PUBLIC DOCUMENT - NONPUBLIC DATA HAS BEEN EXCISED

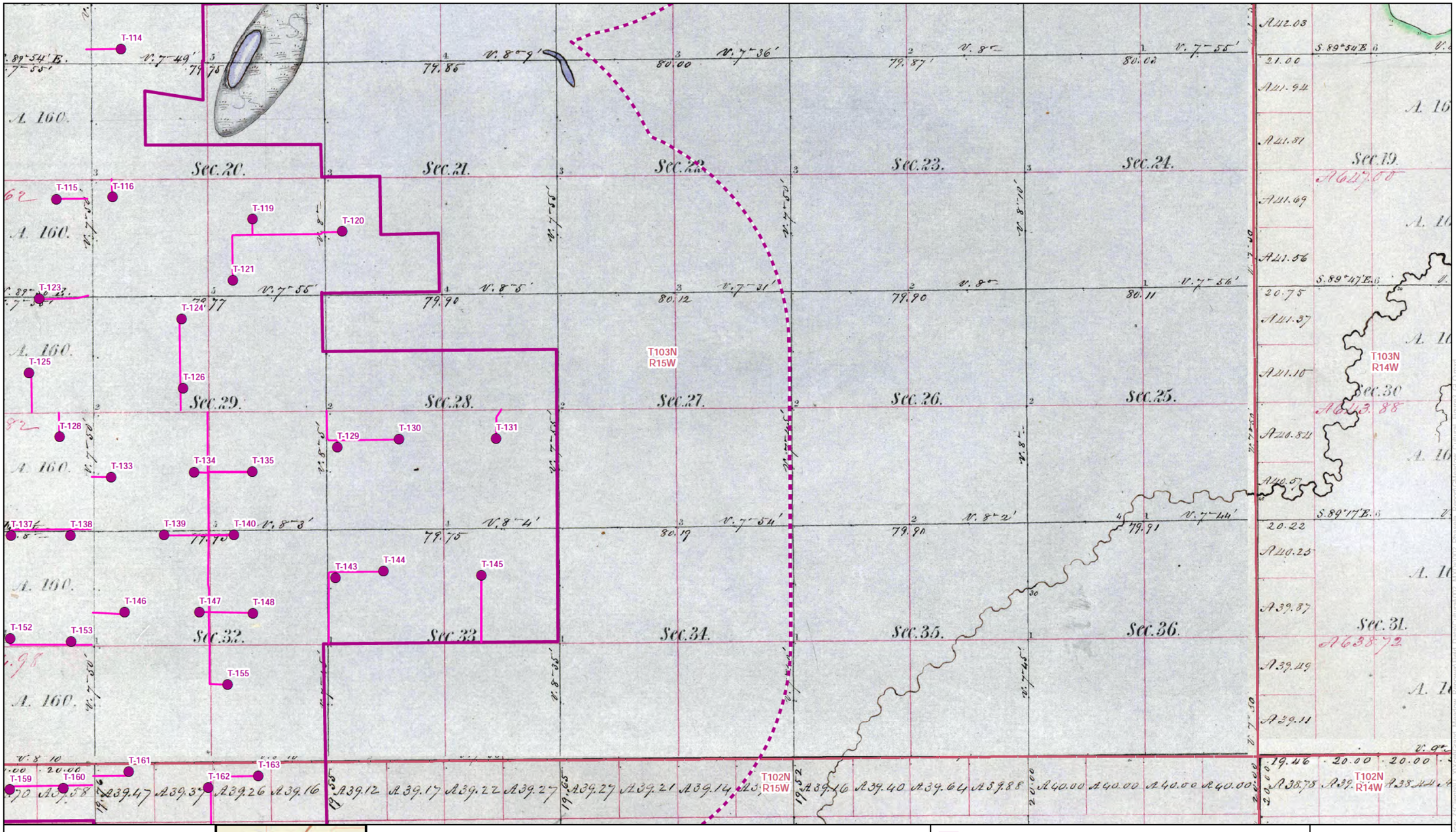

Figure 3.4: General Land Office Map

Xcel Energy
