

Rose Creek Wind, LLC

MINNESOTA PUBLIC UTILITIES COMMISSION

MPUC DOCKET NO. IP-7065/WS-21-643
OAH DOCKET NO. 23-2500-38341

DIRECT TESTIMONY OF DAN FLO

July 20, 2022

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, and business address.

A. My name is Dan Flo. I am employed by Merjent, Inc. (Merjent) and my business address is 1 Main Street SE, Suite 300, Minneapolis, Minnesota 55414.

Q. Please briefly describe your educational and professional background and experience.

A. I received a Bachelor of Science degree in 1996 from Minnesota State University, Mankato with a Major in Geography and a Minor in History. I then received a Juris Doctor degree from Lewis & Clark Law School in Portland, Oregon in 2002. I have been working in the field of environmental compliance and consulting for nearly 20 years.

Q. What is your role with respect to the Project and in this Proceeding?

A. Merjent has been providing environmental permitting support for the Rose Creek Wind Project (Project) since January 2021. The proposed Project will result in the construction and operation of 6 to 7 new wind turbines to deliver up to 17.4 megawatts (MW) of clean electric power generation. The new turbines will replace 11 existing turbines that will be decommissioned in accordance with existing Mower County permits. As Merjent's Project Manager, I have been responsible for a team of specialists as they prepared the Site Permit Application and conducted environmental surveys and analyses to help Rose Creek Wind meet the Minnesota Public Utilities Commission's requirements for a Large Wind Energy Conversion System site permit.

II. OVERVIEW

Q. What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to provide an update on the environmental studies that have been completed for the Project since the Site Permit Application

was filed, specifically including updated surveys on bat activity, avian use, archaeological findings, wetland/waterbody delineations, state-protected plant habitat, and native prairie.

Q. What schedules are attached to your Direct Testimony?

A. The following schedules are attached to my Direct Testimony:

- **Schedule A**: 2021 Bat Activity Study Report
- **Schedule B**: 2021 Avian Use Survey Report
- **Schedule C**: Phase 1 Archaeological Survey Addendum 1
- **Schedule D**: 2022 Native Prairie Observations

III. AVIAN AND BAT SURVEY REPORTS

Q. Has Rose Creek completed any additional environmental surveys since filing the Application?

A. Yes. Since filing the Application, Rose Creek has completed its 2021 bat acoustics study and its 2021 avian use studies. The 2021 Bat Activity Study Report is included as **Schedule A** and the 2021 Avian Use Survey Report is included as **Schedule B**. No federally listed avian or bat species were confirmed present at the Rose Creek Wind Project during either survey effort, though bald eagles were documented during avian use surveys. Possible northern long-eared bat calls were identified by Kaleidoscope during general bat surveys; however, no northern long eared bat calls were confirmed during manual vetting, and all calls were reclassified.

Q. Please summarize the results of the 2021 bat activity surveys.

A. Acoustic surveys were conducted from April 16 – October 20, 2021 at two monitoring stations. One station was located in cropland, which is the dominant land cover type within the Project area and representative of planned turbine locations (representative station), and one station was placed along a creek

riparian system, which is considered habitat attractive to bats for foraging and drinking (bat feature station).

Activity was higher at the bat feature station (98.35 ± 14.15 bat passes per detector-night) compared to the representative station at RW1g (6.37 ± 0.73 bat passes per detector-night). The bat feature station on average recorded almost 16 times more activity than the representative station.

Eight species with the potential to occur within the Project area were identified in the survey data. Hoary bats and silver-haired bats were the primary species recorded, present on 83% and 79% of all calendar nights, respectively, followed by big brown bats on 77% of calendar nights. Other commonly detected species included little brown bat (73%), eastern red bat (53%), evening bat (39%), and tri-colored bat (30%). Little brown bats, tri-colored bats, and big brown bats are state-listed in Minnesota as Species of Special Concern. No federally listed bat species were confirmed at the Project.

Additional detail is available in Schedule A.

Q. What protocols were used for the avian use surveys?

A. In early 2021, Rose Creek initiated consultation with U.S. Fish and Wildlife Service (USFWS) regarding wildlife and associated study protocols. In 2022, Rose Creek completed a year of avian and bat use studies, as well as eagle and raptor nest surveys following these protocols. The avian use surveys were conducted monthly from January to December, 2021 at nine survey points.

