BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF CROWNED RIDGE WIND II, LLC FOR A PERMIT OF A WIND ENERGY FACILITY IN DEUEL, GRANT AND CODINGTON COUNTIES	* * * * * * * *	STAFF'S POST HEARING BRIEF EL19-027

The Commission Staff, by and through its attorneys of record, hereby files this post-hearing brief in the above-captioned siting proceeding:

I. Preliminary Statement.

For purposes of this brief, the South Dakota Public Utilities Commission shall be referred to as the "Commission"; Commission Staff is referred to as "Staff"; Crowned Ridge Wind II, LLC is referred to as "Crowned Ridge" or "Applicant." Reference to the transcript of the Evidentiary Hearing will be "EH", followed by the appropriate page number, and prefiled testimony that was accepted into the record will be referred to by its exhibit and page number.

II. Jurisdictional Statement.

The Applicant filed for a permit to construct a wind energy facility. The Commission has jurisdiction over siting permits for wind energy facilities pursuant to SDCL Chapter 49-41B. For applications received after July 1, 2019, SDCL 49-41B-25 requires the Commission to make "complete findings" in rendering a decision on whether the permit should be granted, denied, or granted with conditions within nine months of receipt of the initial application for a wind energy facility.

III. Statement of the Case and Facts.

On July 9, 2019, Crowned Ridge filed an application for a siting permit, pursuant to SDCL 49-41B-4, to construct the Crowned Ridge II Wind Farm (Project), a wind energy conversion facility to be located on approximately 60,996-acres of land in Deuel, Grant and Codington Counties, in the townships of Waverly, Kranzburg North, Kranzburg South, Troy, Rome, Goodwin, and Havana, South Dakota. The total installed capacity of the Project would not exceed 301 megawatts (MW) of nameplate capacity. The proposed Project would include up to 132 wind turbine generators, access roads to turbines and associated facilities, underground 34.5-kilovolt (kV) electrical collector lines, underground fiber-optic cables, a 34.5-kV to 230-kV collection substation, two permanent meteorological tower, an operations and maintenance facility, and additional temporary construction areas, including a concrete batch plant. The Project will utilize the Crowned Ridge Wind II 5-mile 230-kV generation tie line and the Crowned Ridge Wind II collector substation to transmit the generation to the dead-end transmission structure adjacent to the Crowned Ridge Wind, LLC project's collector substation and conjoined to the Big Stone South 230-kV Substation, which is owned by Otter Tail Power Company. Applicant has executed a purchase and sale agreement with Northern States Power Company (NSP) to sell NSP the Project and the Facility Permits once constructed. The Project is expected to be completed in 2020.

Pursuant to ARSD 20:10:22:40, the Commission established a deadline of September 9, 2019, for submission of applications for party status. Nine individual landowners timely

submitted applications and were granted party status by the Commission. An Evidentiary Hearing was held February 4-6, 2019.

IV. Statement of the Issues.

The principle issue to be decided in this matter is whether, pursuant to SDCL 49-41B and ARSD 20:10:22, the permit requested by the Applicant for a wind energy facility should be granted, denied, or granted upon such terms, conditions or modifications of the construction, operation or maintenance as the Commission finds appropriate. Additionally, the Commission must determine whether the Applicant has met its burden of proof with respect to each element of SDCL 49-41B-22 for the requested permit.

V. Factors Applicant Must Establish and Burden of Proof.

SDCL 49-41B-22, as in effect July 1, 2019, provides that the Applicant has the burden of proof to establish that:

> (1) The proposed facility will comply with all applicable laws and rules;
> (2) The facility will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area. An application for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is determined not to threaten the social and economic condition of inhabitants or expected inhabitants in the siting area;
> (3) The facility will not substantially impair the health, safety or welfare of the inhabitants; and
> (4) The facility will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government. An applicant for an electric transmission line, a solar energy facility, or a wind energy facility that holds a conditional use permit from the applicable local units of government is in compliance with this subdivision.

In addition, the administrative rules state that the Applicant "has the burden of going forward with presentation of evidence…" ARSD 20:10:01:15.01. Therefore, the next question is: What standard shall be applied to determine if the Applicant has met its burden of proof? The general standard of proof for administrative hearings is by preponderance, or the greater weight of the evidence. *In re Setliff*, 2002 SD 58, ¶13, 645 NW2d 601, 605. It is erroneous to require a showing by clear and convincing evidence. *Dillinghan v. North Carolina Dept. of Human Resources*, 132 N.C. App. 704, 513 S.E.2d 823 (1999). "Preponderance of the evidence is defined as the greater weight of evidence." *Pieper v. Pieper*, 2013 SD 98, ¶22, 841 NW2d 787 (citation omitted). Black's Law Dictionary defines preponderance of the evidence as:

> The greater weight of the evidence, not necessarily established by the greater number of witnesses testifying to a fact but by evidence that has the most convincing force; superior evidentiary weight that, though not sufficient to free the mind wholly from all reasonable doubt, is still sufficient to incline a fair and impartial mind to one side of the issue rather than the other. This is the burden of proof in most civil trials, in which the jury is instructed to find for the party that, on the whole, has the stronger evidence, however slight the edge may be.

