equipment and materials, electrical and communication systems, taxes/tariffs, and final design considerations (e.g., Project substation, etc.).³⁰⁸

204. Operating costs are estimated at approximately \$8.2 million per year, which includes labor, materials, and lease payments for the entire Project.³⁰⁹

205. Snowshoe BESS will be responsible for all costs to decommission the Project and associated facilities. Decommissioning of the Project is expected to cost approximately \$902,415, with an estimated scrap/salvage value of \$400,830. Snowshoe BESS anticipates establishing a financial assurance in the form of an escrow account or surety bond equal to 125 percent of the costs to ensure proper decommissioning, less the estimated scrap/salvage value, with Olmsted County listed as the beneficiary.³¹⁰

206. The record reflects that the Applicant selected the most cost-effective option for siting the Project, including selecting a location that is proximate to existing electricity and transportation infrastructure, and has outlined estimated costs for construction, operation, and maintenance for the Project that are reasonable.³¹¹

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

207. Minnesota law requires consideration of the adverse human and natural environmental effects that cannot be avoided.³¹²

208. The primary unavoidable impacts that will resolve following construction include the following:

- Fugitive dust

³⁰⁶ R. 7850.4100(L).

³⁰⁷ Ex. EERA-11 at 24 and Appendix D, Response to Question 1 (EA).

³⁰⁸ Ex. SNOW-3 at 16 (Application).

³⁰⁹ Ex. SNOW-3 at 16 (Application).

³¹⁰ Ex. SNOW-3 at 36 and Appendix D (Application).

³¹¹ See Ex. SNOW-3 at 16, 18–19 (Application).

³¹² Minn. Stat. § 216E.03, subd. 7(b)(6); Minn. R. 7850.4100(M).

- Noise disturbance to nearby residents and recreationalists
- Visual disturbance to nearby residents and recreationalists
- Soil compaction and erosion
- Vegetative clearing
- 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.³¹³

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

- Visual impacts of the Project
- Noise disturbance to nearby residents
- 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 and mammals from fencing.³¹⁴

210. The Applicant will mitigate these impacts to the extent possible. To the extent complete mitigation is not possible, the unavoidable impacts are consistent with similar projects, and the Project will include permit conditions typical for similar projects.

M. Irreversible and Irretrievable Commitments of Resources.

211. Minnesota law requires consideration of the irreversible and irretrievable commitments of resources necessary for the Project.³¹⁵

212. The term “irreversible” describes the loss of future options. It applies primarily to the impacts of use of nonrenewable resources, such as minerals or cultural resources, or to those factors, such as soil productivity, which are renewable only over long periods of time.³¹⁶

213. The term “irretrievable” describes the loss of production, harvest, or use of natural resources. For example, if farmland is used for a non-agricultural development,

³¹³ Ex. EERA-11 at 84 (EA).

³¹⁴ Ex. EERA-11 at 84 (EA).

³¹⁵ Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

³¹⁶ Ex. SNOW-3 at 107 (Application).

some or all of the agricultural production from an area of farmland is lost irretrievably while the area is temporarily used for another purpose. The production lost is irretrievable, but the action is not irreversible.³¹⁷

214. The 22.9 acres of land within the preliminary development area will be developed for Project infrastructure. This land would be unavailable for other uses during the Project lifetime. However, after the Project reaches the end of its operational life, and if the decision is made to decommission it and restore the site, the land would again be available for other uses.³¹⁸

215. The commitment of labor and fiscal resources to develop, construct, and operate the Project is considered irretrievable.³¹⁹

216. No wetland or other sensitive land conversion or alteration will be made during any stage of the Project. Therefore, no foreseen irreversible impacts are addressed.³²⁰

XII. SITE PERMIT CONDITIONS

217. The Commission's Energy Storage System Sample Site Permit (Sample Site Permit) includes 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.³²¹

218. The EA and Draft Site Permit prepared by EERA include various recommendations and potential site permit conditions specific to the Project.³²² Snowshoe BESS responded to EERA's recommendations and proposed permit conditions in the Direct Testimony of Mary Matze,³²³ as well as in its written comments.³²⁴

219. With the above-referenced response to the Draft Site Permit, the record in this matter supports the inclusion of the conditions identified in Snowshoe BESS's and EERA's written comments, as detailed in the paragraphs that follow.