At each of the nine survey points, a WEST biologist conducted a 70-minute survey, subdivided into two segments. During the initial 10-minute segment, all small birds observed within 100 meters (328 feet) of the survey point were recorded; during the remaining 60-minute segment, all eagles and other large birds within 800 meters (2,625 feet) of the survey point were recorded. Eagle observations were

also recorded beyond the 800-meter survey area, when visible. A total of 126 avian use surveys hours were conducting during 2021, including 14 survey hours at each fixed-point survey location.

Q. What were the results of the avian studies?

A. Overall, 108 large bird and 108 small bird use surveys, totaling 14 survey hours per survey point or 126 total survey hours, were conducted for the Project from January to December 2021. Twenty-two unique large bird species, including five raptor species, and 17 unique small bird species were observed during surveys.

Special Status Species: No federally or state-listed threatened or endangered species were observed during avian use surveys. American white pelican was the only species state-listed as Species of Special Concern (SPC). American white pelicans were documented relatively infrequently; 31 pelicans were observed in two groups during spring surveys at Point 9 (outside the current Project area) in the eastern portion of the Project, although only one of the two groups was observed within the survey plot. Given the absence of open water habitat within the current Project area, suitable habitat for American white pelican nesting and foraging is limited. The five remaining non-raptor special status species were designated as Species in Greatest Conservation Need (SGCN), including upland sandpiper (also designated as Birds of Conservation Concern (BCC)), northern harrier, and American kestrel, and sedge wren and dickcissel.

Eagles: No golden eagles were observed incidentally or during surveys at the Project. Bald eagle observations recorded during surveys were primarily documented during fall (18 of the 28 survey observations). Although the majority of bald eagle use was documented at Point 1 in the northwest corner of the Project, bald eagle use was documented throughout the original Project area. Despite recent bald eagle population expansion, suitable habitat for bald eagle nesting and foraging is limited within the Project.

Large Birds: The most commonly observed large bird group were doves/pigeons (primarily rock pigeon) and large corvids (American crow). Rock pigeon and American crow were widespread and abundant throughout the Project during all seasons. Overall, the large bird species documented at the Project are common in the region. Although diurnal raptor species documented at the Project were observed relatively infrequently compared to most other large bird species, the diurnal raptor species documented during surveys are generally common in the region.

Small Birds: Passerines composed the majority of small bird use during all seasons; woodpecker use and unidentified small bird use was documented during spring and fall, respectively. The most commonly observed passerines were blackbirds/orioles (primarily red-winged blackbird) and grassland/sparrows (primarily Lapland longspur, almost entirely documented during spring). Both species are relatively widespread and abundant in the region. Small bird sensitive species (sedge wren and dickcissel) were relatively uncommon, although both species are widespread in the region.

Additional detail is available in Schedule B.

Q. Has Rose Creek provided the 2021 Bat Activity Survey Report and 2021 Avian Use Survey Report to the USFWS and Minnesota Department of Natural Resources (MDNR)?

A. Yes. The 2021 Bat Activity Survey Report was provided to the MDNR on March 14, 2022, and the 2022 Avian Use Survey Report was provided to the MDNR on June 29, 2022. Both Reports were provided to the USFWS on July 15, 2022.

IV. ARCHAEOLOGICAL SURVEY

Q. Has Rose Creek completed any archaeological surveys since filing the Application?

A. Yes. Additional archaeology surveys were completed at the end of June 2022 for parcels that were not previously surveyed in 2021. These surveys resulted in no new findings. The Phase 1 Archeological Survey Addendum 1 is attached as **Schedule C**.

V. WETLAND AND NATIVE PRAIRIE SURVEYS

Q. Has Rose Creek completed any other surveys since filing the Application?

A. Yes. Rose Creek has completed wetland/waterbody surveys, state-protected plant habitat surveys, and native prairie surveys. Reports summarizing the results of each of these surveys are still being completed, but I am providing this testimony to communicate several key findings.

