

October 27, 2021

Jamie MacAlister, Environmental Review Manager  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
St. Paul, MN 55101

RE: DNR Comments on the Louise Solar Project Combined Environmental Assessment and Environmental Report (PUC Docket No. IP7039/CN-20-646 and WS-20-647)

Dear Ms. MacAlister:

The Minnesota Department of Natural Resources (DNR) has reviewed the combined Environmental Assessment and Environmental Report, as well as the revised Vegetation Management Plan (VMP), for the Louise Solar Project in Mower County, Minnesota, for possible impacts to the environment, natural resources, rare natural features, and state and federal listed species, and has the following comments.

#### Vegetation Management Plan

DNR has the following comments on the revised Vegetation Management Plan (dated Oct 21, 2021):

- Page 4, Vegetation Establishment and Management Plan Overview. Does the project plan to meet the gold standard on the BWSR Solar Pollinator Scorecard? If so, the specific goal regarding creating pollinator habitat should mention this.
- Page 8, Soils. As the VMP states and shows on Table 2, there are hydric soils documented throughout the project area. DNR has observed that once agriculture ceases, soils tend to get wetter over time due to a lack of tillage. Given the soils on site and the drainage classes, some areas will be very wet. Even with functioning tile or other mitigating measures, these hydric soils will likely become wetter and could interfere with solar site operations. The DNR recommends avoiding construction in wetland soil types (hydric soils, and somewhat poorly drained to poorly drained and/or soils where the seasonably high water table is within 6" of the surface).
- Page 19, Array Vegetation Management Unit. If construction in wetland soils moves ahead, the DNR recommends different seed mixes (such as a Wet Prairie mix) for the poorly drained and somewhat poorly drained areas vs. the well-drained and moderately-drained soil types.
- Page 20, Stormwater Retention Vegetation Management Unit. Please ensure that infiltration basins are not located in hydric soils. DNR recommends verifying infiltration design rates with an infiltration test.
- Page 22, Soil Compaction. Soil structure is irreplaceable, and damaging it reduces soil function and encourages the spread of invasive species. In order to maintain soil function, reduce the potential for future erosion, and prevent the spread of invasive species, please use BMP's that maintain soil structure in an un-smearred and un-compacted condition. We recommend that no grading activities be performed when the soil moisture content at the depth of excavation is below the plastic limit, especially as hydric soils are located throughout the project area.

Please be aware that decompaction techniques are only effective in the short-term, and that soil compaction cannot be reversed.

- Page 23, Seeding and Planting. It is not stated whether or not seeds will be pre-stratified. DNR does not recommend pre-stratifying seeds, so please plan the timing of planting to allow for a winter stratification if possible.
- Page 24, Establishment, Management, and Maintenance. DNR recommends staggering mowing in the fall to allow some vegetation to provide overwintering habitat for insects.

## Prairie

The statement 'No impacts to rare and unique resources are anticipated' is made on Page S-6 of the Environmental Assessment (EA). DNR notes that a strip of native prairie, with an associated state endangered plant species (*Parthenium integrifolium*, wild quinine), exists along State Highway 56. None of the planned work is expected to occur in this strip, but the strip could be adversely affected if construction equipment, supplies, or personal vehicles are stored or move across this area, or if the collection line proposes to cut across the area. Either possible impact can be avoided by clearly marking off the prairie strip to prevent inadvertent movement or placement of materials or equipment in it, and by directionally boring under the prairie to install the collection line.

## Security Fencing

To prevent deer from entering the solar facility, DNR recommends a 10-foot high fence. Although the *DNR's Fencing Handbook for 10 ft Woven Wire Deer Exclusion Fence* recommends both 10-foot fencing and deer egress areas (see Page 8 of the EA), please note that this guidance is being updated to reflect current best practices and specifications, and the 10-foot fencing itself would nearly eliminate the possibility of deer getting in and would not require egresses. DNR has made this comment on the need for 10-foot high fencing previously, in the DNR comment letter of June 8, 2021; however, the current proposal still includes fencing that is 6 feet high. This design still entails a significant risk that deer could get inside the facility, not be able to get out, and cause damage both to themselves and the solar panels. In addition, the proposed top guard is not wildlife friendly: it does not provide a sufficient deterrent to deer attempting to jump the fence, but could cause damage to the deer and the fencing if they tried and failed. This height can present a hazard for birds as well. A 10-foot fence would improve safety for wildlife and prevent damage to the facility.

## Recreational Trail Crossings

Page 50 of the EA states that the project is within 108 feet of the Shooting Star State Trail, but DNR's inspection of the shapefiles provided for this review indicate that the project fence is approximately 35 feet from the trail, and that a collector line is proposed to run across the trail. DNR is concerned that construction of the collector line could disrupt recreational activities on the trail as well as cause damage to the trail, and that its continued presence could pose a safety hazard for recreational trail users. Please provide a discussion on the practices to be followed to minimize or mitigate construction-related impacts to trail use and condition, as well as an evaluation of continued impacts to trail use and safety due to the presence of the collection line.

## Natural Resources

The presence of native prairie with wild quinine adjacent to the project area should be clearly designated, and project workers should be clearly informed that this is a designated avoidance area. In addition, the collector line that crosses the prairie must be directionally bored to avoid harming the prairie, or surveys must be completed to avoid harm to the prairie and the wild quinine. DNR strongly recommends directional boring to avoid impacts to the prairie.

## Potential Impacts and Mitigation Measures

In the first paragraph on page 75 of the EA (Chapter 5: Potential Impacts and Mitigation Measures), the following statement is made: 'The habitat will be mowed up to three times yearly, which might limit nesting opportunities, etc.' This impact on nesting opportunities can be mitigated by only mowing after July 15, which DNR strongly encourages. In addition, Paragraph 7 of the same page includes the following statement: 'Once permanent vegetation is established, restricting mowing from April 15 to August 15 will improve the potential for ground nesting habitat'; please clarify the seemingly inconsistent planned project actions as reflected in these two statements.

Paragraph 2 of Page 76 states:

Section 8.12 of the sample permit requires permittees to report 'any wildlife injuries and fatalities' to the commission on a quarterly basis. Section 4.3.8 requires use of 'site restoration and management practices that provide for native perennial vegetation and foraging habitat beneficial to gamebirds, songbirds, and pollinators'. No additional mitigation is proposed.

Deer use the entire landscape depending on season. Riparian corridors are important for wildlife travel lanes. The woodland tracts are important migratory habitats for birds. Additional clarifying information is needed to describe what, if any, mitigation measures are being proposed, or are implied by the 'site restoration and management practices' language. This restoration and these management practices should be described in the EA, especially concerning proposed practices that might affect birds or pollinator species. Please clarify whether these management practices would or would not affect the permit's reporting requirements for wildlife injuries or fatalities.

Other language in this chapter (e.g., Page 75, second and third paragraphs) uses such words as 'can' and 'could' in reference to various mitigation practices, strongly implying that there is no guarantee that these practices would be followed during project development (e.g., 'could include the use of natural fiber materials' to avoid plastic erosion-control materials). DNR considers that a more definite commitment to mitigation measures is needed.

Sincerely,



Kathy Metzker, MN DNR Environmental Review/Land Use Programs

C: Joanne Boettcher, MN DNR Region 4 Regional Ecologist  
Melissa Collins, MN DNR Region 3 Regional Ecologist  
Jill Townley, MN DNR Environmental Review Unit Supervisor  
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