220. Snowshoe BESS proposes revisions to Section 3 of the Draft Site Permit to expressly allow the addition of augmentation units, as depicted in the Final Site Plan, without a need for a site permit amendment or minor alteration approval from the Commission. EERA proposes further revisions to Section 3 to require Snowshoe BESS to provide notice to the Commission, pursuant to a new Section 5.12, prior to commencing

³¹⁷ Ex. SNOW-3 at 107 (Application).

³¹⁸ Ex. SNOW-3 at 107 (Application).

³¹⁹ Ex. EERA-11 at 85 (EA).

³²⁰ Ex. SNOW-3 at 108 (Application).

³²¹ See Ex. PUC-4 (Energy Storage System Sample Site Permit).

³²² Ex. EERA-11 at Appendix C (Draft Site Permit).

³²³ See Ex. SNOW-8 (Matze Direct).

³²⁴ See Ex. SNOW-10 (Response to Comments).

augmentation activities. Snowshoe BESS's proposed revisions to Section 3, which incorporates the EERA's changes, read as follows:

3. Designated Site

The site designated by the Commission for the Project is depicted on the site maps attached to this site permit (Designated Site). The site maps show the approximate location of the energy storage system, including future augmentation units, and associated facilities within the Designated Site, and identify a layout that seeks to minimize the overall potential human and environmental impacts of the Project, as they were evaluated in the permitting process.

The Designated Site serves to provide the Permittee with the flexibility to augment the Project in the future to maintain Project capacity, make minor adjustments to the layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. The Permittee shall provide notice to the Commission, pursuant to Section 5.12, prior to commencing augmentation activities. Any modification to the location of an energy storage system or associated facility shall be done in such a manner as to have human and environmental impacts that are comparable to those associated with the layouts on the maps attached to this site permit. The Permittee shall identify any modifications in the Site Plan pursuant to Section 8.3.³²⁵

221. As set forth above, EERA proposes a new Special Permit Condition 5.12 to govern the battery augmentation process.³²⁶ EERA's proposed Condition 5.12, reads as follows:

5.12 Augmentation:

The Permittee shall notify the Commission of scheduled augmentation at least 30 days prior to commencing augmentation activities. In its filing, the Permittee shall describe the number and types of batteries included in the augmentation. The Permittee shall indicate the location of the augmentation on the project Site Plan. In its filing, the Permittee shall include a noise impact assessment submitted to the Commission as required in Section 5.2 of this permit.

³²⁵ Ex. SNOW-10 (Response to Comments).

³²⁶ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)) at 7-8.

222. Snowshoe BESS proposed the following revisions to EERA's proposed Condition 5.12:

5.12 Augmentation:

The Permittee shall notify the Commission of scheduled augmentation at least 30 days prior to commencing augmentation activities. In its filing, the Permittee shall describe the number and types of batteries included in the augmentation. The Permittee shall indicate the location of the augmentation on the project Site Plan. In its filing, the Permittee shall demonstrate compliance with the noise impact assessment submitted to the Commission as required in Section 5.2 of this permit.

223. EERA also proposed a new Special Condition 5.13 requiring Snowshoe BESS to inform the Commission of any offtake agreement for the Project.³²⁷ EERA's proposed Special Condition 5.13 reads as follows:

5.13 Offtake Agreement

In the event the Permittee does not have an offtake agreement, or some other enforceable mechanism for the sale of energy capacity provided by the Project at the time this site permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for the sale of energy capacity. This site permit does not authorize construction of the Project until the Permittee has obtained an offtake agreement, or some other enforceable mechanism for of energy capacity provided by the Project. In the event the Permittee does not obtain an offtake agreement or some other enforceable mechanism for the energy capacity, provided by the Project within two years of the issuance of this site permit, the Permittee must advise the Commission of the reason for not having such commitment. In such event, the Commission may determine whether this site permit should be amended or revoked. No amendment or revocation of this site permit may be undertaken except in accordance with Minn. Stat. § 216I.09 or Minn. Stat. § 216I.14.

224. Snowshoe BESS proposed revisions to EERA's Special Conditions 5.13 that it argues better reflects the nature of the Project.³²⁸ Snowshoe BESS's recommended language, as modified by EERA in its reply comments, is as follows:

³²⁷ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)) at 12-13.

³²⁸ Ex. SNOW-10 (Response to Comments).