Black's Law Dictionary (10th ed. 2014).

The South Dakota Legislature has clearly indicated that it intended for the Commission to very carefully and thoroughly scrutinize applications for siting permits. This is evidenced by its enactment of SDCL 49-41B-12, which provides for a deposit and a filing fee to investigate, review, process, and notice the application. Because the Legislature established a fee to support the investigation into permit applications, it is apparent that the Legislature intended for an extensive and complete review of the application to be conducted. It would not have done so if it did not expect this to be a significant investigation of the required factors. Such a high bar

protects the land and the citizens of this state, as well as adds legitimacy to all permit applications that are granted.

VI. Argument and Analysis.

A. Property Value

Applicant and Staff each called a witness to testify on the Project's potential effects on property value. Michael MaRous testified on behalf of Applicant. David Lawrence testified for Staff. Both witnesses are experts in the area of appraisal and property value. Both ultimately concluded that there was no evidence that the Project would have a negative effect on property value.

David Lawrence analyzed sixteen sale transactions of rural residences in proximity to a wind turbine.[1] Mr. Lawrence testified that he found one property sale that was negatively impacted by the planned wind farm.[2] However, the discovery of this one negatively impacted property sale did not change his overall opinion that "the selling prices of rural residences have not been influenced by the presence of a wind tower, turbine, or project."[3]

At the hearing, Mr. Lawrence testified that the sales data does not support the comments about negative impacts on property value. "It shows that these properties do sell within the range of the market."[4] One property within proximity to a wind farm even sold at six percent appreciation rate.[5]

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[1] Exhibit S6, page 2, lines 6-7.
[2] Exhibit S6, generally.
[3] Exhibit S6, Pages 2-3.
[4] EH 494:21-23.
[5] EH 473:19-22.

Both David Lawrence and Michael MaRous testified that there was no evidence of a negative overall impact. No evidence to contradict this conclusion was presented by any of the intervenors. Further, the one sale that showed a possible negative influence was near a planned wind farm, not an operating wind farm. None of the sales near an operating wind farm showed a negative influence. Therefore, the preponderance of the evidence establishes that there is no evidence of a negative impact on property value due to an operating wind farm.

Staff reached out to all parties for suggestions for permit conditions.[6] No party responded with a recommendation or request for a property value condition, nor does the record suggest that one is needed. Ms. Christenson did bring up the concept of a property value guarantee during her cross examination of Mr. Kearney, however, as Mr. Kearney explained in his response, a property value guarantee is neither necessary nor workable.[7]

In addition, because Applicant has secured all necessary conditional use permits, there is a presumption pursuant to SDCL 49-41B-22(2) that the Project will not pose a threat of serious injury to the economic condition of the inhabitants of the siting area.

For these reasons, Staff recommends the Commission find that there is no evidence that the Project will have a significant negative impact on property value in the siting area. Staff recommends there be no permit condition regarding property value.

B. Recommended Noise Limit for Nonparticipants

When considering the proper noise limits to recommend in a proposed permit condition, Staff relies on its expert witness, Mr. David Hessler. For a regulatory noise limit, Mr. Hessler

[6] EH 554:8-13.
[7] EH 607-608.

recommends a 45-dBA, project-only, noise limit for nonparticipating residences. At the same time, however, Mr. Hessler believes wind energy developers should work to optimize the project layout, to the extent practical, for minimizing noise on nonparticipants. This optimization is captured in Mr. Hessler's ideal design goal of 40-dBA for nonparticipating residences. Mr. Hessler's recommendation for a regulatory noise limit and an ideal design goal have been consistent throughout all recent wind energy facility permit proceedings.

Staff finds that a 45-dBA regulatory noise limit will not substantially impair the health, safety, or welfare of nonparticipants in the project area and works to ensure that all new wind energy facilities are modeled to have expected noise levels at or below a 45-dBA regulatory limit for nonparticipants. Staff also reviews the proposed turbine layout in relation to nonparticipating residences in order to determine if further optimization by the wind farm can reasonably be completed to gain additional reduction in noise levels for nonparticipants. If Staff finds that turbine layout modifications can reasonably be completed to further reduce noise levels for non-participants, Staff will advocate for those changes before the Commission. For Crowned Ridge Wind II, the number of residences in the project area did not allow for further optimization of noise, beyond those recommended by Mr. Hessler, absent major changes to the project.

