

Staff Briefing Papers

Meeting Date May 22, 2025

Agenda Item *6

Company Spearmint Energy (Midwater BESS, LLC)

Docket No. IP7141/ESS-24-294, TL-24-295

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.

In the Matter of the Application of Midwater BESS, LLC for a route permit for the 161kV transmission line for the Midwater Energy Storage project in Freeborn County, Minnesota.

Issues 1. What action should the Commission take concerning site and route alternatives to be evaluated in the environmental assessment?
2. What actions, if any, should the Commission take concerning other procedural items?

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✓ Relevant Documents

Date

Site Permit & Route Permit Application (13 parts)	November 19, 2024
Public Comments Batches 1 and 2	March 24, 2025
DOC EERA – Comments – Shell Rock Township Resolution	April 9, 2025
PUC – Public Comment – Butler County Board of Supervisors	April 15, 2025
DOC EERA – Comments – Freeborn County Resolution	April 17, 2025
Midwater BESS, LLC – Comments	April 21, 2025
IUOE Local 49 and NCSRC of Carpenters Comments	April 21, 2025
PUC – Public Comment – Butler County Board of Supervisors	April 22, 2025
DOC EERA – Comments – Shell Rock River Watershed District	April 24, 2025

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

Public Comments Batch #3
Public Comments Batch #4
DOC EERA Comment Letter on EA Scope
Public Comments Batch #5

Date

April 25, 2025
April 30, 2025
May 05, 2025
May 05, 2025

I. STATEMENT OF ISSUES

1. What action should the Commission take concerning site and route alternatives to be evaluated in the environmental assessment?
2. What actions, if any, should the Commission take concerning other procedural items?

II. PROJECT DESCRIPTION

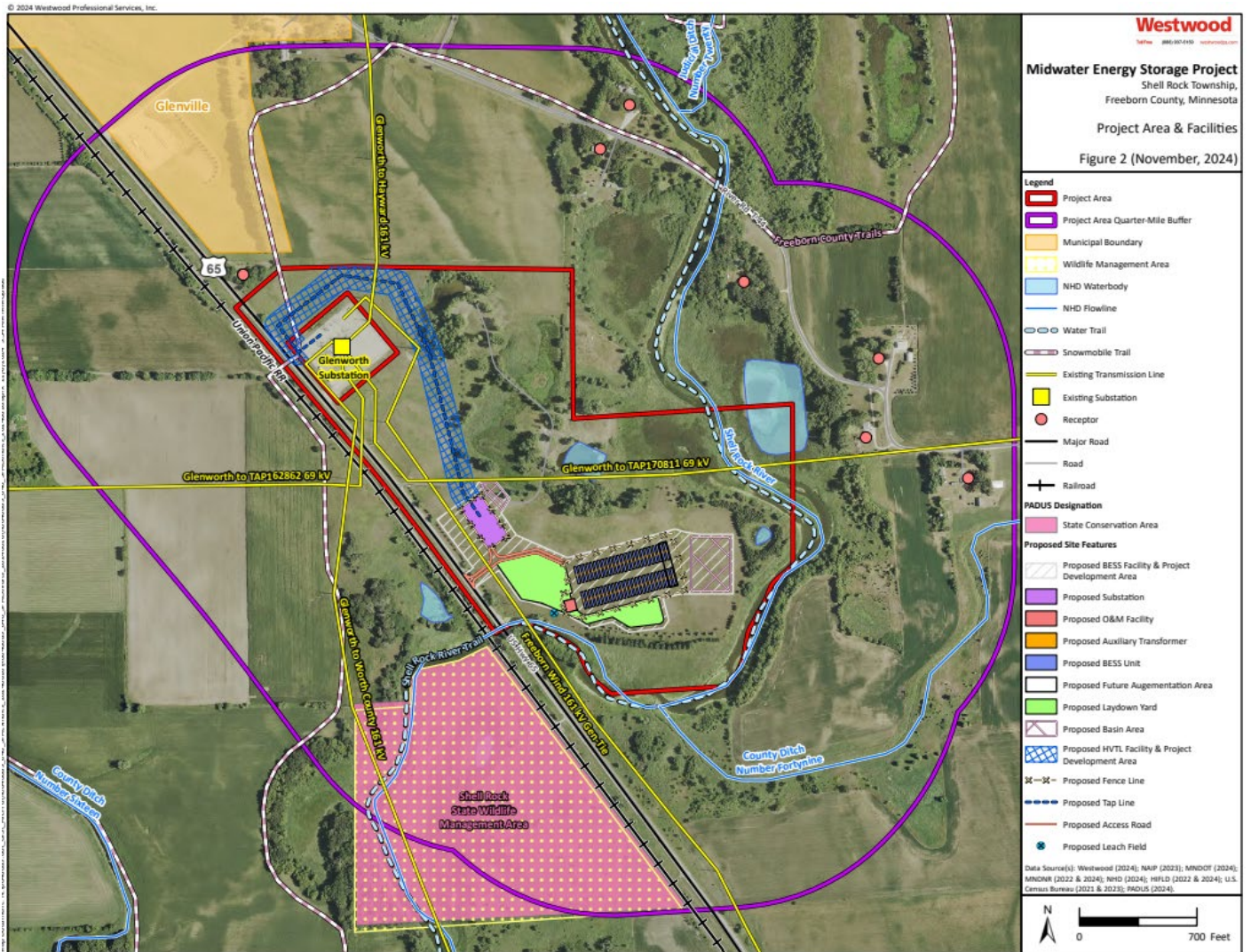
Midwater BESS, LLC (Midwater), a subsidiary of Spearmint Energy, proposed to construct and operate a battery energy storage system (BESS) with a nominal power rating of up to 150 MW alternating current (AC) with approximately 600 megawatt-hours (MWh) of energy capacity on a 104.4-acre site in Shell Lake 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. 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.