5.13 Offtake Agreement

In the event the Permittee does not have an offtake agreement, or some other enforceable mechanism for the sale of energy, capacity, or ancillary services, and/or other products provided by the Project at the time this site permit is issued, the Permittee shall provide notice to the Commission when it obtains a commitment for the sale of energy, capacity, or ancillary services, and/or other products. This site permit does not authorize construction of the Project until the Permittee has obtained an offtake agreement, or some other enforceable mechanism for the sale of energy, capacity, or ancillary services, and/or other products provided by the Project. In the event the Permittee does not obtain an offtake agreement or some other enforceable mechanism for the sale of energy, capacity, or ancillary services, and/or other products provided by the Project within two years of the issuance of this site permit, the Permittee must advise the Commission of the reason for not having such commitment. In such event, the Commission may determine whether this site permit should be amended or revoked. No amendment or revocation of this site permit may be undertaken except in accordance with Minn. Stat. § 216I.09 or Minn. Stat. § 216I.14.

225. EERA also proposed a new Special Condition 5.14 requiring Snowshoe BESS to inform the Commission of any offtake agreement for the Project in an annual report.³²⁹ EERA's proposed Special Condition 5.14 reads as follows:

5.14 Annual Report

The Permittee shall, by February 1st following each complete or partial year of Project operation, file a report with the Commission on the monthly energy production of the facility including:

- (a) the installed nameplate capacity of the permitted facility;
- (b) the monthly and annual capacity factor of the facility;
- (c) the operational status of the facility and any major outages, major repairs, battery augmentation, or performance improvements occurring in the previous year; and
- (d) any other information reasonably requested by the Commission.

³²⁹ Comment by EERA (May 8, 2025) (eDocket No. [20255-218706-01](#)) at 13-14.

The Permittee shall file this information in a format recommended by the Commission. This information shall be considered public and must be filed electronically.

226. Snowshoe BESS proposed revisions to Special Condition 5.14, which it argues better reflect the nature of the Project.³³⁰ Snowshoe BESS's proposed revisions to Condition 5.14 are as follows:

5.14 Annual Report

The Permittee shall, by February 1st following each complete or partial year of Project operation, file a report with the Commission on the monthly availability of the facility including:

- (a) the installed nameplate capacity of the permitted facility;
- (b) the monthly and annual availability of the facility;
- (c) the operational status of the facility and any major outages, major repairs, battery augmentation, or performance improvements occurring in the previous year; and
- (d) any other information reasonably requested by the Commission.

The Permittee shall file this information in a format recommended by the Commission. This information shall be considered public and must be filed electronically.

227. Snowshoe BESS requests removal of Section 5.5 from the Draft Site Permit, which would require Snowshoe BESS to develop an agricultural impact mitigation plan (AIMP). MDA concurred that Section 5.5 is unnecessary for this Project.³³¹ Therefore, it is recommended that Section 5.5 be removed from the Site Permit, should the Commission grant the permit application.

228. EERA recommends the permit include a new special condition requiring Snowshoe BESS to file a report on the feasibility of installing a water main to the site within 90 days of the site permit issuance.³³² EERA's proposed new special condition reads as follows:

³³⁰ Ex. SNOW-10 (Response to Comments).

³³¹ Ex. SNOW-10 (Response to Comments); see Ex. EERA-11 at Appendix C at 13 (Draft Site Permit).

³³² Comment by EERA (June 6, 2025) (eDocket No. [20256-219661-01](#)).

Water Main Feasibility Report

Within 90 days of the issuance of this site permit, the Permittee shall file with the Commission a report on the feasibility of extending a water main to the site.

229. The record supports the inclusion of Snowshoe BESSs proposed revisions to Sections 3 of the Draft Site Permit, as well as EERA's proposed additions of Sections 5.12 and 5.14, as revised by Snowshoe BESS.³³³

230. The record also supports the inclusion of Section 5.13 to the Draft Site Permit, as proposed by EERA, as well as the new permit condition proposed by EERA requiring Snowshoe BESS to file a report on the feasibility of extending an existing water main to the site.³³⁴

231. Finally, the record supports the removal of Sections 5.5 and 5.7 from the Draft Site Permit.³³⁵

XIII. NOTICE

232. Minnesota statutes and rules require an applicant to provide certain notice to the public and local governments before and during the site application process.³³⁶ Snowshoe BESS provided notice to the public and local governments in satisfaction of Minnesota statutory and rule requirements.³³⁷

233. Minnesota statutes and rules also require the Commission and EERA to provide certain notice to the public throughout the site permit processes.³³⁸ The Commission and EERA provided the notice in satisfaction of Minnesota statutes and rules.³³⁹

³³³ Ex. SNOW-10 (Response to Comments).

³³⁴ Comment by EERA (May 8, 2025) (eDocket No. 20255-218706-01) at 12-13.

