

Memorandum

To: Commissioners Christmann, Haugen-Hoffart and Fedorchak

From: Robert Public Utility Analyst

RF

Date: December 11, 2023

Re: Rugby Wind LLC, Rugby Wind Farm – Pierce County, Siting Application, Case No. PU-23-313

On October 3, 2005, in Case No. PU-05-47, the Commission issued its Findings of Fact, Conclusions of Law, and Order issuing Certificate of Site Compatibility Number 5 and First Reissued Certificate of Site Compatibility Number 5 to Rugby Wind, LLC (Rugby) for the Rugby Wind Farm in Pierce County, North Dakota authorizing the construction of an up to 150 MW wind energy facility.

On September 20, 2023, in Case No. PU-23-313, Rugby filed an application to amend First Reissued Certificate of Site Compatibility Number 5 to repower the Rugby Wind Farm (Project). A Notice of Filing and Notice of Opportunity for Hearing was filed on October 3, 2023, public comments were received.

The Project consists of repowering all 71 existing Suzlon 2.1 MW turbines. The project will replace the 88-meter rotor diameter blades, hubs, and gearboxes with 2.2 MW turbines with 120-meter rotor diameter blades, new hubs and gearboxes increasing the height from 407 feet to 456 feet. Rugby anticipates the nameplate capacity to increase from 149.1 MW to 156.2 MW, but it will continue to cap the output to 149 MW in accordance with its Interconnection Agreement with Otter Tail Power Company.

The Project will also consist of reinforcing turbine foundations with upgraded collars, replacing pad-mounted transformers and pads, and installing new 34.5 kV collector line systems as needed. The Project does not anticipate changes to any of the turbine locations, turbine towers, metrological towers, collection substations or the associated 230 kV transmission line approved in Case No. PU-05-305.

The Project does not affect any known exclusion or avoidance areas. The original site for Rugby Wind Farm included a Class I cultural resources inventory, a Class III cultural resources survey, and consultation with the North Dakota State Historic Preservation Office. Rugby has contracted SWCA Environmental Consultants to complete a Class I cultural resource review for the Project to assess any new impacts. Rugby anticipates the construction of the Project will occur within previously surveyed

areas and will obtain consultation and surveys if needed for temporary construction disturbances.

A sound analysis was conducted for the Project and the predicted sound level of 45 dBA or less within 100 feet was exceeded at ten occupied residences. Rugby anticipates obtaining waivers or operating the sound output at a lower level. A shadow flicker assessment was also completed resulting in levels exceeding 30 hours per year at one residence. Either a waiver will be obtained, or Rugby will mitigate the shadow flicker at this residence.

An informal meeting is scheduled for December 13, 2023, to discuss the Project. On that same day, staff will meet with Rugby and two members of the public.

c. Tyler Gludt