Q. Please summarize the results of the wetland/waterbody surveys.

A. Rose Creek completed wetland and waterbody surveys in 2021 and 2022 within the areas of proposed infrastructure. Within the survey corridor, 11 wetlands and four waterbodies were identified. The initial report was filed in January 2022 and an updated wetland and waterbody survey report will be provided when complete.

Q. Please summarize the results of the state-protected plant habitat surveys.

A. State-protected plants (Sullivant's milkweed and edible valerian) are not present within the project design / survey areas.

Q. Please summarize the results of the native prairie surveys.

A. One instance of potential native prairie was observed within the project boundaries, on the west side of 660th Ave., south of 120th St., on June 12, 2022. This prairie community is located within a highly disturbed site, at the bottom of an excavated roadside ditch. The site receives runoff from the adjacent crop land and gravel road, and groundwater seepage was observed at the base of the ditch slopes. A narrow, ephemeral waterway is present at the bottom of the ditch, which flows into a perennial waterway that bisects the ditch. Since the construction of this

ditch, the bottom and lower slopes have been colonized by a combination of native wet prairie species, native wetland generalist species, and exotic species.

The native species present were common in the surrounding prairie-dominated landscape prior to conversion to agriculture. The vegetation is dominated by native plant species with exotic species also abundant but comprising less than 50% total cover. The dominant species in descending order are prairie cordgrass (*Spartina pectinata*), hairy-fruited sedge (*Carex trichocarpa*), reed canary grass (*Phalaris arundinacea*), wild parsnip (*Pastinaca sativa*), big bluestem (*Andropogon gerardii*), common milkweed (*Asclepias syriaca*), marsh hedge nettle (*Stachys palustris*), swamp milkweed (*Asclepias incarnata*), giant goldenrod (*Solidago gigantea*), Jerusalem artichoke (*Helianthus tuberosus*), and white meadowsweet (*Spiraea alba*). **Schedule D** contains a figure depicting where the native prairie community was observed.

VI. PROJECT DESIGN UPDATES

Q. Mr. Andi's direct testimony describes three proposed changes to the Project design. Has Rose Creek reviewed the potential environmental changes related to these changes?

A. Yes. On behalf of Rose Creek, Merjent has reviewed the potential environmental impacts of the potential of not building wind turbine Alternative 1, the shift to the collection line segment, and the addition of the laydown yard.

Q. What are the potential impacts related to not constructing Alternative T1 in Scenario 1?

A. Not constructing this turbine would not have a material change on the potential environmental impacts of the Project. The layouts of Scenario #1 and Scenario #2 are exactly the same, with the exception of Alternative T1. Therefore, all impacts would be the same except Alternative T1 and the associated access road would

not be constructed. There are no wetlands or waterbodies associated with Alternative T1 and therefore, no significant change in impacts.

Q. What are the potential environmental impacts of constructing the laydown yard at the proposed location?

A. The identified location is located on agricultural land that is actively farmed today. Because the laydown yard will be temporary, and the area restored following construction, no permanent impacts are anticipated. Rose Creek plans to access the site via an existing private drive, and the area near the entry has already been surveyed for wetlands, waterbodies, native prairies, state-protected plant species, and cultural resources. Accordingly, expected impacts at this location will be minimal.

Q. What are the potential environmental impacts of moving the collection line segment as proposed?

A. Shifting the collection line segment from the west to the east side of 660th Avenue will avoid potential impacts to an identified native prairie community, wetlands, and waterbodies and will have otherwise equivalent impacts to other resources, as shown in Table 1 below.

Table 1 – Comparison of Impacts based on Collection Line Location Change		
Resource	Collection Line Location as Filed in Site Permit Application (west of 660 th St)	Revised Collection Line Location to Avoid Potential Native Prairie (east of 660 th Street)
Native Prairies* (acres)	0.18	0.0
Wetlands* (acres)	0.18	0.0
Waterbodies* (number)	1	0
Prime Farmland (acres)	1.0	1.0
Cultural Resources* (number)	0	0

* Based on informal observations during previous survey efforts. Studies will be completed prior to construction and the results provided to the Commission.

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VII. CONCLUSION

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237 **Q. Does this conclude your Direct Testimony?**

238 **A. Yes.**