Grand Meadow Wind Farm Repower Project
Mower County, Minnesota

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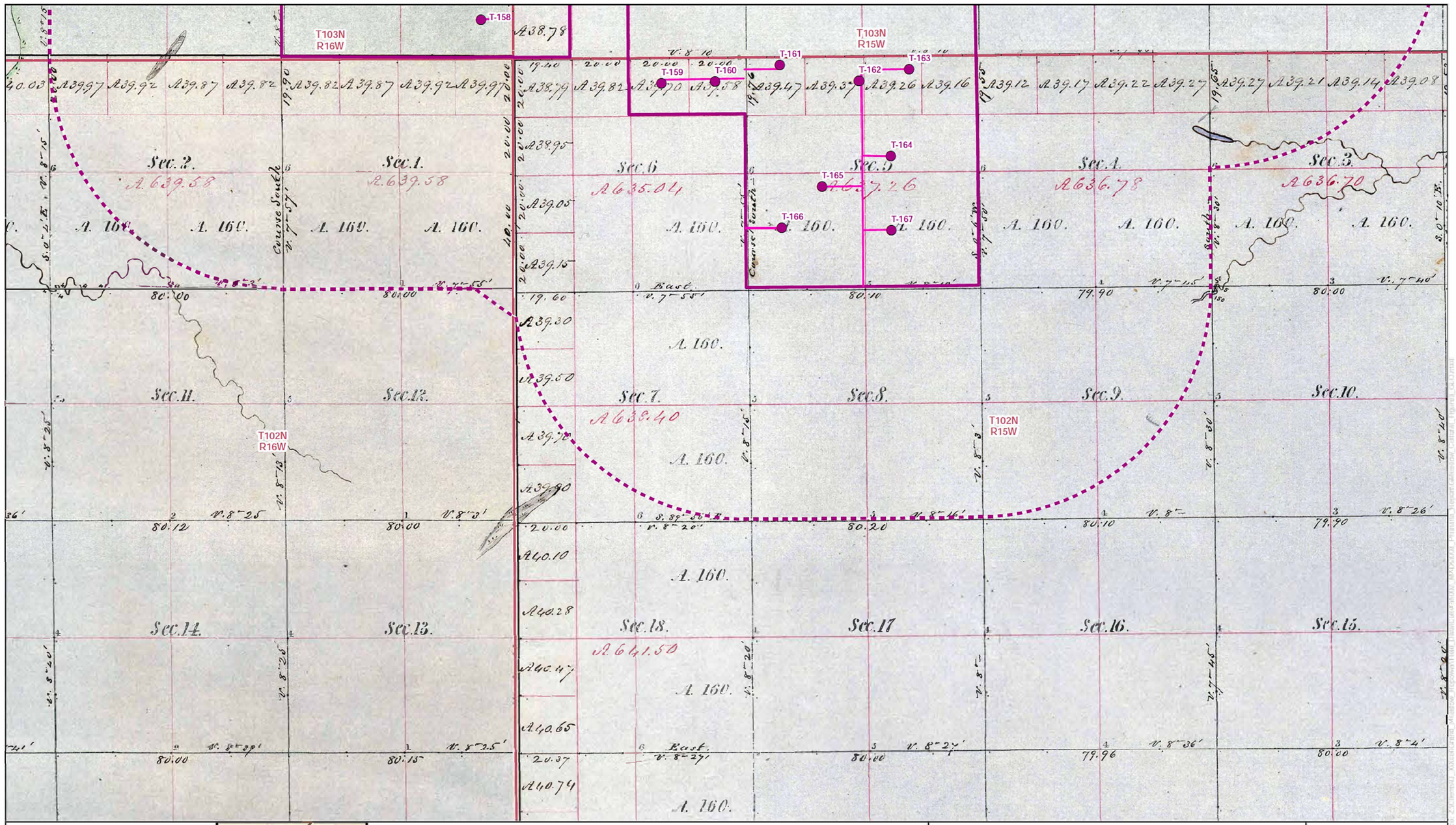

