

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE
APPLICATION BY CROWNED RIDGE
WIND, LLC FOR A PERMIT OF A
WIND ENERGY FACILITY IN GRANT
AND CODINGTON COUNTIES

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STAFF'S RESPONSES TO
APPLICANT'S FIRST DATA REQUEST

EL19-003

Below, please find Staff's responses to Applicant's first set of data request. All responses were provided by David Hessler.

Dated this 23rd day of May 2019.



Kristen N. Edwards
Staff Attorney
South Dakota Public Utilities Commission
500 East Capitol Avenue
Pierre, SD 57501
Phone (605)773-3201
Kristen.edwards@state.sd.us



CRW 1-1 Reference: Page 5, line 15 through Page 6, line 5 of David Hessler's Direct Testimony.

- a. Please identify and provide a list of each non-participant receptor discussed on Page 5, line 15 through Page 6, line 5.
- b. For each non-participant receptor provided in "a," please identify (1) the alternative turbine that you are recommending be used and (2) the primary turbine that you are recommending not be used.
- c. For each non-participant receptor identified in "a" provide the estimated dBA reduction resulting from the use of alternative turbine identified in "b" instead of using the primary turbine identified in "b".
- d. Provide the methodology, workpapers, analysis, and studies used to develop the estimates provided in "c".

Response to CRW 1-1 a, b and c:

The table below summarizes the information requested in Parts a, b and c of CRW 1-1.

| Non-Participant ID | Primary Turbine(s) Proposed for Relocation | Destination Alternate Turbine Site | Current Estimated Sound Level, dBA | Estimated Sound Reduction at Residence, dBA | Estimated Sound Level After Relocation, dBA |
|---------------------------|---|---|---|--|--|
| CR1-C61-NP | CR-16 | Any | 44 | 4 | 40 |
| CR1-C52-NP | CR-19, CR-23 | Any | 43 | 5 | 38 |
| CR1-C39-NP | CR-47, CR-53, CR-55, CR-60 | Any | 43 | 3 | 40 |
| CR1-C38-NP | | Any | 42 | 4 | 38 |
| CR1-C34-NP | | Any | 45 | 3 | 42 |
| CR1-C14-NP | CR-95 | Any | 44 | 3 | 41 |
| CR1-C41-NP | CR-44, CR-46, CR-52 | Any | 45 | 1 | 44 |
| CR1-C31-NP | CR-67, CR-68 | Any | 44 | 4 | 40 |
| CR1-C29-NP | | Any | 41 | 3 | 38 |
| CR1-G16-NP | CR-100 | Any | 42 | 5 | 37 |
| CR1-G68-NP | CR-114 | Any | 43 | 2 | 41 |
| CR1-G23-NP | CR-109 | Any | 43 | 5 | 38 |

Response to CRW 1-1 d:

The projected future sound levels in the table above are rough estimates only based on experience doing iterative layout optimization modeling for other wind projects. The exact figures for both the current and future conditions can be easily determined by manipulating the Applicant's original model.

CRW 1-2 Reference: Page 5, line 17-19 of David Hessler's Direct Testimony.

- a. Confirm that Mr. Hessler's recommendation is to use the following Grant County Ordinance language to measure sound levels for non-participants receptors in Codington County:

"Noise level shall not exceed 45 dBA, average A-weighted Sound pressure including constructive interference effects measured twenty-five (25) feet from the perimeter of existing off-site non-participating residences, businesses, buildings owned and/or maintained by a governmental entity."

If not confirmed, explain your response in detail.

Response to CRW 1-2 a:

The site layout improvements recommended above are unrelated to the Grant County Ordinance and do not supersede, or make more stringent, the regulatory requirement to meet a sound level of 45 dBA or less at (i.e. 25 ft. from) all non-participants.

- b. Confirm that Mr. Hessler is also recommending that the sound level for participant receptors located in Codington County be measured using following language from the Grant County Ordinance:

". . . average A-weighted Sound pressure including constructive interference effects measured twenty-five (25) feet from the perimeter of existing off-site non-participating residences, businesses, buildings owned and/or maintained by a governmental entity."

If not confirmed, please explain your answer in detail.

Response to CRW 1-2 b:

The site layout improvements recommended above are also unrelated to the Codington County Ordinance and do not supersede my current recommendation to apply the Grant County Ordinance limit of 45 dBA or less to all non-participants in Codington County, while also maintaining that County's 50 dBA property line noise limit.