Total project cost (BESS and HVTL) is expected to be approximately \$458 million, with operating costs over the project lifetime anticipated to be approximately \$246 million.

Proposed Project Area



III. STATUTES AND RULES

Energy storage systems and transmission lines between 100 and 200 kv (each of which present here) qualify for alternative review under Minn. Stat. section 216E.04.”

Minn. Stat. § 216E.04, Subd. 3. **Application.** The applicant for a site or route permit for any of the projects listed in subdivision 2 who chooses to follow these procedures shall submit information as the commission may require, but the applicant shall not be required to propose a second site or route for the project. The applicant shall identify in the application any other sites or routes that were rejected by the applicant *and the commission may identify additional sites or routes to consider during the processing of the application.* The commission shall determine whether an application is complete and advise the applicant of any deficiencies.

Minn. Stat. § 216E.04, Subd. 5. **Environmental review.** For the projects identified in subdivision 2 and following these procedures, the commissioner of the Department of Commerce shall prepare for the commission an environmental assessment. The environmental assessment shall contain information on the human and environmental impacts of the proposed project *and other sites or routes identified by the commission* and shall address mitigating measures for all of the sites or routes considered. The environmental assessment shall be the only state environmental review document required to be prepared on the project.

IV. PROCEDURAL HISTORY

On November 19, 2024, Midwater BESS, LLC, filed its Application for a Site and Route permit for a battery energy storage project in Freeborn County, Minnesota.

On January 21, 2025, the Commission issued its Order Accepting the Site and Route permit Application as substantially complete through the consent calendar. No additional alternatives were identified at the application completeness stage.

On February 19, 2025, Commission and Minnesota Department of Commerce Energy Environmental Review and Analysis (EERA) staff conducted an in-person public information and environmental assessment scoping meeting in Albert Lea, Minnesota.

A remote-access public information and environmental assessment scoping meeting was held on February 20, 2025. A comment period was open through March 10, 2025.

Between March 6, 2025, and March 17, 2025, public comments were received from several members of the public opposing the proposed project site and siting numerous concerns with regard to the project’s proximity to the Shell Rock River and possible flooding, contamination,

pollution, and fire.

On March 24, 2025, Public Comments Batches 1 and 2 were filed into the record.

On April 7, 2025, Commission and Minnesota Department of Commerce Energy Environmental Review and Analysis (EERA) staff conducted an additional in-person public information and environmental assessment scoping meeting in Glenville, Minnesota. Additionally, the comment period was extended through April 21, 2025.

On April 9, 2025, Shell Rock Township passed and filed a resolution opposing the project in Shell Rock Township.

