

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE)
APPLICATION OF CROWNED)
RIDGE WIND, LLC FOR A) EL-19-003
PERMIT OF A WIND ENERGY)
FACILITY IN GRANT)
AND CODINGTON COUNTIES)**

**IN THE MATTER OF THE)
STAFF’S PETITION FOR)
A SHOW CAUSE ORDER) EL20-002
REGARDING)
CROWNED RIDGE WIND, LLC)**

RESPONSE AND REQUEST TO DISMISS COMPLAINT

I. Complaint

On May 21, 2020, Amber Christenson (“Complainant”) filed identical complaints (“Complaint”) in Docket Nos. EL19-003 and EL20-002 alleging the Crowned Ridge Wind, LLC (“Crowned Ridge”) Aircraft Detection Light System (“ADLS”) is not operational as required by state law, because the warning lights are only off for five minutes each night and are active when there is no incoming or outgoing air traffic.

Contrary to Complainant’s assertions, the Crowned Ridge ADLS is fully compliant with state law requirements for aircraft detection lighting systems:

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.

SDCL 49-41B-25.2.

The statute clearly requires that wind projects be equipped with an ADLS that meets Federal Aviation Administration (“FAA”) Chapter 14 requirements. Chapter 14 requires that the ADLS activate warning lights when aircraft enter into a three-dimensional area around the wind turbines.¹ The Crowned Ridge ADLS was declared operational on April 28, 2020. See Attachment 1, Affidavit of Ronald Williams. Crowned Ridge’s declaration that its ADLS was operational was made only after a number of aircraft test flights demonstrated that the ADLS activated when aircraft entered into the three-dimensional area around the wind turbines as required by FAA Chapter 14. FAA Chapter 14 does not require that the ADLS mitigate false positives; instead, the FAA requires that ADLS is required to activate warning lights when an aircraft enters the three-dimensional area. FAA regulations are focused on the activation of warning lights to protect aircraft, and, as such, any mitigation of false positives, as discussed below, is conducted in a systematic manner which properly places safety as the first priority. Hence, as of April 28, 2020, as required by SDCL 49-41B-25.2, Crowned Ridge was equipped with an ADLS that was compliant with FAA Chapter 14. Accordingly, the Complainant is without merit and should be dismissed.

II. Status of Mitigating False Positives and Weekly Reports

Notwithstanding the fact that the Complaint is without merit, Crowned Ridge is aware that the ADLS is being activated by false positives (*i.e.*, movements other than aircraft). However, ADLS is a new technology for wind projects, and Crowned Ridge is learning that it is taking longer to adjust and filter out false positives than a few weeks which was the expectation. In hindsight,

¹ The three-dimensional area around the wind turbines, includes among other dimensions, the activation of the warning lights when aircraft are within three nautical miles of a wind turbine.

Crowned Ridge would have liked to have better presented to the Commission and its Staff a more complete understanding of how an ADLS, once operational, is adjusted and filters applied to mitigate against movements other than aircraft activating warning lights without compromising our priority which is the safety of aircraft in area.

Since April 28, 2020, Crowned Ridge has added several filters per week to address false positives related to vehicles on roads, turbine blade tips, and tractors. Crowned Ridge expects it will need to adjust and apply filters to the ADLS through the month of July, 2020 in order to mitigate against false positives activating the warning lights, while, at the same time, not compromising the need for the ADLS to activate warning lights when an aircraft enters the three-dimensional area around the wind turbines.

To provide up-to-date information on the status of mitigating false positive activation of the warning lights, Crowned Ridge will file in Docket Nos. EL19-003 and EL20-002 weekly reports that show the information in Table 1 below for the previous week, as and will explain what adjustments and filters were applied to the ADLS in that week. Such weekly reports will be submitted until Crowned Ridge has taken all reasonable steps to mitigate false positive activation of the ADLS without comprising the need for the ADLS to activate the warning lights when aircraft enters the three-dimensional area around the wind turbines.

In Table 1, Crowned Ridge provides the data on the number of hours the ADLS has activated warning lights at night since April 28, 2020.

TABLE 1

Sunset	Sunrise	Total night hours	Lights on hours during night	Lights on night percentage
4/28/2020 19:30	4/29/2020 5:18	9.8	4.55	46.44
4/29/2020 19:31	4/30/2020 5:16	9.76	2.49	25.55
4/30/2020 19:32	5/1/2020 5:15	9.71	6.34	65.25

5/1/2020 19:33	5/2/2020 5:13	9.66	4.36	45.15
5/2/2020 19:35	5/3/2020 5:12	9.62	5.67	58.94
5/3/2020 19:36	5/4/2020 5:10	9.58	7.86	82.08
5/4/2020 19:37	5/5/2020 5:09	9.53	9.08	95.2
5/5/2020 19:38	5/6/2020 5:08	9.49	2.4	25.25
5/6/2020 19:40	5/7/2020 5:06	9.45	4.86	51.45
5/7/2020 19:41	5/8/2020 5:05	9.41	2.27	24.18
5/8/2020 19:42	5/9/2020 5:04	9.36	4.96	52.96
5/9/2020 19:43	5/10/2020 5:03	9.32	2.91	31.19
5/10/2020 19:44	5/11/2020 5:01	9.28	2.52	27.2
5/11/2020 19:45	5/12/2020 5:00	9.24	3.91	42.29
5/12/2020 19:47	5/13/2020 4:59	9.2	7.24	78.62
5/13/2020 19:48	5/14/2020 4:58	9.16	2.46	26.88
5/14/2020 19:49	5/15/2020 4:57	9.13	3.75	41.03
5/15/2020 19:50	5/16/2020 4:56	9.09	8.06	88.69
5/16/2020 19:51	5/17/2020 4:54	9.05	4.96	54.83
5/17/2020 19:52	5/18/2020 4:53	9.02	4.68	51.94
5/18/2020 19:53	5/19/2020 4:52	8.98	5.56	61.94
5/19/2020 19:55	5/20/2020 4:51	8.95	1.8	20.11
5/20/2020 19:56	5/21/2020 4:51	8.92	1.01	11.33
5/21/2020 19:57	5/22/2020 4:50	8.88	1.08	12.12
5/22/2020 19:58	5/23/2020 4:49	8.85	0.83	9.33
5/23/2020 19:59	5/24/2020 4:48	8.82	2.33	26.43
5/24/2020 20:00	5/25/2020 4:47	8.79	0.43	4.87

The data shows that, contrary to Complainant’s claim, the warning lights are off for hours and not just off for five minutes each night. It is Crowned Ridge’s intent to improve the amount of time the warning lights are not activated at night, and will provide weekly reports on its progress. ADLS is a new technology for wind projects. Our priority is the safety of aircraft in area, and our adjustments and filtering of false positives associated with this new technology will continue to be accomplished with safety as a priority.

III. Conclusion

For the reasons set forth herein, the Commission should dismiss the Complaint.

Sincerely,

May 26, 2020

/s/ Miles Schumacher

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