



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

January 31, 2025

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

- RE: In the Matter of the Application of Benton Solar, LLC for a Site Permit for the 100 MW Solar Energy Generating System for the Benton Solar Project in Benton County, Minnesota
Docket Number: IP7115/GS-23-423 (Solar Facility)**
- RE: In the Matter of the Application of Benton Solar, LLC for a Site Permit for the 100 MW Battery Energy Storage System for the Benton Solar Project in Benton County, Minnesota
Docket Number: IP7115/ESS-24-283 (Storage Facility)**
- RE: In the Matter of the Application of Benton Solar, LLC for a Route Permit for a 115 kV High Voltage Transmission Line Associated with the Benton Solar Project in Benton County, Minnesota
Docket Number: IP7115/TL-23-425 (Transmission Line)**

Dear Mr. Hicks,

The Minnesota Department of Natural Resources (DNR) has reviewed the site and route permit applications for Benton Solar, LLC (Applicant) to construct a 100 MW solar energy generating system (solar facility), a 100 MW battery energy storage system (BESS), and a 115 kV high-voltage transmission line (gen-tie line). Based on the review of the applications, the DNR offers the following comments regarding the potential environmental and wildlife impacts that should be considered in scoping for the Environmental Assessment (EA).

Blanding's Turtles

The EA should evaluate measures to minimize impacts to Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species that has been documented in the vicinity of the proposed project. This project has the potential to impact this rare turtle through direct fatalities and habitat disturbance/destruction due to excavation, fill, and other associated construction activities. As stated in the Natural Heritage Review letter (MCE2024-00434), avoidance measures are required in areas where Blanding's turtles have been documented. The DNR recommends the EA address the avoidance measures outlined in the letters. The DNR appreciates the permit applications address the specific avoidance measures outlined in the Natural Heritage review letter.

Fencing

The DNR recommends the fence is designed in accordance with the DNR's *Commercial Solar Siting Guidance* and the *Fencing Handbook for 10 ft Woven Wire Deer Exclusion Fence*. 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 to wildlife. While DNR appreciates the Applicant's plan to install security fencing that reaches a height of 10 feet around each group of solar arrays, we note that the BESS is intending to use only 7-foot-high fencing with barbed wire. Security fencing can also inhibit the movement of small wildlife, like Blanding's turtle. The DNR recommends that, at sites where Blanding's turtles are known to occur, gaps at the bottom of the fence be incorporated in the design to allow turtles to travel through the fenced area.

The DNR recommends the EA assess what the most appropriate setback requirements between the security fencing for the solar facility and the BESS and the nearby road rights-of-ways to minimize disruptions to wildlife travel corridors. Section 3.3 of the site permit application indicates the Applicant will comply with Benton County's setback requirements. The DNR's recommended minimum setback distance between security fencing and road-rights-of-ways is 50 feet. However, our agency's setback recommendation will be based off traffic volume, speed, wildlife population levels (primarily deer), and the presence of wildlife travel corridors. Wildlife travel corridors should be considered throughout the planning of the security fencing.

Lighting

The DNR recommends the EA discuss measures to mitigate the impacts lighting will have on wildlife. LEDs are often installed at solar and the 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. The Applicant indicates in section 4.2.5.2 of the site permit application that they intend to install downlit lighting.

Bats

The Applicant indicates in their permit applications that they intend to remove a total of approximately 12.4 acres of forested land to construct the solar facility, BESS, and gen-tie line. The EA should discuss tree removal to address necessary restrictions to protect pups. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies, and pups cannot fly. To minimize impacts on bat populations, the DNR recommends tree removal be avoided between June 1 through August 15.

Dust

The DNR recommends the EA address fugitive dust levels and dust suppression measures that will be taken during construction and once the solar facility, BESS, and gen-tie are operational. The site and route permit applications both state that the Applicant will employ dust suppression practices like watering exposed gravel surfaces and using dust control agents. Dust control agents applied during construction 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.

Wildlife-Friendly Erosion Control

The DNR recommends the EA discuss wildlife-friendly erosion control measures. The DNR advises using biodegradable erosion control materials that are flexible and rectangular due to entanglement concerns for wildlife. We appreciate the Applicant's acknowledgement of the DNR's Natural Heritage review letter in their applications which expresses our agency's concern regarding limiting erosion control blankets to "bio-netting" and "natural netting" types along with avoiding mesh and plastic erosion control options.

Vegetation Management Plan

The EA should discuss the construction and vegetation reestablishment phases to minimize stormwater runoff, stabilize soil, and support habitat. 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 provide EA scoping comments on the Benton Solar Project. If you have any questions about our agency's comments, I may be reached at martin.donovan@state.mn.us or 651-259-5402.

Sincerely,

Martin Donovan
Energy Review Planner

CC: Melissa Collins, Minnesota Department of Natural Resources

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