Certain wind farm locations in South Dakota with few residences may allow for the further optimization of noise levels below a 45-dBA regulatory limit for nonparticipants and, therefore, a one-size fits all noise limit is not the best public policy for minimizing noise on nonparticipating residences. For example, in the case of Prevailing Wind Park, Staff found that the project could reasonably achieve expected noise levels of 40-dBA at nonparticipants and then advocated for a 40-dBA permit limit to further minimize noise for nonparticipants to their benefit. Even if a wind farm is proposed to have noise levels at all nonparticipants of 40-dBA or less, Staff will review

the project layout in order to determine if the project can further reduce the expected noise levels for nonparticipants through additional turbine layout optimization.

In short, Staff finds that a 45-dBA permit limit for nonparticipants will not substantially impair the health, safety, or welfare of nonparticipants. However, Staff will also continue to challenge wind energy developers to optimize the layout for minimizing the expected noise levels at nonparticipating residences to the extent practical. Should Staff's efforts to minimize the expected noise levels below a 45-dBA regulatory limit for nonparticipants at one project be used as a precedent for a state noise regulation to be applied in all future wind energy facility cases, Staff will then recommend a 45-dBA regulatory limit for all projects based solely on health and safety impacts and not recommend further project-specific layout optimization to reduce the likelihood of noise complaints. This path, if taken, could leave some nonparticipants with higher noise levels than what a wind project could reasonably achieve.

C. Staff's Recommended Shadow Flicker Limit

In proposed permit condition 35, as found in Exhibit S7, Staff recommends the Commission limit shadow flicker to 30 hours per year unless the owner of the residence has signed a waiver. During the evidentiary hearing, intervenors questioned the reasonableness of this limit and support for this limit. Staff witness Mr. Darren Kearney, in response, testified that "[f]or shadow flicker, we understand that it's a nuisance issue, and Staff defers to the counties, as we feel that they're best suited to address that concern based on the feedback that they hear at the local level." EH 568: 4-7.

The foundation Staff used for the recommended shadow flicker limit in this case is consistent with what Staff used for recommended shadow flicker limits in past wind farm cases.

That foundation is simply to look to see what the county ordinance states in order to determine what the county has found to be acceptable. For Crowned Ridge Wind II, all three counties that the Project will be sited in limits shadow flicker to 30 hours per year and, thus, proposed permit condition 35 reflects this.

One may ask, why does Staff defer to the counties on the shadow flicker concern? The answer is that shadow flicker can be a short-duration nuisance, but it is not a health concern. Staff believes that counties are best positioned to address nuisance matters at the local level and, therefore, defers to them. Further, Staff is not aware of any scientific studies demonstrating that shadow flicker below 30 hours per year, or above for that matter, will pose a threat to the health, safety, or welfare of the inhabitants. Without evidence to support a lower shadow flicker limit, Staff has no basis for advancing a shadow flicker limit lower than the limit required in county ordinance.

Specific to Crowned Ridge Wind II, Staff is not aware of any evidence in the record to support a shadow flicker limit less than what the counties require or the addition of a daily shadow flicker limit. Therefore, Staff continues to support proposed permit condition 35.

D. Recommended Change to Proposed Permit Condition 29 (Post-Construction Avian Mortality Monitoring)

In proposed permit condition 29, as found in Exhibit S7, Staff recommended that the Commission require Crowned Ridge Wind II to undertake a minimum of two years of independently conducted post-construction avian and bat mortality monitoring. Since the time of the evidentiary hearing, South Dakota Game, Fish, and Parks (SD GF&P) worked with Crowned Ridge Wind II, Xcel Energy, and Western Ecosystems Technology (WEST) Inc. to collaboratively

fund an additional component of the grouse lek study being conducted for Crowned Ridge I in lieu of completing the second year of avian and bat mortality monitoring. Based on this, Staff now recommends that proposed permit condition 29 to be revised and state as follows:

> 29. Applicant agrees to undertake one year of independently-conducted post-construction avian and bat mortality monitoring for the Project, and to provide a copy of the report and all further reports to the United States Fish and Wildlife Services, South Dakota Game, Fish and Parks, and the Commission. The Applicant also agrees to fund a federal grant match for the SD GF&P State Wildlife Action Plan designed to facilitate an additional component for the grouse study on avian predator interactions with wind projects. This particular study component must be consistent with SD GF&P State Wildlife Action Plan priorities and must be designed to inform the scientific literature regarding potential mechanisms that may explain grouse and wind project interactions.

A letter from SD GF&P in support of this recommended change to proposed permit condition 29 is provided as Attachment A.

VII. Conclusion.

After the introduction of evidence at the evidentiary hearing, the question before the Commission is: whether it is more likely than not that the Applicant has satisfied each requirement of SDCL 49-41B-22 by a preponderance of the evidence.

With the inclusion of the conditions set forth in this brief, the Project will not pose a significant threat to the health, safety, welfare, or orderly development of the region or the environment. Therefore, Staff recommends approval subject to the conditions detailed in Exhibit S7, as well as the revisions to Condition 29 regarding post-construction avian mortality monitoring and the addition of the grouse lek monitoring condition in the February 25, 2020 letter from Staff.

Respectfully submitted this 2nd day of March 2020.

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