



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS COMMENTS AND RECOMMENDATIONS

Midwater Energy Storage Project

DOCKET NOS. IP-7138/ESS-24-294; IP-7138/TL-24-295

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

Issues Addressed: These comments and recommendations address the completeness of the site permit application, the presence of contested issues of fact, the need for an advisory task force, and consideration of procedural requirements.

Documents Attached:

- (1) Project Overview Map
- (2) Table 1. Application Completeness Requirements
- (3) Table 2. Draft Permitting and Environmental Review Schedule

Additional documents and information can be found on eDockets:

<https://www.edockets.state.mn.us/EFiling/search.jsp> (ESS-24-294; TL-24-295), and on the Department of Commerce's website: <https://eera.web.commerce.state.mn.us/web/project/15971>.

This document can be made available in alternative formats (i.e., large print or audio) by calling 651-539-1530. Persons with a hearing or speech impairment may call using their preferred telecommunications relay service.

Introduction and Background

On November 19, 2024, Midwater BESS, LLC (Midwater) filed a site permit application to construct and operate an up to 150 megawatt (MW) energy storage facility in Freeborn County, Minnesota.¹

¹ Midwater BESS, LLC, *Application to the Minnesota Public Utilities Commission for a Site Permit*, November 19, 2024. [eDockets Nos. [202411-212161-02](#), [202411-212161-03](#), [202411-212161-04](#), [202411-212161-05](#), [202411-](#)

On November 21, 2024, the Commission issued a notice soliciting comments on the completeness of the site permit application, the presence of contested issues of fact, the need for an advisory task force, consideration of procedural requirements, and whether the Executive Secretary should authorize the applicant to initiate consultation with Minnesota State Historic Preservation Office (SHPO).²

Project Purpose

Midwater indicates that the project will help meet the growing demand for renewable energy and will assist Minnesota in reaching its renewable energy objectives by allowing wind and solar resources to continue producing energy at times when they would otherwise be curtailed due to low demand.

Midwater indicates that it anticipates entering into a tolling agreement with an affiliated merchant energy business or other third party market participant, rather than a long-term power purchase agreement more typical of renewable projects.³

Project Description

Midwater proposes to construct and operate a battery energy storage system (BESS) with a nominal power rating of up to 150 MW alternating current (AC) with approximately 600 megawatt-hours (MWh) of energy capacity on a 104.4 acre site in Shell Lake Township, Freeborn County, Minnesota. In addition to battery energy storage enclosures, the facility will also include inverters and transformers, electrical feeder lines, a project substation, stormwater management ponds, storage and parking areas, access roads, fencing, and other minor equipment and subcomponents as are typical of a BESS.

The project involves connecting to the existing ITC Midwest Glenworth Substation through a high voltage transmission line (HVTL). The HVTL will link the substation to bi-directional transformers within the BESS, where the voltage will be reduced from 161 kV to 34.5 kV. Underground 34.5 kV feeder lines will then transport the energy to inverters, which convert it from alternating current (AC) to direct current (DC) for storage in the batteries. When energy is sent to the grid, it is converted back from DC to AC and transmitted via the 34.5 kV lines to the project substation. There, the voltage is stepped up to 161 kV before being delivered to the electrical grid.

Midwater filed a generator interconnection agreement (GIA) application for the project with the Midcontinent Independent System Operator (MISO) in 2022 and anticipates signing a GIA in early 2025.⁴ Midwater anticipates that construction on the project will begin in early 2027 and be completed in time to begin operating in the 4th quarter of 2027.⁵ Total project cost (BESS and HVTL) is expected to be

[212161-06](#), [202411-212161-07](#), [202411-212161-08](#), [202411-212161-09](#), [202411-212161-10](#), [202411-212161-11](#), [202411-212161-12](#), and, [202411-212161-13](#) herein after Midwater Application].

² Commission, Notice of Comment Period on Application Completeness, November 21, 2024. [eDockets No. [202411-212278-01](#)].

³ Midwater Application, p. 17.

⁴ Midwater Application, p. 27.