Figure 3.5: General Land Office Map
Xcel Energy
Grand Meadow Wind Farm Repower Project
Mower County, Minnesota

merjent

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1 Main Street SE ▪ Suite 300 ▪ Minneapolis, Minnesota ▪ 55414

Via Email

April 7, 2021

Ms. Lisa Joyal
Endangered Species Review Coordinator
NHIS Data Distribution Coordinator
Division of Ecological and Water Resources
Minnesota Department of Natural Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155

Email: lisa.joyal@state.mn.us

Re: Natural Heritage Data Review of the Proposed Grand Meadow Repower Project
Mower County, Minnesota

Dear Ms. Joyal:

On behalf of Northern States Power Company (NSP), a Minnesota corporation, doing business as Xcel Energy, Merjent, Inc. (Merjent) queried the Minnesota Natural Heritage Information System (NHIS) to conduct a natural heritage data review for the proposed Grand Meadow Wind Farm Repower Project (Project).

Merjent holds a license agreement with the Minnesota Department of Natural Resources (MnDNR) to access electronic NHIS data. On April 22, 2020, Merjent requested from the MnDNR its annual NHIS data update per its license agreement which was provided on May 8, 2020. This updated MnDNR data was used for this Natural Heritage Data Review by a trained and experienced Merjent biologist. The following provides a brief background of the Project, results of the NHIS query, additional information, and an assessment of potential impacts to rare natural features and state-listed species. Based upon this information and review, Merjent respectfully requests that the MnDNR review and concur with this Natural Heritage Data Review for the Project.

Background

On January 15, 2008, the Minnesota Public Utilities Commission (Commission) issued an order approving a site permit to enXco Development corporation to construct the Grand Meadow Wind Farm (the 2008 Site Permit). The Commission order also approved the transfer of the Site Permit from enXco to NSP, effective upon notification to the Commission. On November 10, 2008, NSP and enXco notified the Commission of the transfer of the 2008 Site Permit to NSP pursuant to the January 15, 2008. On December 8, 2008, the Commission issued an order transferring and reissuing the site permit to NSP (the 2008 Site Permit, as amended).

Xcel Energy is seeking an amendment of the Site Permit to allow Xcel Energy to repower all 67 turbines (Repower), which will increase energy production from the facility, improve overall reliability, and extend the service life of the turbines. The current turbines are otherwise operating as planned. In 2010 when the GE 1.5 sle turbines were installed, the rotor size was 77 meters (252.6 feet) in diameter; Xcel Energy proposes to repower 52 turbines with 97-meter rotors and 15 turbines with 91-meter rotors.

The purpose of the repowering project is to improve turbine technology, maximize energy yield, and extend service life of the turbines. New blades provide an increase in the rotor swept area, which, when coupled with the upgraded generators, results in a corresponding increase in the nominal production capacity of the Project from 100.5 MW to roughly 107.2 MW, a 7 percent increase.

Project Description

Xcel Energy is requesting modification of the project boundary permitted in 2008, which contained approximately 16,704 acres. The Repower Project infrastructure is physically located on approximately 8,088 acres of privately owned and mostly leased land in Mower County (Table 1), generally southeast of Interstate 90 and on each side of State Highway 16 (Figure 1 – Project Location). All but approximately 80 acres are located within the previously evaluated and permitted project boundary; the new 80-acre area is within the town of Dexter and incorporates the existing O&M facility and potential locations for the laydown area (Figure 2 – Project Boundary Modification). Typical landscapes within the reduced Wind Farm area consist largely of agricultural fields and wind energy infrastructure.

