

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

June 13, 2025

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

RE: In the Matter of the Application of North Star Energy Storage, LLC for an up to 80-megawatt Battery Energy Storage System Site Permit for the North Star Storage Project in Chisago County, Minnesota. Docket Number: IP-7155/ESS-25-123

Dear Sam Weaver,

The Minnesota Department of Natural Resources (DNR) has reviewed the site permit application for North Star Energy Storage (Applicant) to construct an up to 80 MW battery energy storage system (Project). Based on the review of the application, the DNR offers the following comments regarding the potential environmental and wildlife impacts that should be considered in scoping for the Environmental Assessment (EA).

Security Fencing

The site permit application describes the security fence as a six-foot-tall chain linked fence topped with one foot 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.

Lighting

The DNR recommends the EA discuss measures to mitigate the impacts lighting will have on wildlife. LEDs are often installed at BESS facilities due to their efficiency and cost competitiveness. LEDs tend to emit blue hue which can adversely affect wildlife and insects. The DNR's [Commercial Solar Siting Guidance](#) advises the nominal color temperature of lighting installed does not exceed 4,000 kelvin. The [Commercial Solar Siting Guidance](#) also recommends lighting is downlit and shielded to minimize blue hue, backlight, and glare.

Dust

The site permit application indicates the Applicant will use best management practices to suppress fugitive dust. The DNR advises against the use of dust suppression agents containing chloride. Chloride does 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 Project 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 nearby waterways.

Blanding’s Turtles

As stated in the Natural Heritage Letter (MCE 2024-00911), Blanding’s Turtles have been documented in the vicinity of the Project and avoidance measures are required. The EA must address the avoidance measures required in the Natural Heritage Letter.

Vegetation Management Plan

The EA should discuss the construction and vegetation reestablishment phases in the surrounding Project Boundary to minimize stormwater runoff, erosion, and support habitat. The Project’s Vegetation Management Plan should be consistent with the DNR’s [*Prairie Establishment and Maintenance Technical Guidance for Solar Projects*](#), which provides technical guidance for vegetation establishment and management.

The DNR appreciates the opportunity to comment on the North Star Energy Storage Project. Please contact me if you have question about our agency’s comments.

Sincerely,

Martin Donovan
Energy Review Planner
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651-259-5402

Attachments: Natural Heritage Review Letter

CC: Melissa Collins, Minnesota Department of Natural Resources

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