⁵ *Ibid.*

approximately \$458 million,⁶ with operating costs over the project lifetime anticipated to be approximately \$246 million.⁷

Regulatory Process and Procedures

In Minnesota, no person may construct an energy storage system (ESS), defined as a facility capable of operating at a capacity of 10 MW or more⁸ without a site permit from the Commission.⁹ Midwater's proposed project will have a nominal power rating of up to 150 MW AC and therefore requires a site permit from the Commission. As an ESS facility, the site permit application qualifies for Commission review under the alternative permitting process described in Minnesota Statute 216E.04.¹⁰

The project does not require a certificate of need from the Commission because the Project is exempt under Minn. Stat. 216B.243, subd. 8(9).

For purposes of brevity, the following sections summarize what Department of Commerce, Energy Environmental Review and Analysis (EERA) staff considers important milestones in the review of the site permit application.

Site Permit Application Acceptance

Site permit applications for large electric power facilities must provide information about the applicant, a description of the project, and discussion of potential environmental impacts and mitigation measures.¹¹ Review under the alternative permitting process does not require an applicant to propose alternative sites in their permit application. However, if the applicant has evaluated and rejected alternative sites they must describe these rejected alternatives and the reasons for rejecting them in their application.¹²

The Commission may accept an application as complete, reject an application and require additional information to be submitted, or accept an application as complete upon filing of supplemental information.¹³ The environmental review and permitting process begins when the Commission determines that a permit application is complete; the Commission has six months (or nine months, with just cause) from the date of this determination to reach a permit decision.¹⁴

⁶ Midwater Application, p. 29.

⁷ Midwater Application, p. 28.

⁸ Minnesota Statute 216E.01, subd. 3a.

⁹ Minnesota Statute 216E.03, subd. 1.

¹⁰ Minnesota Statute 216E.04, Subd. 2 (noting those projects that are eligible to proceed under an alternative permitting process).

¹¹ Minnesota Rules 7850.1900 and 7850.3100.

¹² Minnesota Rule 7850.3100.

¹³ Minnesota Rule 7850.3200.

¹⁴ Minnesota Statute 216E.04, Subd. 7.

Environmental Review

Site permit applications are subject to environmental review conducted by EERA staff. Projects proceeding under the alternative permitting process require the preparation of an environmental assessment (EA).¹⁵ An EA is a document which describes the potential human and environmental impacts of a proposed project and possible mitigation measures. The EA will evaluate any site proposed by the applicant and any other site identified by the Commission.¹⁶ A public information and scoping meeting is held to solicit comments on the scope of the EA. An EA is the only state environmental review document required for site permit applications reviewed under the alternative permitting process.

Advisory Task Force

The Commission may appoint an advisory task force to aid the environmental review process. An advisory task force must include representatives of local governmental units in the project area. A task force assists EERA staff with identifying impacts and mitigation measures to be evaluated in the EA and expires upon issuance of the EA scoping decision.¹⁷

The Commission is not required to appoint an advisory task force for every project. If the Commission does not appoint a task force, citizens may request that one be appointed. If such a request is made, the Commission must determine at a subsequent meeting if a task force should be appointed or not. The decision whether to appoint an advisory task force does not need to be made at the time of application acceptance; however, it should be made as soon as practicable to ensure its charge can be completed prior to issuance of the EA scoping decision.

Public Hearing

Site permit applications under the alternative permitting process require that a public hearing be held in the project area after the EA for the project has been completed and released.¹⁸ The hearing is typically presided over by an administrative law judge (ALJ) from the Office of Administrative Hearings. The Commission may request that the ALJ provide solely a summary of public testimony. Alternately, the Commission may request that the ALJ provide a full report with findings of fact, conclusions of law, and recommendations regarding the project.

EERA Staff Analysis and Comments

EERA staff provides the following analysis and comments in response to the Commission's notice requesting comments on completeness and other issues related to Midwater BESS's site permit application.

¹⁵ Minnesota Rule 7850.3700.

¹⁶ Minnesota Statute 216E.04, subd. 5.

¹⁷ Minnesota Rule 7850.3600.

¹⁸ Minnesota Rule 7850.3800.

Application Completeness

EERA staff previously reviewed a draft of the application and believes that its comments on the draft application and supporting materials were substantially addressed in the final application filed on November 19, 2024. EERA staff evaluated the application against the completeness requirements of Minnesota Rule 7850.3100 (Table 1). The application contains information with respect to these requirements. Accordingly, staff recommends the Commission accept the application as substantially complete and require Midwater to continue to work with EERA staff and provide supplemental information as necessary throughout the environmental review and permitting process.