Table 1
Project Location

County Name	Township Name	Township	Range	Sections
Mower	Clayton	102N	15W	5,6
	Dexter	103N	16W	24-25, 36
	Grand Meadow	103N	15W	7-9, 17-21, 28-33
	Dexter (city)	103N	16W	24

Construction of the Repower Project will require the following temporary workspaces (Figure 3 – Project Area and Facilities):

- Generally, 400-foot radius around turbines,
- Up to 150-foot-wide access roads,
- Up to 100-foot-wide crane paths, and
- One laydown area (exact location pending but will be located in cropland or currently graveled area).

Natural Heritage Review

In a letter dated January 6, 2021, Xcel Energy requested comments on the Project from the MnDNR. The MnDNR responded with early coordination comments on the Project in a letter dated February 5, 2021 (attached).

MnDNR-mapped Native Prairie

There is no MnDNR-mapped native prairie within the Project Boundary; therefore, the Repower Project will not impact any MnDNR-mapped native prairie.

Native Plant Communities

There is one native plant community (NPC) within the Project boundary, a seepage meadow/carr community (WMs83a), which is also a Site of Biodiversity Significance ranked moderate (see below) and is associated with South Fork Bear Creek. The temporary workspaces associated with the Repower Project will not impact this NPC.

Sites of Biodiversity Significance

There are three Sites of Biodiversity Significance (SOBS) within the Project Boundary: Grand Meadow 30 (ranked below), Grand Meadow 19 (ranked below), and Grand Meadow 17 (ranked Moderate). As noted above, the temporary workspaces associated with the Repower Project will not impact Grand Meadow 17.

Turbines 112 and 113 are sited in cultivated cropland and the 400-foot-radius construction workspace for these turbines intersect Grand Meadow 19. Grand Meadow 19 is a former railroad grade, and the current land use where each workspace intersects Grand Meadow 19 is actively cultivated agricultural field. Agricultural production in the immediate Project vicinity may experience minor short-term impacts from the use of the workspace during construction, but these impacts would resolve when construction is complete.

Turbine 123 is within 400 feet of Grand Meadow 30; however, Xcel Energy will use an irregular shaped workspace in cropland to avoid impacts to this site.

State-listed Species[1]

Merjent reviewed the MnDNR NHIS for state-listed threatened and endangered species that are known to occur within 1 mile of the proposed Project. Table 2 summarizes the records found during the review of the NHIS data.

Table 2
State-Listed Species Impact Assessment

Common Name *Scientific Name*	Habitat	Status	Potential Impacts
Edible Valerian *Valeriana edulis* var. *ciliata*	Moist, sunny, calcareous habitat, including calcareous fens, wet meadows, and moist prairies.	THR	Not applicable – the Project will not impact suitable habitat for this species.
Wild Quinine *Parthenium integrifolium*	Restricted to mesic habitats in remnant prairies and savannas of the type that developed in the southeastern portion of the state.	END	Not applicable – the Project will not impact suitable habitat for this species.[1]

[1] During permitting of the original Project, an area within the Project boundary that was documented in 1979 as a prairie remnant and noted as having the state-listed wild quinine present was confirmed to be cultivated with no native prairie species remaining (via field survey and coordination with the MnDNR).

[1] The MnDNR also maintains a listing of special concern species. Special concern species are not legally protected, but are uncommon in Minnesota or have unique or highly specific habitat requirements and deserve careful monitoring of its status.

As noted in Table 2 above, the workspaces associated with the Repower Project will not impact suitable habitat for the edible valerian or wild quinine.

Based on implementation of the measures described above, we believe the Project will not impact state-listed species or rare natural resources. On behalf of Xcel Energy, Merjent respectfully requests that the MnDNR review and concur with this Natural Heritage Data Review for the Project within 30 days of receipt of this submittal.

Should you have any questions or comments regarding this matter, please contact me at 612-746-3666, or at angela.durand@merjent.com.

Sincerely,

Angela Durand
Senior Environmental Analyst
Merjent, Inc.

Enclosure: Figure 1 – Project Location Map
Figure 2 – Project Boundary Modification
Figure 3 – Project Area and Facilities
MN DNR Early Coordination Letter (dated February 5, 2021)