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

April 28, 2025

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

RE: In the Matter of the Joint Application of Minnesota Power for a Site and Route Permit for the 85-Megawatt Boswell Solar Project: Minnesota: Docket Numbers: E015/GS-24-425

RE: In the Matter of the Joint Application of Minnesota Power for an associated 2.45-mile 230-kilovolt Transmission Line in Itasca County, Minnesota: Docket Numbers: E015/TL-24-426

Dear Jessica Livingston,

The Minnesota Department of Natural Resources (DNR) has reviewed the joint site and route permit application for Minnesota Power's Boswell Solar Project (Applicant) to construct an up to 85 MW solar energy generating system (solar facility) and a 230 kV transmission line (HVTL). Based on the review of the application, the DNR offers the following comments regarding potential environmental and wildlife impacts that should be considered in scoping for the Environmental Assessment (EA).

Security Fencing

The permit application describes the security fencing around the solar arrays as seven-feet-tall topped with 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. The final security fence plan should be designed in accordance with our agency's *Fencing Handbook for 10ft Woven Wire Deer Exclusion Fence*. While the DNR understands the security fence design must follow the National Electrical Code, our agency requests the Applicant adhere to the DNR's fencing guidance to the maximum extent practicable.

Lighting

The DNR recommends the EA discuss measures to mitigate the impacts lighting will have on wildlife. LEDs are often installed at solar 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 permit application indicates 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 nearby waterways.

Water Appropriation

A DNR Water Appropriation Permit is required for dewatering activities during construction 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 volume is less than 50 million gallons and the time of the appropriation is less than one year. MNDNR Permitting and Reporting System (MPARS) can be used to apply for a DNR Water Appropriation Permit.

Water Crossing

The EA should identify land and water crossings by the HVTL that will require a utility license from the DNR. The utility license review will identify potential natural resource and recreation concerns. The utility license to cross state lands review also determines deed, contract, funding, or other restrictions on state lands. Such restrictions could impact licensing and routing of the transmission line.

DNR Administered Lands

The DNR serves as the trustee for the 2.5 million acres of School Trust Lands across Minnesota and an additional one million acres of severed mineral rights on behalf of Minnesota's public schools. Our agency manages this diverse portfolio of School Trust Lands by promoting revenue-generating activities that are also protective of the natural resources that Minnesotans enjoy and value. As the trustee for these lands, the DNR must consider the impacts to these properties now and into the future. There are 11 parcels bordering the western portion of the solar facility that have private surface and state mineral ownership of School Trust Lands. While the Project Area is not on School Trust Lands, the DNR encourages coordination with the Office of School Trust Lands to identify potential impacts to state mineral ownership and avoidance measures.

Native Plant Communities

The EA should discuss the presence of Native Plant Communities and measures to avoid or minimize impacts to these ecologically significant resources. The EA should refer to the Natural Heritage Review letters (MCE 2024-00660) for specific actions to minimize disturbance to native plant communities.

Vegetation Management Plan

The EA should discuss the construction and vegetation reestablishment phases to minimize stormwater runoff, stabilize soil, and support habitat for both the solar facility and HVTL. The DNR recommends the utilization of a vegetation management plan (VMP) throughout the permitted sites. The VMP should be consistent with the DNR's *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 and other members of the Vegetation Management Plan Working Group look forward to future coordination on the Applicant's VMP.

The DNR appreciates the opportunity to comment on the Boswell Solar project. Please contact me if you have questions about our agency's comments.

Sincerely,

Martin Donovan

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Date: 2025.04.28 15:51:14 -05'00'

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Attachments: Natural Heritage Review Letter

CC: Jessica Parson, Minnesota Department of Natural Resources

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