Advisory Task Force

EERA staff has analyzed the merits of establishing an advisory task force for the Midwater BESS project. Based on the information known at this time, staff believes that an advisory task force is not warranted for the project.

In analyzing the need for an advisory task force for the project, EERA staff considered four characteristics: project size, project complexity, known or anticipated controversy, and sensitive resources.

- **Project Size.** The project will utilize a relatively small area of land – approximately 104.4 acres – available through negotiated agreements with landowners. This project-size factor weighs against a task force.
- **Project Complexity.** With respect to the storage technology, land use, and tap line, the project is not complex. Land use in the project area is primarily agricultural and the topography is relatively flat. There are no special construction techniques or operational features that make the project complex. This project-complexity factor weighs against a task force.
- **Known or Anticipated Controversy.** To date, EERA staff has received no specific comments concerning the project, and there are currently no public comments in the record. Although the stand-alone energy storage facility is a relatively novel proposal in Minnesota, EERA staff is not aware of any controversy associated with the Project at this time.

Midwater has located and developed both the project through agreements with local landowners. Midwater reports outreach to local governments, state and federal agencies, and tribes. The public will have opportunities to raise concerns and issues during scoping and the public hearing. As it has previously, EERA will assist citizens and governmental units in understanding the environmental review process and how to best identify issues to be addressed and site alternatives to be considered in the EA.

- **Sensitive Natural Resources.** The project area is primarily agricultural land and wetlands. The site is within the potential range of one federally listed species (Northern long-eared bat or “NLEB”) and one federally proposed endangered species (Tri-colored bat). A state-listed

threatened plant species (edible valerian) and a state-listed species of special concern (suckermouth minnow) were also identified near the project area.¹⁹

There are no known NLEB or tri-colored bat maternity roost trees or hibernaculum in Freeborn County; however, the species may still occur within or near the project area. Project activities are not expected to affect edible valerian, as construction and operation will be confined to previously tilled areas, avoiding wetlands, wet meadows, and railroad rights-of-way (ROW), so no significant impacts are expected. One new construction area will cross the highway ROW for site access, where the presence of certain species can be assessed during construction if necessary. The project is not expected to impact the suckermouth minnow population. No work will be conducted within the Shell Rock River and erosion control measures will ensure the stream is not adversely impacted.²⁰ On the whole, potential impacts to sensitive natural resources weigh neither for nor against a task force.

Based on the above analysis, EERA staff believes that an advisory task force is not warranted for the project.

Contested Issue of Fact

Based on its review of Midwater's application and the record to date, EERA staff has not identified any contested issues of fact. Staff is unaware of any issues or concerns associated with the application or project that require a contested case hearing.

Procedural Requirements

EERA staff recommends that the Commission request a full ALJ report for the project's public hearing. Although EERA staff does not believe that the novel nature of the project as a stand-alone energy storage system requires a contested case hearing, EERA staff believes that a full ALJ report with recommendations provides an unbiased, efficient, and transparent method to air and resolve any issues that may emerge as the record is developed. Requiring a full ALJ report reduces the burden on Commission staff and helps to ensure that the Commission has a robust record on which to base its decision. EERA staff has provided a draft schedule concept for the Midwater permitting process, which includes a full ALJ report with findings, conclusions, and recommendations (see [Table 2](#)).

EERA Staff Recommendations

EERA staff recommends that:

- The Commission accept Midwater's site permit application as substantially complete.
- The Commission not appoint an advisory task force for the site permit application at this time.
- The Commission request a full ALJ report with findings, conclusions, and recommendations for the project's public hearing.

¹⁹ Midwater Application, pp. 132-133.

²⁰ Midwater Application, p. 133.

