BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

July 3, 2025

Mr. Steve Kahl
Executive Secretary/Director of Administration
North Dakota Public Service Commission
600 East Boulevard: Department 408
Bismarck, ND 58505-0480

Re: Case No. PU-25-086
Basin Electric Power Cooperative
Bison Generation Station Hearing Additional Information Responses

Dear Mr. Kahl:

As you are aware, on June 30, 2025 the North Dakota Public Service Commission held a public hearing on the Bison Generation Station (BGS) Siting Application (PU-25-086). Basin Electric Power Cooperative (Basin Electric) is proposing to construct BGS in Williams County. During the hearing, the Commission requested additional information on two topics. Those topics along with Basin Electric's response are below.

The Commission questioned why sound modeling was done using calm wind conditions as a parameter and what effect that would have on the modeling outcomes. Per Basin Electric's sound modeling consultant, sound modeling was done assuming downwind environmental conditions in every direction. Specifically, Section 4.1 of the sound study results state, "The modeled atmospheric conditions were assumed to be **calm**, and the temperature and relative humidity were left at the program's default values." (Application, Appx. G, Docket No. 1 (emphasis added)). Calm here refers to the difference between laminar flow and turbulent flow in the air the sound waves are propagating through. If the air were turbulent with a mix of directions and speeds, sound would not propagate as far as if more laminar flow is assumed. The model assumes more laminar flow with a constant wind speed to predict sound levels that would be higher than would be measured if the flow were more turbulent.

The Commission also questioned why a residence indicated by the application to be 1.2 miles to the northeast of the BGS Project was not included in the sound study. The reference to the 1.2 miles distance in the application was a typographical error; the residence to the northeast of the BGS Project site is actually 2 miles from the nearest power block building. The residences shown in the sound study are between 1.3 and 1.8 miles from the power block and would have greater noise impacts from the project. Additionally, the sound study assumed downwind sound propagation in all directions, and with this area having flat terrain, impacts at the residence 2 miles to the northeast would be expected to be less than impacts at the receptors included in the sound study.

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Response to Request for Additional Information

Basin Electric Power Cooperative
Erin Fox Dukart, Director, Envir. Svcs.

If you have any questions or require additional information for this submittal, please contact me at edukart@bepc.com or 701-557-5557.

Sincerely,

Erin Fox Dukart
Director, Environmental Services