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

September 24, 2025

Public Advisor
Minnesota Public Utilities Commission
121 7th Place East
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

Consumer Affairs Staff,

The Minnesota Department of Natural Resources (DNR) has reviewed the environmental assessment (EA) and the draft site and route permits 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 high voltage transmission line (Gen-Tie). Based on the review of the EA and draft site and route permits, the DNR offers the following comments.

Fencing

The DNR has begun coordinating the final fence design with the Applicant, as mentioned in the Applicant's testimony. The DNR appreciates the Applicant has agreed to not install barbed wire on top of the security fence. However, the DNR advises the Applicant to increase the security fence height from a total height of eight feet to at least 10-feet tall to meet our agency's fencing guidance. The DNR is also opposed to the Applicant's plan to install deer escape ramps, which poses a serious risk of injury and fatalities to deer.

The EA states the largest impact associated with solar facilities are security fences. The EA states the fence design proposed by the Applicant may increase the risk of large wildlife, like deer, from getting

trapped within the solar facility. The EA also indicates the solar facility's infrastructure may impede deer's ability to exit the project since wildlife may not be able to reach the speed necessary to jump the security fence. Due to these concerns, the DNR strongly recommends the Applicant adheres to our agency's fencing guidance to construct a fence that reaches a height of at least 10 feet. Our agency supports permit condition 4.3.32 of the draft site permit requiring the Permittee to design the final security fence in coordination with the DNR.

High Value Biological Resources

The EA indicates there are several high value biological resources near the project area as well as several Native Plant Communities. Due to the presence of high value biological resources and Native Plant Communities, the DNR supports special condition 5.9 of the draft site permit directing the Permittee to follow the recommendations included in the Natural Heritage Review Letter to avoid or minimize impacts to high-value biological resources. The DNR recommends a similar special condition is included in the final route permit.

Avian Flight Diverters

The Gen-Tie is routed within the Chippewa Plains Audubon Important Bird Area. To prevent avian collisions due to visibility issues, the DNR supports permit condition 5.3.16 of the draft route permit directing the Permittee to coordinate with the DNR to identify the appropriate locations of avian flight diverters. Standard transmission line design shall 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 device.

Vegetation Management Plan

The DNR recommends continued coordination with the Vegetation Management Plan Working Group (VMPWG). The DNR supports section 4.3.16 of the draft site permit encouraging the Applicant to meet the standards of the Minnesota Habitat Friendly Solar Program and requiring native perennial vegetation to create habitat and improve soil quality. Our agency also supports section 4.3.17 of the draft permit to require the Applicant to develop a VMP in coordination with the VMPWG. The final VMP should be developed in accordance with the DNR's *Prairie Establishment & Maintenance Technical Guidance for Solar Projects*.

The VMP should include a seed mix of native grasses and forbs planted within the solar facility, along the Gen-Tie right-of-way and stormwater basins. Planting native grasses and forbs will minimize erosion, create pollinator and wildlife habitat, and improve soil health. The Applicant's VMP describes a diverse seed mix of native grasses, sedges, and forbs for the solar facility. The Applicant should provide additional information on the seed mixes and vegetation management practices for the Gen-Tie right-of-way and the storm water basins.

Dewatering

As stated in the EA, 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 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. A DNR Water Appropriation Permit can be applied for in MNDNR Permitting and Reporting System (MPARS).

Floodplain

Vegetation clearing within a floodplain, especially tree removal, can greatly destabilize the area and make it more prone to ongoing erosion and sediment issues, and can also destabilize the shoreline further contributing to water quality issues. Once the soil within a floodplain and along the shoreline is destabilized, it can lead to pole stability issues and create long-term maintenance challenges. Due to this concern, the DNR supports special condition 5.12 of the draft site permit directing the Applicant to coordinate with the DNR regarding potential impacts to the Mississippi River from construction activities. The route permit should also include a similar special condition since the Gen-Tie will cross Blackwater Lake, which is rated as outstanding for lakes of biological significance due to the presence of valuable aquatic plants. These valuable aquatic plants may be harmed by the pole placement during construction.

Lighting

The EA indicates the Applicant will install motion-activated and down-lit lighting at the solar facility. The DNR supports special condition 5.6 of the draft site permit directing the Permittee to install shielded and downward facing lighting.

Dust

The EA states that chloride, a frequently used dust control agent, harms aquatic wildlife by impacting reproduction and physiology and cause fatalities. The DNR supports special condition 5.7 of the draft site permit directing the Permittee to utilize non-chloride products for dust control. The DNR advises a similar special condition is included in the final route permit.

Wildlife Friendly Erosion Control

The EA discusses that plastic erosion control materials can entangle and kill wildlife. The EA also states malachite green dye can enter water bodies and poses serious toxicity concerns for wildlife. Due to these concerns, our agency supports special condition 5.8 to require the Permittee to avoid erosion control materials that contain plastic fiber additives and malachite green dye. The DNR recommends a similar permit condition is included in the final route permit.

The DNR appreciates the opportunity to comment on the Boswell Solar Project. Please contact me if you have any questions.

Sincerely,

Martin Donovan

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Attachments: Natural Heritage Review Letter

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