



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

April 29, 2021

Rich Davis, Environmental Review Manager
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul MN 55101

**RE: Big Bend Wind Site Permit, PUC Docket Number: IP7013/WS-19-619
Big Bend Wind 161 kV Transmission Line Route Permit, PUC Docket Number: P7013/TL-19-621
Red Rock Solar Site Permit, PUC Docket Number: P7014/GS-19-620**

Dear Mr. Davis,

The Minnesota Department of Natural Resources (DNR) has reviewed the Big Bend Wind, Big Bend Wind 161 kV Transmission Line, and Red Rock Solar projects. Based on staff review, our agency offers our recommendations regarding potential environmental impacts that should be considered in the Environmental Assessment (EA). We have also identified several issues that need further development.

Big Bend Wind

Calcareous Fens

The EA should discuss potential fens within the project boundary. Many unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of this dependence on groundwater hydrology, calcareous fens can be affected by nearby activities or even those several miles away. Because a known calcareous fen is located within five miles of the project area, the DNR has advised the applicant that areas within 500 feet of proposed construction activity (e.g., collection lines, crane walks, access roads, turbine foundations) be reviewed for the presence of calcareous fens. A qualified plant biologist typically conducts this investigation in conjunction with the wetland delineation. If a potential calcareous fen is identified, further coordination with our agency is necessary. A Calcareous Fen Management Plan may be required if construction is planned within 500 feet of a calcareous fen.

Henslow's Sparrow

The EA should address potential impacts to the state-endangered Henslow's sparrow. The site permit application and the Bird and Bat Conservation Strategy indicate that Henslow's sparrows (two birds) were recorded during the first year of avian surveys. The DNR recommends that the applicant coordinate with our agency to determine the need to restrict construction activities during the nesting season (between May 15 and July 15).

Post-Construction Fatality Monitoring

The site permit application states that Big Bend Wind will conduct a minimum of one year of post-construction fatality monitoring to assess operational impacts to birds and bats. Recent Public Utilities Commission site permits for wind projects have required at least two years of post-construction fatality monitoring. The DNR supports this two-year monitoring requirement.

Species of Special Concern

A species is considered a *species of special concern* if, although the species is not endangered or threatened, it is extremely uncommon in Minnesota, or has unique or highly specific habitat requirements and deserves careful monitoring of its status. The site permit application and the Bird and Bat Conservation Strategy incorrectly use the term *species of particular concern* to describe these species. The DNR requests that the EA use the term *species of special concern*.

National Wetland Inventory

Based on shapefiles provided to the DNR, Turbine 43 appears to be located in a National Wetland Inventory (NWI) wetland. Our agency recommends that the applicant coordinate with the appropriate authority to ensure that the project fulfills Wetland Conservation Act requirements.

Big Bend Wind Transmission Line

Avian Flight Diverters

Section 5.5.7.1 of the route permit application discusses electrocution and avian collision risk. Portions of the proposed transmission line route cross NWI wetlands, the South Fork of the Watonwan River, Cedar Creek and other water bodies. The EA should discuss coordination with the DNR regarding the placement of flight diverters to reduce the potential for avian collisions.

Red Rock Solar

Vegetation Management Plan

Minnesota Statutes 2020, Section 216B.1642, subdivision 1, encourages site management practices that provide native pollinator habitat and reduce stormwater runoff and erosion at solar generation sites. The Vegetation Management Plan (VMP) mentions pollinator habitat just once. The DNR recommends that the EA consider the importance of establishing pollinator habitat and the project's plans for successfully incorporating pollinator habitat into project design. Establishing prairie plants on previously farmed land can provide the following conservation benefits: increased soil water retention, improved soil composition and structure with the extensive root systems of prairie plants, reduced applications of fertilizer and herbicides, and habitat for pollinators and other wildlife. Our agency recommends that a diverse mix of native species be established to stabilize the soil and provide long-term pollinator habitat that does not conflict with project operations.

Section 1 of the VMP states that the document is intended to be a working document. The VMP would benefit from the addition of maps of the Northeast, Northwest, Southeast, and Southwest units (similar to those provided in the Agricultural Impact Mitigation Plan) and specific narratives about how each unit will be vegetated, maintained, and monitored over time. Additional direction is provided in the *Guidance for Developing a Vegetation Establishment and Management Plan for Solar Facilities*, developed by the Minnesota Department of Commerce – Division of Energy Resources in collaboration with the Board of Soil and Water Resources, the Minnesota Department of Agriculture, and the DNR.

The DNR appreciates the opportunity to comment on the Big Bend Wind, Big Bend Wind Transmission Line, and Red Rock Solar projects. If you have questions about our agency's comments, I may be reached at 651-259-5078 or cynthia.warzecha@state.mn.us.

Sincerely,

/S/ Cynthia Warzecha
Energy Projects Planner

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