³³⁵ Ex. SNOW-10 (Response to Comments); *see also* Comment by MDA at 3 (May 8, 2025) (eDocket No. [20255-218709-01](#)).

³³⁶ Minn. Stat. § 216E.03, subd. 3a and 4; Minn. R. 7850.2100, subp. 2 and 4.

³³⁷ *See* Ex. SNOW-1 (Notice of Intent to Submit a Site Permit Application Under the Alternative Permitting Process); Ex. SNOW-4 (Notice of Application); *see also* Ex. SNOW-5 (Confirmation of Notice).

³³⁸ Minn. Stat. § 216E.03, subd. 6; Minn. R. 7850.2300, subp. 2; Minn. R. 7850.3700, subp. 2, 3, and 6.

³³⁹ *See* Ex. PUC-3 (Notice of Public Information and Environmental Assessment Scoping Meetings); Ex. PUC-6 (Notice of Public Hearings and Availability of Environmental Assessment); Ex. PUC-7 (Notice of Public Hearings and Availability of Environmental Assessment – Corrected for Typo); Ex. EERA-10 (Notice of Environmental Assessment Scoping Decision); Ex. EERA-13 (Notification of Environmental Assessment Availability to Tribal Historic Preservation Officers); Ex. EERA-14 (Notification of Environmental Assessment Availability to Tribal Governments); Ex. EERA-15 (Notification of Environmental Assessment Availability to Agencies); Ex. EERA-16 (EQB Monitor Submission – Scoping Meeting); and Ex. EERA-17 (EQB Monitor Submission – Notice of Public Hearings and Environmental Assessment Availability).

XIV. COMPLETENESS OF EA

234. The EA process is the alternative environmental review approved for large electric power generating plants.³⁴⁰ As part of the alternative review process, the Commission is required to determine the completeness of the EA. An EA is complete if it and the record address the issues identified in the scoping decision.³⁴¹

235. The Minnesota Legislature requires that the Commission utilize applicable provisions of Minn. R. ch. 7850 when considering whether to issue a site permit for energy storage systems until energy storage system specific rules are promulgated.³⁴² Further, Minnesota statutes provide that the Commissioner of the Department of Commerce “shall prepare for the [C]ommission an [EA],” and such EA “shall be the only state environmental review document required to be prepared” on a project identified in Minn. Stat. § 216E.04 subd. 2, and submitted under the alternative review process under Minn. R. 7850.2800 to 7850.3900.³⁴³

236. The evidence in the record demonstrates that the EA is adequate because the EA and the record created at the public hearing and during the subsequent comment period address the issues raised in the scoping decision.

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

CONCLUSIONS OF LAW

1. The Commission and the Judge have jurisdiction over the Application pursuant to Minn. Stat. § 216B.243.
2. Snowshoe BESS, EERA, and the Commission provided all required notices for the site permit.
3. The Commission has the authority under Minn. Stat. § 216E.03 to place conditions on site permits.
4. The Draft Site Permit, with the permit conditions revised as set forth above, contains a number of important mitigation measures, other reasonable conditions, and sample special conditions, permissible under Minn. R. 7850.4000 and related laws.
5. The record in this proceeding demonstrates that Snowshoe BESS has satisfied the criteria for the issuance of a site permit for a BESS facility, as set forth in Minn. Stat. § 216E.03 and Minn. R. 7850.4000, and all other applicable legal requirements.

³⁴⁰ Minn. R. 4410.4400, subp. 3; Minn. R. 7850.3900, subp. 2.

³⁴¹ Minn. R. 7850.3900, subp. 2.

³⁴² 2023 Minn. Laws ch. 60, art. 12, § 67(b).

³⁴³ Minn. Stat. § 216E.04 subd. 5.

6. The Project does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act or the Minnesota Environmental Policy Act.

Based on the Findings of Fact and Conclusions of Law contained herein and the entire record of this proceeding, the Administrative Law Judge makes the following

RECOMMENDATIONS

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

Date: July 9, 2025


KIMBERLY MIDDENDORF
Administrative Law Judge

NOTICE

Notice is hereby given that exceptions to this Report, if any, by any party adversely affected must be filed under the time frames established in the First Prehearing Order of February 3, 2025, unless otherwise directed by the Commission. Exceptions should be specific and stated and numbered separately. Oral argument before a majority of the Commission will be permitted pursuant to Minn. R. 7829.2700, subp. 3. The Commission will make the final determination of the matter after the expiration of the period for filing exceptions, or after oral argument, if an oral argument is held.

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