On April 16, 2025, the comments of the Minnesota Pollution Control Agency were filed mentioning that the MPCA was not opposed to the EA. Though staff believes these comments were made in mistake, as an EA had not yet been completed or filed.

On April 17, 2025, a resolution from Freeborn County was passed and filed opposing the approval and development of the project.

On April 21, 2025, Midwater BESS, LLC filed a letter asserting that the claims of environmental impacts were untimely and pre-judged a head of the environmental assessment and reasserted their commitment to work with the Township and County.

Also, on April 21, 2025, IUOE Local 49 filed comments supporting the construction of the project.

On April 22, 2025, Butler County filed a letter asserting their concerns regarding impacts to the Shell Rock River, explaining that they are not apposed to the development of the project, but are opposed to the specific location of the project and its proximity to the river.

April 24, 2025, Shell Rock River Watershed district filed a letter reasserting district rule regarding maintenance of storm water facilities and design criteria and asked that more restrictive design criteria be used due to the location of the proposed project next to the river and that skimmers are installed to further treat water before it is discharged.

May 5, 2025, EERA filed comments recommending that the Commission authorize EERA to include in the scoping decision for the EA solely the proposed BESS site and transmission line route identified by the applicant in its joint application.

Also on May 5, 2025, batched public comments were efiled opposing the project.

V. PROPOSED LOCATION OF THE STORAGE PROJECT AND TRANSMISSION LINE

Site of the Storage Facility

Midwater BESS indicated that it conducted a detailed analysis of several areas to identify the proposed Point of Interconnection (POI) location and site location for development. Site selection for the Project was the result of an iterative process that considered many factors. For the BESS Facility, finding open space where substations and transmission lines have capacity for the Project to connect and supply energy narrowed down feasible sites.

The Applicant identified the ITC Midwest Glenworth Substation as having available capacity and low interconnection costs. Midwater BESS then screened available land within the area of the proposed POI to reduce the financial burden of constructing a longer transmission line (i.e., construction cost, easement acquisition cost, and electrical losses). Lands within the area of the POI were determined potentially suitable if they were: cleared and otherwise undeveloped; not currently encumbered by other easements (e.g., wind farms, pipelines); and, contained minimal transmission lines, pipelines, roads, and few wetland or other obstacles that would limit the buildable land or lead to irregularly shaped development areas. Midwater BESS also screened the areas for geotechnical risks, habitat for endangered species, proximity to culturally sensitive areas, other potential environmental risks such as pollutants, steep slopes, flood zones, current land use conflicts, and a clear and uncontested title. Following the screening, Midwater BESS approached landowners to negotiate voluntary lease and purchase option agreements.

The Project Area was chosen for its proximity to the POI, supportive landowners, and limited competition with other potential renewable energy storage projects.

Transmission Line

The Applicant indicated that it considered the same factors that were evaluated for the BESS Facility in an iterative process to arrive at a Project design that minimized impacts to the environment and landowners while maximizing the efficiency of the Project. The HVTL Facility purpose is to facilitate the interconnection of the Project to the grid at ITC Midwest Glenworth Substation. Given the existing environmental and electrical infrastructure constraints present in and around the Project Area, the selected route provides the shortest route possible to accomplish this purpose.

The applicant indicated it was guided by the routing criteria set forth in Minn. Stat. ch. 216E and Minn. R. 7850.4100. These criteria were analyzed to select a route that minimize overall impacts. The criteria include, but are not limited to:

- Sharing existing ROW, such as transmission lines;
- Using property lines and hay/pasture field boundaries to minimize impacts if existing ROW were not available or practicable;

- Maximizing distance between the HVTL Facility and homes; and
- Minimizing potential impacts to the natural environment, including wetlands, waterways, trees, and rare and unique natural resources.

The applicant indicated that an alternative route was considered but is not feasible due to existing environmental constraints, such as wetlands and the network of existing electrical transmission and distribution lines crossing the Project Area. Given the existing land constraints, the Applicant identified the current routing for the HVTL Facility. The current route area takes advantage of parcels that are available east of U.S. Highway 65, surrounding the ITC Midwest Glenworth Substation, and landowners willing to enter lease agreements to route the HVTL Facility through this area.

Under Minn. Stat. §216E.04, subd. 3 and Minn. R. 7850.3100 applicants are required to identify any alternative routes that were considered and rejected for the HVTL Facility. One alternative was considered but ultimately rejected. The alternative route is described below, along with the reasons it was rejected.

