

**Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road
St. Paul, MN 55155-4040**

March 10, 2025

James Sullivan
Minnesota Department of Commerce
85 7th Place East, Suite 280
St. Paul, MN 55101

RE: In the Matter of the Joint Application of Midwater BESS, LLC for a Site Permit and Route Permit for the up to 150 MW Midwater Energy Storage Project and Associated 161 kV Transmission Line in Freeborn County, Minnesota: PUC Docket Number: IP-7138/ESS-24-294 and IP-7138/TL-24-295

Dear Mr. Sullivan,

The Minnesota Department of Natural Resources (DNR) has reviewed the site and route permit applications for the Midwater BESS, LLC (Applicant) to construct a 150 MW battery energy storage system (BESS) and associated 161 kV high voltage transmission line (HVTL). Based on the review of the applications, the DNR offers the following comments regarding potential environmental and wildlife impacts that should be considered in scoping for the environmental assessment (EA).

Security Fence

Section 5.1.1.4 describes the security fencing as a six-foot-tall chain linked fence topped with one to two feet of barbed wire. The DNR recommends the security fence reaches a minimum height of 10 feet to prevent white-tailed deer and other large wildlife from entering the facility. Our agency also advises against the use of barbed wire due to entanglement and injury concerns it can cause to wildlife. While the DNR understands the fencing design must follow the National Electrical Code, our agency requests the Applicant coordinate with the DNR before finalizing the security fence to minimize impacts to wildlife.

Lighting

The DNR recommends that any lighting installed is shielded and downward facing to minimize potential impacts related to illumination. Light-emitting diode (LED) lighting has become increasingly

popular due to its efficiency and long lifespan, but they tend to emit blue light which can be harmful to wildlife. The DNR recommends choosing products that emit the lowest levels of blue hue, backlight, and glare possible.

Water Appropriation

The EA should identify dewatering activities that may be necessary during construction. A DNR water appropriation permit is required if the water pumped exceeds 10,000 gallons in a day, and/or one million gallons in one year. The DNR General Permit for Temporary Appropriation, with its lower permit application fee and reduced time for review, may be used for the dewatering if the dewatering volume is less than 50 million gallons and the time of the appropriation is less than one year. The DNR's [Permitting and Reporting System \(MPARS\)](#) can be used to apply for a DNR water appropriations permit.

Dust

The site and route permit application indicate the Applicant intends to employ best management practices for suppressing dust, like watering or treating exposed surfaces to minimize fugitive dust. Dust control agents used to control fugitive dust levels often contain calcium chloride or magnesium chloride. The DNR advises against using products that contain chloride as a dust-suppression agent because they do not break down and may accumulate to levels that are toxic to wildlife and plants. The DNR recommends the EA address fugitive dust levels and dust suppression measures that will be taken during construction and once the facility is operational.

Wildlife-Friendly Erosion Control

The EA should discuss the use of wildlife-friendly erosion control. Due to entanglement issues with small animals, the DNR recommends that erosion control blankets be limited to “bio-netting” or “natural netting” types, and specifically not products containing plastic mesh netting or other plastic components. Hydro-mulch products may contain small synthetic (plastic) fibers to aid in its matrix strength. These loose fibers could potentially re-suspend and make their way into the Shell Rock River.

Vegetation Management Plan

The DNR recommends continued coordination with the Vegetation Management Plan Working Group (VMPWG) to refine the Vegetation Management Plan (VMP). The BESS and HVTL VMPs should be consistent with the DNR's recently revised [Prairie Establishment and Maintenance Technical Guidance for Solar Projects](#), which provides technical guidance for prairie establishment and management at solar sites. The aim of a VMP should be to develop native seed mixes that suit site conditions and are pollinator-friendly and habitat-friendly. The DNR advises against planting non-native seed mixes because they can spread throughout the Project site thus defeating the purpose of using adjacent native seed mixes.

The VMP should discuss how the Applicant intends to vegetate the surrounding Project Boundary for the BESS and HVTL. Currently the Project Boundary consists mostly of grassland habitat. The EA should discuss the Project's construction and vegetation reestablishment phases to minimize stormwater runoff. The VMPs for the BESS and HVTL should also discuss incorporating wetland characteristics and native plant species into the design of the water storage basins, which can minimize erosion and provide habitat.

Avian Flight Diverters

The HVTL and BESS are in a riparian corridor important for breeding and migratory waterfowl. As a result, avian flight diverters will need to be installed on the HVTL to minimize bird fatalities. Standard transmission line design should incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices. The DNR recommends the EA discusses avian interactions with the HVTL.

The DNR appreciates the opportunity to provide EA scoping comments on the Midwater BESS project. Please contact me if you have questions about the DNR's comments.

Sincerely,

Martin Donovan
Energy Review Planner
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651-259-5402

Attachments: Natural Heritage Letter

CC: Haley Byron, Minnesota Department of Natural Resources

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