Figure 1. Midwater BESS Project

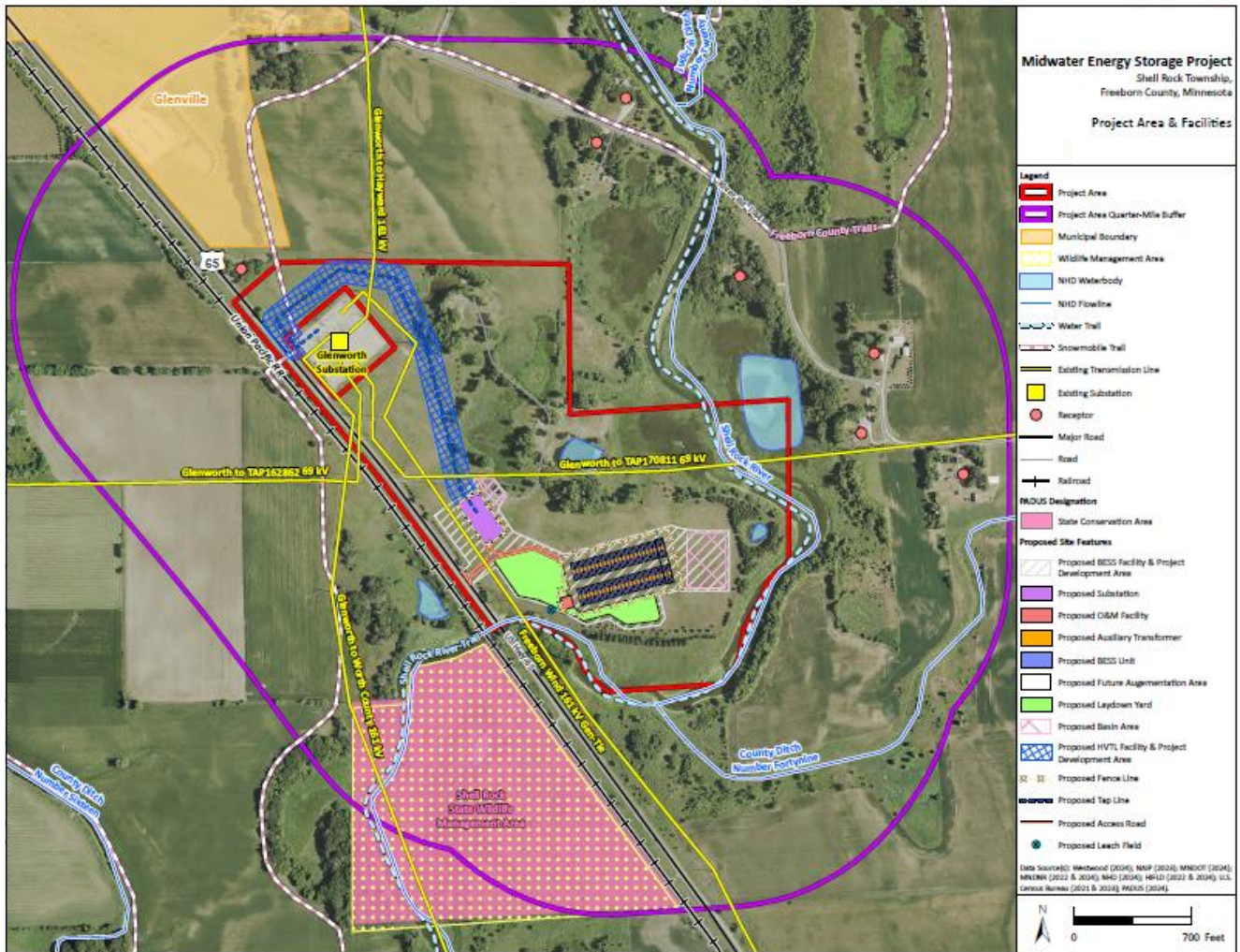


Table 1. Site Permit Application Completeness Requirements

Authority	Required Information	Application Location	EERA Staff Comments
Minnesota Rule 7850.1900, Subpart 1 - Site Permit Application for Large Electric Generating Plant			
A.	A statement of proposed ownership of the facility at the time of filing the application and after commercial operation;	1.1.2	Midwater BESS, LLC, a wholly owned indirect subsidiary of Spearmint Energy.
B.	The precise name of any person or organization to be initially named as permittee or permittees and the name of any other person to whom the permit may be transferred if transfer of the permit is contemplated;	1.1.1	Midwater BESS, LLC will be the permittee.
C.	At least two proposed sites for the proposed large electric power generating plant and identification of the applicant's preferred site and the reasons for the preference;	3.2	As an energy storage system seeking permitting under the alternative permitting process of Minnesota Statute 216E.04, alternative sites are not required under this process.
D.	A description of the proposed large electric power generating plant and all associated facilities, including the size and type of the facility;	2.1 – 2.4, 4.0, Figures 2a & 2b	Information is provided to satisfy this requirement.
E.	The environmental information required under subpart 3;	See Minnesota Rule 7850.1900, Subpart 3 below.	
F.	The names of the owners of the property for each proposed site;	1.1.2, Figure 4	Information is provided to satisfy this requirement.
G.	The engineering and operational design for the large electric power generating plant at each of the proposed sites;	Section 4, Figures 2a, 2b & 3	Information is provided to satisfy this requirement.
H.	A cost analysis of the large electric power generating plant at each proposed site, including the costs of constructing and operating the facility that are dependent on design and site;	2.3, Table 2.3-1	Information is provided to satisfy this requirement.

