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South Dakota

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July 31, 2020

Patricia Van Gerpen
Executive Director
SD Public Utilities Commission
500 E. Capitol Ave.
Pierre, SD 57501

RE: Docket EL20-002, In the Matter of Commission Staff's Request for an Order to Show Cause regarding Crowned Ridge Wind, LLC

Ms. Van Gerpen,

On May 26, 2020, Commission Staff notified the Commission of informal complaints asserting that the aircraft detection lighting system ("ADLS") at Crowned Ridge Wind, LLC ("Crowned Ridge" or "Company") was not working and the obstruction lights rarely turn off. Crowned Ridge confirmed that the ADLS was activated by movements other than aircraft, and Crowned Ridge was adjusting the radar to mitigate invalid light activation events. Commission Staff requested a weekly report from Crowned Ridge detailing the effectiveness of the ADLS and a summary of outstanding radar issues. Commission Staff committed to analyze the information and determine if the ADLS is operational consistent with the terms and conditions of the Settlement Stipulation in Docket EL20-002.

The purpose of the Settlement Stipulation was to resolve ADLS compliance issues with SDCL 49-41B-25.2 and Condition 33 of the Crowned Ridge Permit in Docket EL19-003 ("Permit"). SDCL 49-41B-25.2 states:

For any wind energy facility that receives a permit under this chapter after July 1, 2019, the facility shall be equipped with an aircraft detection lighting system that meets the requirements set forth by the Federal Aviation Administration for obstruction marking and lighting in Chapter 14 of FAA Advisory Circular (AC) 70/7460-1L, "Obstruction Marking and Lighting," dated December 4, 2015. Any cost associated with the installation, operation, or maintenance of a system under this section is solely the responsibility of any owner of the wind energy facility. (emphasis added)

Condition 33 of the Permit stated that Crowned Ridge "shall utilize an ADLS approved by the Federal Aviation Administration." Commission Staff interpreted the concepts of "equipped" and "utilized" to require that the Crowned Ridge ADLS be operational before the facility is considered commercially operational. The payment structure to resolve the ADLS operational delay was established in the terms and conditions of the Settlement Stipulation is shown below:

- A. Crowned Ridge agrees to deposit into the permanent school fund a check for \$170,000 within 14 business days following the approval of the Stipulation by the Commission.

- B. If the ADLS is not operational at the Crowned Ridge Wind Project by May 20, 2020, Crowned Ridge further agrees to deposit a second check in the permanent school fund, the sum of which will be calculated by \$2,000 times the number of calendar days that have elapsed after May 20, 2020 until the ADLS is operational. The second check, if required, shall be deposited within 14 business days following the date the ADLS is operational.

On May 1, 2020, Crowned Ridge filed a letter in Docket EL19-003 indicating the ADLS system was operational on April 27, 2020. Informal complaints received after Crowned Ridge filed the letter assert that the ADLS is not operational because the lights are frequently activated for invalid events and requested that additional penalties be assessed pursuant to the Settlement Stipulation. State law, the Permit, and the Settlement Stipulation did not establish a performance standard for ADLS. According to the filing made by Crowned Ridge on May 26, 2020, the Company focuses on aircraft detection when evaluating ADLS effectiveness, and Crowned Ridge adjusts the ADLS and applies radar filters to remove false activations in a systematic manner so that aircraft safety is not compromised. The complaints appear to focus primarily on mitigating aesthetic impacts and expect that issues are resolved in a optimization phase before the ADLS is considered operational.

Three wind facilities in South Dakota currently have operating ADLSs¹, and each ADLS has gone through a optimization phase spanning multiple weeks to multiple months to reduce invalid light activation events. Commission Staff agrees with a methodical, systematic, and conservative approach to making adjustment to the ADLS in order to ensure safety for aircrafts. This approach may result in invalid light activation events that are not resolved because further adjustment may pose a risk to aircraft safety that is too great to justify the aesthetic benefit and/or not meet the FAA's requirements for detecting aircraft if implemented.

In its January 31, 2020 filing, Commission Staff interpreted SDCL 49-41B-25.2 to require a wind facility be equipped with a ADLS prior to commercial operation of the facility. Commission Staff does not believe the legislative intent of SDCL 49-41B-25.2 is to require a wind facility be equipped with a 100% effective ADLS prior to commercial operation. An interpretation requiring 100% effectiveness of an ADLS prior to commercial operation may idle a wind facility capable of producing electricity for multiple months while the ADLS is adjusted to mitigate aesthetic impacts. In order to comply with FAA regulations, aircraft obstruction lights will remain on whether the turbines are idle or not. Therefore, requiring the turbines to remain idle during the ADLS optimization phase doesn't mitigate the aesthetic impact and is only punitive to the wind facility. Commission Staff has no legislative guidance to support such an interpretation.

From the information provided in Crowned Ridge's weekly ADLS reports, the Company appears to be working in good faith to mitigate invalid light activation events. Based on the requirements set forth in state law and the Permit, Commission Staff believes the ADLS was operating in accordance with FAA requirements on April 27, 2020, and Commission Staff will not pursue additional fines through to the Settlement Stipulation. Commission Staff requests that Crowned Ridge continue to provide weekly reports until the Company believes the ADLS is optimized.

While Commission Staff does not believe Crowned Ridge violated the Settlement Stipulation in this docket, there are areas where Crowned Ridge can improve going forward. First, as Crowned Ridge acknowledged in its June 2, 2020 filing, the Company failed to communicate the ADLS optimization process and establish a timeline to mitigate invalid light activation events. Knowledge of the process helps create a reasonable

¹ Staff contacted Crocker Wind Farm, LLC, and Prevailing Wind Park, LLC, to discuss informal complaints regarding the ADLS at their facilities. Through these discussions, Staff learned that the ADLS invalid activation issues are not unique to Crowned Ridge and are being addressed at all three wind facilities.

expectation for the effectiveness of the ADLS on day one of operations. Second, Commission Staff understands how residents may take issue with the Company's use of the adverb "fully" when characterizing the ADLS as "fully operational" on April 27, 2020. With the number of invalid light activation events that have occurred over the past three months, Commission Staff does not believe the use of the adverb "fully" was appropriate if considering the operational status from an aesthetics viewpoint. Third, Crowned Ridge filed an inaccurate weekly report showing a greater level of ADLS effectiveness than the residents visually confirmed. Crowned Ridge corrected data previously submitted for May 24 to May 30, 2020, because it was found that the obstruction lights were on 100% of the time due to a communication issue with the ADLS on-site server. This issue was present for May 24, 2020, through June 5, 2020. Besides the credibility issue created by inaccurate reporting, it is disappointing that this issue persisted for over ten days without being noticed and addressed by the Company.

Thank you for the opportunity to present our findings regarding the ADLS informal complaints. Staff continues to monitor the optimization progress of the ADLS and the public liaison officer remains a valuable resource for residents who have questions or concerns. Please let us know if you have any questions.

Sincerely,

Jon Thurber
Staff Analyst