The Applicant evaluated an HVTL route segment that was parallel to the Project BESS enclosures and O&M facility, which was farther east than the currently proposed HVTL. This route segment traveled north and followed the edge of the CRP land between the Proposed HVTL Facility Development Area and tree line for the CRP land. To reduce the potential impact to wetlands, tree coverage, nearby residences, and other sensitive environmental features, the proposed alignment of the transmission line was relocated closer to U.S. Highway 65. No other routes were considered for the Proposed HVTL Facility Development Area.

VI. COMMENTS RECEIVED ON THE MIDWATER BESS PROJECT

Local Government

Several local governments have expressed opposition to the proposed project. Shell Rock Township and Freeborn County in Minnesota have each passed formal resolutions opposing the siting of the project near Glenville, Minnesota. Additionally, the Shell Rock River Watershed District provided stormwater-related site location concerns, expressing the need for more restrictive construction practices to protect the Shell Rock River. Similarly, Butler County, Iowa has voiced its opposition to locating the project near the Shell Rock River and Glenville in recognition of the downstream impacts from the project.

Public Comments

The Commission has received approximately 350 public comments on the project. A large majority of the comments have expressed concerns about, and opposition to, the proposed site of the project. Their concerns include its proximity to the Shell Rock River, and to the City of Glenville, its High School, and its residents. At both in-person information/scoping meetings

held by the agencies and during the subsequent written comment periods members of the public expressed concerns regarding transparency, the applicant, and the review process, project safety, and coordination with local emergency response resources. The comments also raise concerns for wildlife, wetlands, and downstream impacts if there was a fire or leak of hazardous chemicals. Other concerns include impacts to wildlife and wetlands, the selection of labor for the construction of the project, the benefits to be received by the City of Glenville and the surrounding community, the number of transmission lines in and around the project, property impacts will not receive any of the benefits from the project.

Approximately 145 members of the public provided comments in support of the project. These comments indicate support for storage projects generally and the benefits these projects bring to grid stability and the support they provide to the development of renewables on the system. None of these commenters, however, appear to be residents of the local community or in Freeborn County.

Staff note: This is a very brief and high-level summary of the comments received and staff encourages Commissioners to review Public Comment batches 1-5 for a comprehensive review.

VII. STAFF ANALYSIS

The Commission has the following issues before it regarding the environmental assessment of the project:

1. What action should the Commission take concerning site and route alternatives to be evaluated in the environmental assessment?
2. What actions, if any, should the Commission take concerning other procedural items?

The Commission makes its permitting decisions based on the considerations set out in Minn. Stat. § 216E.03, Subd. 7. These considerations ensure that the Commission's permitting determinations align with 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.

Staff acknowledges that it is too early in the permitting review process to draw any conclusions on the appropriateness of the proposed site and transmission line route of the Midwater project, as further record development is necessary and environmental review must be conducted. The Commission's decisions on whether to permit a proposed project are not simply based on the popularity or the amount of opposition to a project. The statutory considerations require a much more comprehensive evaluation of the positive and negative



impacts a project will have on a variety of important factors.

However, the review process requires a broad spectrum of citizen participation as a principal of operation and the Commission takes the comments and concerns expressed by members of the public and local governments very seriously when considering whether to permit a project and what appropriate conditions should be applied to a project should it be allowed to proceed.

Given the public opposition to the project and concerns about the site, Staff recommends requiring the Applicant to identify with specificity any other sites or routes considered within the southeast region of the state (**Decision Option 1**), and that the Commission open a supplemental comment period for the purpose of soliciting alternative sites and routes for potential consideration by the Commission (**Decision Option 2**).

VIII. COMMISSION DECISION OPTIONS

Scoping Decision

1. Require the applicant to make a filing within 10 days of the order identifying with specificity any other sites or routes considered within the southeast region of the state, as noted in application section 3.2. (Staff)

And

2. Delegate authority to the Executive Secretary to open a supplemental comment period for the purpose of soliciting alternative sites and routes. (Staff)

Or

3. Authorize EERA to include in the EA scoping decision solely the Applicant's proposed BESS site and transmission line route identified in the application. (EERA)

Staff Recommendation: 1,2