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

September 16, 2025

Jessica Livingston
Minnesota Public Utilities Commission
121 7th Place East
St. Paul, MN 55101

RE: In the Matter of Lake Charlotte Solar, LLC's joint application for the Lake Charlotte 150-MW Solar Facility and 150-MW Lake Charlotte Battery Energy Storage System (BESS) located in Rutland Township, Martin County, Minnesota.
Docket Number: IP-7159/GS-25-206 (Solar Facility), IP-7159/ESS-25-205 (Storage Facility)

Dear Jessica Livingston,

The Minnesota Department of Natural Resources (DNR) has reviewed Geronimo Power's joint site permit application for Lake Charlotte Solar (Applicant) to construct an up to 150 MW solar energy generating system (solar facility) and an associated 150 MW battery energy storage system (BESS). Based on the review of the joint site permit 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 each grouping of solar arrays as reaching a total height of eight feet. 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 appreciates the Applicant using smooth wire on top of the fence instead of barbed wire. 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.

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 Applicant's Vegetative Buffer and Screening Plan include several native trees and shrubs. However, the plan includes non-native shrubs like Winged Suman and Mapleleaf Viurnum. The plan also includes Eastern Red Cedar, which is a native tree species but tends to aggressively reseed without active fire management and can quickly suppress native prairie. The DNR advises against planting non-native species and species that aggressively reseed, which can outcompete native plants and forbs. The Applicant should replace the above-mentioned tree and shrub species with alternatives that are compatible with neighboring natural areas.

Grant-in-Aid Trails

The Minnesota Legislature has delegated the responsibility of administering a cost-sharing program for the development and maintenance of snowmobile trails to the DNR. The proposed project may impact segment #161 of the Prairie Trail snowmobile trail. The DNR's interactive snowmobile trail map is available online, along with spatial data for download. Impacts to snowmobile trails are best avoided by limiting or refraining from construction activities from December 1 through April 1. If trail closures or reroutes are necessary, the permittee will need to maintain coordination with local snowmobile clubs to allow enough time to accommodate changes to the snowmobile trail/route. Statewide snowmobile routes are finalized by mid-summer and are not normally changed prior to the winter recreation season. Trail users incorporate the route maps as mobile phone apps and any late-determined route changes can cause safety issues.

Lighting

The DNR recommends the EA discuss measures to mitigate the impacts lighting will have on wildlife. LEDs are often installed at solar facilities and BESS sites 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 joint 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 ate 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 solar facility and BESS are 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.

The DNR appreciates the opportunity to comment on the Lake Charlotte Solar project. Please contact me if you have questions.

Sincerely,

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CC: Haley Byron, Minnesota Department of Natural Resources

Attachments: Natural Heritage Review Letter

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