Authority	Required Information	Application Location	EERA Staff Comments
I.	An engineering analysis of each of the proposed sites, including how each site could accommodate expansion of generating capacity in the future;	3.3	Information is provided to satisfy this requirement.
J.	Identification of transportation, pipeline, and electrical transmission systems that will be required to construct, maintain, and operate the facility;	4.0, 5.1.2, 5.2.2	Information is provided to satisfy this requirement.
K.	A listing and brief description of federal, state, and local permits that may be required for the project at each proposed site;	1.3; Table 1.3.1	Information is provided to satisfy this requirement.
L.	A copy of the certificate of need for the project from the Commission or documentation that an application for a certificate of need has been submitted or is not required;	1.4.1	The project is exempt from the certificate of need requirement.
Minn. R. 7850.1900, subp. 3 - Environmental Information			
A.	A description of the environmental setting for each site;	6.0	Information is provided to satisfy this requirement.
B.	A description of the effects of construction and operation of the facility on human settlement, including, but not limited to, public health and safety, displacement, noise, aesthetics, socioeconomic impacts, cultural values, recreation, and public services;	6.2, Tables 6.2-1 – 6.2-7; 6.4-1, 6.4-2. Appendix F	Information is provided to satisfy this requirement.
C.	A description of the effects of the facility on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;	6.3	Information is provided to satisfy this requirement.
D.	A description of the effects of the facility on archaeological and historic resources;	6.4, Table 6.4-2, Appendix F	Information is provided to satisfy this requirement.

Authority	Required Information	Application Location	EERA Staff Comments
E.	A description of the effects of the facility on the natural environment, including effects on air and water quality resources and flora and fauna;	6.5, Tables 6.5-1 – 7.5.10	Information is provided to satisfy this requirement.
F.	A description of the effects of the facility on rare and unique natural resources;	6.5.8, Appendices J & K	Information is provided to satisfy this requirement.
G.	Identification of human and natural environmental effects that cannot be avoided if the facility is approved at a specific site or route; and	6.6 – 6.7	Information is provided to satisfy this requirement.
H.	A description of measures that might be implemented to mitigate the potential human and environmental impacts identified in items A to G and the estimated costs of such mitigative measures.	6.0	Information is provided to satisfy this requirement.

Table 2. Draft Permitting Process Concept Schedule

Permitting Day*	Process Step	Responsible Party
Application Filed to Application Acceptance		
-	Site Permit Application Filed	Applicant
	Comment Period on Application Completeness	EERA/Agencies/Public
	Reply Comment Period	Applicant
	Supplemental Comments	EERA/Agencies/Public
	Consideration of Application Acceptance	PUC
Acceptance to Permit Decision		
1	Application Acceptance Order	PUC
5	Public Information and Scoping Meeting Notice	PUC
30	Public Information and Scoping Meeting	EERA/PUC
40	Scoping Comment Period Closes	EERA
60	Scoping Decision Issued	Commerce
170	EA Issued Notice of EA Availability and Public Hearing	EERA
190	Public Hearing	PUC/ OAH/ Applicant/EERA
200	Public Hearing Comment Period Closes	PUC
210	Responses to Hearing Comments	EERA/Applicant
220	Proposed Findings of Fact (FOF)	Applicant
230	Reply Comments/Technical Analysis	EERA
260	FOF, Conclusions of Law, and Recommendations	OAH
275	Exceptions to ALJ Report	Applicant/EERA
310	Consideration of Site Permit	PUC

*All timeframes are hypothetical and will change. Meetings and hearings will occur over multiple days.